

## **8 Ecology and Nature Conservation – Figures and Appendices**

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### **Figures**

**Figure 8.1: Ecological Constraints and Zone of Influence**

**Figure 8.2: Phase 1 Habitat Plan**

**Figure 8.3: Habitat Connectivity**

**Figure 8.4: Additional Ecological Mitigation Land**

## **Appendix 8A: Previous Ecological Reports.**

The following Ecological Reports were submitted in support of the original ES chapter under Appendix 8A, and are referred to in this revised ES chapter:

- WSPE (2006) Phase 1 Habitat Survey
- WSPE (2005) Reptile Survey
- WSPE (2006) Dormouse Report
- WSPE (2006) Great Crested Newt Report
- WSPE (2006) Bat Report
- Colin Plant Associates (2006) Invertebrate walkover and scoping study

The following Ecological Reports and Supplementary Baseline Information have been submitted to MBC subsequent to the original planning application submission as part of the Regulation 19 responses, and are referred to in this revised ES chapter.

- WSPE (2007) Great Crested Newt Supplementary Report
- WSPE (2007) Breeding Bird Report
- WSPE (2008) Water Vole Survey Report
- WSPE (2008) Additional Bat Survey Report
- WSPE (2008) Supplementary Note on Watercourses and Associated Protected Species
- WSPE (2008) Invertebrate Report.

In addition, the following items of supplementary information have been submitted to MBC but are no longer relevant to the application (have been superseded by the revised masterplan and revisions to the ES chapter).

- WSPE (2008) Habitat Balance Sheet (now superseded)
- WSPE (2008) Supplementary Note on Additional Mitigation Land (now superseded)
- WSPE (2008) Supplementary Note on Revisions to the Ecological Environmental Statement (now superseded)
- WSPE (2008) Plan showing Key Ecological Mitigation and Connectivity (now superseded)

## **Appendix 8B: Consultation Responses (pre-submission)**

These were submitted as part of the original ES and are not repeated here.

## Appendix 8C: Sensitive Receptors and Potential Effects Scoped Out of this Assessment

**Table 1: Habitats and Species Scoped out of the zone of influence**

| Habitat / Species                        | Status                    | Description  | Distance from application site                                  | Reason scoped out  |
|--|---------------------------|--|---|--|
| Hollingbourne Downs SSSI                 | SSSI                      | Species rich chalk grassland, mixed deciduous woodland (including yew woodland and beech woodland) | 2.2km   | The SSSI is a long distance from the site (over 2km) and separated from the site by the M20. Environmental assessments of the potential arising impacts of the scheme show that there will be no significant impacts that would extend to this distance. (including noise, lighting and air quality impacts). No infrastructure associated with the construction or operation of the site will be developed north of the existing M20. |
| Thurnham Castle                          | Local Wildlife Site (LWS) | Designated for its county nature conservation importance.  | Situated 1.6km north of the proposed development boundary.      | Separated by motorway and 1 km of rural land.  |
| Leeds Castle Estate, meadow and woodland | LWS                       | Designated for its bryophytes. A large number of moss and liverworts are present.                  | Situated 1.3km south east of the proposed development boundary. | Separated from the site by the A20 and 0.5km of rural land.  |
| Snarkhurst Wood                          | LWS                       | Designated for its woodland and open grassland. Common   | Situated 0.1km immediately north of the proposed                | Separated from the site by motorway.   |

|                        |         |   |   |  |
|------------------------|---------|---|---|--|
|                        |         | spotted orchid is present.  | development boundary.   |  |
| Horish Wood            | LWS     | Designated for its county nature conservation importance.                 | Situated 1.3km west of the proposed development boundary.   | Separated from site by over 1km of grassland and woodland habitat.   |
| Churchyard at Leeds    | LWS     | Designated for its county nature conservation importance.                 | Situated 1.3km south of the proposed development boundary.  | Separated from site by over 1km of rural land.   |
| Ancient woodland Sites | Various | Designated woodlands due to their continuous cover since at least 1600AD. | Various, although it should be noted that a small section of ancient woodland (Union Wood) is located adjacent to the site to the south of the A20. | The ancient woodland adjacent to the south of the application site is separated from the application site by the A20. Furthermore, the northern part of the ancient woodland as mapped on the ancient woodland inventory has been developed into a caravan park, thereby reducing the ecological sensitivity of this receptor. |

## Appendix 8D: Legislative Framework

Conventions relating to nature conservation and the protection of the environment are known as Multilateral Environmental Agreements (MEAs). The UK is a contracting party to a number of such agreements. The most relevant to the KIG application is the Habitats Directive, 1992. All of these conventions are ratified into England Law by the following Acts and Regulations;

The Wildlife and Countryside Act (WCA), 1981, as amended is the principal mechanism for wildlife protection in the UK, originally aimed at consolidating and amending previous legislation to implement the requirements of the Bern Convention and the Birds Directive. Of particular relevance are Schedule 1, which lists bird species afforded special protection, Schedules 4-6, which protect various wild animal species from injury, killing or disturbance, and Schedule 8, which confers protection to certain plant species. The statutory designation of Sites of Special Scientific Interest (SSSI) is the main Site protection measure in the UK established under the WCA.

The Conservation (Natural Habitats, &c.) Regulations 1994 as amended are the implementation of the legislation regarding Natura 2000 sites and species and place a duty on planning authorities to meet the requirements of the Habitats Directive (as above), and to provide protection for priority habitats and species listed in the Habitats Directive outside of protected areas.

The Countryside Rights of Way Act 2000 extends the public's ability to enjoy the countryside whilst also providing safeguards for landowners and occupiers. It gives statutory right of access to open country and registered common land; modernises the rights of way system; gives greater protection to SSSI's; provides better management arrangements for Areas of Outstanding Natural Beauty (AONBs); and strengthens wildlife enforcement legislation.

The Natural Environment and Rural Communities (NERC) Act (2006) created the new integrated agency of Natural England. The act also reinforced the duty that is placed on every public authority to conserve biodiversity and imposes a duty on the secretary of state to produce a list of habitats and species that are of principle conservation concern (these are known as the UK BAP Priority habitats and species).

### **Specific information relating to protection of species:**

#### **Badgers**

Badgers are protected under the *Protection of Badgers Act 1992* and the *Wildlife and Countryside Act 1981* and subsequent amendments (1985, 2000). As such it is an offence to wilfully take, kill, injure or ill-treat a badger or to obstruct, destroy or damage a badger sett. Badgers are also protected against disturbance whilst within a sett. Badgers can only be disturbed under a licence from English Nature.

#### **Bats**

All British bat species and their roosts are protected under the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation (Natural Habitats &c.) Regulations 1994*. These combine to make it an offence to undertake the following acts;

- Kill, injure or capture bats.
- Damage, destroy or obstruct access to any place used by bats for shelter or protection
- disturb bats

### **Great Crested Newts**

Great crested newts are protected under the *Wildlife & Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)* and the *Conservation (Natural Habitats & c.) Regulations 1994*. This prohibits intentional or reckless killing, injuring or taking; possession; intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places. Also prohibited are sale, barter, exchange, transporting for sale and advertising to sell or buy this species.

### **Reptiles**

Slow-worm, (*Anguis fragilis*), common or viviparous lizard (*Lacerta vivipara*), adder (*Vipera berus*) and grass snake (*Natrix natrix*) are protected by the *Wildlife & Countryside Act 1981 (as amended)* by part of Section 9(1) and all of Section 9(5). This means that they are protected against intentional or reckless killing and injuring (but not 'taking') and against sale and transporting for sale.

### **Birds**

All species of wild bird and their nests and eggs are protected under the *Wildlife & Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)* .

In addition to the protection described above, some wild birds receive special protection from disturbance at the nest. These birds are listed under Schedule 1, Part 1 of the *Wildlife & Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)* because they are considered to be rare, endangered, declining or vulnerable species. It is therefore an offence to intentionally or recklessly;

- disturb a schedule 1 species while it is nest building;
- disturb a nest containing eggs or young, or to;
- disturb the dependent young. Kent County Council;

### **Fish**

Under the terms of the Salmon and Freshwater Fisheries Act, 1975, it is an offence to cause or knowingly permit to flow, or put, into any waters containing fish, any liquid or solid matter to such an extent as to cause the water to be poisonous or injurious to fish or the spawning grounds, spawn or food of fish.

## Appendix 8E: Notes And Limitations Of Survey

These Notes and Limitations cover ecological work undertaken by WSP Environmental and its sub-contractors. They are additional and complimentary to WSP Environmental's Standard Terms and Conditions, and should be read in association with them.

1. WSP Environmental staff and their sub-consultants have endeavoured to identify the presence of protected species wherever possible on site, where this falls within the agreed scope of works.
2. Up to date standard methodologies have been used, which are accepted by English Nature and other statutory conservation bodies. No responsibility can be accepted where these methodologies fail to identify all species on site. WSP cannot take responsibility where Government, national bodies or industry subsequently modify standards.
3. The results of the survey and assessment work undertaken by WSP Environmental are representative at the time of surveying.
4. WSP Environmental have advised on the optimum survey season for a particular habitat/species prior to undertaking the survey work. However, WSP cannot accept responsibility for the accuracy of surveys undertaken outside this period.
5. WSP Environmental cannot accept responsibility for data collected from third parties.
6. Optimum conditions for alien species surveys i.e. Japanese knotweed, Giant hogweed and Himalayan balsam, are between the months of April and September inclusive. WSP Environmental have advised on the presence of the species although strategies to deal with their eradication are subject to a separate scope of works.

## Appendix 8F: Bird Species Recorded In Study Area (Data Search Records)

| Common Name               | Scientific Name                      | Status                         | Comments           |
|---------------------------|--------------------------------------|--------------------------------|--------------------|
| reed warbler              | <i>Acrocephalus scirpaceus</i>       | UKBAP C, KRDB3                 |                    |
| skylark                   | <i>Alauda arvensis</i>               | UKBAP P, RSPB Red, KBAP, KRDB2 |                    |
| kingfisher                | <i>Alcedo atthis</i>                 | WCA1, RSPB Amber               |                    |
| teal                      | <i>Anas crecca</i>                   | UKBAP C, RSPB Amber, KRDB1     | winter record only |
| gadwall                   | <i>Anas strepera</i>                 | UKBAP C, RSPB Amber, KRDB3     | winter record only |
| pochard                   | <i>Aythya ferina</i>                 | UKBAP C, RSPB Amber, KRDB3     | Leeds Castle only  |
| linnet                    | <i>Carduelis cannabina</i>           | UKBAP P, RSPB Red, KRDB2       | Leeds Castle only  |
| siskin                    | <i>Carduelis spinus</i>              | UKBAP C, KRDB1                 | winter record only |
| hawfinch                  | <i>Coccothraustes coccothraustes</i> | UKBAP C, RSPB Amber, KRDB3     |                    |
| lesser spotted woodpecker | <i>Dendrocopus minor</i>             | RSPB Red, KRDB3                |                    |
| Yellowhammer              | <i>Emberiza citrinella</i>           | UKBAP C, RSPB Red, KRDB3       |                    |
| Hobby                     | <i>Falco subbuteo</i>                | WCA1, KRDB3                    |                    |
| Common Gull               | <i>larus canus</i>                   | RSPB Amber, KRDB 1             | winter record only |
| common crossbill          | <i>Loxia curvirostra</i>             | WCA1                           | Leeds Caslte only  |
| nightingale               | <i>Luscinia megarhychos</i>          | UKBAP C, RSPB Amber, KRDB3     |                    |
| red kite                  | <i>Milvus milvus</i>                 | WCA1, RSPB Amber               |                    |

|                    |                            |                                   |                    |
|--------------------|----------------------------|-----------------------------------|--------------------|
| spotted flycatcher | <i>Muscicapa striata</i>   | UKBAP P, RSPB Red,<br>KBAP, KRDB2 |                    |
| wheatear           | <i>Oenanthe oenanthe</i>   | UKBAP C, KRDB1                    |                    |
| house sparrow      | <i>Passer domesticus</i>   | UKBAP P, RSPB Red,<br>KRDB3       |                    |
| tree sparrow       | <i>Passer montanus</i>     | UKBAP P, RSPB Red,<br>KBAP, KRDB2 |                    |
| grey partridge     | <i>Perdix perdix</i>       | UKBAP P, RSPB Red,<br>KBAP, KRDB2 |                    |
| cormorant          | <i>Phalacrocorax carbo</i> | UKBAP C, RSPB<br>Amber, KRDB3     | winter record only |
| bullfinch          | <i>Pyrrhula pyrrhula</i>   | UKBAP P, RSPB Red,<br>KBAP, KRDB2 |                    |
| starling           | <i>Sturnus vulgaris</i>    | UKBAP P, RSPB Red                 | winter record only |
| green sandpiper    | <i>Tringa ochropus</i>     | WCA1, RSPB Amber                  |                    |
| redwing            | <i>Turdus iliacus</i>      | WCA1, RSPB Amber                  | winter record only |
| fieldfare          | <i>Turdus pilaris</i>      | WCA1, RSPB Amber                  | winter record only |

Birds recorded pre-1980 or from the area only once have not been included in this table as they are not considered to be relevant to this assessment. Most of these records have been provided as 1km or Tetrad records (covering a 4km<sup>2</sup> area), and therefore it is not possible to ascertain whether any of the records originate from the proposed development site itself.