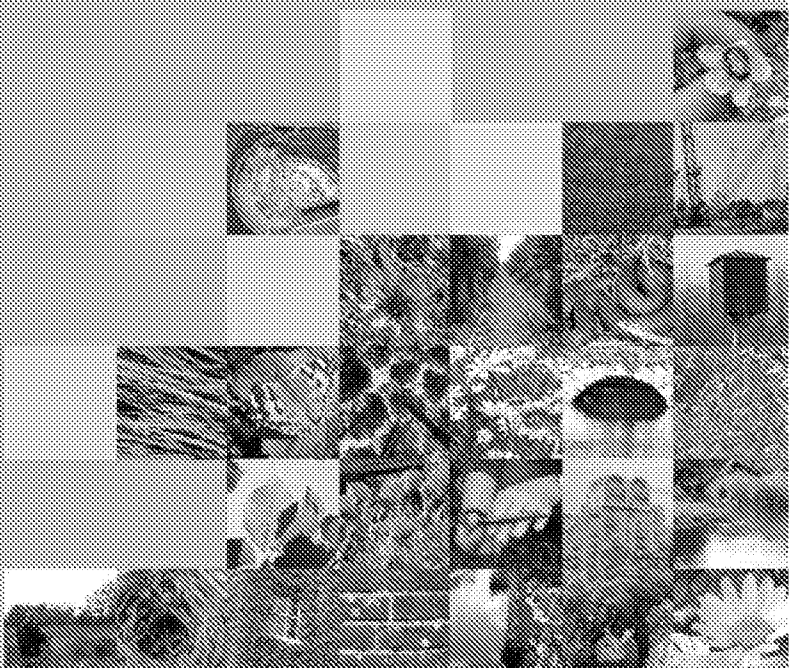




Wings, Lidsey Road, Woodgate, Chichester

Preliminary Ecological Appraisal

Report for Thakeham

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Summary of Key Findings

The Ecology Consultancy was commissioned by Thakeham to carry out a Preliminary Ecological Appraisal (PEA), comprising a Phase 1 habitat survey, protected species assessment and ecological evaluation of land at Wings House Lidsey Road, Woodgate, Chichester, West Sussex. The main findings of the PEA are as follows:

- » The site comprised a residential property and garden with outbuildings. The main habitats present included amenity grassland, species-poor hedgerow, bare ground, scattered trees, buildings and hardstanding. Habitats present are considered of value within the site and boundary habitats only (but may assume higher value where they support protected and/or notable species).
- » **Bats** – Building 1 has High suitability to support roosting bats as detailed within the Preliminary Roost Assessment undertaken by the Ecology Consultancy (The Ecology Consultancy, 2019b). A single large oak tree was recorded on site with Moderate suitability to support bats due to its size and age. Further surveys are required to ascertain if any bats are using the site for roosting.
- » **Breeding birds** – the buildings, introduced shrub, trees and hedgerows on site all have potential to support breeding birds and are likely to be affected by the proposed development. In order to comply with legislation, these habitats should be removed September to February inclusive. Where this is not possible, a check for nesting birds prior to vegetation clearance should be undertaken. If any nesting birds are found at any time during clearance works, work should stop immediately and an ecologist consulted.
- » **Great crested newts** – no waterbodies were recorded on site but suitable terrestrial habitats are present in the form of hedgerows and areas of rubble, compost and log piles. According to a Natural England rapid risk assessment, development of the site is highly unlikely to cause an offense and a mitigation licence is not considered necessary. Further surveys are not considered necessary for the site.
- » **Reptiles** – habitats with low potential to support reptiles were present at the site. In order to comply with legislation, it is recommended that a precautionary approach is taken whereby habitats are removed in such a way as to minimise the risk of killing and injuring reptiles and dissuade them from using the site during construction.
- » Recommendations to enhance the biodiversity value of the site in accordance with national and local planning policies comprise the inclusion of wildlife planting; the provision of bird nesting opportunities; and wildlife-friendly fencing.

1 Introduction

BACKGROUND TO COMMISSION

- 1.1 The Ecology Consultancy was commissioned by Thakeham, to carry out a Preliminary Ecological Appraisal (PEA) of Wings House, Lidsey Road, Woodgate, West Sussex. The appraisal was carried out in order to provide ecological information to accompany the planning application for a proposed development at Wings House, Lidsey Road. Previous ecology survey work including PEA, reptiles, bat activity and GCN assessment has been undertaken at the adjacent Wings Nursery site to inform a planning application for a residential development. This appraisal considers the land within an additional area to be appended to the Wings Nursery planning application and land within this site boundary is hereon referred to as 'the site'.

SCOPE OF THE REPORT

- 1.2 This aim of this appraisal is to provide baseline ecological information about the site. This will be used to identify any potential ecological constraints associated with the proposed development and/or to identify the need for additional survey work to further evaluate any impact that may be risk contravention of legislation or policy relating to protected species and nature conservation. Where necessary, avoidance, mitigation/compensation and/or enhancement measures have been recommended to ensure compliance.
- 1.3 This appraisal is based on the following information sources:
- » a desk study of the site and land within a 2km surrounding radius;
 - » a Phase 1 habitat survey (JNCC, 2010) of the site to identify and map the habitats present;
 - » a protected species assessment of the site to identify features with potential to support legally protected species; and
 - » an evaluation of the site's importance for nature conservation.
- 1.4 This appraisal has been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2013) and as detailed in British Standard 42020:2013 *Biodiversity - Code of Practice for Biodiversity and Development* (BSI, 2013).

- 1.5 The habitat survey was carried out by Jessica Lewis BSc (Hons) MRes, an Assistant Ecologist with over two years commercial survey experience. The assessment and report was written by Georgina Baulcomb BSc (Hons) MSc GradCIEEM, an Ecologist with over four years' experience who is competent in carrying out Phase 1 habitat surveys and protected species assessments.

SITE CONTEXT AND STATUS

- 1.6 The proposed development site is located in an urban area in the area of Woodgate, north Bognor Regis. It is approximately 0.22 hectares (ha) in size and is located at Ordnance Survey National Grid reference SU 93760 04139. The site is comprised of a residential building with linked garage, shed, hardstanding, and garden with scattered trees and hedgerows.
- 1.7 The site is bordered to the north by pasture and a railway line, to the east by Lidsey Road, to the south by residential properties and associated gardens and to the west by plant nurseries and arable land. The wider area includes open space and scattered broadleaved woodland copses interspersed between residential properties.

DEVELOPMENT PROPOSALS

- 1.8 Proposals for the Wings Nursery land immediately adjacent the site to the west include construction of approximately 50 new residential dwellings with associated gardens and driveways with a wildlife zone (Arbeco Ltd, 2017). It is considered that the site would form part of the proposed development, however, detailed development proposals for the site were not available at time of writing.

RELEVANT LEGISLATION AND PLANNING POLICY

- 1.9 The following key pieces of nature conservation legislation are relevant to this appraisal. A more detailed description of legislation is provided in Appendix 5:
- ✧ The Conservation of Habitats and Species Regulations 2017 (as amended) (commonly referred to as the Habitats Regulations);
 - ✧ Wildlife and Countryside Act 1981 (as amended);
 - ✧ Natural Environment and Rural Communities Act 2006;
 - ✧ Protection of Badgers Act 1992; and
 - ✧ Wild Mammals (Protection) Act 1996.

- 1.10 The National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2018) requires local authorities to avoid and minimise impacts on biodiversity and, should provide net gains in biodiversity when taking planning decisions.
- 1.11 Other planning policies at the local level which are of relevance to this development include: The Arun District Council Local Plan (2014). Further information is provided in Appendix 5.

2 Methodology

DESK STUDY

2.1 The following data sources were reviewed to provide information on the location of statutory designated sites¹, non-statutory designated sites², legally protected species³, Species and Habitats of Principal Importance⁴ and other notable species⁵ and notable habitats⁶ that have been recorded within a 2km radius of the site:

- ✧ Sussex Biological Information Centre (SxBIC), the local Biological Records Centre, principally for species records and information on non-statutory sites;
- ✧ MAGIC (<http://www.magic.gov.uk/>) - the Government's on-line mapping service Information was sought concerning: the presence of ancient semi-natural woodland (ASNW); statutory designated nature conservation sites ; and extant or historic European Protected Species Mitigation licences.; and
- ✧ Ordnance Survey mapping and publicly available aerial photography to determine any features such as: running and standing water; woodland; tree lines; hedgerows; railway corridors; and the surrounding landscape uses..

2.2 Records provided by the desk study are provided in Section 3 of this report. Records for relevant protected or noteworthy species have been used to inform the assessment of the potential for protected species at the site and to provide a preliminary view of the site's ecological value but are not presented in the report.

HABITAT SURVEY

2.3 A habitat survey of the site was carried out on the 14 October 2019 in cool, cloudy conditions with some light rain. It covered the entire site including boundary features. Habitats were described and mapped following standard Phase 1 habitat survey

¹ Statutory designations include Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR).

² Non-statutory sites are designated by local authorities (e.g. Sites of Importance for Nature Conservation or Local Wildlife Sites).

³ **Legally protected species** include those listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981; Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended); or in the Protection of Badgers Act 1992 (as amended).

⁴ **Species of Principal Importance** are those listed on Section 41 of the Natural Environment and Rural Communities Act, 2006.

⁵ **Notable species** include Species of Principal Importance under the Natural Environment and Rural Communities Act 2006; Local Biodiversity Action Plan (LBAP) species; Birds of Conservation Concern (Eaton *et al.*, 2015); and/or Red Data Book/nationally notable species (JNCC, undated).

⁶ **Notable habitats** include Habitats of Principal Importance under the Natural Environment and Rural Communities Act, 2006; those included in an LBAP; Ancient Woodland Inventory sites; and Important Hedgerows as defined by the Hedgerow Regulations 1997.

methodology (JNCC, 2010). Habitats were marked on a paper base map and subsequently digitised using ESRI ArcGIS software. Habitats were also assessed against descriptions of Habitat of Principal Importance as set-out by the JNCC (BRIG, 2008)⁷.

- 2.4 Records for dominant and notable plants are provided, as are incidental records of birds and other fauna noted during the course of the habitat survey.
- 2.5 Common names are used where widely accepted – for amphibians, birds, fish, mammals, reptiles and vascular plants. Scientific names are provided for other groups but at first mention only if there is also an accepted common name.
- 2.6 The site was also surveyed for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, detailed mapping of such species is beyond the scope of this commission and the location on habitat plan are indicative only.
- 2.7 Target notes are used to provide information on specific features of ecological interest (e.g. a badger sett) or habitat features that were too small to be mapped.

PROTECTED AND INVASIVE SPECIES ASSESSMENT

- 2.8 The suitability of the site for legally protected species was assessed on the basis of relevant desk study records⁸ combined with field observations from the habitat survey. The likely value of habitat for protected species occurrence was ranked on a scale from 'negligible' to 'present' as described in Table 2.1.
- 2.9 The assessment of habitat suitability for protected or notable species was based on professional judgement drawing on experience of carrying out surveys of a large number of urban and rural sites and best practice survey guidance on habitat suitability and identifying field signs. Further information is provided in CIEEM's Sources of Survey Methods⁹.

⁷ Data required to confirm that certain habitats (including rivers and ponds) meet criteria for Habitats of Principle Importance is beyond that obtained during a Phase 1 habitat survey. In these cases the potential for such habitats to meet relevant criteria is noted but further surveys to confirm this assessment may be recommended

⁸ Primarily dependent on the age of the records, distance from the site and types of habitats at the site.

⁹ <http://www.cieem.net/sources-of-survey-methods-sosm->

Table 2.1: Protected species assessment categories

Category	Description
Present	Presence confirmed from the current survey or by recent, confirmed records.
High	Habitat present provides all of the known key requirements for a given species/species group. Local records are provided by desk study. The site is within or close to a national or regional stronghold for a particular species. Good quality surrounding habitat and good connectivity.
Moderate	Habitat present provides all of the known key requirements for a given species/species group. Several desk study records and/or site within national distribution and with suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, barriers to movement and disturbance.
Low	Habitat present is of relatively poor quality for a given species/species group. Few or no desk study records. However, presence cannot be discounted on the basis of national distribution, nature of surrounding habitats or habitat fragmentation.
Negligible	Habitat is either absent or of very poor quality for a particular species or species group. There were no desk study records. Surrounding habitat unlikely to support wider populations of a species/species group. The site may also be outside or peripheral to known national range for a species.

2.10 The findings of this assessment establish the need for protected species surveys that are required to achieve compliance with relevant legislation. Surveys are commonly required for widespread species such as bats, great crested newt, reptiles and badger; but may be necessary for other species if suitable habitat is present.

2.11 Surveys may be required where a site is judged to be of low suitability for a particular species/species group. However, in some cases there may be opportunities to comply with legislation, without further survey, through precautionary measures prior to and during construction.

SITE EVALUATION

2.12 The site's ecological value has been evaluated broadly following guidance issued by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) which ranks the nature conservation value of a site according to a geographic scale of reference: international, national, regional, county/metropolitan, district/borough, local/parish or of value at the site scale. In evaluating the nature conservation value of the site the following factors were considered: nature conservation designations; species/habitat rarity; naturalness; fragility and connectivity to other habitats;

- 2.13 An initial assessment of the site's contribution to green infrastructure and ecosystem services, as recommended by *BS 42020:2013 Biodiversity. Code of practice for planning and development*, is also included.

DATA VALIDITY AND LIMITATIONS

- 2.14 Every effort has been made to provide a comprehensive description of the site, however, the following limitations apply to this assessment.
- ✧ The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if on the basis of the preliminary assessment or during subsequent surveys it is considered reasonably likely that protected species may be present.
 - ✧ The ecological evaluation is preliminary and may change subject to the findings of further ecological surveys (should these be required).
 - ✧ Even where data for a particular species group is provided in the desk study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest, the area may simply be under-recorded.
 - ✧ Where only four figure grid references are provided for protected species by third parties, the precise location of species records can be difficult to determine and they could potentially be present anywhere within the given 1km x 1km square. Equally six figure grid references may be accurate to the nearest 100m only.
 - ✧ The Phase 1 habitat survey does not constitute a full botanical survey or provide accurate mapping of invasive plant species.
 - ✧ Ecological survey data is typically valid for two years unless otherwise specified.
- 2.15 Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity values and the potential of the site to support protected and notable species.

3 Results

DESIGNATED SITES

Statutory designated nature conservation sites

- 3.1 The proposed development site is not subject to any statutory nature conservation designations. There are no European or national statutory sites within a 2km radius of the site.

Non-statutory designated nature conservation sites

- 3.2 The proposed development site is not subject to any non-statutory nature conservation designations. No non-statutory designated sites are present within 2km of the site.

Habitat inventories and landscape-scale conservation initiatives

Ancient woodland

- 3.3 One area of woodland within a 2km radius of the site appears on the ancient woodland inventory located approximately 1.8km northwest of the site.

PHASE 1 HABITAT SURVEY

Overview

- 3.4 The site consists of three buildings/structures including the main residential building, garage connected to the north of the main building and a separate timber shed which were surrounded by a garden including areas of hardstanding, amenity grassland, scattered trees and species-poor hedgerows. The entire site boundary was fenced with a mix of chain link and wooden fence panels. There were multiple gaps underneath the fence line on the west boundary allowing access to the fields beyond.
- 3.5 Phase 1 habitats types are mapped in Figure 1, areas are given in Table 3.1. A description of dominant and notable species and the composition of each habitat is provided below.

Table 3.1: Phase 1 Habitat Areas

Phase 1 Habitat	Extent m ²	%
Amenity grassland and scattered trees	1207	60.35
Hardstanding	435	21.75
Buildings	327	16.35
Bareground	31	1.55

Table 3.1: Phase 1 Habitat Areas

Phase 1 Habitat	Extent m ²	%
Total	2000	100
Hedgerow	~100m	N/A

Habitat description

Buildings and hardstanding

3.6 Three buildings were situated in the centre of the site and are described below, in terms of their suitability for roosting bats (The Ecology Consultancy, 2019b).

- ✦ Building 1 was a two-storey residential property with four main roof pitches; two running east-west with two similar sized sections extending north. The roof was covered with clay roof and ridge tiles and the upper storey of the building was covered with clay hanging tiles (see Photograph 3 – Appendix 2).
- ✦ Building 2 was a single storey garage that had been converted into a swimming pool. The roof was pitched and hipped with a central timber roof vent. This building was connected to the north elevation of building 1.
- ✦ Building 3 was a small, timber framed shed with pitched roof covered with timber boarding. (see Photograph 2).

3.7 There were adjacent areas of hardstanding, including a tarmac drive to the main access point on the eastern boundary of the site. Timber decking was located along the west elevation of building 1.

Amenity grassland

3.8 Amenity grassland formed the majority of the garden area and comprised (amongst other species) dominant perennial rye grass, Yorkshire fog, with frequent daisy, yarrow, dandelion, occasional white clover, ground ivy, ribwort plantain, creeping buttercup, common nettle and rarer examples of viola sp., and chickweed. The sward was mown very short and appeared to be regularly managed in this way (see Photograph 1 and 2).

3.9 Areas of grassland south and east of the main house where the habitat extends close to and underneath the species-poor hedgerow was dominated by springy turf moss due to the high levels of shade.

Species-poor hedgerow

- 3.10 *Leylandii* sp., hedging approximately 10m high formed the southern and eastern boundaries. Other species were present within and at the base of the hedgerow including common ivy, broadleaved dock, common nettle, thistle sp., yarrow, teasel and wood sorrel.

Scattered trees

- 3.11 Nine trees were scattered across the garden on site and included coniferous and non-native species planted as ornamentals. This included cedar, cypress, cherry, eucalyptus, holly and oak. All of the trees were mature specimens. There was also the occasional ivy-clad tree.

PROTECTED AND INVASIVE SPECIES ASSESSMENT

3.12 The potential for the site to support protected species has been assessed using criteria provided in Table 3.2, based on the results of the desk study and observations made during the site survey of habitats at the site. Other legally protected species are not referred to as it is considered that the site does not contain habitats that would be suitable to support them. The following species/species groups are potentially present at the site:

- ✦ bats;
- ✦ dormice;
- ✦ great crested newts;
- ✦ breeding birds;
- ✦ reptiles; and
- ✦ badgers;

3.13 The table also summarises relevant legislation and policies relating to protected and invasive species. Key pieces of statute are summarised in Section 1 and set-out in greater detail in Appendix 5.

Table 3.2: Protected and Invasive Species Assessment

Habitat/ species	Status ref.	Likelihood of occurrence
Bats	HR WCA S5	HIGH: The main residential property with garage extension to the north was assessed as having high suitability to support roosting bats according to the Preliminary Roost Assessment undertaken by The Ecology Consultancy in October 2019 (The Ecology Consultancy, 2019b). The building had multiple gaps under and missing hanging tiles and roof tiles. One mature oak tree located in the east section of the site had thick ivy coverage and multiple dead branches with potential to support bat roosts. Three mature trees were of a size and age suitable to support features with bat roost potential. The site is linked to suitable off-site roosting and foraging habitat via hedgerows, scrub and grassland and contains habitats suitable for foraging bats. There are desk study records of five species of bats within 2km of the site including common pipistrelle, soprano pipistrelle, barbastelle, noctule and brown long-eared bats occurring between 2009-19. The buildings and trees on site are likely to be removed to facilitate development and will be considered further in this report. A separate Preliminary Roost Assessment report (The Ecology Consultancy, 2019b) on the suitability of the buildings and trees on site to support bats has been produced and should be read alongside this Preliminary Ecological Appraisal.
Dormice	HR WCA S5	NEGLECTIBLE: Woody habitat present on-site that could support foraging or nesting dormouse was limited to species-poor non-native hedgerows and scattered trees. Connectivity to the site via hedgerows and scrub was not good due to a lack of canopy cover, and overall there is little suitable habitat in the wider landscape and no significant areas of woodland within 1km. The desk study did not return any records of dormice within 2km of the site. However, there is an extant EPSM licence for hazel dormice approximately 1.6km north of the site. Overall, based on the small area of sub-optimal habitat present and limited availability of suitable off-site habitat in the wider landscape it is highly unlikely that this species is present on site. As there is a negligible likelihood of presence, dormice are not considered further in this report.
Great crested newts	HR WCA S5	LOW: The piles of garden waste (see Target Note 3), rockery and species-poor hedgerow around the margins of the site could potentially be used as refugia. However, habitats on-site were largely unsuitable for great crested newts in their terrestrial phase as they mainly comprised short-mown amenity grassland which does not provide cover or foraging opportunities. There are no ponds located on-site. A

¹⁰ The following abbreviations have been used to signify the legislation regarding different species: HR = Conservation of Habitats and Species Regulations 2010 (as amended); WCA S1 = Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); WCA S5 = Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); WCA S9 = Schedule 9 of the Wildlife and Countryside Act 1981 (as amended); PBA = Protection of Badgers Act, 1992.

¹¹ The following abbreviations have been used to signify the policy of conservation assessments applying to notable species: SPI = Species of Principal Importance under the NERC Act 2006; LBAP = Local Biodiversity Action Plan species; BoCC = Birds of Conservation Concern - amber list / red list (Eaton *et al.*, 2015); and/or RD/NN = red data book/nationally notable species (JNCC, undated).

Table 3.2: Protected and Invasive Species Assessment

Habitat/ species	Status	Likelihood of occurrence
		single pond and two drains were identified within 500m of the site that could support breeding great crested newt. Seven desk study records for this species from the past ten years located approximately 1.6km north of the site. In May 2019, The Ecology Consultancy carried out Habitat Suitability Index (HSI) assessment and eDNA survey of a pond, two drains and the reservoir approximately 470m from the adjacent site boundary (The Ecology Consultancy, 2019a). The results for the reservoir were positive indicating it is likely used as a breeding pond for this species. Due to the limited availability of suitable terrestrial habitat and low connectivity to suitable habitats in the wider landscape, it is considered unlikely that this species is present on site. As there is a low likelihood of presence, great crested newts are considered further in Section 4 this report.
Breeding birds	WCA S5	HIGH: The buildings, species-poor non-native hedgerows and scattered trees provided suitable nesting habitat for common breeding bird species. Disused nest debris of an unknown species of bird was recorded on the main residential property showing the site has suitability and had been used in the past by breeding birds. It is likely that breeding birds will occur at the site in low numbers and as such they are considered further in Section 4 of this report.
Reptiles	WCA S5	LOW: Habitats on site suitable for supporting breeding or foraging reptiles comprised piles of garden waste, log piles and species-poor hedgerows around the margins of the site. The site is connected to similar suitable off-site habitat including large areas of grassland, scrub and hedgerows to the west. However, suitable habitat at the site was of limited extent and most comprised short-mown amenity grassland that does not provide foraging or cover for reptiles. There are desk study records for three species of reptile within 2km of the site including slow worm, common lizard, and grass snake. These records were all at least nine years old and located approximately 1.6km north of the site. Considering the above, there is a low possibility that widespread reptiles may occur at the site in low numbers and as such they are considered further in Section 4 of this report.
Badgers	PBA	NEGLECTIBLE: Habitats on site were easily visible and no signs of badger were recorded during the habitat survey. Given the lack of field evidence for this species, the presence of intact fencing along the majority of the site boundary and the small size of the site it is highly unlikely that badgers are present on site or that the site forms an important part of a badger territory. The SxBIC do not provide desk study records of badger. As there is a negligible likelihood of presence, badgers are not considered further in this report.

NATURE CONSERVATION EVALUATION

3.14 The proposed development site is not subject to any nature conservation designations. It contains small areas of common and widespread habitats none of which are habitats of principal importance or Sussex BAP habitats. It is situated in a semi-rural location surrounded by arable fields and residential properties with roads and is distant from and sites of habitats of nature conservation importance.

3.15 The habitats on site were suitable for a range of note-worthy species, including Species of Principal Importance and Sussex BAP species, as reported in the desk study or recorded during the survey, as follows:

- ✦ slow worm and other widespread species of reptile;
- ✦ great crested newts and other widespread amphibians;
- ✦ common and widespread but declining species of birds that are also species of conservation concern¹²; and
- ✦ hedgehog.

3.16 The habitats at the site and populations of the above species are likely to be of value within the site only. It is unlikely that the site would support rare species, or diverse assemblages or large populations of any noteworthy species.

3.17 Records for barbastelle, common pipistrelle, soprano pipistrelle, noctule and brown long-eared bats, which are all Species of Principal Importance, were provided in the desk study. It is not possible to confirm the value of bat populations that may be present at the site until further surveys have been undertaken. Recommendations for further survey are provided in Section 4.

Natural England rapid risk assessment for GCN

3.18 A rapid risk assessment for the potential of development on site to impact GCN was carried out and the results are shown in Table 3.3 below.

Table 3.3: Protected and Invasive Species Assessment

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	National offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0

¹² Birds of Conservation Concern - amber list / red list (Eaton *et al.*, 2015);

Table 3.3: Protected and Invasive Species Assessment

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	National offence probability score
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	No effect	0
Maximum:		0.005
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

4 Potential Impacts and Recommendations

4.1 This section summarises the potential impacts on habitats and notable species that may be present at this site. The impact assessment is preliminary and further detailed assessment and surveys will be required to assess impacts and design suitable mitigation, where appropriate.

4.2 The following key ecological issues have been identified:

- ✧ habitat suitable for roosting bats is present – further survey will be required to establish their presence/likely absence in buildings and trees that are due to be removed;
- ✧ habitat suitable for breeding birds is present – measures must be taken to avoid killing birds or destroying their nests;
- ✧ habitat suitable for widespread reptiles is present – measures must be taken to avoid killing or injuring reptiles;
- ✧ habitat suitable for great crested newt (GCN) is present – measures must be taken to avoid killing or injuring GCN;
- ✧ habitat suitable for hedgehog is present – measures should be taken to continue accommodating this species on site post-development; and
- ✧ a range of measures should be undertaken to satisfy the requirement for ecological enhancement included in planning policy.

CONSTRAINTS AND MITIGATION/COMPENSATION

Designated Nature Conservation Sites

4.3 No impacts are envisaged on statutory or non-statutory designated sites due to the small scale of the proposed development and distance of the site from any designated site. Therefore there are no constraints to the proposed development in this regard.

Habitats

4.4 Approximately 0.22ha of amenity grassland, buildings with hardstanding, bare ground, species-poor hedgerow and scattered trees are likely to be directly impacted to facilitate development on site. No particular constraints were identified in relation to the intrinsic value of the habitats present; however, best environmental practice measures should be implemented to protect any retained trees.

Bats

- 4.5 All British species of bat are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). Under this legislation it is an offence to deliberately capture, kill, disturb and damage or destroy a bat roost. Some species of bat are also Species of Principal Importance and Sussex LBAP species.
- 4.6 Building 1 was assessed to have high suitability to support roosting bats (The Ecology Consultancy, 2019b). Detailed development proposals were not available at time of survey, however, should the buildings on site be removed to facilitate development then further surveys will be required including three emergence/re-entry bat surveys. Full recommendations are detailed in the Preliminary Roost Assessment report.
- 4.7 One oak tree located in the south eastern corner of the site (T7 in the PRA report) had multiple broken or cracked branches and dense growth of ivy that were suitable for roosting bats were present at the site. Recommendations for further survey are detailed in the PRA report.
- 4.8 It is recommended that measures are implemented to avoid night-time lighting of features with potential for roosting bats, as well as areas that could provide flight lines and foraging habitats for bats. Further advice on the locations and appropriate methods for controlling light emissions should be sought when commissioning the bat surveys noted above.

Breeding birds

- 4.9 All wild birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). The site supports at least breeding bird and highly likely to support others.
- 4.10 Where the proposed works require the removal of buildings, shrubs, trees and hedgerows with potential to support breeding birds, this must be carried out September to February inclusive, to avoid any potential offences relating to breeding birds during their main bird breeding season (Newton *et al.*, 2011).
- 4.11 If site clearance during the breeding season is unavoidable then potential nesting habitat must be inspected shortly before work commences to identify active birds'

nests. Should they be present, the nest and a suitable buffer of habitat around it must be retained until the young have left the nest.

Reptiles

- 4.12 All species of reptile are protected from killing or injury under the Wildlife and Countryside Act 1981 (as amended).
- 4.13 Habitats on site with potential to support reptiles were restricted to a piles of garden waste, log piles, rockery and species-poor hedgerow boundary. Consequently there is limited potential for reptiles to be present at the site and any populations present are likely to be small and comprised of widespread species such as slow worm.
- 4.14 Due to the limited potential for reptiles, it is not considered necessary to carry out reptile surveys but management of suitable habitat is required to dissuade reptiles from using the site (should they be present), to avoid any potential impacts on reptiles and to comply with legislation. This will involve maintaining the grassland on site at a regularly-mown sward that is unsuitable for reptiles until just before works commence. Garden waste and tall ruderal vegetation that may provide cover or hibernation sites must be carefully removed by hand and with hand-held tools and taken off-site. Any vegetation also of value to breeding birds must be removed outside of the main breeding bird season, otherwise this work should be carried out when reptiles are active i.e. March to September.

Great crested newts

- 4.15 Great crested newts are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). Under this legislation it is an offence to deliberately capture, kill, injure or disturb this species.
- 4.16 As there is a low likelihood of great crested newts being present on site, and the results of a rapid risk assessment consider on site development highly unlikely to cause an offence, no further survey is required and GCN do not pose a constraint to development.

Other protected species

- 4.17 In the unlikely event that any protected species are found during site clearance or construction works must stop immediately and advice sought from a suitably qualified ecologist on how to proceed

Hedgehogs and other small mammals.

- 4.18 In the event that the proposed development will include the use of fencing to divide the residential properties and gardens, it is recommended that connectivity is maintained by installing wildlife-friendly fencing, with gaps or tunnels in the bottom panels/gravel boards to allow easy passage for small mammals to continue foraging in this area. This can be achieved for example by cutting a hole (approximately 10cm²) in certain gravel boards, which is large enough for small mammals to pass through, but small enough to contain pets.

Environmental best practice

- 4.19 Any retained trees should be protected in accordance with British Standards Institution (2012) guidelines.

FURTHER SURVEY REQUIREMENTS

- 4.20 Table 4.1 lists further survey requirements as recommended in the constraints section.

Table 4.1: Further survey requirements

Species/ Habitat	Survey Requirement	Number of surveys and seasonal considerations
Bats	Emergence surveys for buildings with suitability to support roosting bats following the results of the PRA.	Buildings with high suitability require three surveys to ascertain the presence/likely absence of bats. These must be carried out in the bat active period of May to September with at least one survey undertaken between May-August.
	To survey trees bat with roosting potential. Climbed tree inspection and/or emergence/re-entry surveys as required.	Following a single climbed tree inspection two emergence/re-entry survey visits are required for any features with moderate roost potential and three for those with high roost potential. Climbed tree inspections can be carried out at any time of year and emergence surveys must be carried out between May and August and spread evenly across this period (Collins, 2016).

OPPORTUNITIES FOR ECOLOGICAL ENHANCEMENT

- 4.21 Planning policy at the national and local level and strategic biodiversity partnerships encourage inclusion of ecological enhancements in development projects. Ecological enhancements can also contribute to green infrastructure and ecosystem services such as storm water attenuation and reducing the urban heat island effect. The following measures would be suitable for integration into the site's design, but would require a more detailed design to successfully implement.

Wildlife planting

- 4.22 Wildlife planting should be integral to the soft landscape plans and should include native species and/or species of recognised wildlife value¹³. The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals and continue to accommodate those already recorded at the site. Trees should also be provided and can be under-planted to improve structure and cover for wildlife. Consideration should also be given to creation of species-rich native hedgerows.
- 4.23 Good horticultural practice should be utilised, including the use of peat-free composts, mulches and soil conditioners, native plants with local provenance and avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).
- 4.24 Landscaping should include the use of climbing plants growing on a support structure to provide vertical nesting habitat and foraging resources for birds and invertebrates. The support structure should ideally be placed 50-100mm off the façade. Plants should comprise native species or non-native species of recognised wildlife value and either deciduous or evergreen species depending on the specification.

Provision of bird nesting opportunities

- 4.25 The continued provision of bird boxes would be appropriate at this site and any that are lost should be replaced. Many different designs are available including boxes to support colonial species such as house sparrow. Woodcrete bird boxes (Schwegler, 2011) are recommended as they are long lasting compared to wooden boxes, insulate occupants from extremes of temperature and condensation and are available in a broad range of designs.

¹³ For example The Royal Horticultural Society (RHS) Perfect for Pollinators Scheme <https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators> and the joint RHS/Wildlife Trust's Gardening With Wildlife In Mind Database <http://www.joyofplants.com/wildlife/home.php>

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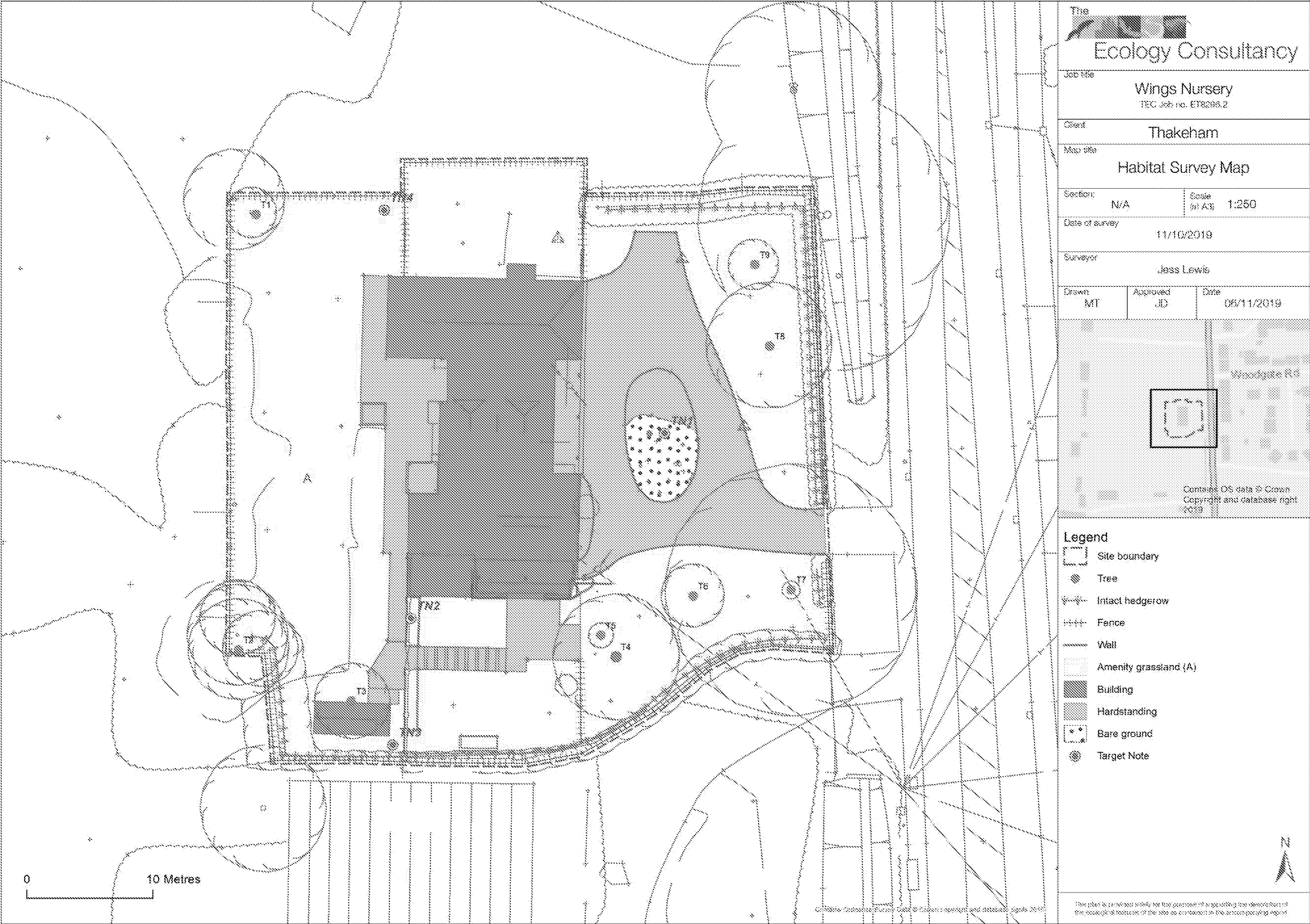
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Appendix 1: Habitat Map

Figure 1: Habitat Survey Map



Appendix 2: Photographs

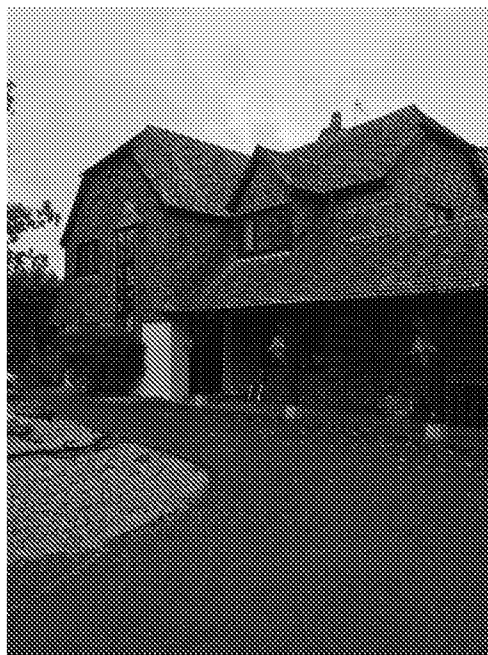
Photograph 1
Amenity grassland and timber
decking in the west section of
the site.



Photograph 2
Amenity grassland,
hardstanding, wall and fence
line in south section of site.



Photograph 3
East elevations of main
residential building with
numerous gaps under hanging
tiles.



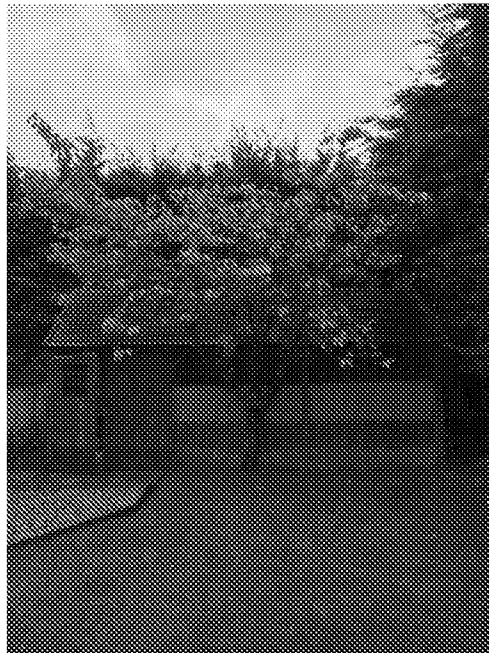
Photograph 4

T7, a large mature oak tree with multiple suitable features for roosting bats. View looking east.



Photograph 5

Building 2 (timber shed) with T3 on amenity grassland.



Appendix 3: Plant Species List

Plant Species List for Wings Nursery, compiled from the Phase 1 habitat survey carried out on the 11 October 2019.

Scientific nomenclature and common names for vascular plants follow Stace (2010) and Blockeel & Long (1998) for bryophyte species. Please note that this plant species list was generated as part of a Phase 1 habitat survey, does not constitute a full botanical survey and should be read in conjunction with the associated results section of this PEA.

Abundance was estimated using the DAFOR scale and additional notes taken as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally
c=clumped, e=edge only, g=garden origin, p=planted, y = young, s=seedling or sucker,
t=tree, h=hedgerow, w=water

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	QUALIFIER
<i>Achillea millefolium</i>	Yarrow	F	
<i>Bellis perennis</i>	Daisy	A	
<i>Betula pendula</i>	Silver birch	R	t, g
<i>Cedrus atlantica</i>	Atlas cedar	LO	t, g, p
<i>Eucalyptus</i> sp.	Eucalyptus	R	t, g
<i>Glechoma hederacea</i>	Ground-ivy	LF	
<i>Hedera helix</i>	Ivy	R	
<i>Holcus lanatus</i>	Yorkshire fog	A	
<i>Ilex aquifolium</i>	Holly	R	t, y, p
<i>Leylandii</i> sp.	Leyland cypress	F	e
<i>Lolium perenne</i>	Perennial rye-grass	D	
<i>Plantago lanceolata</i>	Ribwort plantain	O	
<i>Prunus</i> sp.	Cherry	O	t, y, p
<i>Quercus robur</i>	Pedunculate oak	R	s, e
<i>Ranunculus repens</i>	Creeping buttercup	O	
<i>Rosa</i> sp.	Rose	R	p
<i>Rumex obtusifolius</i>	Broad-leaved dock	R	e
<i>Rumex acetosa</i>	Sorrel	O	
<i>Rhytidiadelphus squarrosus</i>	Springy turf moss	D	
<i>Sonchus</i> sp.	Sow-thistles	LF	e
<i>Taraxacum</i> sp.	Dandelion	O	
<i>Trifolium repens</i>	White clover	O	
<i>Urtica dioica</i>	Common nettle	LF	e

Appendix 4: Target Notes

Target Notes List for Wings Nursery from the Phase 1 habitat survey and protected and notable species assessment carried out on the 11 October 2019.

Target note (TN)	Description
1	Rockery area with a mixture of large rocks and gravel located in the centre of the tarmac car parking area. Evidence of tree stumps suitable for basking reptiles.
2	Raised beds on amenity grassland planted with plastic plants.
3	Compost, garden waste and brash heap to side of shed building.
4	Pile of timber, stacked up by fence boundary.

Appendix 5: Legislation and Planning Policy

Important notice: This section contains details of legislation and planning policy applicable in Britain only (i.e. not including the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

A NATIONAL LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive¹⁴ is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CROW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- ✧ Deer Act 1991;
- ✧ Countryside and Rights of Way (CROW) Act 2000;
- ✧ Natural Environment & Rural Communities (NERC) Act 2006;
- ✧ Protection of Badgers Act 1992;
- ✧ Wild Mammals (Protection) Act 1996.

Species and species groups that are protected or otherwise regulated under the aforementioned domestic and European legislation, and that are most likely to be affected by development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds,

¹⁴ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

dormouse, invasive plant species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2010 (as amended) (which includes smooth snake, sand lizard, great crested newt and natterjack toad), all bat species, otter, dormouse and some plant species) are given below. **These should be read in conjunction with the relevant species sections that follow.**

- ✧ In the Directive, the term ‘deliberate’ is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- ✧ The Conservation of Habitats and Species Regulations 2010 (as amended) does not define the act of ‘migration’ and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.
- ✧ In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three ‘tests’: i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

Bats

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- ✧ Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- ✧ Deliberate disturbance of bat species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) to hibernate or migrate³
 - b) to affect significantly the local distribution or abundance of the species
- ✧ Damage or destruction of a breeding site or resting place

- ✧ Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- ✧ Intentional or reckless disturbance (at any level)
- ✧ Intentional or reckless obstruction of access to any place of shelter or protection
- ✧ Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded de facto protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost¹⁵.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this makes it an offence to:

- ✧ Intentionally kill, injure or take any wild bird;
- ✧ Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- ✧ Intentionally take or destroy an egg of any wild bird:

¹⁵ Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. **150**. The Mammal Society, Southampton.

- ✧ Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- ✧ Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young;
- ✧ Intentional or reckless disturbance of dependent young of such a bird.

How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird breeding season which typically runs from March to August¹⁶. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Those species of bird listed on Schedule 1 are additionally protected against disturbance during the breeding season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Herpetofauna (Amphibians and Reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita* and great crested newt *Triturus cristatus* receive full protection under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. The pool frog *Pelophylax lessonae* is also afforded full protection under the same legislation. Regulation 41 prohibits:

- ✧ Deliberate killing, injuring or capturing of species listed on Schedule 2

¹⁶ It should be noted that this is the main breeding period. Breeding activity may occur outwith this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

- ✧ Deliberate disturbance of any Schedule 2 species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate
 - b) to affect significantly the local distribution or abundance of the species
- ✧ Deliberate taking or destroying of the eggs of a Schedule 2 species
- ✧ Damage or destruction of a breeding site or resting place
- ✧ Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- ✧ Intentional or reckless disturbance (at any level)
- ✧ Intentional or reckless obstruction of access to any place of shelter or protection
- ✧ Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to Section 9(1) & (5). For these species, it is prohibited to:

- ✧ Intentionally (or recklessly in Scotland) kill or injure these species
- ✧ Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to Section 9(5) only which affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or

resting places of those amphibian and reptile species protected under The Conservation Habitats and Species Regulations 2010 (as amended). A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

Invasive Plant Species

Certain species of plant, including Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera* are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Such species are generally non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to plant or otherwise cause these species to grow in the wild.

How is the legislation pertaining to invasive plants liable to affect development works?

Although it is not an offence to have these plants on your land per se, it is an offence to cause these species to grow in the wild. Therefore, if they are present on site and development activities (for example movement of spoil, disposal of cut waste or vehicular movements) have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this happening prior to the commencement of works.

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to:

- ❖ Mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

B NATIONAL AND EUROPEAN LEGISLATION AFFORDED TO HABITATS

Statutory Designations: National

Nationally important areas of special scientific interest, by reason of their flora, fauna, or geological or physiographical features, are notified by the countryside agencies as statutory *Sites of Special Scientific Interest (SSSIs)* under the *National Sites and Access to the Countryside Act 1949* and latterly the *Wildlife & Countryside Act 1981* (as amended). As well as underpinning other national designations (such as *National Nature Reserves* which are declared by the countryside agencies under the same legislation), the system also provides statutory protection for terrestrial and coastal sites which are important within a European context (Natura 2000 network) and globally (such as *Wetlands of International Importance*). See subsequent sections for details of these designations. Improved provisions for the protection and management of SSSIs have been introduced by the *Countryside and Rights of Way Act 2000* (in England and Wales).

The *Wildlife & Countryside Act 1981* (as amended) also provides for the making of *Limestone Pavement Orders*, which prohibit the disturbance and removal of limestone from such designated areas, and the designation of *Marine Nature Reserves*, for which byelaws must be made to protect them.

Statutory Designations: International

Special Protection Areas (SPAs), together with *Special Areas of Conservation (SACs)* form the *Natura 2000* network. The Government is obliged to identify and classify SPAs under the *EC Birds Directive* (Council Directive 2009/147/EC (formerly 79/409/EEC)) on the *Conservation of Wild Birds*. SPAs are areas of the most important habitat for rare (listed on Annex I of the Directive) and migratory birds within the European Union. Protection afforded SPAs in terrestrial areas and territorial marine waters out to 12 nautical miles (nm) is given by *The Conservation of Habitats & Species Regulations 2010* (as amended). The *Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007* (as amended) provide a mechanism for the designation and protection of SPAs in UK offshore waters (from 12-200 nm).

The Government is obliged to identify and designate SACs under the *EC Habitats Directive* (Council Directive 92/43/EEC on the *Conservation of Natural Habitats and of Wild Fauna and Flora*). These are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive within the European Union. SACs in terrestrial areas and territorial marine waters out to 12 nm are protected under *The Conservation of Habitats & Species Regulations 2010* (as amended). The

Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SACs in UK offshore waters (from 12-200 nm).

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and wise use, in particular recognizing wetlands as ecosystems that are globally important for biodiversity conservation. Wetlands can include areas of marsh, fen, peatland or water and may be natural or artificial, permanent or temporary. Wetlands may also incorporate riparian and coastal zones adjacent to the wetlands. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. This effectively extends the level of protection to that afforded to sites which have been designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs).

Statutory Designations: Local

Under the National Sites and Access to the Countryside Act 1949 Local Nature Reserves (LNRs) may be declared by local authorities after consultation with the relevant countryside agency. LNRs are declared for sites holding special wildlife or geological interest at a local level and are managed for nature conservation, and provide opportunities for research and education and enjoyment of nature.

Non-Statutory Designations

Areas considered to be of local conservation interest may be designated by local authorities as a Wildlife Site, under a variety of names such as County Wildlife Sites (CWS), Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), Sites of Biological Importance (SBIs), Sites of Importance for Nature Conservation (SINCs), or Sites of Nature Conservation Importance (SNCIs). The criteria for designation may vary between counties.

Together with the statutory designations, these are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined. The level of protection afforded to these sites through local planning policies and development frameworks may vary between counties.

Regionally Important Geological and Geomorphological Sites (RIGS) are the most important places for geology and geomorphology outside land holding statutory designations such as SSSIs. Locally-developed criteria are used to select these sites, according to their value for education, scientific study, historical significance or aesthetic qualities. As with local Wildlife Sites, RIGS are a material consideration when planning applications are being determined.

C NATIONAL PLANNING POLICY

The National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) replaced Planning Policy Statement (PPS9) in April 2012 as the key national planning policy concerning nature conservation. The NPPF emphasises the need for suitable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species. An emphasis is also made for the need for ecological networks via preservation, restoration and re-creation. The protection and recovery of priority species – that is those listed as UK Biodiversity Action Plan priority species – is also listed as a requirement of planning policy. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 40 of the Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the ‘biodiversity duty’.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of ‘principal importance for the conservation of biodiversity.’ They are referred to in this report as Species of Principal Importance and Habitats or Principal Importance. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

D LOCAL PLANNING POLICY

The Arun District Council Local Plan (2014) deals with matters of strategic importance for Arun. Key chapters include Chapter 17 – Natural Environment, the main strategic objective being *"To plan for climate change and work in harmony with the environment to conserve natural resources and increase biodiversity."*

Policy ENV SP1: Natural environment

Arun District Council will encourage and promote the conservation and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites. Where possible it shall also promote the creation of new areas for habitats and species. In relation to designated sites, development will be permitted where it protects sites listed in Tables 17.1-17.6 that are recognised for the species and habitats contained within them.

Policy ENV DM4: Protection of trees

Development will be permitted where it can be demonstrated that trees protected by a Tree Preservation Order(s), (TPO) identified as Ancient Woodland, in a Conservation Area or contributing to local amenity, will not be damaged or destroyed now and as they reach maturity, unless to do so:

- a. Would result in the removal of one or more trees in the interests of good arboricultural practice. This shall be demonstrated by the developer following the advice of a suitably qualified person which shall be guided by BS 5837 (2012). Details of any advice received having regard to BS 5837 (2012) shall be submitted, in writing, as part of a planning application; or*
- b. Would enhance the survival and growth prospects of other protected trees;*
- c. The benefits of the proposed development in a particular location outweigh the loss of trees or woodland, especially ancient woodland.*

Where planning permission is granted in any of the above instances, conditions shall be used to ensure that, for any trees which are removed as part of a development, at least an equivalent number of a similar species and age (where practical) are planted on the proposed development site. Sufficient space for replacement trees to mature without causing future nuisance or damage shall be provided. The planting of new trees shall form an integral part of the design of any development scheme.

Proper provision must be made for the protection and management of trees or areas of woodland on-site when undertaking development. A management plan shall be provided as part of a planning application in accordance with BS 5837 (2012) in order to ensure that trees are adequately protected during development and appropriately maintained in the future. Conditions for the continued protection of trees on sites shall be included in any planning consent given.

Where there are existing trees on or adjacent to a development site, developers shall be required to provide:

d. Land and tree surveys

e. A tree constraints plan

f. An arboricultural impact assessment to include a tree protection plan and arboricultural method statement

These will ensure that development is planned to take a comprehensive view of tree issues at an early stage in the design process and that development works do not have a negative impact on existing trees. Developments shall also be consistent with all other Local Plan policies.

Policy ENV DMS: Development and biodiversity

Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement.

Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. This involves consideration of any impacts that will affect the species directly or indirectly, whether within the application site or in an area outside of the site, which may be indirectly affected by the proposals. All surveys shall be carried out at an appropriate time of year and shall be undertaken by a qualified and, where appropriate, suitably licensed person. All developments

shall have regard to Natural England's standing advice for protected species. Developments shall also be consistent with all other Local Plan policies.

F REGIONAL AND LOCAL BAPS

Many local authorities in the UK have also produced a local Biodiversity Action Plan (LBAP) at the County or District level. The Sussex Biodiversity Action Plan is based on the UK list of Species and Habitats of Principal Importance and contains 1,149 species and 65 habitats.



The Ecology Consultancy is part of the Kier Group

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