

DRAFT

LAND AT UPPER HORSEBRIDGE ROAD, LOWER HORSEBRIDGE, EAST SUSSEX

Ecological Assessment

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1. INTRODUCTION

1.1. Background and Proposals

- 1.1.1. Ecology Solutions was instructed by Decimus Ltd in January 2016 to undertake an ecological assessment of land at Upper Horsebridge Road, Lower Horsebridge, East Sussex (see Plan ECO1), hereafter referred to as the site.
- 1.1.2. The proposals for the site comprise a small residential development with associated infrastructure and landscaping confined to the east of the site, and a larger area of public open space as an extension to the adjacent recreation ground to the west.

1.2. Site Characteristics

- 1.2.1. The site is located on the south-eastern edge of the village of Lower Horsebridge. The A271 Upper Horsebridge Road is present to the immediate east of the site, the Kings Head public house is present to the north, agricultural land is present to the south and a recreation ground is present to the west.
- 1.2.2. The site comprises of a semi-improved grassland field with areas of woodland, tall ruderal vegetation and scrub at the margins, bounded in part by a hedgerow and post-and-rail fencing.

1.3. Ecological Assessment

- 1.3.1. This document assesses the ecological interest of the site. The importance of the habitats within the site are evaluated with due consideration given to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)¹.
- 1.3.2. Where necessary, mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and, where appropriate, potential enhancement measures are put forward and reference made to both national and local biodiversity priorities.

¹ CIEEM (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

2. SURVEY METHODOLOGY

2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Study

- 2.2.1. In order to compile background information on the site and the surrounding area, Ecology Solutions contacted Sussex Biodiversity Record Centre (SxBRC).
- 2.2.2. Further information on designated sites from a wider search area was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)² database, which uses information held by Natural England and other organisations. This information is reproduced at Appendix 1, and where appropriate on Plan ECO1.

2.3. Habitat Survey Methodology

- 2.3.1. Habitat surveys were carried out by Ecology Solutions in February 2016 in order to ascertain the general ecological value of the site and to identify the main habitats and associated plant species.
- 2.3.2. The site was surveyed based around extended Phase 1 survey methodology³, as recommended by Natural England, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail.
- 2.3.3. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.
- 2.3.4. All the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent in different seasons. Nonetheless, given the habitats present it is considered an accurate and robust assessment has been made of the botanical interest, albeit further species may be apparent later in the season.

2.4. Faunal Survey

2.4.1. Obvious faunal activity, such as birds or mammals observed visually or by call during the course of the surveys, was recorded. Specific attention was paid to any potential use of the site by protected species, priority species, or other notable species.

² http://www.magic.gov.uk

³ Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit.* England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

2.4.2. In addition, specific surveys were undertaken in respect of bats and Badger *Meles meles* by an experienced surveyor.

Bats

- 2.4.3. All trees within the site were assessed for their potential to support roosting bats. Features typically favoured by bats or evidence of past use by bats were searched for including:
 - Obvious holes, e.g. rot holes and old Woodpecker holes;
 - Dark staining on the tree, below the hole;
 - Tiny scratch marks around a hole from bats' claws;
 - Cavities, splits and or loose bark from broken or fallen branches, lightning strikes etc.; and
 - Very dense covering of mature lvy over trunk.
- 2.4.4. In addition, the site was appraised in terms of its likely value for both foraging and commuting bats.

Badger

- 2.4.5. Ecology Solutions undertook a check survey of Badger activity across the site and adjacent areas in February 2016.
- 2.4.6. The survey was extended to cover adjacent land of up to 30 metres away from the site, where possible, within habitat considered suitable for Badgers. This was considered necessary as any potential impacts which the development may have upon Badger setts located within adjacent habitat would also have to be considered.
- 2.4.7. Evidence of any Badger activity was identified in the following ways:
 - Identification of Badger setts on the basis of their size and location;
 - Inspection of spoil heaps for footprints or discarded hair;
 - Presence of dung pits or latrines;
 - Presence of well-used mammal pathways; and
 - Presence of other indications of Badger activity including signs of foraging or hair caught in fences.

3. ECOLOGICAL FEATURES

- 3.1. A habitat survey of the site was undertaken by Ecology Solutions in February 2016.
- 3.2. The following main habitat / vegetation types were identified within the site during the survey:
 - Hedgerows;
 - Semi-improved Grassland;
 - Rubbish Piles;
 - Tall Ruderal Vegetation;
 - Scrub; and
 - Woodland and Trees.
- 3.3. The location of these habitats is shown on Plan ECO2, and described individually below.

3.4. **Hedgerows**

3.4.1. Hedgerow H1 forms the site's eastern boundary with the A271 Upper Horsebridge Road (see Photograph 1). Hedgerow H1 is a young hedgerow approximately 2 m tall, is thought to be receiving occasional management on the off-site side, and comprises Elder *Sambucus nigra* and Hawthorn *Crataegus monogyna*. The trees within hedgerow H1 are planted close together but the hedgerow is of limited depth. A chestnut paling fence runs along the Upper Horsebridge Road side of the hedgerow.

3.5. Semi-improved Grassland

- 3.5.1. The majority of the site comprises tussocky semi-improved grassland, concentrated in the centre of the site (see Photographs 2 and 3). The sward is generally below 15 cm tall and is dominated by grasses including Yorkshire Fog Holcus lanatus and Perennial Rye Grass Lolium perenne. Other species present include Bramble Rubus fruticosus, Creeping Thistle Cirsium arvense (to approximately 40 cm tall), Creeping Buttercup Ranunculus repens, Common Chickweed Stellaria media, Ground Ivy Glechoma hederacea and Ragwort Senecio jacobaea.
- 3.5.2. A small linear strip of semi-improved grassland is also present on the site's northern boundary, which is formed by a wooden post-and-rail fence. Species present include Yorkshire Fog, Cleavers *Galium aparine* and Broad-leaved Dock *Rumex obtusifolius*.

3.6. Rubbish Piles

3.6.1. The north-western corner of the main semi-improved grassland area (the corner nearest the Kings Head pub) contains building materials, rubbish such as old tables and plastic litter bins and piles of treated timber including dismantled furniture (see Photograph 4). A small area of the ground in this corner has been burnt relatively recently.

3.7. Tall Ruderal Vegetation

3.7.1. Two stands of tall ruderal vegetation are present within the site; both are present on interfaces of scrub and semi-improved grassland, one in the north-west (see Photograph 3) and one in the east of the site. Bracken *Pteridium aquilinum* is dominant in these areas, rising to a height of approximately 2 m tall. Other species present include Bramble, Common Nettle *Urtica dioica*, Lords-and-ladies *Arum maculatum*, Ground Ivy and Cleavers. Areas of the eastern stand are littered with items such as beer cans.

3.8. **Scrub**

3.8.1. The northern, western and north-eastern margins of the site are dominated by two stands of dense scrub up to a height of approximately 4 m tall (see Photograph 2). Species present in these stands include Hawthorn, Ash *Fraxinus excelsior* and Oak *Quercus robur* saplings, Bramble, Common Nettle, Creeping Thistle, Ragwort and lower-growing species including Yorkshire Fog, Lords-and-Ladies, Creeping Buttercup and Ground Ivy.

3.9. Woodland and Trees

- 3.9.1. The southern edge of the site is occupied largely by a linear copse of semimature trees up to approximately 8 m tall. Tree species present include Oak and Hazel *Corylus avellana*. Occasional Elder is also present, as are Common Nettle and Lords-and-Ladies, but the ground flora is sparse and, where present, usually dominated by mosses.
- 3.9.2. A semi-mature Oak trees approximately 5 m tall is present in the southeastern corner of the site, whilst occasional semi-mature Oak, Beech Fagus sylvatica and Hawthorn trees are present within the scrub along the site's western boundary.

3.10. Background Records

3.10.1. SxBRC returned no records of notable plants from within the site. The two nearest records of notable plant species both refer to the presence of a Box *Buxus sempervirens* approximately 0.5 km north of the site in 2010.

4. WILDLIFE USE OF THE SITE

4.1. General observations were made during the surveys of any faunal use of the site, with specific attention paid to the potential presence of protected species.

4.2. **Bats**

- 4.2.1. No trees within the site have features with any obvious potential to support roosting bats, nor was any evidence of bats noted at any point during the surveys.
- 4.2.2. The woodland, scrub, hedgerow H1 and to a lesser extent the tall ruderal vegetation within the site are of some interest for foraging bats. The network of hedgerows, watercourses and areas of woodland in the wider landscape provide habitats of interest and good linear corridors for foraging and commuting bats.
- Several bat records were returned by SxBRC during the desk study. These 4.2.3. records include a single record of a foraging Bechstein's Bat Myotis bechsteinii approximately 1.7 km to the east of the site in 2006; a single record for Brandt's Bat Myotis brandtii approximately 2.1 km to the northeast of the site in 2012; four records for Brown Long-eared Bat Plecotus auritus, with the most relevant record coming from approximately 1.4 km to the north-east of the site in 2005; eight records of Common Pipistrelle Pipistrellus pipistrellus, the closest of which is from approximately 0.4 km to the south-east of the site in 2012; three records of Daubenton's Bat Mvotis daubentonii, with the latest record being of a hibernating bat approximately 0.2km to the south-east of the site in 2014; a single record of Leisler's Bat Nyctalus leisleri approximately 0.3 km to the south-east of the site in 2013 and a single Whiskered Bat Myotis mystacinus record from approximately 1.7 km to the south-east of the site in 2013. A single record of Nathusius' Pipistrelle Pipistrellus nathusii, three records of Natterer's Bat Myotis nattereri, two Noctule Nyctalus noctula records, a single record of Serotine Bat Eptesicus serotinus and a single record of Soprano Pipistrelle *Pipistrellus pygmaeus* derive from bat surveys undertaken approximately 1.3 km to the east of the site in 2011.

4.3. Badger

- 4.3.1. Information relating to Badger is considered to be sensitive and should be prevented from entering the public domain.
- 4.3.2. An active Badger sett is present in the south-east of the site. Two recently-used entrance holes are present, orienting away from the site, whilst two somewhat older entrances and five clearly disused entrances are present, mostly orienting into the site (see Plan ECO2). At least one clear path leads to the sett and a number of disused latrine pits are also present in the vicinity. It is considered that the site provides suitable foraging and dispersal opportunities for the locally present social group in the form of woodland and semi-improved grassland.
- 4.3.3. SxBRC does not provide Badger records.

4.4. Dormice

- 4.4.1. The site lacks suitable Dormouse *Muscardinus avellanarius* habitat, with Hedgerow H1, the scrub and the woodland present within the site all considered to lack a sufficient extent, species diversity (particularly lacking in the key species of Honeysuckle and Hazel) or complexity of structure to offer opportunities to this protected species.
- 4.4.2. Four records of Dormouse were returned by SxBRC. The most recent of these are a record of a breeding colony approximately 2 km south-east of the site in 2011 and the presence of the species at a location approximately 1 km to the south of the site in 2006.

4.5. **Hedgehog**

- 4.5.1. The site comprises almost entirely of suitable Hedgehog *Erinaceus* europaeus foraging and dispersal habitat and it is considered that the species is likely to be present within the site.
- 4.5.2. Two records for Hedgehog were also returned, with the most recent and closest record from approximately 0.2 km to the south-east of the site in 2009.

4.6. Other Mammals

- 4.6.1. A Rabbit *Oryctolagus cuniculus* was noted in the semi-improved grassland within the site during the ecological survey work, whilst Rabbit droppings were abundant in this area and Rabbit burrows were present in the tall ruderal stand in the east of the site. Mammal tracks leading to / from this area (see Plan ECO2) and foraging signs in the semi-improved grassland in the vicinity are thought to be associated with Rabbit use. A hole present between trees on the western edge of the site is thought to be attributable to Fox *Vulpes vulpes*. Save for the effect of Rabbits in maintaining a relatively short sward height at the site, the presence of these two species is of little significance.
- 4.6.2. The desk study exercise returned four records of Water Vole *Arvicola amphibius*; however, there is no suitable habitat for the species within the site.

4.7. **Birds**

- 4.7.1. A number of common and widespread species were recorded during the surveys, including Goldcrest *Regulus regulus*, Wood Pigeon *Columba palumbus*, Long-tailed Tit *Aegithalos caudatus*, Blue Tit *Cyanistes caeruleus*, European Robin *Erithacus rubecula* and Bullfinch *Pyrrhula pyrrhula*. A single disused nest were recorded within the site; it is thought that the nest belonged to a common and widespread species such as Wood Pigeon *Columba palumbus*.
- 4.7.2. The woodland, trees, hedgerow and scrub within the site offer some nesting and foraging resources for a variety of common bird species, whilst the semi-improved grassland and stands of tall ruderal vegetation offer similar foraging opportunities.

4.7.3. SxBRC returned a number of bird records during the desk study, including of species protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). These include eight records for Barn Owl Tyto alba. of which the closest is from approximately 0.6 km to the west of the site in 2006 and the most recent was observed in 2011 approximately 0.8 km to the north-west of the site: three records for Red Kite Milvus milvus, the most recent record being from approximately 0.6 km to the north-east of the site in 2014; 13 records for Hobby Falco subbuteo, with the majority of these referring to single birds recorded regularly approximately 0.4 km to the south of the site until 2007; 16 records for Kingfisher Alcedo atthis, with the closest record coming from approximately 0.6 km to the north-east of the site in 2006; three Osprey Pandion haliaetus records, the closest of which is from approximately 0.5 km to the south of the site in 2001 and the most recent of which refers to the presence of the species approximately 0.6 km to the north-east of the site in 2007, and three records for Peregrine Falco peregrinus, with the most recent record from a location approximately 0.5 km to the south of the site in 2011.

4.8. Reptiles

- 4.8.1. Despite a relatively short sward height at the time of the surveys, it is considered that the tussocky semi-improved grassland within the site will offer suitable habitat opportunities for common reptile species during the active season, during which the height of sward will increase. The site also contains suitable habitat for hibernating common reptile species in the form of the woodland, hedgerow, dense scrub and wood piles present.
- 4.8.2. Records of four common reptile species were returned by SxBRC during the desk study exercise. These include 42 records of Slow Worm *Anguis fragilis* since 2005 (with the closest and most recent record observed in 2015 approximately 60 m to the north-east of the site), 22 records of Grass Snake *Natrix natrix*, with the closest record from approximately 0.3 km to the east of the site in 2005), and five records of Common Lizard *Zootoca vivipara* and a single record Adder *Vipera berus*, both of which refer to their presence at a location approximately 1.3 km to the south-east of the site in 2011.

4.9. **Amphibians**

4.9.1. The site contains some habitat with the potential to support amphibians such as Great Crested Newts *Triturus cristatus* during their terrestrial phase through the presence of woodland, hedgerow, dense scrub and wood piles. No waterbodies are present within the site. A number of ponds are present in the local area, although these are largely isolated from the site by the A271 and the River Cuckmere, which act as dispersal barriers. The only feature not subject to such dispersal constraints that may possess suitability for breeding Great Crested Newts is a drain present approximately 90 m to the south of the site. Given the lack of Great Crested Newt records in areas that are likely to be connected to the site by suitable dispersal habitat (see below), it is considered that Great Crested Newts are unlikely to be affected by the proposals, particularly as the suitable newt habitat present is limited to the site margins.

4.9.2. Amphibian records returned by SxBRC include a total of 25 records accounting for 86 individual Great Crested Newts. The closest of these records comes from approximately 0.4 km to the south-west of the site in 2006. However, the River Cuckmere forms a barrier between this location and both the site and the nearby drain. The most recent record of Great Crested Newts comes from approximately 1.9 km to the south-east of the site in 2014.

4.10. Invertebrates

- 4.10.1. The habitats within the site are likely to support a reasonable invertebrate assemblage, although there is no evidence to suggest any notable species would be present.
- 4.10.2. The closest recent record of a notable invertebrate species refers to the presence of the rare Wasp Spider *Argiope bruennichi* at a location approximately 0.5 km south-east of the site in 2007.



5. ECOLOGICAL EVALUATION

5.1. The Principles of Ecological Evaluation

- 5.1.1. The guidelines for ecological evaluation produced by CIEEM propose an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.
- 5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe⁴. These are broadly used across the United Kingdom to rank sites so priorities for nature conservation can be attained. For example, current Sites of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.
- 5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicality, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.
- 5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make a site worthy of importance to nature conservation.
- 5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with comparatively poor species diversity, common in the south of England, may be of importance at its northern limits, say in the border country.
- 5.1.6. In addition, habitats and species of local importance are often highlighted within a local Biodiversity Action Plan (BAP). The Sussex BAP highlights a number of habitats. Where these occur within or adjacent to the site they are considered below.
- 5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.
- 5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

5.2. Habitat Evaluation

Designated Sites

5.2.1. **Statutory Designations.** There are no statutory designated sites of nature conservation interest within or adjacent to the site. The closest such site is the Lower Dicker Site of Special Scientific Interest (SSSI), located approximately 2 km to the west of the site, although this site is designated for its geological value rather than any nature conservation value.

⁴ Ratcliffe, D. A. (1977). *A Nature Conservation Review*. Two Volumes. Cambridge University Press, Cambridge.

- 5.2.2. Pevensey Levels Special Area of Conservation (SAC), Ramsar Site and SSSI is situated approximately 2.5 km to the south-east of the site beyond the urban area of Hailsham. This designated site comprises in the main of humid grassland and supports a significant population of the Lesser Whirlpool Ram's-horn Snail *Anisus vorticulus*, a small aquatic snail that occurs in unpolluted, calcareous waters and can only be found at a few sites in Britain.
- 5.2.3. The proposed development site falls into an Impact Risk Zone associated with the Pevensey Levels SSSI such that Natural England consider potential development within this zone has the potential to impact the SSSI in some way. However, the types of proposals considered to have the potential for impact at this distance are limited to aviation and quarrying developments and those producing large amounts of manure, slurry or foul water not being discharged to mains sewers.
- 5.2.4. The citation for Pevensey Levels SAC states that the main threats to the site are the occurrence of invasive species, human-induced changes in hydraulic pressures in and around the site and pollution to ground water. It is not considered that any adverse effects will occur to Pevensey Levels SAC, Ramsar Site and SSSI given the nature of the threats to its interest features, the nature of the proposed development and the distance between the designated site and the proposed development.
- 5.2.5. **Non-statutory Designations.** There are no non-statutory designated sites within or immediately adjacent to the site. The closest such site is Hellingly Cemetery Local Wildlife Site (LWS), which is approximately 0.4 km to the north-east of the site. The LWS contains a species-rich grassland with a high proportion of herbs to grasses.
- 5.2.6. Given its size, its nature and its distance from non-statutory designated sites in the area, the proposed development is unlikely to have any significant effect on Hellingly Cemetery LWS or any other local non-statutory designation.

Habitats

- 5.2.7. Overall the habitats present are of low intrinsic ecological interest and their loss to the proposed development would be of little significance. Hedgerow and woodland are Sussex priority habitats, and the woodland present is of some ecological interest in the context of the site. It is recommended that where possible, these features are retained as part of the development proposals. The proposals should seek to subject them to management that maintains and increases their attractiveness to wildlife, which would constitute an enhancement in biodiversity terms. Site access will require a short section of hedgerow H1 to be removed. However, the use of bolster planting to increase the native species diversity of hedgerow H1 and the use of native species in new hedgerows proposed for the site will more than off-set this loss.
- 5.2.8. It is recommended that any new landscape planting associated with the proposals incorporate native species or species of known wildlife value.

5.3. Faunal Evaluation

Bats

- 5.3.1. **Legislation.** All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2010 ("the Habitats Regulations"). These include provisions making it an offence:
 - deliberately to kill, injure or take (capture) bats;
 - deliberately to disturb bats in such a way as to:-
 - (i) be likely to impair their ability to survive, to breed or rear or nurture their young; or to hibernate or migrate; or
 - (ii) affect significantly the local distribution or abundance of the species to which they belong;
 - to damage or destroy any breeding or resting place used by bats;
 - intentionally or recklessly to obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).
- 5.3.2. The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.
- 5.3.3. The offence of damaging (making worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.
- 5.3.4. In accordance with the Habitats Regulations the licensing authority (Natural England) must apply the three derogation tests as part of the process of considering a licence application. These tests are that:
 - 1. the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety:
 - 2. there must be no satisfactory alternative; and
 - 3. the favourable conservation status of the species concerned must be maintained.
- 5.3.5. Licences can usually only be granted if the development is in receipt of full planning permission.
- 5.3.6. **Site Usage.** No trees within the site have features with any obvious potential to support roosting bats, nor was any evidence of bats noted at any point during the surveys. The woodland, scrub, hedgerow H1 and to a lesser extent the tall ruderal vegetation within the site are likely to be of some interest for foraging bats.
- 5.3.7. **Mitigation and Enhancements.** There is no requirement for a Natural England European Protected Species licence on the results of the surveys completed. However, it is recommended that, where possible, the proposals retain and strengthen the boundary features of interest to bats and that the landscape strategy for the proposed development incorporate native species of local provenance. The use of native species bolster planting and new hedgerows consisting of native species will satisfy this recommendation. This will also make up for the proposed loss of a small

- section of hedgerow H1 to facilitate site access, with the scheme resulting in an increase in linear features of potential interest to foraging bats.
- 5.3.8. Development works should be planned and carried out in a manner that does not detrimentally impact any bats that may be using the on-site habitats. Any lighting used to assist construction or installed as part of the development should not cause any significant increase in illumination above the current levels. Provided that these recommendations are followed, the development is not likely to have any significant effects on locally present bat species, with all species likely to be retained at a favourable conservation status.
- 5.3.9. As an enhancement bat boxes could be provided on new buildings or retained trees on the site margins to provide new bat roosting opportunities.

Badger

- 5.3.10. **Legislation.** The Protection of Badgers Act 1992 consolidates the previous Badgers Acts of 1973 and 1991. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status.
- 5.3.11. As well as protecting the animal itself, the 1992 Act also makes the intentional or reckless destruction, damage or obstruction of a Badger sett an offence. A sett is defined as "any structure or place, which displays signs indicating current use, by a Badger". 'Current use' is defined by Natural England as any use within the preceding 12 months.
- 5.3.12. In addition, the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence by constituting 'cruel ill treatment' of a Badger.
- 5.3.13. Local Authorities are therefore obliged to consult Natural England over any application that is likely to adversely affect Badgers.
- 5.3.14. Any work that disturbs Badgers is illegal without a licence granted by Natural England. Unlike the general conservation legislation, the Badgers Act 1992 makes specific provision for the granting of licences for development purposes, including for the destruction of setts.
- 5.3.15. Guidance produced by Natural England in 2002 developed guidelines on the types of activity that it considers should be licensed within certain distances of sett entrances. For example using heavy machinery within 30 metres of any entrance to an active sett, lighter machinery within 20 metres, or light work such as hand digging within ten metres, may all require a license.
- 5.3.16. More recent 'interim guidance' issued by Natural England in September 2007 specifically states "it is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed."

- 5.3.17. The guidance goes on to state, "Where interference with a sett showing signs of use cannot be avoided during the development, a licence should be sought from Natural England."
- 5.3.18. However, this latest guidance no longer makes reference to any 30m / 20m / 10m radius as a threshold for whether a licence would be required. Nonetheless, it is stated that tunnels may extend for 20 metres so care needs to be taken when implementing excavating operations within the vicinity of a sett and to take appropriate precautions with vibrations and noise, etc. Fires / chemicals within 20 metres of a sett should specifically be avoided.
- 5.3.19. This interim guidance allows greater professional judgement as to whether an offence is likely to be committed by a particular development activity and therefore whether a licence is required or not. For example, if a sett clearly orientates southwards into an embankment it may be somewhat redundant to have a 30-metre exclusion zone to the north.
- 5.3.20. It should be noted that a licence cannot be issued until the site is in receipt of a full and valid planning permission and that generally licences are not granted between December and June inclusive to avoid disruption to the Badger breeding cycle.
- 5.3.21. Site Usage. An active Badger sett is present in the south-east of the site along with other signs of Badger presence. Although some of the evidence of Badger use at this sett appears recent, it would be expected that if the sett were a main sett there would be clearer indications of regular and even more recent use (particularly given that February is a time of increased territorial activity by Badgers). It is therefore considered more likely that the sett is an annex sett, i.e. a smaller sett that is close to a main sett but is not necessarily occupied continually. The site provides suitable foraging and dispersal opportunities for the locally present social group in the form of woodland and semi-improved grassland.
- 5.3.22. **Mitigation.** It is recommended that the site is checked immediately prior to ground works commencing to ensure no additional setts have been excavated in the intervening period. The existing sett should be retained and protected within the development proposals, with a corridor provided along the southern boundary to maintain dispersal and access to foraging resources in the local area.
- 5.3.23. During the construction phase the sett should be cordoned off using robust fencing (also designed to protect the surrounding trees to be retained) and buffered from any development. The fencing should not extend right to the ground in order to allow access by Badgers. The proposals will thus ensure that the sett remains accessible to Badgers and as such there will be no obstruction on the passage of Badgers through the site.
- 5.3.24. All contractors working on the building construction will be briefed regarding the presence of Badgers and of the types of activities that would not be permissible on site. Any licensing requirements should particularly be highlighted.

- 5.3.25. Any trenches or deep pits associated with construction that are to be left open overnight should be provided with a means of escape should a Badger enter. This could simply be in the form of a roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water.
- 5.3.26. Any trenches / pits should be inspected each morning to ensure no Badgers have become trapped overnight. Should a Badger get stuck in a trench it will likely attempt to dig itself into the side of the trench, forming a temporary sett. Should a trapped Badger be encountered, Ecology Solutions should be contacted immediately for further advice.
- 5.3.27. During the construction process all dug ground should be levelled and compacted wherever possible. This will prevent Badgers from attempting to excavate setts prior to completion of construction.
- 5.3.28. The storage of topsoil or other 'soft' building materials within the site should be given careful consideration. Badgers will readily adopt such mounds as setts, which would then be afforded the same protection as established setts. To avoid the adoption of any mounds, these should be subject to daily inspections (or nightly patrols if 24 hour security is present on site) or consideration given to fencing them with Badger-proof fencing.
- 5.3.29. During the development the storage of any chemicals required for construction should be well away from any Badger activity and contained in such a way that containers cannot be accessed or knocked over by any roaming Badgers.
- 5.3.30. Post-construction fencing may be required along the southern boundary to prevent Badgers accessing and foraging within the new gardens.
- 5.3.31. These measures will ensure that Badgers do not suffer adversely as a result of the proposed development. It is noted that the two active sett entrances orientate away from the site, which is likely to minimise the envisaged level of disruption to the species. At the time of writing it is not considered that temporary or complete closure of the sett would be required under licence.

Hedgehog

- 5.3.32. **Legislation.** Hedgehog is a Species of Principal Importance under Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006, requiring action to be taken and promoted in relation to its conservation.
- 5.3.33. **Site Usage.** The site comprises almost entirely of suitable Hedgehog foraging and dispersal habitat and Hedgehogs are likely to be present.
- 5.3.34. **Mitigation and Enhancements.** Clearance operations should be mindful of the presence of this species. During site clearance, the following precautionary measures should be implemented or supervised by an Ecological Clerk of Works:

- turn over any suitable refugia, such as piles of deadwood and scrub, before any burning or removal using large machinery;
- carry out hedgerow and tree removal in a sensitive manner, clearing by using hand tools the base of any hedgerows to be removed prior to large machinery pulling out roots; and
- move any animals encountered out of harm's way and into areas not due to be impacted by the development.
- 5.3.35. Mitigation should ensure continued dispersal opportunities for the species, for instance by designing breaks or sufficiently-sized ground level gaps within new garden fences and railings to allow Hedgehogs free movement across the site, enabling them to forage and find shelter.
- 5.3.36. Proposals should seek to ensure that new and retained Hedgehog habitats such as woodland, hedgerows, grassland and scrub are managed in a manner that maintains or increases their attractiveness to Hedgehogs.

Birds

- 5.3.37. **Legislation.** Section 1 of the Wildlife and Countryside Act 1981 (as amended) is concerned with the protection of wild birds, whilst Schedule 1 lists species that are protected by special penalties. All species of birds receive general protection whilst nesting.
- 5.3.38. **Site Usage.** It is likely that the woodland, trees, hedgerow, scrub, semi-improved grassland and stands of tall ruderal vegetation within the site will offer good nesting and / or foraging resources for a variety of common bird species, but there is no evidence to suggest that any notable species would be present on or close to the site.
- 5.3.39. **Mitigation and Enhancements.** It is recommended that a check survey for nesting bird species be undertaken prior to any removal of suitable nesting habitat, or that this be done outside of the nesting bird season (which is typically March to July inclusive). No further survey work is required for birds provided that vegetation is cleared outside of the nesting season.
- 5.3.40. It is recommended that the landscape strategy for the proposed development incorporate native species of local provenance and include shrubs and trees to provide suitable nesting and foraging habitat for birds.

Common Reptiles

- 5.3.41. **Legislation.** Rare, endangered or declining species receive full protection under the Wildlife & Countryside Act 1981 (as amended) as well as protection under the Conservation of Habitats and Species Regulations 2010. Species that are fully protected are Smooth Snake *Coronella austriaca* and Sand Lizard *Lacerta agilis*. It is illegal to:
 - Kill, injure or take (capture) these reptiles deliberately;
 - Disturb these reptiles deliberately in such a way as to be likely:-
 - (i) to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or to hibernate; or
 - (ii) to affect their local distribution or abundance significantly;

- Damage or destroy any breeding or resting place used by these reptiles;
- Obstruct access intentionally or recklessly to any place used by these reptiles for shelter or protection (even if the reptiles are not present at the time);
- Sell, offer for sale, possess or transport for purposes of sale these reptiles (live or dead animal, part or derivative).
- 5.3.42. Owing to their abundance in Britain, Common Lizard, Slow Worm, Grass Snake and Adder are only 'partially protected' under the Wildlife & Countryside Act 1981 (as amended) and therefore only receive protection from:
 - Intentional killing and injuring; and
 - Being sold or other forms of trading.
- 5.3.43. The habitat of common reptiles is therefore not directly protected. However, because of their partial protection, disturbing or destroying their habitat while they are present may lead to an offence.
- 5.3.44. All reptile species are listed as Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006. The NERC Act places responsibility upon public bodies to have regard for the conservation of biodiversity in England.
- 5.3.45. **Site Usage.** The tussocky semi-improved grassland within the site offers a suitable habitat for common reptile species during the active season. The site also contains suitable habitat for hibernating common reptile species in the form of the woodland, hedgerow, dense scrub and wood piles present.
- 5.3.46. **Mitigation and Enhancements.** It is recommended that a presence / absence survey be undertaken between the months of April and September / October inclusive. Artificial refugia would be deployed in areas of suitable habitat and be subject to periodic checks on seven occasions.
- 5.3.47. If a population of one or more reptile species were confirmed, a translocation exercise would likely be required prior to the commencement of development. It is considered that the area of the site proposed for public open space would contain enough suitable habitat to be used in part as a receptor site for any translocation exercise. The receptor site could take the form of a wildflower meadow with sinuous margins and would need to be managed in a manner enabling the persistence of the translocated reptile population. This could be achieved through measures such as the maintenance of a sufficiently tall and complex sward in line with the habitat requirements of the relevant species.

6. PLANNING POLICY CONTEXT

6.1. The site is situated in the district of Wealden. The planning policy framework that relates to nature conservation at the site is issued at two main administrative levels: nationally through the National Planning Policy Framework (NPPF) and locally through the Wealden District Core Strategy Local Plan and saved policies of the 1998 Local Plan. Any proposed development will be judged in relation to the policies contained within these documents.

6.2. National Policy

National Planning Policy Framework

- 6.2.1. Guidance on national policy for biodiversity and geological conservation is provided by the NPPF, published in March 2012. It is noted that the NPPF continues to refer to further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system provided by Circular 06/05 (DEFRA / ODPM, 2005) accompanying the now-defunct Planning Policy Statement 9 (PPS9).
- 6.2.2. The key element of the NPPF is that there should be "a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking" (paragraph 14). It is important to note that this presumption "does not apply where development requiring Appropriate Assessment under the Birds or Habitats Directives is being considered, planned or determined" (paragraph 119).
- 6.2.3. A number of policies in the NPPF are comparable to those in PPS9, including reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 109) and ensuring that Local Authorities place appropriate weight on statutory and non-statutory nature conservation designations, protected species and biodiversity.
- 6.2.4. The NPPF also considers the strategic approach that Local Authorities should adopt with regard to the protection, enhancement and management of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.
- 6.2.5. Paragraph 118 of the NPPF comprises of a number of principles that Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments; provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for; applying the protection given to European sites to potential SPAs, possible SACs, listed or proposed Ramsar Sites and sites identified (or required) as compensatory measures for adverse effects on European sites; and the provision for the refusal of developments resulting in the loss or deterioration of 'irreplaceable' habitats unless the need for, and benefits of, the development in that location clearly outweigh the loss.
- 6.2.6. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.3. Local Policy

Local Plan (Saved Policies; 1998)

- 6.3.1. The adopted Wealden Local Plan was published in 1998. As of 27 September 2007 a number of policies in the Wealden Local Plan were saved by approval of the Secretary of State under paragraph 1(3) of Schedule 8 of the Planning and Compulsory Purchase Act 2004. These saved policies included a number of policies pertinent to the natural environment. Four of these policies, namely EN12, EN14, EN15 and EN29, are relevant to the site.
- 6.3.2. Policy EN12 is associated with the protection of trees and woodland as part of new developments, including the encouragement of woodland management and tree and hedgerow planting where appropriate.
- 6.3.3. Policy EN14 states that in appropriate cases, the Council will require landscaping to be carried out. This landscaping should include the retention of "existing trees, significant hedgerows and other valuable site features," "normally comprise primarily native species," "have regard to associated nature conservation benefits" and "be implemented at the earliest practicable opportunity and thereafter satisfactorily maintained during the early years."
- 6.3.4. Policy EN15 is associated with the protection of designated sites in the district.
- 6.3.5. Policy EN29 states that "in considering development proposals which include external lighting, the Council will require [...] light spillage to be minimised."

Core Strategy Local Plan (2013)

- 6.3.6. The Core Strategy Local Plan was adopted in February 2013 and comprises a long-term spatial vision and strategic objectives for the Wealden District area, including the area within Wealden that is in the South Downs National Park, for the period 2013 to 2027. All subsequent documents produced as part of the emerging Wealden Local Plan (which is currently at the consultation stage) will build on the objectives set out in this Core Strategy.
- 6.3.7. The Core Strategy Local Plan contains a number of policies pertinent to ecology and nature conservation that largely echo those objectives set out within the NPPF.
- 6.3.8. Under Policy WCS12 the authority states that they shall prevent a net loss of biodiversity, ensure a comprehensive network of habitats, and work with partners to maximise opportunities to ensure that habitats, biodiversity features and ecological networks are maintained, restored, enhanced and where possible created to achieve a net gain in biodiversity and sustain wildlife both in rural and in urban areas.

6.4. Discussion

6.4.1. The development proposals for the site would be judged against the policies summarised above. It is considered that the development site is of little ecological interest. Mitigation measures have been recommended to offset any potential adverse impacts whilst seeking to provide net biodiversity gains. Taking these recommendations on board it is considered that the relevant policy requirements will be met.



7. SUMMARY AND CONCLUSIONS

- 7.1. Ecology Solutions was instructed by Decimus Ltd in January 2016 to undertake an ecological assessment of land at Upper Horsebridge Road, Lower Horsebridge, East Sussex, hereafter referred to as the site.
- 7.2. The proposals for the site comprise a small residential development with associated infrastructure and landscaping confined to the east of the site and a larger area of public open space as an extension to the adjacent recreation ground to the west.
- 7.3. The site was subject to an extended Phase 1 habitat survey in February 2016. A desk-based study was also undertaken to place the site within the local context.
- 7.4. **Statutory Designations.** There are no statutory designated sites of nature conservation interest within or adjacent to the site. The closest such site is the Lower Dicker Site of Special Scientific Interest (SSSI), located approximately 2 km to the west of the site, although this site is designated for its geological value rather than any nature conservation value.
- 7.5. Pevensey Levels Special Area of Conservation (SAC), Ramsar Site and SSSI is situated approximately 2.5 km to the south-east of the site beyond the urban area of Hailsham. This designated site comprises in the main of humid grassland and supports a significant population of the Lesser Whirlpool Ram's-horn Snail, a small aquatic snail that occurs in unpolluted, calcareous waters and can only be found at a few sites in Britain.
- 7.6. The proposed development site falls into an Impact Risk Zone associated with the Pevensey Levels SSSI such that Natural England consider potential development within this zone has the potential to impact the SSSI in some way. However, the types of proposals considered to have the potential for impact at this distance are limited to aviation and quarrying developments and those producing large amounts of manure, slurry or foul water not being discharged to mains sewers.
- 7.7. The citation for Pevensey Levels SAC states that the main threats to the site are the occurrence of invasive species, human-induced changes in hydraulic pressures in and around the site and pollution to ground water. It is not considered that any adverse effects will occur to Pevensey Levels Special Area of Conservation (SAC), Ramsar Site and SSSI given the nature of the threats to its interest features, the nature of the proposed development and the distance between the designated site and the proposed development.
- 7.8. **Non-statutory Designations.** There are no non-statutory designated sites within or immediately adjacent to the site. The closest such site is Hellingly Cemetery Local Wildlife Site (LWS), which is approximately 0.4 km to the northeast of the site.
- 7.9. Given its size, its nature and its distance from non-statutory designated sites in the area, the proposed development is unlikely to have any significant effect on Hellingly Cemetery LWS or any other local non-statutory designation.
- 7.10. **Habitats.** Overall the habitats present are of low intrinsic ecological interest and their loss to the proposed development would be of little significance. Hedgerow

and woodland are Sussex priority habitats and the woodland present is of some ecological interest in the context of the site. It is recommended that where possible these features are retained as part of the development proposals. The proposals should seek to subject them to management that maintains and increases their attractiveness to wildlife, which would constitute an enhancement in biodiversity terms. Site access will require a short section of hedgerow H1 to be removed. However, the use of bolster planting to increase the native species diversity of hedgerow H1 and the use of native species in new hedgerows proposed for the site will more than off-set this loss.

- 7.11. It is recommended that any new landscape planting associated with the proposals incorporate native species or species of known wildlife value.
- 7.12. **Protected Species.** No trees within the site have features with any obvious potential to support roosting bats, nor was any evidence of bats noted at any point during the surveys. The woodland, scrub, hedgerow H1 and to a lesser extent the tall ruderal vegetation within the site are likely to be of some interest for foraging bats.
- 7.13. There is no requirement for a Natural England European Protected Species licence on the results of the surveys completed. However, it is recommended that, where possible, the proposals retain and strengthen the boundary features of interest to bats and that the landscape strategy for the proposed development incorporate native species of local provenance. The use of native species bolster planting and new hedgerows consisting of native species will satisfy this recommendation. This will also make up for the proposed loss of a small section of hedgerow H1 to facilitate site access, with the scheme resulting in an increase in linear features of potential interest to foraging bats.
- 7.14. Development works should be planned and carried out in a manner that does not detrimentally impact any bats that may be using the on-site habitats. Any lighting used to assist construction or installed as part of the development should not cause any significant increase in illumination above the current levels. Provided that these recommendations are followed, the development is not likely to have any significant effects on locally present bat species, with all species likely to be retained at a favourable conservation status.
- 7.15. As an enhancement bat boxes could be provided on new buildings or retained trees on the site margins to provide new bat roosting opportunities.
- 7.16. An active Badger sett, probably an annex sett, is present in the south-east of the site along with other signs of Badger presence. The site provides suitable foraging and dispersal opportunities for the locally present social group in the form of woodland and semi-improved grassland.
- 7.17. It is recommended that the site is checked immediately prior to ground works commencing to ensure no additional setts have been excavated in the intervening period. The existing sett should be retained and protected within the development proposals, with a corridor provided along the southern boundary to maintain dispersal and access to foraging resources in the local area.
- 7.18. A number of mitigation methods will be implemented to avoid collapse of sett entrances and tunnels and possible Badger injury or mortality. These include the sensitive installation of temporary fencing around the sett, the checking of

- unattended trenches or deep pits associated with construction to ensure no Badgers have become trapped overnight and the briefing of site personnel concerning the presence of Badgers.
- 7.19. Post-construction fencing may be required along the southern boundary to prevent Badgers accessing and foraging within the new gardens.
- 7.20. The site comprises almost entirely of suitable Hedgehog foraging and dispersal habitat and Hedgehogs are likely to be present.
- 7.21. Clearance operations should be mindful of the presence of Hedgehog, with a number of precautionary measures to be implemented / supervised by an Ecological Clerk of Works.
- 7.22. Mitigation should ensure continued dispersal opportunities for the species, for instance by designing breaks or sufficiently-sized ground level gaps within new garden fences and railings to allow Hedgehogs free movement across the site, enabling them to forage and find shelter.
- 7.23. Proposals should seek to ensure that new and retained Hedgehog habitats such as woodland, hedgerows, grassland and scrub are managed in a manner that maintains or increases their attractiveness to Hedgehogs.
- 7.24. It is likely that the woodland, trees, hedgerow, scrub, semi-improved grassland and stands of tall ruderal vegetation within the site will offer good nesting and / or foraging resources for a variety of common bird species, but there is no evidence to suggest that any notable species would be present on or close to the site.
- 7.25. It is recommended that a check survey for nesting bird species be undertaken prior to any clearance, or that clearance be done outside of the nesting bird season (which is typically March to July inclusive).
- 7.26. It is recommended that the landscape strategy for the proposed development incorporate native species of local provenance and include shrubs and trees to provide suitable nesting and foraging habitat for birds.
- 7.27. The tussocky semi-improved grassland within the site offers suitable habitat opportunities for common reptile species during the active season. The site also contains suitable habitat for hibernating common reptile species in the form of the woodland, hedgerow, dense scrub and wood piles present.
- 7.28. It is recommended that a common reptile presence / absence survey be undertaken between the months of April and September / October inclusive. Artificial refugia would be deployed in areas of suitable habitat and be subject to periodic checks on seven occasions.
- 7.29. If a population of one or more reptile species were confirmed, a translocation exercise would likely be required prior to the commencement of development. It is considered that the area of the site proposed for public open space would contain enough suitable habitat to be used in part as a receptor site for any translocation exercise. The receptor site could take the form of a wildflower meadow with sinuous margins and would need to be managed in a manner enabling the persistence of the translocated reptile population. This could be

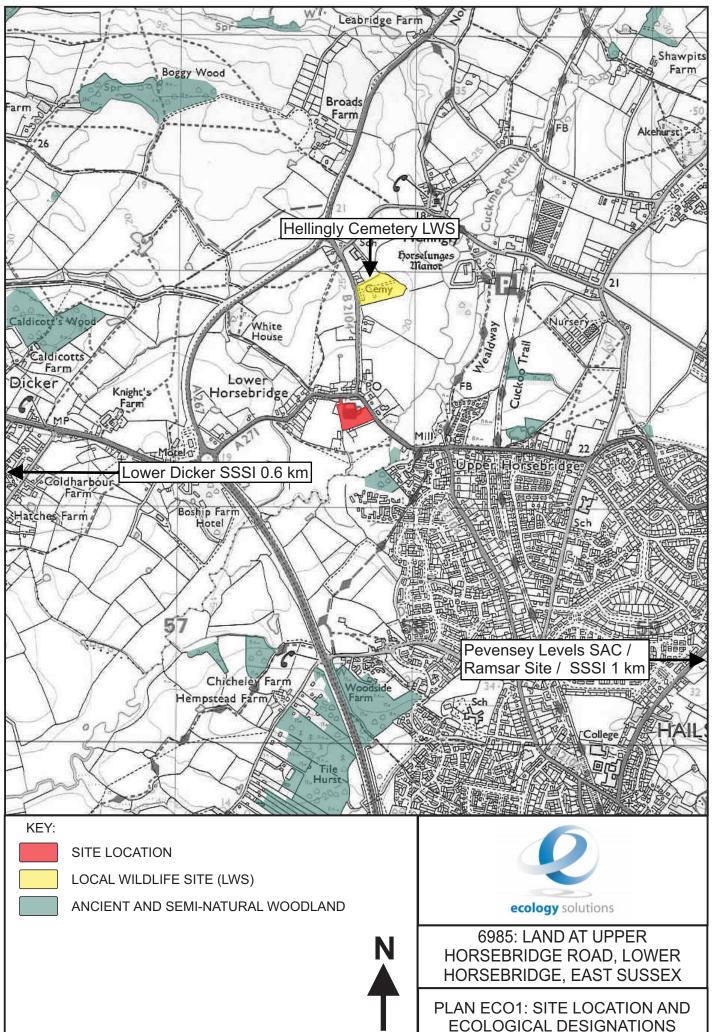
- achieved through measures such as the maintenance of a sufficiently tall and complex sward in line with the habitat requirements of the relevant species.
- 7.30. No evidence of the presence of other protected or notable species was noted on site during survey work undertaken or from the background data search information received.
- 7.31. In conclusion, there is no overriding ecological constraint to the development of the site and it is considered that the relevant policy requirements will be met. The proposals accord with planning policy with regard to nature conservation at all administrative levels.





PLAN ECO1

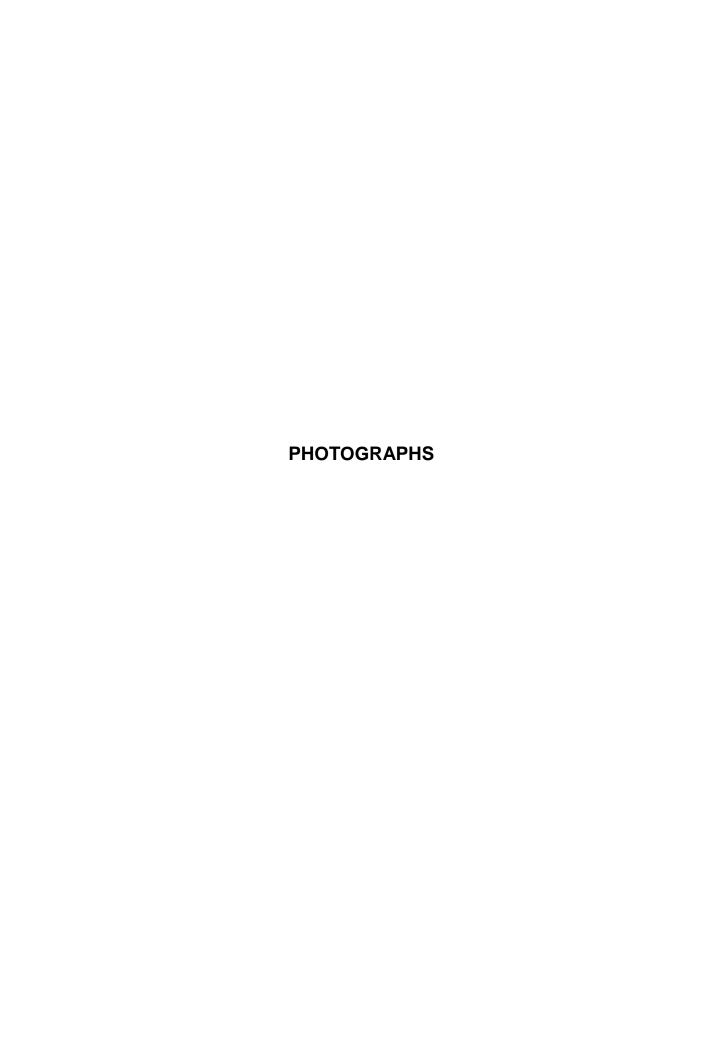
Site Location and Ecological Designations



PLAN ECO2

Ecological Features [CONFIDENTIAL]





PHOTOGRAPH 1: View of Hedgerow H1



PHOTOGRAPH 2: View of Semi-improved Grassland and Scrub

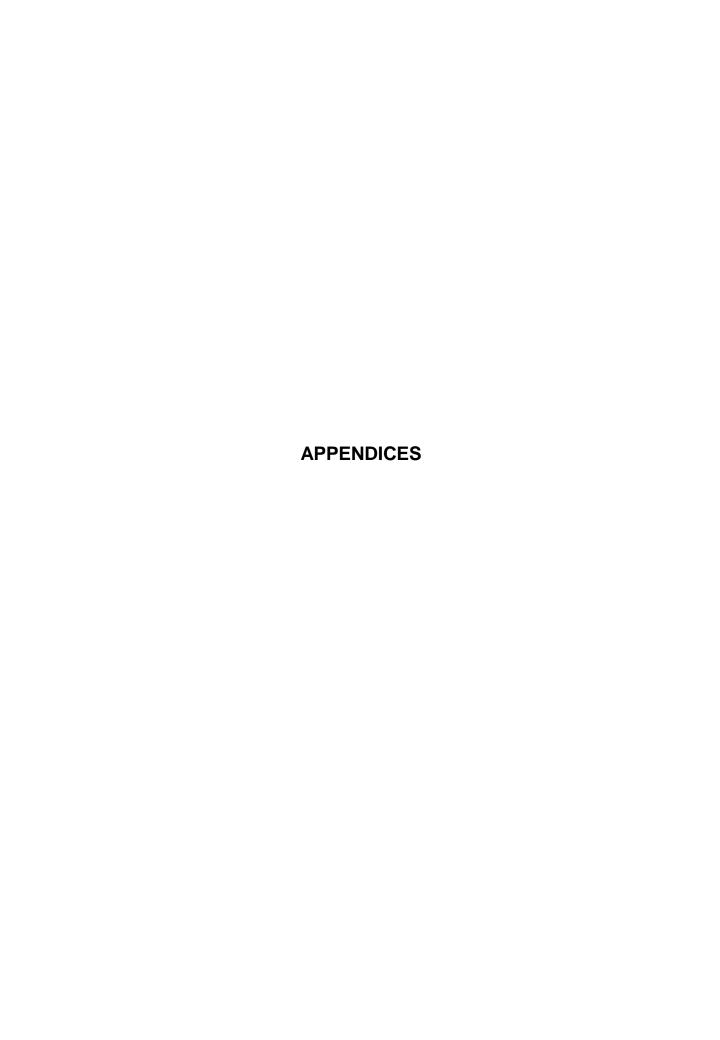


PHOTOGRAPH 3: View of Tall Ruderal Vegetation, Semi-improved Grassland and Woodland



PHOTOGRAPH 4: View of Rubbish Piles



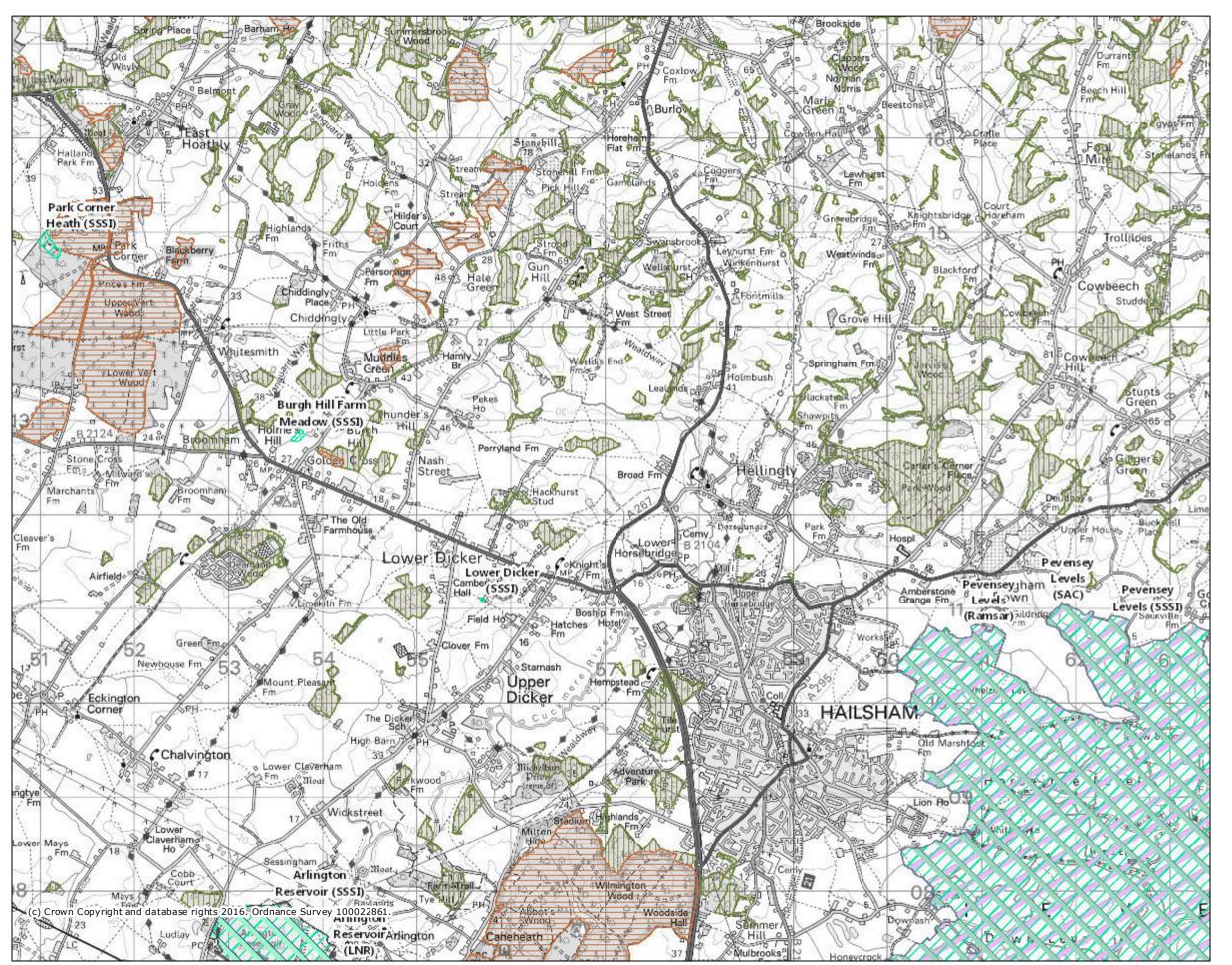


APPENDIX 1

Information downloaded from Multi-Agency Geographic Information for the Countryside (MAGIC)



6985 Land at Upper Horsebridge Road



Legend

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

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB36

xmin = 547800

ymin = 107800

xmax = 566300 vmax = 116800

Map produced by MAGIC on 15 February, 2016.

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