



# **Preliminary Ecological Appraisal**

Land west of Garden Square

Rendlesham, Suffolk

**ISSUE**

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**LIST OF ABBREVIATIONS**

|       |   |
|-------|---|
| BAP   | Biodiversity Action Plan                                    |
| CIEEM | Chartered Institute of Ecology and Environmental Management |
| CRoW  | The Countryside and Rights of Way Act 2000                  |
| CWS   | County Wildlife Site  |
| EPSL  | European Protected Species Licence                          |
| GCN   | Great crested newt  |
| HPI   | Habitat of Principal Importance                             |
| JNCC  | Joint Nature Conservation Committee                         |
| LNR   | Local Nature Reserve  |
| NERC  | The Natural Environment and Rural Communities Act 2006      |
| NNR   | National Nature Reserve                                     |
| NPPF  | National Planning Policy Framework 2012                     |
| PEA   | Preliminary Ecological Appraisal                            |
| PRF   | Potential [bat] Roost Feature                               |
| RNR   | Roadside Nature Reserves                                    |
| SAC   | Special Area of Conservation                                |
| SBAP  | Suffolk Biodiversity Action Plan                            |
| SBIS  | Suffolk Biological Information Service                      |
| SPA   | Special Protection Area                                     |
| SSSI  | Site of Special Scientific Interest                         |
| WCA   | The Wildlife and Countryside Act 1981 (as amended)          |

| <b>EXECUTIVE SUMMARY</b> |   |
|--------------------------|---|
| <b>Introduction</b>      | BASEcology was commissioned by the client to undertake a Preliminary Ecological Appraisal (PEA) to support a full planning application for a residential development on an allocated site in Rendlesham, Suffolk.   |
| <b>Methodology</b>       | <p><u>Desk Study:</u> Records of protected / notable species and habitats were reviewed within a defined search area from the centre of the site. The search radius was: 14 km for statutory designated sites of European significance; 2 km for statutory sites of national, county and local significance; 1 km for non-statutory designated sites and protected / notable species; and 500 m for ancient woodland and Habitats of Principal Importance. The respective search radii were considered suitable for the scale and type of the proposed development.</p> <p><u>Phase 1:</u> Survey was carried out following standard methodology published by the Joint Nature Conservation Committee (JNCC). This methodology is a standardised technique for rapidly obtaining baseline ecological information over a large area of land. All habitat types present on-site were recorded on a map and dominant plant species were recorded in accordance with standard nomenclature.</p> <p>In accordance with best practice, the standard survey methodology was extended to consider and include all protected / notable fauna and habitats suitable to support them. Any incidental records or evidence of species were target noted and each habitat was evaluated for its potential to support protected or notable species.</p>  |
| <b>Results</b>           | <p><u>Desk Study:</u></p> <p>Eight statutory designated sites of European importance (Natura 2000) and one of national importance were noted within the search area (14 km / 2km):</p> <ul style="list-style-type: none"> <li>• Alde-Ore Ramsar Site;</li> <li>• Deben Estuary Ramsar Site;</li> <li>• Alde-Ore &amp; Butley Estuaries Special Area of Conservation (SAC);</li> <li>• Orfordness-Shingle Street SAC;</li> <li>• Staverton Park &amp; The Thicks, Wantisden SAC;</li> <li>• Alde-Ore Estuary Special Protection Area (SPA);</li> <li>• Deben Estuary SPA;</li> <li>• Sandlings SPA; and</li> <li>• Sandlings Forest Site of Special Scientific Interest (SSSI).</li> </ul> <p>One non-statutory designated site was noted within the search area (1 km):</p> <ul style="list-style-type: none"> <li>• Whitmore Wood County Wildlife Site (CWS).</li> </ul> <p>One Habitat of Principal Importance (HPI) was highlighted within 500 m:</p> <ul style="list-style-type: none"> <li>• Deciduous woodland.</li> </ul> <p>The search area also featured one area defined as having no main habitat but additional habitats present (e.g. as part of a mosaic).</p> <p>Suffolk Biodiversity Information Service (SBIS) holds records of plants, invertebrates, GCN, birds, badger, bats, otter and hedgehog within 1 km.</p> <p><u>Phase 1:</u></p> <p>Seven habitats were identified during the Phase 1 Habitat Survey:</p> <ul style="list-style-type: none"> <li>• Broadleaved semi-natural woodland – A.1.1.1</li> <li>• Dense and scattered scrub – A.2.1 / A.2.2;</li> <li>• Scattered broadleaved trees &amp; dry ditch – A.3 &amp; J.2.6</li> <li>• Arable &amp; improved grassland - J.1.1 &amp; B.4</li> </ul> |
| <b>Recommendations</b>   | <p><u>Statutory sites of European significance</u></p> <p>The Conservation of Habitats and Species Regulations 2010 (as amended) require an HRA to be undertaken for any plan or project that may have a "likely significant effect" on a European site.</p> <p><u>Deciduous woodland</u></p> <ul style="list-style-type: none"> <li>• Best practice methods should be followed throughout;</li> </ul>  |



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|  | <ul style="list-style-type: none"> <li>• Work compounds and access tracks etc. will not be located in, or adjacent to, areas that maintain habitat value or are within areas supporting protected species;</li> <li>• Site fencing will be used to prevent access to areas outside working areas, particularly in areas adjacent to features of interest / value;</li> <li>• Procedures will be implemented to address site safety issues, including storage of potentially dangerous materials;</li> <li>• Briefings and instruction will be given to contractors regarding the biodiversity issues associated with the site; and</li> <li>• A sensitive lighting scheme will be implemented to avoid lighting of sensitive habitat areas and to prevent disturbance of any protected or notable species such as birds and bats.</li> </ul> <p><u>Protected species</u></p> <p>Precautionary mitigation is recommended for invertebrates, reptiles, birds, badger, bats and hedgehog in order to help achieve a neutral developmental impact for these respective species / species groups:</p> <p><u>Invertebrates</u></p> <p>As a precaution, the artificial lighting scheme for the development should be designed to reduce its impact on invertebrates even though there is no evidence that species of conservation concern would be affected.</p> <p><u>Reptiles</u></p> <p>Precautionary mitigation is recommended for those areas earmarked for development (i.e. for access and egress purposes and visibility splays) along the eastern and southern boundaries off from Tidy Road and Garden Square:</p> <ul style="list-style-type: none"> <li>• All staff working on site should receive a toolbox talk regarding reptiles.</li> <li>• Clearance of vegetation and any excavation works should be undertaken when the species are active and can readily disperse. This should also be timed around the nesting bird season unless an ecologist is present to check for the presence / absence of active nests. Clearance works should therefore be timed between August and September although can extend to April and September if an ecologist can verify the absence of active nests from the works footprint.</li> <li>• Habitat displacement / manipulation should be undertaken using a staged approach to allow reptiles to naturally move out of the area. Accordingly, this displacement / manipulation should consist of the gradual removal of suitable habitat working towards nearby woodland areas using hand held tools (i.e. a strimmer). The vegetation should be reduced to approximately 150 mm in height and left for 48 hours to allow reptiles present to disperse naturally to adjacent more suitable habitat. After this dispersal period, the works footprint should be inspected by a suitably qualified ecologist and followed by a second vegetation cut, reducing the vegetation to ground height. The vegetation should undergo regular strimming prior to, and during, construction works to ensure that no reptiles re-colonise the site.</li> </ul> <p><u>Birds</u></p> <ul style="list-style-type: none"> <li>• Any vegetation removal, or actions that will impact upon vegetation, should be carried out outside of the peak nesting bird season.</li> <li>• If works cannot be timed outside of the nesting season, they should only be carried out during this period if preceded by a survey to identify any active nests or nests being built. Temporary exclusion zones will be set up to be placed around them until such time that the dependent young have fledged and left the area. The distance of which would depend on the species recorded. The peak bird breeding season extends between March and August (inclusive), although active nests can theoretically be encountered at any time of the year.</li> <li>• New and replacement plantings within the proposed development should constitute at least 50% native species by area. Ornamental species should include a preponderance of species of known value to wildlife, such as fruiting / berrying species, of species providing a good nectar source and hence attractive to insects. All planting should be structurally diverse with areas of dense scrub as well as more open areas.</li> <li>• Artificial lighting should be standardised within the development plans where it cannot be otherwise reasonably avoided. In instances where it is</li> </ul> |
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|  | <p>deemed necessary, it should be designed and positioned to minimise any adverse impacts on the retained surrounding vegetation. Such measures include the use of hoods and cowls and directional lighting away from adjacent hedgerows, trees, and scrub.</p> <p><u>Badger</u></p> <p>All site excavations and trenches must either be covered overnight or have a basic ramp fitted during the construction phase to enable any animals that fall within to easily find means of escape.</p> <p><u>Bats</u></p> <p>Works should be undertaken during daylight hours and artificial lighting should be avoided wherever possible. Where this is not possible (i.e. during certain construction activities) light spillage onto any linear features should be avoided by the use of directional lighting (i.e. the use of hoods and / or cowls).</p> <p><u>Hedgehog</u></p> <p>Site clearance to be undertaken with due consideration for the likely presence of this species.</p> |
|--|---|

*This sheet is intended as a summary only*

SECTION 1

**INTRODUCTION**

## **1 INTRODUCTION**

### **1.1 Overview**

1.1.1 BASEcology was commissioned by the client to undertake a Preliminary Ecological Appraisal (PEA) to support a full planning application for a residential development on an allocated site in Rendlesham, Suffolk.

1.1.2 The site, as defined by the red line boundary (as shown on the Phase 1 Map, Appendix C), is located west of Garden Square along the northern outskirts of Rendlesham approximately 8 km north-west of Woodbridge. The central Ordnance Survey National Grid Reference of the site is TM 3375 5379.

1.1.3 The site comprises an arable field approximately 5.05 ha in size that is allocated for housing in the adopted local plan. The immediate environs feature woodland to the immediate north and west, with existing residential development along the eastern and southern boundaries.

1.1.4 The wider environs are dominated by an arable farmscape but also feature numerous stands of coniferous and deciduous woodland. The local green infrastructure is considered strong in context of the quantity, quality and connectivity of the respective woodland.

### **1.2 Legislation and Policy Context**

1.2.1 Relevant wildlife and countryside legislation have been used along with planning policy guidance and the UK Biodiversity Framework to inform this assessment. Their context and applicability is explained as appropriate in the relevant sections of the report and additional details are presented in Appendix A.

1.2.2 The key articles of relevance are:

- The Conservation of Habitats and Species Regulations 2010, as amended (Habitats Regulations);
- The Wildlife and Countryside Act 1981, as amended (WCA);
- The Countryside and Rights of Way (CRoW) Act 2000;
- The Natural Environment and Rural Communities (NERC) Act 2006;
- National Planning Policy Framework (NPPF) 2012;
- The Protection of Badgers Act 1992;
- The Hedgerow Regulations 1997;
- The UK Post-2010 Biodiversity Framework (2011-2020);
- Biodiversity 2020: A strategy for England's wildlife and ecosystem services; and
- Suffolk Biodiversity Action Plan (SBAP).

SECTION 2

**METHODOLOGY**

## 2 METHODOLOGY

2.1.1 This PEA follows the Chartered Institute of Ecology and Environmental Management (CIEEM) published guidelines<sup>1</sup> and comprises a desk study and a Phase 1 Habitat Survey.

### 2.2 Desk Study

2.2.1 A desk study was undertaken to obtain and review records of protected / notable species and habitats within a defined search area from the centre of the site. The search radius was: 14 km for statutory designated sites of European significance; 2 km for statutory sites of national, county and local significance; 1 km for non-statutory designated sites and protected / notable species; and 500 m for ancient woodland and Habitats of Principal Importance. The respective search radii were considered suitable for the scale and type of the proposed development.

2.2.2 The designated sites included within this search were as follows:

- Ramsar Sites;
- Special Areas of Conservation (SAC);
- Special Protection Areas (SPA);
- Sites of Special Scientific Interest (SSSI);
- National Nature Reserves (NNR);
- Local Nature Reserves (LNR); and
- County Wildlife Sites (CWS).

2.2.3 The following data sources were used, contacted and/or reviewed:

- Suffolk Biological Information Service (SBIS);
- Multi Agency Geographic Information for the Countryside (MAGIC)<sup>2</sup>;
- Species and habitats of principal importance in England, Section 41 of the Natural Environment and Rural Communities Act 2006<sup>3</sup>; and
- SBAP<sup>4</sup>.

### 2.3 Phase 1 Habitat Survey

2.3.1 A Phase 1 Habitat Survey was undertaken by a suitably experienced ecologist (Tom Moore, MCIEEM) on 18<sup>th</sup> August 2017. The survey assessed the ecological value of the site, and recorded any protected habitats and evidence of, or potential for, any protected or notable species on site or within the relevant surrounding area.

2.3.2 The Phase 1 Habitat Survey followed standard methodology published by the Joint Nature Conservation Committee (JNCC)<sup>5</sup>. This methodology is a standardised technique for rapidly obtaining baseline ecological information over a large area of land. All habitat types present on-site were recorded on a

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<sup>1</sup> CIEEM (2013). Guidelines for Preliminary Ecological Appraisal. Technical Guidance Series

<sup>2</sup> <http://magic.defra.gov.uk> accessed 15/11/2017

<sup>3</sup> <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx> accessed 15/11/2017

<sup>4</sup> <http://www.suffolkbis.org.uk/biodiversity/speciesandhabitats> accessed 15/11/2017

<sup>5</sup> Joint Nature Conservation Committee (2010) Handbook for Phase 1 Habitat Survey - A Technique for Environmental Audit. Joint Nature Conservation Committee, Peterborough.

map (Appendix C) and dominant plant species were recorded in accordance with standard nomenclature<sup>6</sup>. Scientific names are only mentioned the first time the species occur in the report.

## 2.4 Caveats and Limitations

### Desk Study

2.4.1 An absence of desk study records does not necessarily convey an absence of such species in that area, but is often a facet of under-recording. The desk study is designed to give an overview of the species already recorded in the local area, and merely provides indicative data prior to more detailed Phase 2 surveys.

2.4.2 Historic records more than 15 years old have not been included in the desk study, as it is considered sufficient time has passed to reduce the relevance of the respective record(s); they do not also account for likely habitat changes overtime (to the site and/or local environs) which inevitably effects the likelihood of presence / likely influence.

### Phase 1 Habitat Survey

2.4.3 The Phase 1 Habitat Survey was carried out on one visit during the month of August. As such, seasonal variations could not be observed and potentially only a selection of all species that occur within the survey area will have been noted. The Phase 1 Habitat Survey therefore provides a general assessment of potential nature conservation value. However, it is considered that the combination of biological records from the desk study and the site visit provides an accurate representation of the various species and habitat types present or potentially present within the survey area.

2.4.4 Mid-August is considered to be an appropriate time of year for recording the majority of species that are likely to grow in this type of habitat. Some spring-flowering species will not have been visible but given the nature of the site it is not considered that this compromises the validity of the survey as species of high conservation value are unlikely to be present.

2.4.5 The Phase 1 Habitat Map (Appendix C) has been reproduced from field notes. Whilst this provides a sufficient level of detail to fulfil the requirements of a Preliminary Ecological Assessment, the map is not intended to provide exact locations and distributions of key habitats. Furthermore, the habitats and the management of the habitats are likely to change over time.

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<sup>6</sup> Stace, C. (2010) *New Flora of the British Isles*; Third Edition, Cambridge University Press, Cambridge.

SECTION 3

**RESULTS**



**3 RESULTS****3.1 Desk Study**Statutory Sites

3.1.1 Eight statutory designated sites of European importance (Natura 2000 and Ramsar sites) and one of national importance were noted within the search area:

- Alde-Ore Ramsar Site;
- Deben Estuary Ramsar Site;
- Alde-Ore & Butley Estuaries Special Area of Conservation (SAC);
- Orfordness-Shingle Street SAC;
- Staverton Park & The Thicks, Wantisden SAC;
- Alde-Ore Estuary Special Protection Area (SPA);
- Deben Estuary SPA;
- Sandlings SPA; and
- Sandlings Forest Site of Special Scientific Interest (SSSI).

3.1.2 A summary of these sites is provided in Table 3.1 below; the descriptions are combined where the same site has more than one designation.

**Table 3.1: Statutory sites within 14 km / 2 km**

| Site Name     | Site Status  | Site Summary  | Location |
|---------------|--------------|---|----------|
| Alde Ore      | Ramsar & SPA | The Alde-Ore Estuary is located on the Suffolk coast in eastern England. It comprises the estuarine complex of the rivers Alde, Butley and Ore, including Havergate Island and Orfordness. There is a variety of habitats including intertidal mud-flats, saltmarsh, vegetated shingle (including the second-largest and best-preserved area in Britain at Orfordness), saline lagoons and semi-intensified grazing marsh. The diversity of wetland habitat types present is of particular significance to the birds occurring on the site as these provide a range of opportunities for feeding, roosting and nesting within the site complex. At different times of the year, the site supports notable assemblages of wetland birds including seabirds, wildfowl and waders. As well as being an important wintering area for waterbirds, the Alde-Ore Estuary provides important breeding habitat for several species of seabird, wader and raptor. During the breeding season, gulls and terns feed substantially outside the SPA. | 5.1 km E |
| Deben Estuary | Ramsar & SPA | The Deben Estuary is located on the coast of Suffolk in eastern England. It extends south-eastwards for over 12 km from the town of Woodbridge to the sea just north of Felixstowe. It is relatively narrow and sheltered, and has limited amounts of freshwater input. The estuary mouth is the narrowest section and is protected by the  | 5 km SW  |

|                             |     |  |           |
|-----------------------------|-----|--|-----------|
|                             |     | presence of shifting sandbanks. The intertidal areas are constrained by sea walls. The saltmarsh and intertidal mudflats that occupy the majority of the site, however, display the most complete range of saltmarsh community types in Suffolk. The estuary holds a range of swamp communities that fringe the estuary, and occasionally form larger stands. In general, these are dominated by Common Reed <i>Phragmites australis</i> . The estuary is of importance for its wintering waterbirds, especially Avocet <i>Recurvirostra avosetta</i> .  |           |
| Alde-Ore & Butley Estuaries | SAC | <p><b>Annex I habitats that are a primary reason for selection of this site</b></p> <p><i>Estuaries</i></p> <p>This estuary, made up of three rivers, is the only bar-built estuary in the UK with a shingle bar. This bar has been extending rapidly along the coast since 1530, pushing the mouth of the estuary progressively south-westwards.</p> <p>The estuary contains large areas of shallow water over subtidal sediments, and extensive mudflats and saltmarshes exposed at low water. Its diverse and species-rich intertidal sand and mudflat biotopes grade naturally along many lengths of the shore into vegetated or dynamic shingle habitat, saltmarsh, grassland and reedbed.</p>  | 5.1 km E  |
| Orfordness-Shingle Street   | SAC | <p><b>Annex I habitats that are a primary reason for selection of this site</b></p> <p><i>Coastal lagoons</i> * Priority feature</p> <p>Shingle Street encompasses a series of percolation lagoons on the east coast of England, and, together with Benacre to Easton Bavents and The Wash and North Norfolk Coast, forms a significant part of the percolation lagoon resource concentrated in this part of the UK.</p> <p><i>Annual vegetation of drift lines</i></p> <p>Orfordness is an extensive shingle spit some 15 km in length and is one of two sites representing Annual vegetation of drift lines on the east coast of England. In contrast to Minsmere to Walberswick Heaths and Marshes, drift-line vegetation occurs on the sheltered, western side of the spit, at the transition from shingle to saltmarsh, as well as on the exposed eastern coast. The drift-line community is widespread on the site and comprises sea beet <i>Beta vulgaris</i> ssp. <i>maritima</i> and orache <i>Atriplex</i> spp. in a strip 2-5 m wide.</p> <p><i>Perennial vegetation of stony banks</i></p> <p>Orfordness is an extensive shingle structure on the east coast of England and consists of a foreland, a 15 km-long spit and a series of recurves running from north to south on the Suffolk coast. This spit has been selected as it supports some</p> | 5.6 km SE |

|  |            |   |            |
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|  |            | of the largest and most natural sequences in the UK of shingle vegetation affected by salt spray.   |            |
| Staverton Park & The Thicks, Wantisden | SAC        | <b>Annex I habitats that are a primary reason for selection of this site:</b><br><i>Old acidophilous oak woods with Quercus robur on sandy plains</i><br><br>This site is representative of old acidophilous oak woods in the eastern part of its range, and its ancient oaks <i>Quercus</i> spp. have rich invertebrate and epiphytic lichen assemblages.  | 2.9 km SSE |
| Sandlings                              | SPA & SSSI | The Sandlings SPA lies near the Suffolk coast between the Deben Estuary and Leiston. In the 19th century, the area was dominated by heathland developed on glacial sandy soils. During the 20th century, large areas of heath were planted with blocks of commercial conifer forest and others were converted to arable agriculture. Lack of traditional management has resulted in the remnant areas of heath which have survived successional changes. The heaths support both acid grassland and heather-dominated plant communities with dependent invertebrate and bird communities of conservation value. Woodlark <i>Lullula arborea</i> and Nightjar <i>Caprimulgus europaeus</i> have also adapted to breeding in the large blocks of conifer forest, using areas that have recently been felled and recent plantation, as well as areas managed as open ground. | 1.65 km S  |

### Non-Statutory Sites

- 3.1.3 One non-statutory designated site, Whitmore Wood County Wildlife Site (CWS), was noted within the search area (1 km). A summary of this site is provided in Table 3.2 below.

**Table 3.2: Non-Statutory sites within 1 km**

| Site Name     | Site Status | Site Summary   | Location |
|---------------|-------------|--|----------|
| Whitmore Wood | CWS         | This wood consists mainly of hazel coppice with oak and ash standards. There is a good age range within the canopy trees while the understorey includes a wide variety of species for example elm, hawthorn, blackthorn, elder, snowberry, willow and sycamore. Although the rides are at present unmanaged, there seems to have been some recent coppicing work done in part of the wood. There appears to be a shallow boundary earthworks on the northern edge. This wood was originally 15 hectares in size, however 2 hectares were clear felled to construct RAF Bentwaters airfield. This woodland is | 625 m SE |

|  |  |  |  |
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|  |  | listed in English Nature's Ancient Woodland Inventory. |  |
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### Ancient Woodland, Habitats of Principal Importance & SBAP Priority Habitats

- 3.1.4 One Habitat of Principal Importance (HPI), also listed as Suffolk BAP priority habitat, was identified in the search area (500 m) as detailed in Table 3.3 below. The search area also featured one area defined as having no main habitat but additional habitats present (e.g. as part of a mosaic).

**Table 3.3: HPI and SBAP Priority Habitats within 500 m**

| Habitat Type                                  | Policy Context*   | Location  |
|---|---|---|
| Deciduous woodland                            | Sect.41 / SBAP  | Woodland stands bound the northern and western site perimeter. Additional stands are located north-east, east, south-east, and north-west further afield. |
| No main habitat but additional habitats exist | N/A - Candidate habitats present although no main habitat can be identified | One area 75 m north-east.   |

\* Sect.41 = Habitat of Principal Importance (Section 41, NERC Act, 2006) and SBAP = Suffolk Biodiversity Action Plan.

### Protected, Notable and Invasive Species

- 3.1.5 Species records obtained from the data trawl within 1 km of the proposed site, including nationally rare and legally protected flora and fauna, are summarised in the sections and associated tables below and have informed the selection of target species groups for assessment. The full desk study obtained from SBIS is available on request.

#### *Flora & Fungi*

- 3.1.6 SBIS holds 13 records of 10 different flowering plant species within the search area as detailed in Table 3.4 below. SBIS holds no records of fungi within 1 km.

**Table 3.4: Summary of flora records within 1 km**

| Common name      | Scientific name                  | Date | Conservation status <sup>1</sup> | Location <sup>2</sup> |
|------------------|----------------------------------|------|----------------------------------|-----------------------|
| Loose silky-bent | <i>Apera spica-venti</i>         | 2006 | WCA8                             | N/A                   |
| Quaking-grass    | <i>Briza media</i>               | 2016 | WCA8                             | N/A                   |
| Heather          | <i>Calluna vulgaris</i>          | 2000 | NR-excludes, RLGB.Lr(NT)         | N/A                   |
| Crosswort        | <i>Cruciata laevipes</i>         | 2004 | RLGB.Lr(NT)                      | N/A                   |
| Bell heather     | <i>Erica cinerea</i>             | 2000 | RLGB.Lr(NT)                      | N/A                   |
| Bluebell         | <i>Hyacinthoides non-scripta</i> | 2005 | RLGB.Lr(NT)                      | N/A                   |
| Hoary cinquefoil | <i>Potentilla argentea</i>       | 2000 | RLGB.Lr(NT)                      | N/A                   |

|                   |                           |      |                         |          |
|-------------------|---------------------------|------|-------------------------|----------|
| Water-soldier     | <i>Stratiotes aloides</i> | 2005 | RLGB.Lr(NT),<br>RLGB.VU | 800 m SE |
| Large-leaved Lime | <i>Tilia platyphyllos</i> | 2006 | NS-excludes             | N/A      |
| Heath dog-violet  | <i>Viola canina</i>       | 2003 | RLGB.Lr(NT)             | N/A      |

<sup>1</sup> WCA8 = Wildlife and Countryside Act (1981) Schedule 8; RLGB.Lr(NT) = IUCN (2001) - Lower risk – nationally threatened; RLGB.VU = IUCN (2001) – vulnerable; NS-excludes = Nationally scarce, excludes red listed taxa.

<sup>2</sup> N/A indicates the record is not sufficiently precise to accurately calculate the distance of this from the site.

### Invertebrates

3.1.7 SBIS holds 22 records of 9 different invertebrate species within the search area as detailed in Table 3.5 below.

**Table 3.5: Summary of invertebrate records within 1 km**

| Common name                      | Scientific name              | Date | Conservation status <sup>1</sup>                     | Location <sup>2</sup> |
|----------------------------------|------------------------------|------|--|-----------------------|
| <i>Beetle (Coleoptera)</i>       |                              |      |  |                       |
| Stag beetle                      | <i>Lucanus cervus</i>        | 2015 | Bern3, HSD2p,<br>Nb, Sect.41,<br>UKBAP,<br>WCA5/9.5a | 600 m SW              |
| <i>Butterflies (Lepidoptera)</i> |                              |      |  |                       |
| Small heath                      | <i>Coenonympha pamphilus</i> | 2013 | RLGB.Lr(NT),<br>Sect.41, UKBAP                       | N/A                   |
| Grayling                         | <i>Hipparchia semele</i>     | 2014 | RLGB.VU,<br>Sect.41, UKBAP                           | 725 m SE              |
| <i>Moths (Lepidoptera)</i>       |                              |      |  |                       |
| Knot grass                       | <i>Acrionicta rumicis</i>    | 2005 | Sect.41, UKBAP                                       | 725 m SE              |
| Mottled rustic                   | <i>Caradrina morpheus</i>    | 2005 | Sect.41, UKBAP                                       | 725 m SE              |
| Latticed heath                   | <i>Chiasmia clathrata</i>    | 2004 | Sect.41, UKBAP                                       | 100 m E               |
| Ghost moth                       | <i>Hepialus humuli</i>       | 2014 | Sect.41, UKBAP                                       | 425 m<br>WSW          |
| Long-legged tabby                | <i>Synaphe punctalis</i>     | 2005 | Nb   | 725 m SE              |
| <i>Dragonfly (Odonata)</i>       |                              |      |  |                       |
| Variable Damselfly               | <i>Coenagrion pulchellum</i> | 2002 | RLGB.Lr(NT)  | N/A                   |

<sup>1</sup> Bern 3 = Bern Convention Appendix 3; HSD2p = Habitats Directive Annex 2 - priority species; Nb = Nationally Notable B; WCA5/9.5a = Schedule 5 Section 9.5a; LGB.Lr(NT) = IUCN (2001) – Lower near threatened; RLGB.VU = IUCN (2001) – Vulnerable; Sect.41 = Species of Principal Importance (Section 41, NERC Act, 2006); UKBAP = UK Biodiversity Action Plan Priority Species.

<sup>2</sup> N/A indicates the record is not sufficiently precise to accurately calculate the distance of this from the site.

*Herpetofauna*

3.1.8 Amphibians: SBIS holds one record of great crested newt *Triturus cristatus* within the search area, c. 1 km east. GCN are protected under the Conservation of Habitats and Species Regulations (2010) as amended and under the Wildlife and Countryside Act (1981) as amended. GCN are also priority species under Section 41 of the NERC Act (2006).

3.1.9 Reptiles: SBIS holds no record of reptiles within the search area.

*Birds*

3.1.10 SBIS holds 265 records of 52 different bird species within the search area. The most recent of these for each species are presented in Table 3.6 below.

3.1.11 Twelve Schedule 1 bird species were noted within the search area (as highlighted in bold in Table 3.6 below). As such it is an offence to intentionally or recklessly disturb these species at, on, or near an active nest site. Eight red (highest conservation priority) and four amber (next most critical group) species of conservation concern<sup>7</sup> were also highlighted within the search area.

3.1.12 All birds are protected under the Wildlife and Countryside Act (1981) as amended. Various bird species are also listed as priority species under Section 41 of the NERC Act (2006).

**Table 3.6: Summary of bird records within 1 km**

| Common name          | Scientific name              | Date | Conservation status <sup>1</sup> | Location <sup>2</sup> |
|----------------------|------------------------------|------|----------------------------------|-----------------------|
| Skylark              | <i>Alauda arvensis</i>       | 2011 | BD2.2, Sect.41, UKBAP            | N/A                   |
| Swift                | <i>Apus apus</i>             | 2011 | BAmb                             | N/A                   |
| Great white egret    | <i>Ardea alba</i>            | 2008 | Bern2, CITESA, CMS_AEWA-A2       | N/A                   |
| Little owl           | <i>Athene noctua</i>         | 2011 | Bern2, CITESA                    | N/A                   |
| Waxwing              | <i>Bombycilla garrulus</i>   | 2013 | Bern2                            | 375 m S               |
| Nightjar             | <i>Caprimulgus europaeus</i> | 2001 | BD1, Bern2, Sect.41, UKBAP       | N/A                   |
| Goldfinch            | <i>Carduelis carduelis</i>   | 2013 | Bern2                            | 700 m SW              |
| Treecreeper          | <i>Certhia familiaris</i>    | 2011 | Bern2                            | N/A                   |
| Greenfinch           | <i>Chloris chloris</i>       | 2014 | Bern2                            | 375 m S               |
| <b>Marsh harrier</b> | <i>Circus aeruginosus</i>    | 2008 | BD1, CITESA, CMS_A2, WCA1i       | N/A                   |
| Cuckoo               | <i>Cuculus canorus</i>       | 2010 | BRed, Sect.41, UKBAP             | 375 m S               |

<sup>7</sup> Bird species that breed or overwinter were assessed against a set of objective criteria to be placed on the Green, Amber or Red list – indicating an increasing level of conservation concern.

|                          |  |      |  |          |
|--------------------------|--|------|--|----------|
| Blue tit                 | <i>Cyanistes caeruleus</i>             | 2013 | Bern2  | 700 m SW |
| <b>Bewick's swan</b>     | <i>Cygnus columbianus</i>              | 2008 | BAmb, BD1, Bern2, CMS_A2, CMS_AEWA-A2, UKBAP, WCA1i  | N/A      |
| House martin             | <i>Delichon urbicum</i>                | 2011 | BAmb, Bern2  | N/A      |
| Great spotted woodpecker | <i>Dendrocopos major</i>               | 2011 | Bern2  | N/A      |
| Little egret             | <i>Egretta garzetta</i>                | 2011 | BD1, Bern2, CITESA, CMS_AEWA-A2                      | N/A      |
| Yellowhammer             | <i>Emberiza citrinella</i>             | 2011 | Bern2, Sect.41, UKBAP                                | N/A      |
| Robin                    | <i>Erithacus rubecula</i>              | 2013 | Bern2  | 700 m SW |
| <b>Merlin</b>            | <i>Falco columbarius</i>               | 2008 | BD1, Bern2, CITESA, CMS_A2, WCA1i                    | N/A      |
| <b>Peregrine</b>         | <i>Falco peregrinus</i>                | 2009 | BD1, Bern2, CITESA, CMS_A2, WCA1i                    | N/A      |
| <b>Hobby</b>             | <i>Falco subbuteo</i>                  | 2013 | Bern2, CITESA, CMS_A2, WCA1i                         | 375 m S  |
| Kestrel                  | <i>Falco tinnunculus</i>               | 2011 | Bern2, CITESA, CMS_A2                                | N/A      |
| <b>Brambling</b>         | <i>Fringilla montifringilla</i>        | 2014 | WCA1i  | 375 m S  |
| Swallow                  | <i>Hirundo rustica</i>                 | 2011 | Bern2  | N/A      |
| Herring gull             | <i>Larus argentatus</i>                | 2010 | BD2.2, BRed, CMS_AEWA-A2, UKBAP                      | N/A      |
| Linnet                   | <i>Linaria cannabina</i>               | 2011 | Bern2, UKBAP   | N/A      |
| <b>Common crossbill</b>  | <i>Loxia curvirostra</i>               | 2008 | Bern2, WCA1i   | N/A      |
| <b>Woodlark</b>          | <i>Lullula arborea</i>                 | 2008 | BD1, Sect.41, UKBAP, WCA1i                           | N/A      |
| Nightingale              | <i>Luscinia megarhynchos</i>           | 2011 | Bern2, BRed  | N/A      |
| Pied wagtail             | <i>Motacilla alba subsp. yarrellii</i> | 2011 | Bern2  | N/A      |
| Grey wagtail             | <i>Motacilla cinerea</i>               | 2011 | Bern2, BRed  | N/A      |
| Curlew                   | <i>Numenius arquata</i>                | 2008 | BD2.2, CMS_A2, CMS_AEWA-A2, RLGLB.NT, Sect.41, UKBAP | N/A      |
| Great tit                | <i>Parus major</i>                     | 2013 | Bern2  | 700 m SW |
| House sparrow            | <i>Passer domesticus</i>               | 2013 | BRed, Sect.41, UKBAP                                 | 700 m SW |
| Coal tit                 | <i>Periparus ater</i>                  | 2011 | Bern2  | N/A      |
| Wood warbler             | <i>Phylloscopus sibilatrix</i>         | 2012 | BRed, Sect.41, UKBAP                                 | 375 m S  |
| Green woodpecker         | <i>Picus viridis</i>                   | 2011 | Bern2  | N/A      |

|                         |                                |      |  |           |             |
|-------------------------|--------------------------------|------|--|-----------|-------------|
| Marsh tit               | <i>Poecile palustris</i>       | 2011 | Bern2,<br>UKBAP                          | BRed,     | N/A         |
| Dunnock                 | <i>Prunella modularis</i>      | 2011 | BAmb,<br>UKBAP                           | Bern2,    | N/A         |
| Bullfinch               | <i>Pyrrhula pyrrhula</i>       | 2011 | UKBAP                                    |           | N/A         |
| Goldcrest               | <i>Regulus regulus</i>         | 2011 | Bern2                                    |           | N/A         |
| Nuthatch                | <i>Sitta europaea</i>          | 2011 | Bern2                                    |           | N/A         |
| Siskin                  | <i>Spinus spinus</i>           | 2010 | Bern2                                    |           | N/A         |
| Tawny owl               | <i>Strix aluco</i>             | 2011 | BAmb,<br>CITESA                          | Bern2,    | N/A         |
| Starling                | <i>Sturnus vulgaris</i>        | 2013 | BD2.2, UKBAP                             |           | 700 m<br>SW |
| <b>Dartford warbler</b> | <i>Sylvia undata</i>           | 2008 | BD1, WCA1i                               | RLGLB.NT, | N/A         |
| Wren                    | <i>Troglodytes troglodytes</i> | 2011 | Bern2                                    |           | N/A         |
| <b>Redwing</b>          | <i>Turdus iliacus</i>          | 2011 | BD2.2,<br>WCA1i                          | BRed,     | N/A         |
| Song thrush             | <i>Turdus philomelos</i>       | 2011 | BD2.2, UKBAP                             |           | N/A         |
| <b>Fieldfare</b>        | <i>Turdus pilaris</i>          | 2014 | BD2.2,<br>WCA1i                          | BRed,     | 375 m S     |
| <b>Barn owl</b>         | <i>Tyto alba</i>               | 2014 | Bern2,<br>WCA1i                          | CITESA,   | 375 m S     |
| Lapwing                 | <i>Vanellus vanellus</i>       | 2008 | BD2.2,<br>CMS_AEWA-A2,<br>Sect.41, UKBAP | CMS_A2,   | N/A         |

<sup>1</sup> BAmb = Included in Birds of Conservation Concern (BoCC) Amber List; BD2.1 = Birds Directive Annex 2.1; Bern2 = Bern Convention Appendix 2; BRed = Included in Birds of Conservation Concern (BoCC) Red List; CITESA = EC CITES Annex A; CMS\_A2 = Convention on Migratory Species, Annex 2; CMS\_AEWA-A2 = Convention on Migratory Species, African-Eurasian Waterbirds Agreement - Annex II; RLGLB.NT = IUCN (1994) - Lower risk - near threatened; SBAP = Suffolk BAP Priority Species; Sect.41 = Listed on NERC Act Section 41; UKBAP = UK Biodiversity Action Plan Priority Species; WCA1i = Listed on Schedule 1 of the Wildlife and Countryside Act (1981, as amended); WCA1ii = Listed on Schedule 5 (Schedule 1 Part 2) of the Wildlife and Countryside Act (1981, as amended).

<sup>2</sup> Inclusion of place name indicates the record is not sufficiently precise to accurately calculate the distance of this from the site.

### Mammals

3.1.13 Badger *Meles meles*: SBIS holds one record within the search area c.725 m south-west. Badgers are protected under the Protection of Badgers Act 1992.

3.1.14 Bats: SBIS holds only one bat record within the search area as detailed below in Table 3.7. No roosts were identified within the search area. All UK bat species are protected under the Conservation of Habitats and Species Regulations (2010) as amended and under the Wildlife and Countryside Act (1981) as amended. Various bat species are classified priority species under Section 41 of the NERC Act (2006).



**Table 3.7: Summary of bat records within 1 km**

| Common name      | Scientific name         | Date | Conservation status <sup>1</sup>   | Location <sup>2</sup> |
|------------------|-------------------------|------|--|-----------------------|
| Brown long-eared | <i>Plecotus auritus</i> | 2014 | Bern2, CMS_A2, CMS_EUROBAT S-A1, HabRegs2, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a | N/A                   |

<sup>1</sup> Bern2 = Bern Convention Appendix 2, CMS\_A2 = Convention on Migratory Species, Appendix 2, CMS\_EUROBATS-A1 = Convention on Migratory Species, EUROBATS - Annex I, HabRegs2 =, The Conservation (Natural Habitats, &c.) Regulations 2010 (Schedule 2), HSD2p = Habitats Directive Annex 2 - priority species, HSD4 = Habitats Directive Annex 4, Sect.41, UKBAP = Priority Species, WCA5/9.4b = Wildlife and Countryside Act 1981 (Schedule 5 Section 9.4b), WCA5/9.4c = Wildlife and Countryside Act 1981 (Schedule 5 Section 9.4c), WCA5/9.5a = Wildlife and Countryside Act 1981 (Schedule 5 Section 9.5a).

<sup>2</sup> N/A indicates the record is not sufficiently precise to accurately calculate the distance of this from the site.

3.1.15 Dormouse *Muscardinus avellanarius*: SBIS holds no record of dormouse within the search area.

3.1.16 Otter *Lutra lutra* and water vole *Arvicola amphibius*: SBIS holds one record of an otter road kill with the search area, c.950 m south-west along the A1152 road. No records were returned for water vole. Otters are protected under the Conservation of Habitats and Species Regulations (2010) as amended and under the Wildlife and Countryside Act (1981) as amended. Otter is classified as a priority species under Section 41 of the NERC Act (2006).

3.1.17 Hedgehog *Erinaceus europaeus*: SBIS holds 54 records of hedgehog within the search area. The closest record is located c.175 m south-west. Hedgehog is classified as a priority species under Section 41 of the NERC Act (2006).

3.1.18 Brown Hare *Lepus europaeus*: SBIS holds no record of brown hare within the search area.

#### *Non-native invasive plant species*

3.1.19 SBIS holds no records of Schedule 9 plant species within the search radius.

## **3.2 Phase 1 Habitat Survey**

3.2.1 Seven habitats were identified during the Phase 1 Habitat Survey. Further details of each habitat and their significance on-site are provided below and presented on the Phase 1 Habitat Map within Appendix C. Alpha-numeric codes below cross-refer to the JNCC Phase 1 Habitat Survey habitat classifications<sup>8</sup>.

<sup>8</sup> Joint Nature Conservation Committee (JNCC) (2010) Handbook for Phase 1 habitat survey - a technique for environmental audit.

*Broadleaved semi-natural woodland – A.1.1.1*

- 3.2.2 The immediate site environs feature broadleaved woodland to the north and west. The woodland is comprised from common deciduous species of varying age. Sycamore *Acer psuedoplatanus*, beech *Fagus sylvatica* and English oak *Quercus robur* are dominant amongst the canopy layer in the woodland to the north, and sycamore and ash *Fraxinus excelsior* in the stand to the west.
- 3.2.3 The understorey and field layers beneath feature scattered bramble *Rubus fruticosus* agg, hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, ivy *Hedera helix*, blackthorn *Prunus spinosa*, elder *Sambucus nigra* and nettle *Urtica dioica*. The woodland also encompasses a small area of Scot's pine *Pinus sylvestris* to the immediate north of the site.

*Dense & scattered scrub – A.2.1 / A.2.2*

- 3.2.4 The north-western site corner features dense bramble beside the woodland edge. The southern boundary also supports dense and scattered sections of bramble, along with occasional field maple *Acer campestre*, sycamore, blackthorn *Prunus spinosa*, and dog rose *Rosa canina* along. Young / semi-mature trees (field maple, sycamore and whitebeam *Sorbus aria*) also feature amongst the scrub along the field edge.

*Scattered broadleaved trees & dry ditch – A.3 & J.2.6*

- 3.2.5 The eastern boundary supports a line of semi-mature lime *Tilia cordata* trees with scattered blackthorn and dog rose underneath. No structural damage or decay was noted for roosting bats or saproxylic invertebrates such as stag beetle *Lucanus cervus*. The field boundary also features a dry ditch which runs parallel for the entire length.

*Arable & improved grassland - J.1.1 & B.4*

- 3.2.6 The majority of the site is made up of an arable field which supported a maize crop at the time of survey. The field margins feature an improved grassland sward with occasional tall ruderal species intermixed.
- 3.2.7 The sward is dominated by common grasses such as cock's foot *Dactylis glomerata* and perennial rye grass *Lolium perenne*. Other recorded species include common bent *Agrostis capillaris*, false-oat grass *Arrhenatherum elatius*, meadow buttercup *Ranunculus Acris*, broad-leaved dock *Rumex obtusifolius*, white clover *Trifolium repens* and nettle.

SECTION 4

**DISCUSSION AND RECOMMENDATIONS**

## 4 DISCUSSION AND RECOMMENDATIONS

### 4.1 Statutory Designated Sites

4.1.1 Eight sites of European importance and one site of national importance were identified within the search area. In accordance with the SSSI Impact Risk Zones detailed on Natural England's Magic website<sup>9</sup>, the threshold for any residential development at the proposed site is set at 50 units.

4.1.2 At present, the proposed number of units exceeds this limit at 75 units. The Local Planning Authority (LPA) will therefore need to contact NE on this proposal regarding potential developmental impacts on the respective SSSI. The magnitude of the resulting impacts is considered to be lessened to some degree, but by no means altogether, by the following factors:

- The distance separating the proposed development from the designated sites (1.65 km south and c.5 km east / south east / south-west);
- The presence of existing residential development in-between which forms the existing settlement boundary of Rendlesham village; and
- The absence of hydrological linkages in-between.

4.1.3 The Conservation of Habitats and Species Regulations 2010 (as amended) require an HRA to be undertaken for any plan or project that may have a "likely significant effect" on a European site. The exception is where the plan or project is directly connected with or necessary to the management of the site for the purpose of conserving its features. European sites (also referred to as Natura 2000 sites) comprise Special Areas of Conservation (SAC)<sup>10</sup> and Special Protection Areas (SPA)<sup>11</sup>. It is also Government policy that plans and projects that may affect Ramsar sites (wetlands of international importance) are also subject to HRA.

4.1.4 The HRA is undertaken by a "competent authority" (CA), which can be any public decision-making body that is responsible for granting consents and licences. In the case of planning applications, it is the LPA that fulfils that role. The CA is required to consult with Natural England as part of the process. The applicant is required to provide the necessary information for the CA to be able to undertake the HRA.

4.1.5 The criteria for determining if a development proposal would have a likely significant effect, and require assessment, are based on the characteristics of the relevant European site and the objectives set by Natural England. The main factors to consider are:

- Development on or close to the European site destroying part or all of the site, or changing the ecological functioning of the site (e.g. disrupting water flows or migration routes, or causing damaging levels of air pollution);

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<sup>9</sup> [www.magic.gov.uk](http://www.magic.gov.uk) accessed 15/11/2017.

<sup>10</sup> Designated under European Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna ("the Habitats Directive" 2009/147/EC).

<sup>11</sup> Classified under European Council Directive 2009/147/EC on The Conservation of Wild Birds ("the Wild Birds Directive").

- Increased public recreation, causing disturbance to birds, damage to vegetation, increased littering / flytipping, or leading to management compromises (e.g. grazing being restricted);
- Reduction in water levels or flow, from increased water demand in the District requiring greater water abstraction; and
- Reduction of water quality, from increased discharges of sewage and surface water drainage, or from pollution incidents, either during or after construction.

## 4.2 Non-Statutory Designated Sites

4.2.1 One non-statutory designed site was highlighted within the search area. Due to the distance of the CWS from the site there are no significant direct or indirect impacts that can be foreseen apart from a slight increase in recreational usage. However, in context of the scale of the proposed development and limited sensitivity of the CWS, the potential adverse impact is not considered to be of a significant magnitude.

## 4.3 Notable Habitats

4.3.1 The deciduous woodland within the immediate site environs would be subject to a range of impacts including direct and indirect disturbance, and potential pollution, degradation and damage. In the absence of mitigation, these impacts will be adverse, temporary - short- term, direct and indirect, of minor magnitude and significant at the local level.

### Generic Mitigation to Avoid / Reduce Impacts

4.3.2 The following measures should be implemented to avoid / minimise any adverse effects on the adjacent area of deciduous woodland and also other habitats which are not otherwise considered important but are still important components of the local green infrastructure:

- Best practice methods should be followed throughout;
- Work compounds and access tracks etc. will not be located in, or adjacent to, areas that maintain habitat value or are within areas supporting protected species;
- Site fencing will be used to prevent access to areas outside working areas, particularly in areas adjacent to features of interest / value;
- Procedures will be implemented to address site safety issues, including storage of potentially dangerous materials;
- Briefings and instruction will be given to contractors regarding the biodiversity issues associated with the site; and
- A sensitive lighting scheme will be implemented to avoid lighting of sensitive habitat areas and to prevent disturbance of any protected or notable species such as birds and bats.

## 4.4 Protected and Notable Species

4.4.1 The results of the desk study and Phase 1 Habitat Survey highlighted the potential presence of several protected / notable species as expanded upon below.

*Flora & fungi*

- 4.4.2 No protected / notable flora or fungi are likely to be present or impacted and no further survey is required.

*Invertebrates*

- 4.4.3 The majority of the site is in arable production and is unsuitable for invertebrates. The woodland environs may provide suitable dead wood habitat for specialised saproxylic species such as the S41 listed stag beetle *Lucanus cervus*, although none was noted within the immediate environs at the time of survey. The overall potential developmental impact in terms of disturbance is considered no more than adverse, of low magnitude and significant only at a localised site level.
- 4.4.4 As a precaution, the artificial lighting scheme for the development should be designed to reduce its impact on invertebrates even though there is no evidence that species of conservation concern would be affected. The inclusion of an attenuation basin, a proportion of species rich grassland, and flowering native / ornamental shrubs in the final scheme of known value to invertebrates would achieve a minor beneficial impact.

*Herpetofauna*

- 4.4.5 Amphibians: The risk of GCN presence on-site is considered extremely low due to the arable characteristic of the site and the surrounding low pond density (three ponds identified from OS maps and aerial photographs within 500 m although none within 250 m).
- 4.4.6 This conclusion is supported by the rapid risk assessment tool in Natural England's GCN mitigation licencing method statement (Natural England, Form WML-A14-2 version December 2015). The proposed development results in a 'Green: Offence Highly Unlikely' grade due to the overall size and number of ponds surrounding the site. As a result, this indicates the development is of such a type, scale, and location that it is highly unlikely to result in a legislative offence being committed.
- 4.4.7 Reptiles: The surrounding woodland provides suitable habitat for this species group. The local green infrastructure also indicates the wider site environs are capable of supporting viable reptile populations.
- 4.4.8 The majority of the site in arable production, is unsuitable for reptiles due to the lack of invertebrates and dense low-down shelter derived from the crop characteristics. Annual cultivation is likely to remove any physical structures suitable for reptiles. The impact of construction on arable land is likely to have no impact upon reptile habitat.
- 4.4.9 Precautionary mitigation is recommended for those areas earmarked for development (i.e. for access and egress purposes and visibility splays) along the eastern and southern boundaries off from Tidy Road and Garden Square:
- All staff working on site should receive a toolbox talk regarding reptiles.

- Clearance of vegetation and any excavation works should be undertaken when the species are active and can readily disperse. This should also be timed around the nesting bird season unless an ecologist is present to check for the presence / absence of active nests. Clearance works should therefore be timed between August and September although can extend to April and September if an ecologist can verify the absence of active nests from the works footprint.
- Habitat displacement / manipulation should be undertaken using a staged approach to allow reptiles to naturally move out of the area. Accordingly, this displacement / manipulation should consist of the gradual removal of suitable habitat working towards the nearby woodland areas using hand held tools (i.e. a strimmer). The vegetation should be reduced to approximately 150 mm in height and left for 48 hours to allow reptiles present to disperse naturally to adjacent more suitable habitat. After this dispersal period, the works footprint should be inspected by a suitably qualified ecologist and followed by a second vegetation cut, reducing the vegetation to ground height. The vegetation should undergo regular strimming prior to, and during, construction works to ensure that no reptiles re-colonise the site.
- Should any animals be found during site works, work should be temporarily stopped in the immediate area until it is declared safe to continue by an ecologist.

#### *Birds*

- 4.4.10 Due to the planting of cereal crops on-site, there is potential for breeding habitat of farmland birds such as skylark to be lost through the proposed development. In order to mitigate for this potential adverse impact, skylark plots are recommended off-site in order to maintain / enhance the carrying capacity of skylark in the local area.
- 4.4.11 Skylark plots can either be created by switching the drill off whilst drilling winter cereal crops, or by drilling the crop as normal and spraying out the plots before the end of December. Two skylark plots per hectare are recommended across the winter cereal area. The plots should be a minimum of 16 m square in area and 3 m wide (e.g. 4 m x 4 m, or 3 m x 6 m, depending on the width of drill if they are left undrilled).
- 4.4.12 The site margins and adjacent woodland afford nesting and foraging habitat for common species associated with mixed rural and urban landscapes. The woodland also provides potential habitat opportunities for overwintering species of conservation concern such as redwing *Turdus iliacus* and fieldfare *Turdus pilaris*.
- 4.4.13 The construction phase will result in an increase in human disturbance, dust, noise, and vibration resulting in the potential disturbance to nesting and foraging activity in the immediate woodland / scrub environs. New access points visibility splays will result in minor habitat loss. The potential unmitigated impact in terms of disturbance and habitat loss is considered adverse, of low magnitude and significant only at a site level.

4.4.14 In order to offset the minor adverse impacts of the proposed development, basic mitigation recommendations for nesting and foraging birds are detailed below:

- Any vegetation removal (i.e. for new access routes and/or visibility splays), or actions that will impact upon vegetation, should be carried out outside of the peak nesting bird season. Works must also adhere to reptile mitigation if clearing to ground (i.e. below 150 mm height).
- If works cannot be timed outside of the nesting season, they should only be carried out during this period if preceded by a survey to identify any active nests or nests being built. Temporary exclusion zones will be set up to be placed around them until such time that the dependent young have fledged and left the area. The distance of which would depend on the species recorded. The peak bird breeding season extends between March and August (inclusive), although active nests can theoretically be encountered at any time of the year.
- New and replacement plantings within the proposed development should constitute at least 50% native species by area. Ornamental species should include a preponderance of species of known value to wildlife, such as fruiting / berrying species, of species providing a good nectar source and hence attractive to insects. All planting should be structurally diverse with areas of dense scrub as well as more open areas.
- Artificial lighting should be standardised within the development plans where it cannot be otherwise reasonably avoided. In instances where it is deemed necessary, it should be designed and positioned to minimise any adverse impacts on the retained surrounding vegetation. Such measures include the use of hoods and cowls and directional lighting away from adjacent woodland, trees and scrub.

4.4.15 The overall impact can be improved by creating green buffer zones along the northern, eastern and western boundaries of the proposed site which incorporate a scalloped scrub edge and species-rich grassland. The inclusion of Schwegler 16s swift boxes (or suitable alternative) and/or Schwegler 9A house martin boxes on 10% of the proposed dwellings would also result in a net bio-diversity benefit.

#### *Mammals*

4.4.16 Badger: The woodland site environs provide suitable habitat although no signs such as snuffle holes or latrines were discovered around the site perimeter during the Phase 1 survey. Basic mitigation is recommended to accommodate the low risk of presence on-site during the construction phase:

- All site excavations and trenches must either be covered overnight or have a basic ramp fitted during the construction phase to enable any animals that fall within to easily find means of escape.

4.4.17 The provision of suitable landscaping features such as an attenuation basin, wildflower meadow (cut on either an annual / biennial basis), and native shrub planting would represent a net biodiversity benefit.



- 4.4.18 Bats: The potential impact upon roosting bats is considered negligible as there are no buildings or trees within the immediate zone of influence that are structurally suitable for roosting purposes.
- 4.4.19 In terms of disturbance to bat activity, the construction of the development would lead to an increase in human activity, dust, noise, vibration and light resulting in the potential for disturbance to local bat activity. However, it is noted that the construction works will (mainly) be undertaken during daylight hours when bats are inactive and, although there may be increased levels of lighting, the security lighting will be limited. Therefore, unmitigated, it is considered probable that potential impacts due to disturbance to bat activity will be adverse, of low magnitude and significant at a site level.
- 4.4.20 In order to offset the minor adverse impact of the proposed development, basic mitigation recommendations for foraging / commuting bats are detailed below.
- Works should be undertaken during daylight hours and artificial lighting should be avoided wherever possible in order to minimise the potential impact upon bat activity and disturbance. Light spillage onto any linear features such as the vegetated boundaries should also be avoided throughout the construction and operation development phases by the use of directional lighting (i.e. the use of hoods and / or cowls).
- 4.4.21 The overall impact can be improved with the inclusion of bat Schwegler 1 FE bat boxes (or suitable alternative) on 10% of the proposed dwellings. These features would represent a net biodiversity gain as the site currently supports no roosting opportunity.
- 4.4.22 Dormouse: Although Suffolk is known to support viable populations, the Suffolk Coastal District is currently located outside the known geographic range within the county<sup>12</sup>. No records were furthermore returned from SBIS and no previous EPSL applications were noted within a 10 km radius on MAGIC. Therefore, although the wooded environs appear to support suitable habitat, the species is likely absent from the immediate and wider site environs. No further survey and/or mitigation is considered necessary.
- 4.4.23 Otter and water vole: There is no suitable aquatic habitat for either species within the immediate site surrounds. The impact upon these species is considered negligible.
- 4.4.24 Hedgehog: Presence should be assumed in the woodland / scrub environs of the site. Any vegetation clearance (i.e. for new access and/or visibility splays) should be done with due consideration for their likely presence in order to achieve a neutral impact. Any new fences / walls / gates installed should also be made hedgehog friendly by adopting one of the following measures: 1) removing a brick at the base of a wall; 2) cutting a small hole in the base of a fence; and 3) digging a channel underneath a wall, fence or gate. The provision of new areas of species-rich grassland would represent a net biodiversity benefit.

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<sup>12</sup> Paul Bright, Pat Morris and Tony Mitchell-Jones (2006) The dormouse conservation handbook Second edition. ISBN 1 85716 219 6.

4.4.25 Brown hare: The arable habitat favoured by this species would be entirely lost to the development. The impact is likely to be a minor negative due to the low numbers evident on site, and the widespread availability of suitable habitats for foraging and breeding in the wider area.

*Non-native invasive plants*

4.4.26 None were recorded during the Phase 1 Habitat Survey. No further action is therefore considered necessary.

## 4.5 Recommendations

4.5.1 The following recommendations detailed within Table 4.1 are based on the information derived from the desk study and Phase 1 Habitat Survey. The information provided in this report has been used to inform the detailed design, with the aim of minimising impacts on the ecological receptors identified as far as possible.

**Table 4.1: Recommendations**

| Ecological receptor                      | Recommendations  | Programme / timing constraints                        |
|--|--|---|
| Statutory sites of European significance | The Conservation of Habitats and Species Regulations 2010 (as amended) require an HRA to be undertaken for any plan or project that may have a "likely significant effect" on a European site.   | Applicable all year round.                            |
| Deciduous woodland                       | <ul style="list-style-type: none"> <li>• Best practice methods should be followed throughout;</li> <li>• Work compounds and access tracks etc. will not be located in, or adjacent to, areas that maintain habitat value or are within areas supporting protected species;</li> <li>• Site fencing will be used to prevent access to areas outside working areas, particularly in areas adjacent to features of interest / value;</li> <li>• Procedures will be implemented to address site safety issues, including storage of potentially dangerous materials;</li> <li>• Briefings and instruction will be given to contractors regarding the biodiversity issues associated with the site; and</li> <li>• A sensitive lighting scheme will be implemented to avoid lighting of sensitive habitat areas and to prevent disturbance of any protected or notable species such as birds and bats.</li> </ul> | Applicable all year round.                            |
| Invertebrates                            | As a precaution, the artificial lighting scheme for the development should be designed to reduce its impact on invertebrates even though there is no evidence that species of conservation concern would be affected.  | Applicable all year round.                            |
| Reptiles                                 | Precautionary mitigation is recommended for those areas earmarked for development (i.e. for access and egress purposes and visibility splays) along the  | August - September (time around nesting bird season). |

|              |   |   |
|--------------|---|---|
|              | <p>eastern and southern boundaries off from Tidy Road and Garden Square:</p> <ul style="list-style-type: none"> <li>• All staff working on site should receive a toolbox talk regarding reptiles.</li> <li>• Clearance of vegetation and any excavation works should be undertaken when the species are active and can readily disperse. This should also be timed around the nesting bird season unless an ecologist is present to check for the presence / absence of active nests. Clearance works should therefore be timed between August and September although can extend to April and September if an ecologist can verify the absence of active nests from the works footprint.</li> <li>• Habitat displacement / manipulation should be undertaken using a staged approach to allow reptiles to naturally move out of the area. Accordingly, this displacement / manipulation should consist of the gradual removal of suitable habitat working towards the nearby woodland areas using hand held tools (i.e. a strimmer). The vegetation should be reduced to approximately 150 mm in height and left for 48 hours to allow reptiles present to disperse naturally to adjacent more suitable habitat. After this dispersal period, the works footprint should be inspected by a suitably qualified ecologist and followed by a second vegetation cut, reducing the vegetation to ground height. The vegetation should undergo regular strimming prior to, and during, construction works to ensure that no reptiles re-colonise the site.</li> </ul> | <p>Can also extend April - September if an ecologist can verify the absence of active nests from the works footprint.</p> |
| <p>Birds</p> | <ul style="list-style-type: none"> <li>• Any vegetation removal, or actions that will impact upon vegetation, should be carried out outside of the peak nesting bird season.</li> <li>• If works cannot be timed outside of the nesting season, they should only be carried out during this period if preceded by a survey to identify any active nests or nests being built. Temporary exclusion zones will be set up to be placed around them until such time that the dependent young have fledged and left the area. The distance of which would depend on the species recorded. The peak bird breeding season extends between March and August (inclusive), although active nests can theoretically be encountered at any time of the year.</li> <li>• New and replacement plantings within the proposed development should constitute at least 50% native species by area. Ornamental species should include a preponderance of species of known value to wildlife, such as fruiting / berrying species, of species providing a good nectar source and hence</li> </ul>   | <p>Peak bird breeding season extends between February and August (inclusive).</p>   |

|          |  |                            |
|----------|--|----------------------------|
|          | attractive to insects. All planting should be structurally diverse with areas of dense scrub as well as more open areas.   |                            |
| Badger   | All site excavations and trenches must either be covered overnight or have a basic ramp fitted during the construction phase to enable any animals that fall within to easily find means of escape.  | Applicable all year round. |
| Bats     | Works should be undertaken during daylight hours and artificial lighting should be avoided wherever possible. Where this is not possible (i.e. during certain construction activities), light spillage onto any linear features should be avoided by the use of directional lighting (i.e. the use of hoods and / or cowls). | Applicable all year round. |
| Hedgehog | Site clearance to be undertaken with due consideration for the likely presence of this species.  | Applicable all year round. |

APPENDIX A

**LEGISLATION AND POLICY CONTEXT**

## **LEGISLATION AND POLICY CONTEXT**

### **Introduction**

The following Appendix sets out details of legislation within the UK and how this legislation applies to particular species groups. The key pieces of international and national legislation are described after which specific legislation pertaining to species or species groups are described in turn.

### **International and national legislation**

#### **EC Habitats Directive**

In 1992 the then European Community adopted Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, known as the Habitats Directive. The main aim of the Habitats Directive is to promote the maintenance of biodiversity by requiring member states to introduce protection for these habitats and species of European importance. The mechanism for protection is through the designation of Special Areas of Conservation (SACs), both for habitats and for certain species listed within Annex II. There are a number of species listed within Annex II of the Habitats Directive that are present within the UK; these include four lower plant species, nine higher plant species, six species of molluscs, six species of arthropods, eight species of fish, two species of amphibian, and nine species of mammal.

#### **The Bern Convention**

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) came into force in 1982. The principal aims of the Convention are to ensure the conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix 3. To this end the Convention imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1000 wild animal species.

#### **Bonn Convention**

The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention or CMS) was adopted in Bonn, Germany in 1979 and came into force in 1985. Contracting Parties work together to conserve migratory species and their habitats by providing strict protection for endangered migratory species (listed in Appendix 1 of the Convention), concluding multilateral agreements for the conservation and management of migratory species which require or would benefit from international cooperation (listed in Appendix 2 of the Convention), and by undertaking co-operative research activities.

#### **Convention on Biological Diversity**

The Convention on Biological Diversity (Biodiversity Convention or CBD) was adopted at the Earth Summit in Rio de Janeiro, and entered into force in December 1993. It was the first treaty to provide a legal framework for biodiversity conservation. Contracting Parties are required to create and enforce national strategies and action plans to conserve, protect and enhance biological diversity.

**Wildlife and Countryside Act 1981 (as amended)**

The Wildlife and Countryside Act 1981 (as amended) is the principle mechanism for the legislative protection of wildlife in Great Britain. However it does not extend to Northern Ireland, the Channel Islands or the Isle of Man. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats (the 'Bern Convention') and the European Union Directives on the Conservation of Wild Birds (79/409/EEC) and Natural Habitats and Wild Fauna and Flora (92/43/EEC) are implemented in Great Britain.

**Conservation of Habitats and Species Regulations 2010, as amended**

In the UK the Council Directive 92/43/EEC has been transposed into national laws by means of the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended), and the Regulations (Northern Ireland) 1995 (as amended). The Regulations came into force on 30 October 1994, and have been amended several times. Subsequently the Conservation of Habitats and Species Regulations 2010 was created which consolidates all the various amendments made to the 1994 Regulations in respect of England and Wales and is commonly known as the 'the Habitats Regulations'. In Scotland the Habitats Directive is transposed through a combination of the Habitats Regulations 2010 (in relation to reserved matters) and the 1994 Regulations. The Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) transpose the Habitats Directive in relation to Northern Ireland.

The Regulations contain five Parts and four Schedules, and provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.

**Other Legislation****Wild Mammals (Protection) Act 1996**

The Act protects wild mammals from malicious or intentional harm.

Protection of Badgers Act 1992.

**Species and Habitat Specific Legislation****Plants**

Wild plants are protected under Section 13 of the Wildlife and Countryside Act 1981 (as amended). It prohibits the unauthorised intentional uprooting of any wild plant species and forbids any picking, uprooting or destruction of plants listed on Schedule 8 of which there are over 150.

The Conservation of Habitats and Species Regulations 2010 have nine plants listed within Annex IV these are; shore dock, (*Rumex rupestris*), killamey fern (*Trichomanes speciosum*), early gentian (*Gentianella anglica*), lady's slipper (*Cypripedium calceolus*), creeping marshwort (*Apium repens*), slender naiad (*Najas flexilis*), fen orchid (*Liparis loeselii*), floating-leaved water plantain (*Luronium natans*), and yellow marsh saxifrage (*Saxifraga hirculus*). It is an offence to deliberately pick, collect cut, uproot or destroy any protected plant, or keep, transport, sell, or exchange, any live or dead such plant species, this applies to all stages of its life cycle.

## Invasive Species

Schedule 9, Section 14 of the Wildlife and Countryside Act (1981, as amended) prohibits the introduction into the wild of any species that is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state, or any species of the 69 plants listed on Schedule 9.

The frequently encountered invasive species within proposed development sites include Japanese knotweed (*Fallopia japonica*); Giant hogweed (*Heracleum mantegazzianum*); Himalayan balsam (*Impatiens glandulifera*); Floating pennywort (*Hydrocotyle ranunculoides*); New Zealand pygmyweed (*Crassula helmsii*); Rhododendron (*Rhododendron ponticum*); and certain hybrids of the above, some species may be native yet are listed for conservation purposes.

Plant or soil material contaminated by Japanese knotweed that is to be discarded is considered to be a 'controlled waste' under the Environmental Protection Act 1990 (EPA 1990). It is an offence to deposit, treat, keep, or dispose of controlled waste without a licence. Furthermore knotweed that has been cut down and removed must be received by an authorised person to be disposed of correctly. A licence can be obtained from the Environment Agency (EA). The release or planting of a listed species in the wild can be permitted under a licence granted by the relevant statutory body.

## Fungi

There are five species of fungi protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). These include the sandy stilt puffball (*Battarrea phalloides*), royal bolete (*Boletus regius*), and the hedgehog fungus (*Hericium erinaceus*). It is an offence to pick, uproot, trade in, or possess for the purpose of trade, any species listed under schedule 8.

## Invertebrates

A number of invertebrates such as stag beetles (*Lucanus cervus*), silver studded blue butterfly (*Plebejus argus*) or white letter hairstreak (*Stymondia w-album*) are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended). This legislation makes it illegal to intentionally kill, injure, or take a protected invertebrate, or to damage, destroy, or obstruct access to any structure or place used for shelter or protection by such a species; and disturb any protected species occupying such a structure or place.

Three invertebrates are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2010, the large blue butterfly (*Maculinea arion*), fisher's estuarine moth (*Gortyna borelii lunata*), and lesser whirlpool ram's-horn snail (*Anisus vorticulus*). It is an offence deliberately to kill, capture, or disturb a listed species, or to damage or destroy the breeding site or resting place of such an animal.

## Amphibians

There are four widespread amphibian species, common frog (*Rana temporaria*), common toad (*Bufo bufo*), palmate newt (*Lissotriton helveticus*), and smooth newt (*Lissotriton vulgaris*). All of the four widespread species receive partial protection under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) making it an offence to offer them for sale or trade.



## Great Crested Newts, Natterjack Toads and Pool Frogs

Great crested newts (*Triturus cristatus*) (GCN) and natterjack toads (*Epidalea calamita*) are fully protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and the Conservation of Habitats and Species Regulations 2010. Reintroduced populations of 'native' pool frogs (*Pelophylax lessonae*), currently restricted to one site in Norfolk, also receive the same protection. It is illegal to possess a protected species (alive or dead), deliberately capture, injure or kill, to intentionally or recklessly disturb, or to deliberately take or destroy the eggs of these protected species. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a breeding or resting place used by these protected species'. All life stages of each species' are afforded the same level of protection.

In order to undertake any activity which would otherwise result in any of the above offences being committed, it may be necessary to obtain a European Protected Species (EPS) licence from the relevant statutory body (Natural England (NE), Countryside Council for Wales (CCW) or Scottish Natural Heritage (SNH)). It is possible to undertake surveys which would otherwise involve unlawful acts, such as disturbance, by obtaining a survey licence which provides authorisation for scientific and educational purposes.

## Reptiles

The four common reptile species, adder (*Vipera berus*), grass snake (*Natrix natrix*), common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*), are protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) against deliberate and / or intentional killing, injuring and trade.

If common reptile species are found to be present or considered potentially present within a proposed development site, mitigation will be required to ensure that no legislative offence will be committed.

## Birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act (1981, as amended). It is an offence to intentionally kill, injure, or take any wild bird, or take or destroy an egg of any wild bird. It is also an offence to damage or destroy the nest of any wild bird (whilst being built, or in use). Therefore, clearance of vegetation within the site boundary, or immediately adjacent to the site during the nesting season could result in an offence occurring under the Act. The bird breeding season can be taken to run between the 1 February and 31 August and is subject to geographical and seasonal factors. There are 79 species of birds listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

## Mammals

All wild mammals are protected under the Wild Mammals (Protection) Act 1996 from certain cruel acts; and for connected purposes. It is an offence to mutilate, kick, beat, nail, or otherwise inflict unnecessary suffering on any wild mammal.

## Badgers

Badgers (*Meles meles*) are protected under the Protection of Badgers Act (1992) and the Wildlife and Countryside Act (1981, as amended). As such it is an offence to wilfully take, kill,

injure or ill-treat a badger, or possess a dead badger or any part of a badger. Under the Act their setts are also protected against obstruction, destruction, or damage in any part.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett.

Work that causes significant disturbance to badgers or their setts is illegal without a development licence from the relevant statutory body (NE, CCW, SNH). As a precautionary principle, a buffer distance between a badger sett and the works will be determined, based upon guidance from an appropriately experienced ecologist. This buffer distance should be based upon the size and activity levels at the sett, the topography between the sett and the works and the nature of the works.

### **Bats**

All native UK bat species are fully protected by UK law under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) and Schedule 6 of the Wildlife and Countryside Act (1981, as amended), and under Schedule 2 of the Conservation of Habitats and Species Regulations 2010. It is illegal to deliberately capture, injure or kill a bat or to intentionally or recklessly disturb bats. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a breeding or resting place used by a bat.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH). Works or mitigation activities involving interference with bats or bat shelters must be carried out by a licensed bat worker.

### **Dormice**

Dormice (*Muscardinus avellanarius*) are protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations 2010. Under the current legislation it is illegal to intentionally or deliberately kill, injure or capture dormice, deliberately disturb dormice (whether in a nest or not); or to damage, or destroy dormouse breeding sites or resting places.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH).

### **Otters**

The otter (*Lutra lutra*) is fully protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2010. It is therefore illegal to deliberately capture, injure or kill an otter, possess an otter (dead or alive), or any other part of an otter, or intentionally or recklessly disturb otters. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a holt or other resting place used by an otter.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH).

### **Water voles**

Water voles (*Arvicola amphibius*) are protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended). It is an offence to possess, control or sell water voles or to intentionally kill, injure or take water voles. It is also an offence to intentionally or recklessly

damage, destroy or obstruct access to a place that water voles use for shelter or protection or disturb water voles whilst using such a place.

A licence is required for catching / handling water voles, or for field surveys that are intrusive or disturbing where the surveyor suspects' water voles are present. A licence can be obtained by applying to the relevant statutory body (NE, SNH, and CCW,). Please note that the legislation does not permit licences to be issued in relation to development of land.

### **Hedgerows**

The Hedgerows Regulations (1997) make provision for the protection of important hedgerows in England and Wales. The regulations affect hedgerows which are 20 m or more in length, or connected at both ends to another hedgerow of any length.

They relate to hedgerows which are on, or adjoining land used for the following purposes: agriculture or forestry; the breeding or keeping of horses, ponies or donkeys; common land; village greens; Sites of Special Scientific Interest (which include all terrestrial SACs, NNRs, and SPAs) and Local Nature Reserves. They do not include hedges that is attached to, or marking the boundaries of a private house.

It is an offence to intentionally or recklessly remove or cause or permit another person to remove a hedgerow or intentionally or recklessly remove, or cause or permit another person to remove, a hedgerow without planning permission or without prior notification to the local planning authority.

### **General Guidance on European Protected Species Licence Applications**

Should a European Protected Species (EPS) be found on a development site, and where best practice guidance either cannot be followed or is not applicable an EPS licence will be required. The licence permits operations that otherwise would be unlawful and fall outside the Good Practice Guidance, an application for such a licence should be made to the relevant statutory body (NE, CCW or SNH) before any works can proceed. It is also possible to obtain a general licence that may cover an area rather than applying in each individual case for a separate specific/individual licence.

Should the survey information be considered insufficient or the statutory body is not satisfied with the application, the licence application may be refused. This could potentially result in significant delays to a project, if not considered in time; however, early consideration of the potential presence of EPS on a site and an assessment of suitable mitigation measures to derogate such possibilities early in a project will negate this potential delay.

### **Biodiversity Policies**

The key national policies which influence the ecology and nature conservation assessments are the:




- National Planning Policy Framework (NPPF) (DCLG 2012);
- The UK Biodiversity Framework (2011-2020).



The NPPF replaces all Planning Policy Statements and sets out the government's national planning policy on the protection of biodiversity. One of the 12 core planning principal is that planning should contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value.

The UK Biodiversity Framework is an important framework that is owned, governed and implemented by the four UK countries, assisted by Defra and JNCC in their UK co-ordination capacities. Although differing in details and approach, the four UK countries have published strategies which promote the same principles and address the same global targets: joining-up our approach to biodiversity across sectors; and identifying, valuing and protecting our 'Natural Capital' to protect national well-being now and in the future. This new framework has been developed to enhance the recovery of priority habitats and species in England (published under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006), thereby contributing to the delivery of the England Biodiversity Strategy. The framework has been developed and endorsed by the England Biodiversity Group and wider partnership. It is the starting point for a more integrated approach to biodiversity conservation in England, building on the strengths of the former UK Biodiversity Action Plan (BAP) process and improving those areas where insufficient progress was being made.

APPENDIX B

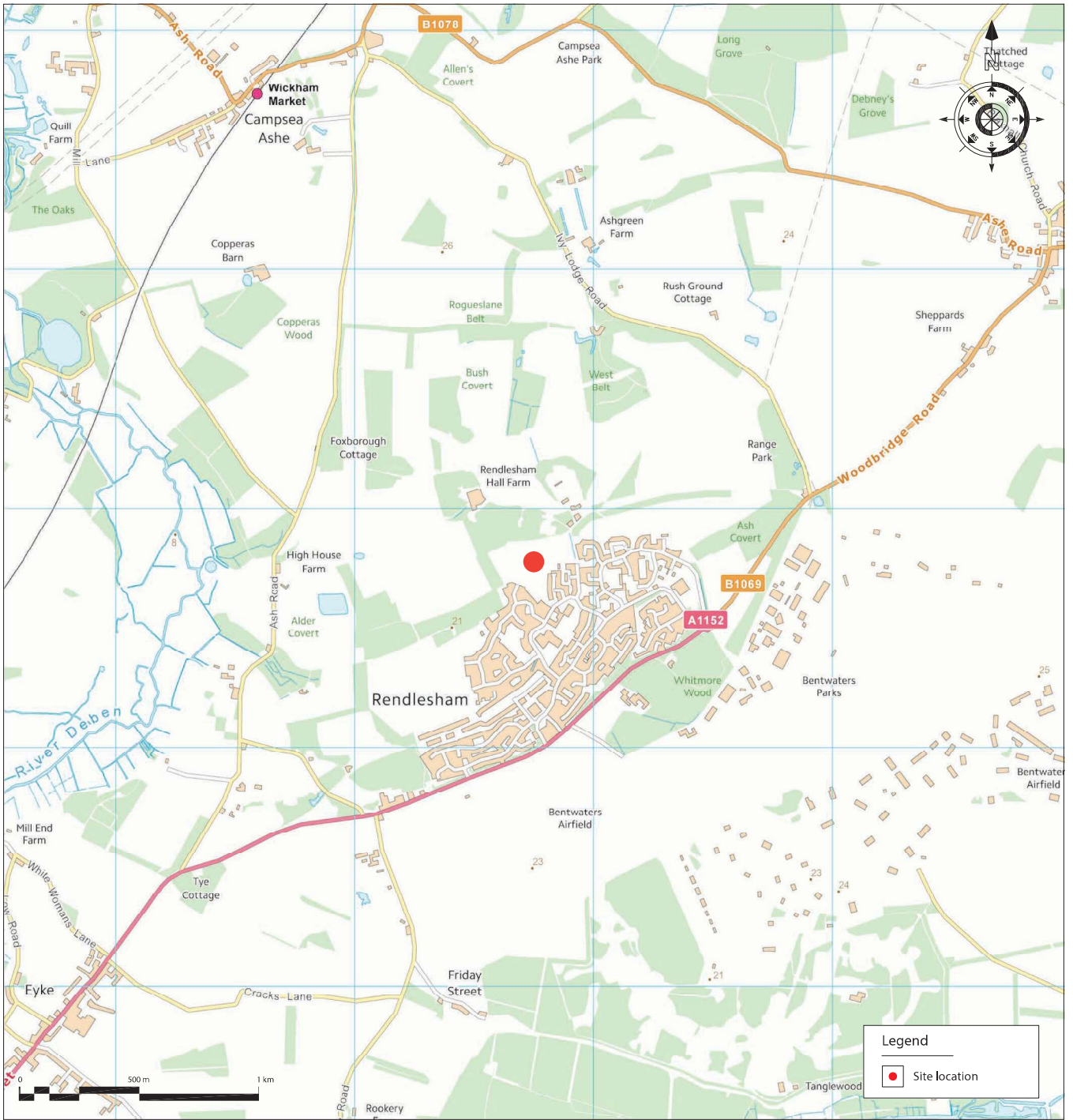
**TARGET NOTES**

| Target note No. | Target note  | Photograph   |
|-----------------|--|--|
| 1               | Semi-mature lime trees along eastern field boundary with scattered scrub and dry underneath.                             |    |
| 2               | Off-site young woodland with sparse field layer.   |   |
| 3               | Woodland boundary along northern edge – sycamore beech, E. oak canopy of different ages - varied structural composition. |  |

|   |  |   |
|---|--|---|
| 4 | Small area of Scot's pine within woodland north of the site - more open canopy with ruderal (nettle) underneath. |   |
| 5 | Sycamore / ash woodland along western boundary - open understorey.   |  |

APPENDIX C  
**FIGURES**





201720 Rendlesham

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Location Plan

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March 2018

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1:250000@A4







Legend

- Site location
- 14 km radius
- Ramsar
- SAC
- SPA

201720 Rendlesham

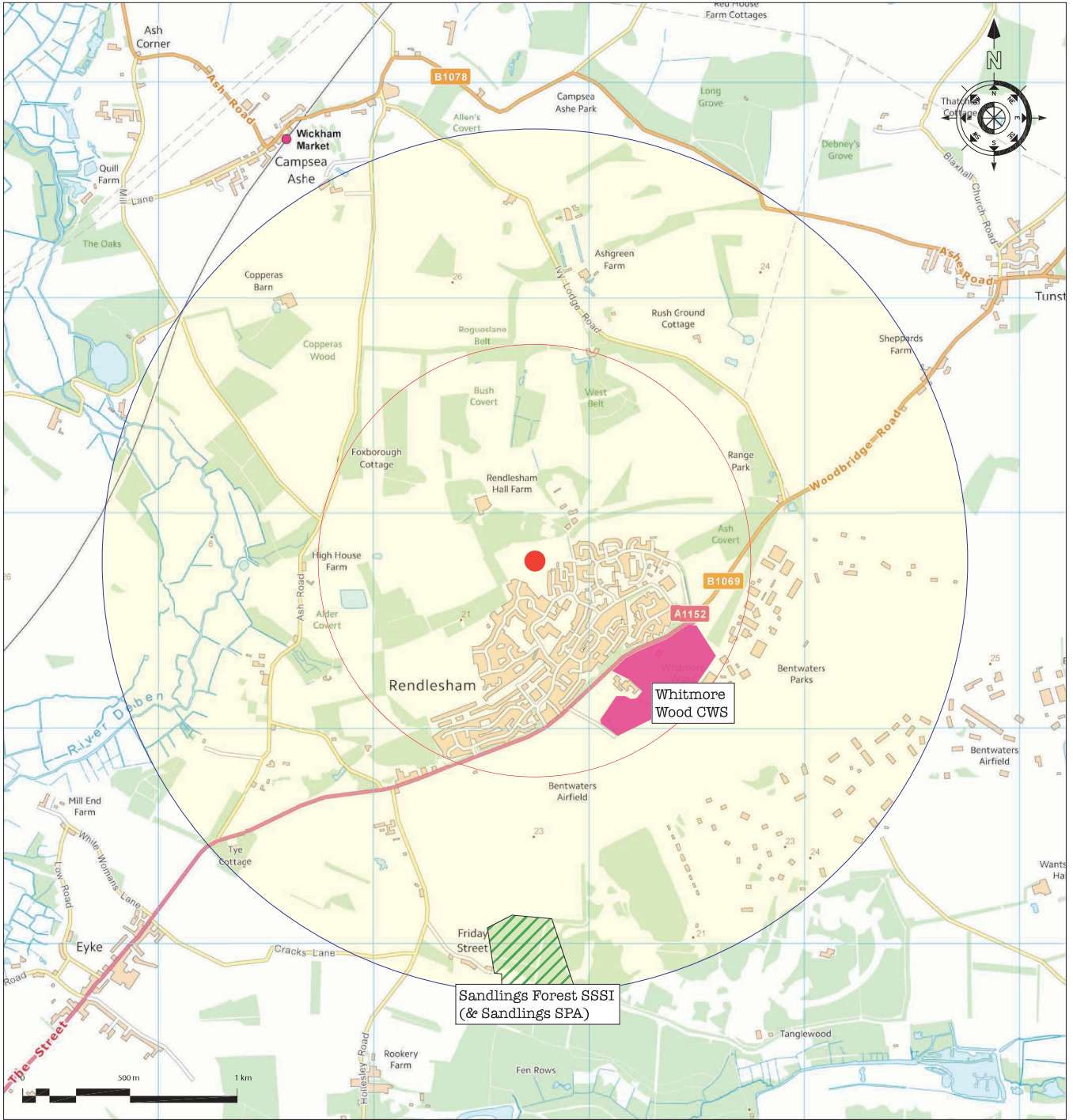
Statutory Designated Sites of International Significance

March 2018

1:250000@A4







**Legend**

- Site location
- 2 km radius
- 1 km radius
- SSSI
- CWS

201720 Rendlesham

Statutory Designated Sites of National, County and Local Significance & Non-Statutory Designated Sites

March 2018

1:250000@A4





Legend

- Site location
- 500 m radius
- Deciduous woodland
- No main habitat (additional habitats exist)



201720 Rendlesham

Habitats of Principal Importance

March 2018

1:250000@A4



201720 Rendlesham

Phase 1 Habitat Survey

March 2018

1:1250 @A3

