

Preliminary Ecological Appraisal

Thorneydown Farm, Eastleigh

September 2022

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30/09/2022

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Non-technical Summary

Phlorum Ltd was commissioned by JM Leisure to undertake a Preliminary Ecological Appraisal which was carried out at Thorneydown Farm, Eastleigh on the 20th April 2021, in order to determine whether any ecological constraints could affect the proposed works for the site.

Revision 2 follows an updated site walkover on 2nd February 2022, following demolition and landscaping works undertaken under planning consents references F/17/81667, X/21/91541 and DC/21/90985.

Revision 3 follows a change in proposed development, a revised site boundary and an updated local plan being finalised and released for Eastleigh Borough Council in 2022. Revision 3 also follows the demolition of the building no longer included within the revised site boundary, following prior consent, and so the site now has negligible potential to support roosting bats.

Current proposals are for a touring caravan site with 34 pitching sites. The survey area extended over approximately 1.5 hectares (ha).

The main findings of the surveys are as follows:

-  The closest statutory designated site is Wildern Local Nature Reserve 800m east. The closest non statutory site is Telegraph Woods, 415m north.
-  Habitats on site within the revised site boundary include hardstanding, amenity grassland, marshy grassland, ruderal vegetation, laurel, scrub, trees, a dry ditch, and a tree stump.
-  The site has potential to support bats, breeding birds, badger, hedgehogs, dormice, reptiles, and stag beetles.
-  A precautionary approach to bats, reptiles, breeding birds, badgers, hedgehogs, dormice, and stag beetles should be employed.
-  Although no longer included within the site boundary, it should be noted that the building 2 has now been demolished following consent given to application DC/21/90985. The building was demolished on the 3rd of May 2022 under a watching brief.
-  If the ruderal vegetation and scrub along the northern boundary of the site is to be removed, a reptile survey will be required.
-  A management plan should be produced for the retained scrub and ruderal vegetation along the northern boundary of the site prior to commencement.
-  Further information on precautionary working practices and additional surveys together with recommended mitigation and enhancement measures are discussed in Section 5.

1. Introduction

Background

- 1.1 Phlorum Ltd has been commissioned by JM Leisure to undertake a Preliminary Ecological Appraisal, to inform the potential ecological constraints of proposed future development of Thorneydown Farm, Moorhill Road, Eastleigh, SO30 3AY (hereafter referred to as “the site”).
- 1.2 The purpose of the Preliminary Ecological Appraisal was:
 -  to identify the major habitats present;
 -  to identify the potential for any legally protected species to be present; and
 -  to recommend any additional ecological surveys, if required.
- 1.3 As part of the assessment, a desktop review and a site visit were carried out. The results of which were used to assess the nature conservation importance of the site and the potential of the site to support protected species.
- 1.4 This report has been compiled in accordance with current guidelines (British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013 and CIEEM, 2017 and 2018).
- 1.5 It is understood that the proposed development is for a touring caravan site.

Site Location

- 1.6 The site was in Eastleigh to the east of Southampton. The site was located between the south west corner of a golf course (Boundary lakes golf course) and two roads, the A334 and the A27 (Moorhill Road), which meet at Kanes Hill Roundabout which is adjacent to the south west corner of the site. To the west and south-west of the site, on the other side of the adjacent roads/roundabout is housing. To the north-west and north-east is the golf course and trees. To the south is a mix of fields, trees residential and commercial space. The site contains hardstanding to the west and grassland to the east.
- 1.7 The National Grid Reference for the centre of the site is SU 47397 13112. The survey area extended over approximately 1.5 hectares (ha).

2. Methodology

Desk Study & Consultations

Database and Map Search

- 2.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites, legally protected species and features of interest within a 2km radius of the site. The database and map search was based on available information provided by the following sources:
-  Hampshire Biodiversity Information Centre (HBIC, 2021);
 -  Multi-Agency Geographical Information for the Countryside (MAGIC, 2022);
 -  Ordnance Survey mapping;
 -  Aerial photography; and
 -  The Woodland Trust online Ancient Tree Inventory.

Previous Reports

-  Phil Smith (2017) Ecological Appraisal and Phase 1 Bat Survey-Thorneydown Farm
-  Phlorum (2021) Preliminary Ecological Appraisal Thorneydown Farm.

Habitat Survey and Assessment

- 2.2 This report is based on the site visit carried out on 2nd February 2022. The survey was carried out by Paul Carter who has over 10 years' experience of undertaking ecological surveys. The weather conditions during the survey were cool with sunny spells.
- 2.3 Phlorum Limited carried out an initial ecological survey of the site on 20th April 2021.
- 2.4 A second site visit to inspect the buildings internally, was undertaken on 29th June 2021. These buildings are no longer within the area covered by this PEA.
- 2.5 The field survey comprised a walkover inspection of the land and habitats present. The survey followed standard Phase 1 survey methodology (JNCC, 2010) and covered all accessible parts of the site, including boundary features. Habitats were described and mapped (Figure 1: Appendix A). A list of plant species was compiled, together with an estimate of abundance made according to the DAFOR scale (Appendix D).

- 2.6 This assessment provides information on the habitats in the survey area and identifies actual or potential presence of legally protected or otherwise notable species/habitats in or immediately adjacent to the site.
- 2.7 Target notes highlighting a particular feature of ecological interest are provided in Appendix B, with associated photographs.
- 2.8 Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2010) for vascular plant species.

Protected Species Assessment

- 2.9 The potential for the site to provide habitat for protected species was assessed from field observations in conjunction with results of the desk study. The site was inspected for indications of the presence of protected species including:
 -  Habitat considered suitable to support widespread reptile species including areas with a scrub/grassland mosaic and potential hibernation sites;
 -  On-site ponds offering potential breeding opportunities for great crested newts (*Triturus cristatus*) and the presence of suitable terrestrial habitat including hedgerows and rough grassland;
 -  The presence of features in, and on trees, indicating potential for roosting bats Chiroptera, including knot and rot holes, loose bark. Secondary evidence of bats including staining, droppings and feeding remains were also looked for;
 -  The presence of nesting habitat for breeding birds, including mature trees, dense scrub and hedgerows and direct evidence of bird nesting including bird song, old nests etc.;
 -  Habitats considered suitable to support badger (*Meles meles*) setts, and evidence in the form of hair, pathways and latrines;
 -  Presence of woodland and or hedgerows providing suitable habitat to support hazel dormice (*Muscardinus avellanarius*); and
 -  Riparian habitat supporting suitable features for water voles (*Arvicola amphibius*) and otters (*Lutra lutra*), and the
 -  Presence of nationally protected and/or invasive plants.
- 2.10 The potential presence for protected species is categorised as **Negligible, Low, Moderate, High** or **Present**, based on the findings of the field survey and on the evaluation of existing data.
- 2.11 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species or mitigation should be recommended.

Caveat

Data Search Constraints

- 2.12 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

Survey Constraints

- 2.13 Ecological surveys are limited by factors that affect presence of plants and animals such as seasonality. Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the environment.
- 2.14 The survey was carried out before the growing season and therefore many species may not have been visible above ground or readily identifiable.
- 2.15 The appraisal does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species. This survey provides a preliminary view of the likelihood of protected species occurring on the site based on the suitability of the habitat, known distribution of the species in the local area and any direct evidence on the site. It is therefore used as a tool to recommend further protected species surveys (or other species of significant nature conservation interest) if on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present.
- 2.16 It is however considered that the survey was sufficiently rigorous to assess the ecological value of the site.

Limitations

- 2.17 This appraisal also does not constitute as a full invasive species survey. All surveys are subject to the conditions on site at the time of the survey. Site surveys are non-intrusive and rely on the visual identification of aboveground growth. If parts of a site are inaccessible then these areas can often not be surveyed, unless they can be viewed from other areas. If any aboveground growth is being managed or has been disturbed or covered, or the below ground growth is dormant, then it may be impossible for us to identify invasive plants in these areas during our non-intrusive survey.

3. Baseline Conditions

Aerial Photography and OS Maps

- 3.1 Aerial photographs and OS maps show the site to be on the edge of the Southampton conurbation. The site is bordered to the south by the A334, and to the west by the A27. To the north and east is a golf course. In the wider area, are residential and industrial properties to the south, east and west. Beyond the golf course to the north is an area of woodland known as Telegraph Woods.
- 3.2 Historic aerial images indicate that the main area of grassland within the site has been intensively managed for at least 20 years.

Statutory and Non-Statutory Designated Sites

Statutory Sites

- 3.3 The closest statutory designated site is Wildern LNR (Local Nature Reserve). Table 1 provides a list of Statutory sites within 2km of the site.

Table 1: Statutory Sites within 2km of the site

Site Name	Reason for Designation	Area (ha)	Distance from the Site
Wildern LNR	Native woodland, ponds and meadows with a central stream	10	800m east
Netley Common LNR	Lowland heath with grassland, woodland, gorse and scrub.	12.8	1.2 km south
Moorgreen Meadows Sites of Special Scientific Interest (SSSI)	Acid grassland with mixed woodland	14	1.4 km north east

Non-statutory Sites

- 3.4 The closest non-statutory designated site is Telegraph Woods SINC (Site of Importance for Nature Conservation). There are 19 non statutory sites within 2km, all of which are SINCs. Table 2 provides a list of Non-Statutory sites within 1km of the site.

Table 2: Non-Statutory Sites within 1km of the site

Site Name	Reason for Designation	Area (ha)	Distance from the Site
Telegraph Woods	An area of woodland common with heathland vegetation	20	415m north
Harefield Copse	Woodland with elements of semi natural woodland surviving	6	500m north west
West End Covered Reservoir	An area of grassland Known for its colony of green wing orchids	1	540m north east
Thornhill Park Plantation	Grassland of high value to the community	3	600m west
Hogsty Corner	Semi natural woodland containing yew, heathland and wetlands	2	750m east
Dumbletons Copse	Area of open heathland	11	800m south

Ancient Woodland

- 3.5 There is no ancient woodland covering any part of the site or immediately adjacent to the site. No trees on or adjacent to the site are listed on the Woodland Trusts' Ancient Tree Inventory. The closest recorded veteran tree is a sweet chestnut in Telegraph Wood, 500m north.

Habitats

Site Summary

- 3.6 Within the revised site boundary, the site comprised hardstanding, amenity grassland, marshy grassland, ruderal vegetation, laurel, scrub, trees, a dry ditch, and a tree stump.
- 3.7 The main habitats recorded within the site are described below. Additional details are shown on the habitat survey plan in Appendix A, and the target notes are listed in Appendix B.

Buildings

- 3.8 During the initial survey in 2021, five buildings were present at the site but located outside of the revised site boundary. All buildings have now been demolished.
- 3.9 The last remaining building, known as building 2, was demolished on the 3rd of May 2022 following consent given to application DC/21/90985.**

Hardstanding

- 3.10 The west of the site was predominantly hardstanding that comprised of compacted rubble, with areas of tarmac and concrete. See photograph 2 in appendix B.

Grassland

- 3.11 The majority of the site comprised of improved grassland. In the west of the site this was in the form of an area of neglected lawn near the house. In the remainder of the site this was a field that was dominated by cocksfoot (*Dactylis glomerata*) growing in tussocks. There were few other species, although occasional specimens of hogweed (*Heracleum spondylium*) and dock (*Rumex* sp.) were seen. See photograph 3 in Appendix B.

Marshy Grassland

- 3.12 An area in the west of the site contained soft rush (*Juncus effusus*) and field horsetail (*Equisetum arvense*), indicating the soil was damp. See photographs 4 and 5 in Appendix B.

Ruderal

- 3.13 There were large areas of ruderal vegetation along the north of the field and also between the field and the hardstanding. Species included dock, nettle (*Urtica dioica*), hogweed teasel (*Dipsacus fullonum*) and bramble (*Rubus fruticosus* agg.). See photograph 6 in Appendix B.

Scrub

- 3.14 Within the revised site boundary, in the north of the site were patches of scrub among the ruderal vegetation. Species in these areas included bramble, willow (*Salix* sp.) and gorse (*Ulex europeus*). See photograph 7 in Appendix B. The scrub and ruderal vegetation growing along the northern boundary of the site had potential to support a range of invertebrates as well as other species. This area is understood to be retained throughout development.

Trees

- 3.15 Within the revised site boundary was 3 weeping willow (*Salix babylonica*) which were planted between the hardstanding and the field on the bank between these areas. The spruce that were present on the previous surveys had been removed.

Tree Stumps

- 3.16 There were two tree stumps from trees that had been removed since the previous survey, located to the north west outside of the revised boundary of the site. There was also another in the north east of the site that appeared to have been recently cut (see photograph 9 in appendix B).

Laurel

- 3.17 A line of cherry laurel (*Prunus laurocerasus*) had been planted along the bank between the hardstanding and the field (see photograph 10 in appendix B).

Dry Ditch

- 3.18 A deep ditch containing no water was seen to run along the north of the site. During earlier surveys this was only noted to be present along the north east section as it was obscured by vegetation. See photograph 11 in Appendix B.

Protected Species

- 3.19 Legislation relating to the protected species referred to in this section is included in Appendix C.
- 3.20 The following paragraphs detail the suitability of the on-site habitats to support protected species and include information from the data search for protected, rare and otherwise notable species returned within a 2km radius.

Reptiles

- 3.21 The data search showed records of common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix helvetica*) within 2km of the site within the past 4 years.
- 3.22 During the most recent survey it was noted that suitable habitat for reptiles was restricted to the northern boundary of the site in the areas near the scrub and ruderal vegetation.
- 3.23 During the April 2021 survey, two common lizards were seen. One in the ruderal vegetation south of the house, and one in the unmanaged grass north of the house. During the February 2022 survey this area was no longer suitable.
- 3.24 Overall the site was assessed as having reptiles historically **present**.

Amphibians

- 3.25 The data search showed no records of great crested newt within 2km of the site within the past years. Aerial photographs and maps show 3 ponds north of the site over 400m away, as well as a ditch 200m north. The habitat between these water bodies and the site itself was an intensively managed golf course, offering little suitable foraging or commuting habitat. Magic maps shows surveys undertaken on ponds 1.3km east and 1.8km north east from the site found no evidence of great crested newts. The closest record is 2.5km to the south west.
- 3.26 The biological data indicate one record of a toad (*Bufo bufo*) in the past 10 years, although it is likely that this species is under recorded.

- 3.27 The ordnance survey map of the site indicates a drain running across the site but this was not present during the survey. It is not visible on any aerial images from the past 20 years. A dry ditch was seen on the north of the site and a small dry ditch was seen proximal to the site on the southern boundary between the fence and the A334.
- 3.28 During the survey no water was seen on site. During the 2021 survey, a large new pond was seen close to the eastern boundary. This pond was not well established and contained no vegetation.
- 3.29 During the 2022 survey this pond was no longer present and the area had been raised with a large layer of introduced substrate that sloped steeply towards the survey area. See photograph 13 in appendix B.
- 3.30 The habitats on site were not suitable for breeding amphibians due to the lack of water. However, if amphibians were present then the habitats would allow foraging and commuting. Due to the lack of suitable breeding ponds nearby, and poor connectivity to the site, it is very unlikely that great crested newts are using the site.
- 3.31 It was considered that the site offered **negligible** potential for breeding newts and **negligible** potential for foraging and commuting newts.

Bats

- 3.32 The data search showed records of bats from the genera pipistrelle (*Pipistrellus*), long eared (*Plecotus*), *Myotis*, serotine (*Serotinus*), and *Nyctalus* occurring within the 2km search area in the past 4 years. There are also records of barbastelle (*Barbastella barbastellus*) within 1km of the site in the past 4 years.
- 3.33 Trees off site to the north contained potential roosting features and these should be considered during development. The trees considered to have roosting potential during the 2021 surveys had been removed by the February 2022 surveys, leaving stumps.
- 3.34 During the survey on the 29th June 2021, building 2, within the previous site boundary, was entered and explored thoroughly under the supervision of a demolition expert Tim Trivett. Building 2 did not contain any visible evidence of bats in the form of staining or droppings.
- 3.35 Building 2 had numerous potential points of ingress. Potential roosting features were restricted to the cavities within the walls and fireplace. This agrees with the findings of the previous bat report (Smith, 2017).
- 3.36 Building 2 has now been demolished following consent given to application DC/21/90985. The demolition works were carried out on the 3rd of May under an ecological watching brief provided by a suitably qualified ecologist.
- 3.37 The trees that were previously considered to offer bat roosting potential had been removed.
- 3.38 Overall it was considered that the site now offers **negligible** potential for roosting bats. The site offered **moderate** foraging potential.

Birds

- 3.39 Several Red or Amber listed Birds of Conservation Concern¹ (BoCC), and notable² bird species were returned by the data search that may utilise habitats within the site. Species include house sparrow (*Passer domesticus*), and starling (*Sturnus vulgaris*).
- 3.40 During the survey it was noted that the onsite scrub, trees provided suitable habitat for nesting birds. A kestrel (*Falco tinnuculus*) was seen foraging over the grassland during the April 2021 survey.
- 3.41 There was evidence of old nests within building 2, now offsite, which appeared to be swallow (*Hirundo rustica*)
- 3.42 Overall it was considered that the site offered **high** potential for breeding birds, although this is now restricted to the onsite vegetation.

Badgers

- 3.43 The data search showed numerous records of badger within 2km of the site within the past 5 years.
- 3.44 The habitat on site was not suitable for breeding badgers with the exception of the dense scrub on the northern boundary and possibly by the A27. However, it was suitable for commuting and feeding badgers. In the south eastern corner of the field a track was present indicating that mammals use the site. It is not known what mammal these tracks belonged to however. See photograph 14 in Appendix B.
- 3.45 Overall, the site offered **low** potential for breeding badgers and **high** potential for foraging and commuting badgers.

Hazel Dormice

- 3.46 The data search showed 5 records of dormice within 2km of the site within the past 10 years.
- 3.47 The site didn't contain vegetation of a density and type that would support breeding dormice. The dense scrub did however seem to be suitable for commuting dormice.
- 3.48 Overall it was considered that the site offered **negligible** potential to support breeding dormice and **low** potential to support foraging and commuting dormice.

¹ Birds of Conservation Concern status is prioritised into high concern (Red), medium concern (Amber) and low concern (Green) (Eaton et al, 2009). Red-list species are those that are globally threatened according to the IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and have not shown a substantial recent recovery. Amber-list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations. Green-list species are those that fulfil none of the criteria.

² Notable Birds are based on a list of birds that are particularly scarce or vulnerable either at national or a regional level. The majority of these bird species are designated as Schedule 1 species, under the Wildlife and Countryside Act 1981 (as amended), or listed as red or amber-listed BoCC.

Otters

- 3.49 The data search showed 2 records of otter within 2km of the site within the past 15 years.
- 3.50 The site did not contain the aquatic habitat and vegetation types that would support breeding, foraging or commuting otters. Nor was it close to any habitat that could be connected to suitable areas for breeding otter.
- 3.51 Overall it was considered that the site offered **negligible** potential to support breeding otter and **negligible** potential to support commuting otter.

Hedgehogs

- 3.52 The data search showed numerous records of hedgehogs (*Erinaceus europaeus*) within 2km of the site within the past 3 years.
- 3.53 Although no direct evidence of hedgehogs was seen during the survey, the habitats on site, such as the grassland, and dense scrub seen on site would provide suitable habitat for them to forage and/or hibernate.
- 3.54 Overall, the site offered **high** potential for hedgehogs.

Stag Beetles

- 3.55 The data search showed numerous records of stag beetle (*Lucanus cervus*) within 2km of the site within the past 2 years.
- 3.56 Although no direct evidence of stag beetle was seen during the survey, the tree stumps and dead wood seen on site would provide suitable habitat for them to breed.
- 3.57 Overall, the site offered **high** potential for stag beetle.

Invasive Plants

- 3.58 The data search showed records of Japanese knotweed (*Reynoutria japonica*) and Himalayan cotoneaster (*Cotoneaster simonsii*) occurring within the 2km search area in the past 3 years. These plants are listed as invasive in Schedule 9 of the Wildlife and Countryside Act (1981 amended).
- 3.59 During the 2021 survey numerous specimens of buddleia were seen across the western part of the site amongst the scrub and emerging from the hardstanding. During the 2022 survey, this had largely gone but the seeds may be present in aggregates within the site. Cherry Laurel was also noted on site. While not listed in Schedule 9 of the Wildlife and Countryside Act (1981 amended), they both appear on the Non-Native Species Secretariat (NNSS, 2019) register of species that are of concern.

4. Evaluation

- 4.1 On the basis of the information available from the habitat survey and desk study, the site has been evaluated in terms of its potential for biodiversity, support of protected species and habitats, and the contribution the area makes as part of the wider landscape. The nature conservation value of the site has been assessed following standard criteria developed by CIEEM (2017 and 2018) and in accordance with BS 24040:2013. This is provided below.
- 4.2 The biodiversity value of protected species within the site is a preliminary evaluation based upon the desk study records, habitat suitability and the conservation status of the species in question. It should be noted that where European Protected Species (EPS) or species of Principle Importance for the Conservation of Biodiversity are present on-site they may be valued at a lower level/scale where it is considered likely that populations would not be of sufficient importance to justify designation at a higher level. However, regardless of their biodiversity value, such species are still subject to national and/or European legislation.
- 4.3 Key aspects of relevant planning policy regarding conservation, including an explanation of species referred to as being of 'Principal Importance for Conservation of Biodiversity' and European Protected Species and habitats, are provided in the Legislation section in Appendix C.

Geographic Evaluation

Features of International Importance

- 4.4 Features of International Importance are principally sites covered by international legislation or conventions. The Conservation of Habitats and Species Regulations 2017 (as amended) implements the Natural Habitats and Wild Fauna and Flora (92/43/EC) (Habitats Directive) in England and Wales. The Regulations mainly deal with the protection of sites with certain habitats and populations of species that are important for nature conservation in a European context, i.e. Special Areas of Conservation (SAC's) and Special Protection Areas (SPA's).
- 4.5 The site is not subject to any international statutory nature conservation designations. The closest site of International Importance is Solent and Southampton Water SPA and Ramsar located 3.1 km to the west. The site does not provide any supporting habitat for this designated site.

Features of National Importance

- 4.6 Features of national importance include Sites of Special Scientific Interest (SSSIs) which are designated under the Wildlife and Countryside Act 1981 (as amended). The site is not subject to any national statutory nature conservation designations and it is not considered that any habitats or populations or assemblages of species within the site would meet the criteria for the designation of SSSIs at an appropriate geographic level³.
- 4.7 The closest designated site of national importance for nature conservation is Moorgreen Meadows SSSI located 1.4 km to the north east. The site does not provide any supporting habitat for this SSSI.
- 4.8 The site is also located within the 5km Impact Risk Zone of Upper Hamble Estuary and Woods SSSI, but the site does not have any supporting habitat for this SSSI.

Features of Regional (i.e. Hampshire) Importance

- 4.9 The site does not include any features of value at this level neither is it likely to be selected as a SNCI based on the results of the current survey.

Features of District (i.e. Eastleigh) Importance

- 4.10 The site is relatively small and does not support any features that were considered to be of value at this level.

Features of Local (i.e. West End) Importance

- 4.11 The site does not support any features that were considered to be of value at this level.

Features of Value Immediate Vicinity (c. 250m) of the Project

- 4.12 The on-site vegetation is of value within the immediate vicinity and provides suitable habitat to support protected species including bats, birds, badger, hedgehogs, dormice, reptiles, and stag beetles. It also forms part of the wider ecological network of habitats in the locality, providing wildlife corridors for mobile species to move through the landscape.

Summary

- 4.13 Overall on the basis of the survey results and the above criteria, habitats within the site are considered largely to be of ecological value within the immediate vicinity only. The site provides suitable habitat to support several protected species and groups including bats, birds, badger, hedgehogs, dormice, reptiles, and stag beetles. However, populations of these are unlikely to be locally significant.

³ JNCC Guidelines for selection of biological SSSIs (see <http://jncc.defra.gov.uk/page-2303#download>).

Local Plan Evaluation

- 4.14 It is considered that the statutory Eastleigh Local Plan (Adopted 2006) contains the following nature conservation policies relevant to the site. A list of the policies is provided below. The full text of the relevant policies is contained in the Legislation section in Appendix C and this should also be referred to.
- 4.15 There is currently a draft form of the new unadopted local plan and once adopted this should be referred to.

Eastleigh Borough Local Plan (Adopted 2016-2036)

-  Strategic Policy 9 – Green Infrastructure
-  Policy DM11 - Nature Conservation

5. Discussion and Recommendations

Discussion

- 5.1 The survey site is located at Thorneydown Farm, Eastleigh. The survey area extended over approximately 1.5 hectares (ha). Habitats to be impacted by the revised development proposals include hardstanding, grassland, marshy grassland, ruderal vegetation, laurel, scrub, trees, a dry ditch, and tree stumps.
- 5.2 Design proposals include development as a touring caravan site.
- 5.3 Habitats within the proposed development area were assessed as being of value to wildlife with the local vicinity with potential to support bats, breeding birds, badger, hedgehogs, dormice, reptiles, and stag beetles and these species may pose a constraint to works.
- 5.4 If the vegetation is to be cleared along the northern boundary, it is recommended that targeted surveys in respect to reptiles are undertaken in order to determine presence or likely absence.
- 5.5 In addition, a precautionary approach to site clearance in respect to breeding birds, badger, hedgehogs, dormice and stag beetles is recommended to minimise any adverse impacts on these species groups.
- 5.6 Details regarding specific mitigation, including further surveys and precautionary working practices together with habitat enhancement measures are provided below.

Recommendations

Breeding Birds

- 5.7 The on-site scattered trees and scrub provide suitable nesting habitat for a range of bird species. All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.8 In order to avoid any potential impact on breeding birds, the clearance of the site should be undertaken outside the main bird nesting season which runs from March to August inclusive⁴, with clearance works possible between September and February. Where this is not possible, an ecologist would need to check the vegetation for active nests and signs of bird breeding activity.
- 5.9 In the event that a nest is found, an exclusion zone around the nest would be established. Works would have to cease within this buffer area until the young birds have fledged.

⁴ It should be noted that this is the main breeding period. Breeding activity may occur outside 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.

Badgers

- 5.10 Badgers receive protection under The Protection of Badgers Act 1992.
- 5.11 Due to the potential presence of badgers in the area, a series of general precautions are recommended. This will include the following;
- 5.12 Throughout construction, all on-site contractors must be made aware of the potential presence of badgers in the locality and a tool box talk should be given by a qualified ecologist immediately prior to the start of construction works to discuss the potential for badgers to pass through the site and to provide information on legislation and the ecology of this species.
- 5.13 All trenches should be covered at night or if this is not possible, ramps must be installed into the trenches to enable badgers to escape should they enter the excavations. All materials must be stored safely and lids securely fitted, particular waste and other potential food sources.

Bats

- 5.14 Bats receive protection under The Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended)
- 5.15 A number of trees off site to the north contained potential roosting features and this should be a consideration in terms of lighting.

Hedgehogs

- 5.16 Hedgehogs are listed on the Natural Environment and Rural Communities (NERC) Act 2006 Section 41 as a Species of Principal Importance and a London BAP Priority Species. They are a rapidly declining species.
- 5.17 Hedgehogs need short grass areas to search for invertebrate prey. Decaying vegetation is used to forage and hibernate in. Areas of leaf litter can be collected and used in nests. Dense scrub areas are also useful to build hibernation nests during winter. Wildlife friendly corridors allow hedgehogs and other wildlife to migrate across a site. These are discussed in the Wildlife Friendly Pathways Section below.

Dormice

- 5.18 The hazel dormouse is protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
- 5.19 Although there was habitat on site that was considered suitable for supporting commuting dormice, it is not felt that this will be significantly impacted by the proposed development, as the majority of the scrub to the north of the site is to be retained. Therefore, a precautionary approach to the clearance of the site should be sufficient for protecting any dormice present.
- 5.20 It is recommended that all clearance work is undertaken in the presence of a suitably qualified ecologist, who will guide the schedule of works.

Reptiles

- 5.21 All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.22 The site provides a vegetation structure suitable for widespread reptiles. This is limited to the margins of the site, particularly to the north.
- 5.23 The previous ecology report (Smith, 2017) found the potential for reptiles to be low as the site was more intensively managed. This covered only the south western part of this site.
- 5.24 The Phlorum (2021) ecology report found reptiles to be present but in habitats that have since been removed.
- 5.25 It is understood that the scrub and ruderal vegetation along the northern boundary of the site is to be retained.
- 5.26 A precautionary approach to vegetation clearance should be sufficient for the rest of the site. This will involve a phased clearance where vegetation is taken down in stages to 15cm initially, then after 24 hours, down to ground level. This would be done between April and October when reptiles are active and able to escape.
- 5.27 If vegetation is to be cleared from the northern area of scrub and ruderal vegetation it is suggested that a reptile survey is undertaken.
- 5.28 This will entail a minimum of seven survey visits, following current guidelines (Froglife, 1999; English Nature, 2004), to determine the distribution of reptiles within the site.
- 5.29 Reptile surveys can be undertaken in the active period for reptiles taken to run between mid-March and October. The optimum time is generally late spring, from April to mid-June and in the early autumn during September.
- 5.30 The results of the survey will then be used to inform mitigation proposals for this species group.

Stag Beetles

- 5.31 As a Species of Principle Importance for the UK, a precautionary approach to the clearance of all deadwood should be taken during works. Where possible dead wood around the site boundaries should be retained as part of the works. Where the dead trees pose a health and safety risk, the above ground section should be felled and the arisings stacked on the ground. The tree base and root system of these trees should be retained where possible.
- 5.32 Where it is not possible to retain these areas, the root system of the dead trees should be removed under an ecological watching brief and any larvae encountered should be removed to suitable retained deadwood habitat elsewhere around the site boundaries.

Habitat Retention

- 5.33 All retained trees, including all adjacent off-site trees should be protected in accordance with British Standards (BS 2012) 5837:2012 Trees in Relation to Design, Demolition and Construction. The root protection areas of any retained trees must be left free from excavation and disturbance, and protected during any proposed works. Protection should be in the form of fencing and signs installed for the duration of the works.
- 5.34 The scrub and ruderal vegetation along the northern boundary of the site provides a valuable corridor and habitat for wildlife. This includes the bank on the north west of the site, which contained tree stumps and had very sparse vegetation growth. These areas together provide habitats for a range of invertebrate species, with the combination of sunny banks, and undisturbed dead wood and old vegetation providing nesting, foraging and overwintering sites. These areas are presumably within the tree root protection areas but should also be left undisturbed as a buffer along the north of the site. No dead wood should be removed or disturbed, and the scrub should not be removed.
- 5.35 It is suggested that a management plan is in place for the on site vegetation before works commence.

Habitat Enhancement

- 5.36 New development offers the opportunity for habitat enhancement in accordance with national and local planning policy and some recommendations are included below.

Control of Invasive Non-Native Species (INNS)

- 5.37 Although it is not illegal to have species listed under the Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), it is illegal to permit these species to spread and grow in the wild.
- 5.38 We recommend that a member for the Property Care Association Invasive Weed Control Group (PCA IWCG) is contacted to manage the invasive weeds on site including buddleia and cherry laurel.

Bird and Bat Boxes and Bricks

- 5.39 Additional bird nesting and bat roosting provision could be incorporated into new design proposals. These could either be installed on trees or incorporated into the new building design. Some recommendations are made below as a guide.
- 5.40 Bat roosting opportunities could be provided through the installation of boxes on the outside of the walls or remaining trees, such as the Schwegler 2F, or other makes of a similar design, such as Chavenage Bat box. There are a range of bat boxes available and these can be selected to suit the development and bat species in the locality.
- 5.41 Bird boxes could be installed on the walls of the new building or in the remaining trees which could include the following Schwegler bird house or 1B makes, or similar designs from alternative suppliers.

- 5.42 Further details of the bird and bat boxes are provided in Appendix F.
- 5.43 Bat boxes should be installed at appropriate locations ideally with south-east, south, or south-west facing aspects at least 2 to 3m from ground level. Ideally they need to be exposed to 6-8 hours of direct sunlight, but sheltered from strong winds. If installed on the new buildings, these should ideally be positioned directly below the eaves.
- 5.44 Bird Boxes should be located out of prevailing wind, rain, and strong sunlight, ideally with a clear flight path to the entrance. Ideally they should be installed two to four metres from the ground facing north or north-east.

Wildlife Friendly Pathways

- 5.45 The increase in building can result in ecological areas which are unconnected. Effectively these are ecological islands, and often there is no way for wildlife to migrate to and from these areas. One way to reduce the impact and allow wildlife, including hedgehogs, to migrate across sites is to install wildlife friendly pathways across a site. This can include a range of things such as wildlife corridors, such as hedgerows and scrub or rough grassland corridors, but also installing holes in fences. Wildlife holes, often referred to as hedgehog holes, help wildlife migrate through areas. The holes need to be at least 13cm by 13cm, at ground level.

Compensatory Planting

- 5.46 Additional tree and shrub planting could be incorporated into the landscape proposals to compensate for any removal to facilitate the works. Planting should include a high proportion of native species and be of local provenance where possible. These should be carefully selected to ensure they contain species suitable for the area. Some species of known wildlife value are listed in Appendix E.

6. Conclusions

- 6.1 The site survey revealed the following habitats to be within the revised site boundary: hardstanding, amenity grassland, marshy grassland, ruderal vegetation, laurel, scrub, trees, a dry ditch, and a tree stump.
- 6.2 The site is not subject to any statutory or non-statutory designations. The closest statutory site is Wildern LNR located approximately 800m to the east at its closest point and the survey area does not support any features that contribute to the designation of this site.
- 6.3 In addition, a precautionary approach to vegetation clearance in respect to breeding birds, badger, hedgehogs, dormice and stag beetle is recommended to minimise any adverse impacts on these species groups.
- 6.4 Vegetation along the northern boundary of the site is to be retained and it is suggested a management plan is in place for this area prior to commencement.
- 6.5 Although no longer included within the revised site boundary, it should be noted that building 2 has now been demolished. The demolition works for building 2 were carried out on the 3rd of May 2022 following consent given to application DC/21/90985.
- 6.6 If scrub or ruderal vegetation is to be removed from the northern area of the site then a reptile survey will be required.
- 6.7 It has been recommended that the site is enhanced by introducing some compensatory planting and installing bat and bird boxes.

7. References

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8. Glossary of Terms

BAP	Biodiversity Action Plan
BRC	Biological Records Centre
CIEEM	Chartered Institute of Ecology and Environmental Management
Habitats Directive	Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MAGIC	Multi-Agency Geographical Information for the Countryside
NNR	National Nature Reserve
Nomenclature	The system of devising of names for plants
NPPF	National Planning Policy Framework
PEA	Preliminary Ecological Appraisal- formerly referred to as a Phase 1 Habitat Survey
SAC	Special Area of Conservation
SNCI	Site of Nature Conservation Interest
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

Figures and Appendices

Appendix A

Habitat Map

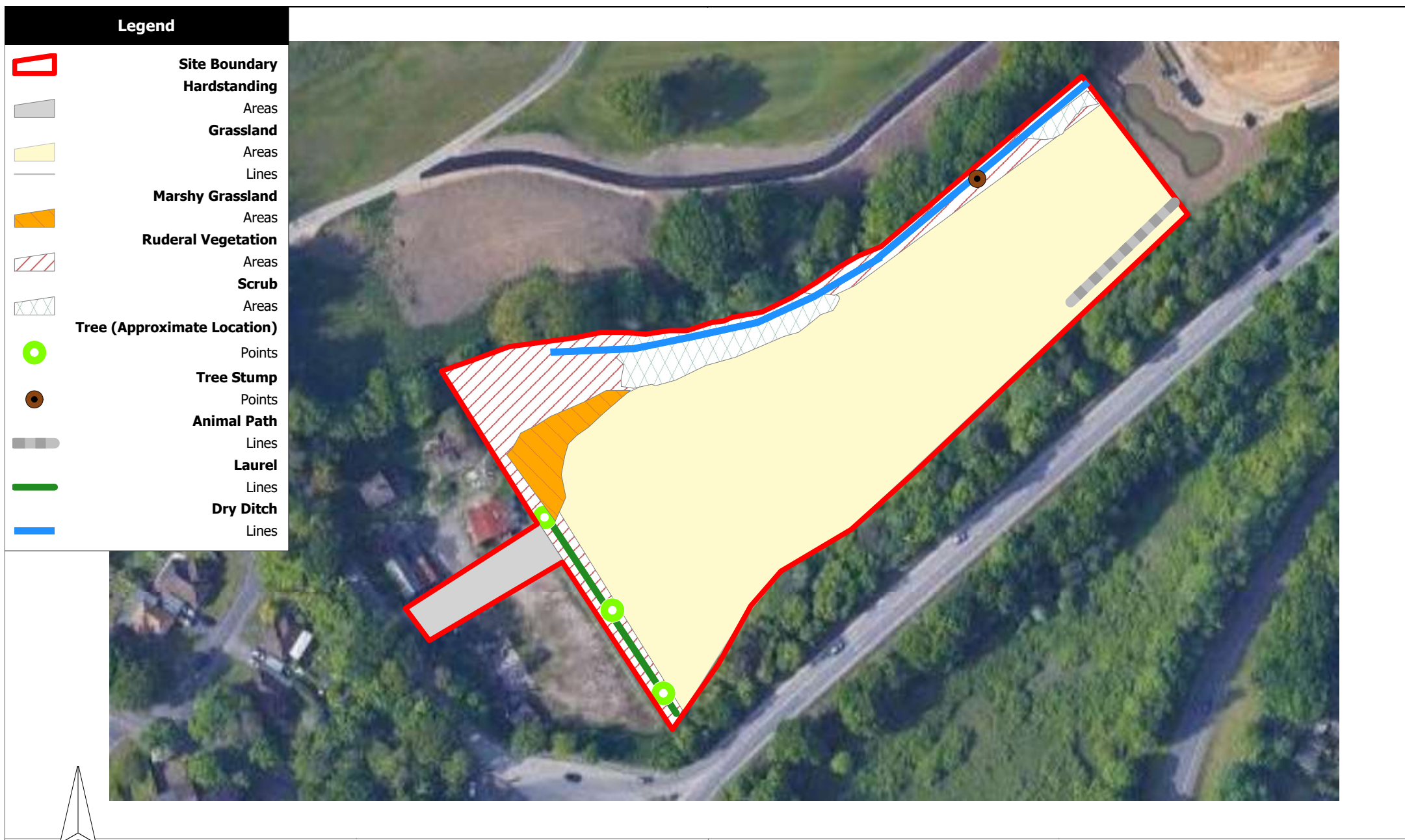


Figure 1: 10571 Thorneydown Farm Habitat Map

Drawn by: PC
On the: 30.09.2022
Not to Scale
Ref: 10571



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Appendix B

Photographs and Target Notes

Photographs and Target Notes

Photo No.	Feature	Photograph of Feature
1	Offsite: Building 2 A barn that was without doors or windows and had multiple potential points of ingress. This was demolished under ecological supervision.	 A photograph showing a two-story brick building, identified as Building 2, in the process of being demolished. An orange excavator is visible on the left side of the building. The building has several large openings where windows and doors once were. The ground in front is a mix of dirt and gravel, with some debris scattered around. A metal gate is partially visible in the foreground. The background shows some trees and a clear sky. 2 Feb 2022 11:44:40 50.91520286165178N 1.3282019086182117W 27 Moorhill Gardens Hampshire England
2	Hardstanding Much of the west of the site was compacted aggregate forming an expanse of hardstanding.	 A photograph showing a large, flat area of compacted aggregate, which is the hardstanding. The surface is uneven and composed of small stones and dirt. In the background, there are several tall, thin trees and a fence line. A white car is parked near the fence. The sky is blue with some clouds. 2 Feb 2022 11:06:55 50.91541609726846N 1.3281123898923397W 27 Moorhill Gardens Hampshire England

Photo No.	Feature	Photograph of Feature
3	The majority of the site was covered in improved grassland.	
4	Marshy grassland can be seen as an area within the improved grassland, distinguished by the darker Juncus species present.	 2 Feb 2022 10:36:21 50.91568117495626N 1.3280223682522774W 27 Moorhill Gardens Hampshire England

Photo No.	Feature	Photograph of Feature
5	Marshy grassland This horsetail was seen in the marshy grassland	 20 Apr 2021 12:02:46 50.9156106412211074N 1.3276772014796734W 24 Moorhill Gardens Hampshire England
6	Ruderal vegetation Nettles, docks and hogweed occurred in various places across the site.	 20 Apr 2021 11:41:36 50.91544539202005N 1.328018931671977W 27 Moorhill Gardens Hampshire England

Photo No.	Feature	Photograph of Feature
7	Scrub The wide margin of scrub can be seen along the north of the site, below the trees on the neighbouring property.	 2 Feb 2022 11:07:05 50.915415049530566N 1.328094368800521W 27 Moorhill Gardens Hampshire England
8	Trees These oaks and sycamores were located northwest of the revised site boundary.	 2 Feb 2022 11:45:40 50.91518714558333N 1.328229485079646W 27 Moorhill Gardens Hampshire England

Photo No.	Feature	Photograph of Feature
9	Tree Stump amongst the scrub on the north of the site as seen here.	 2 Feb 2022 10:43:05 50°91'59.74751114845N 1°32'6.5083450824022W Charles Watts Way Hampshire England
10	Laurel can be seen growing in the area of ruderal vegetation between the field of improved grassland and the hardstanding	

Photo No.	Feature	Photograph of Feature
11	Dry ditch The deep ditch ran for the majority of the northern boundary, obscured by vegetation. It did not contain any significant quantities of water.	 2 Feb 2022 10:43:24 50.91604046523571N 1.3264744824935892W Charles Watts Way Hampshire England
12	The area that contained an offsite pond in 2021, was now below a steep area of substrate.	 2 Feb 2022 10:45:13 50.9163425071165N 1.3258584961295128W 27 West Road Hedge End Hampshire England

Photo No.	Feature	Photograph of Feature
13	Animal path In the east of the site a well worn path used by mammals was seen during both surveys. The species using it is unknown and it is likely to be used by various species.	

Appendix C

Legislation

Legislation

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

Species

The objective of the EC Habitats Directive⁵ is to conserve plants and animals which are considered to be 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) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include:

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

Badgers

Badgers and their setts are protected under the Protection of Badgers Act (1992), which consolidated and added to the previous Badger Acts of 1973 and 1991. Under this legislation it is an offence to:

-  cruelly ill-treat a badger, including use of tongs and digging;

⁵ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

-  intentionally or recklessly cause a dog to enter a badger sett;
-  intentionally or recklessly damage, destroy or obstruct access to a badger sett⁶ or any part thereof;
-  intentionally or recklessly disturb⁷ a badger when it is occupying a badger sett;
-  possess or control a dead badger or any part of a badger;
-  sell or offers for sale, possesses or has under his control, a live badger; and
-  wilfully kill, injure, take, or attempt to kill, injure or take a badger.

A Development Licence will be required from Natural England for any development works affecting an active badger sett, or to disturb badgers while individuals are occupying the sett. Depending on the nature of the works and the specifics of the sett, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. Natural England has issued guidelines on what constitutes a licensable activity. There is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

-  intentional or reckless disturbance (at any level);
-  intentional or reckless obstruction of access to any place of shelter or protection; and
-  selling, offering or exposing for sale, possession or transporting for purpose of sale.

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

-  deliberate killing, injuring or capturing of Schedule 2 species (all bats);
-  deliberate disturbance of bat species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.

⁶ A badger sett is defined in the legislation as *"any structure or place which displays signs indicating current use by a badger"*. This includes seasonally used setts. Natural England (2009) have issued guidance on what is likely to constitute current use of a badger sett: www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf

⁷ For guidance on what constitutes disturbance and other licensing queries, see Natural England (2007) Badgers & Development: A Guide to Best Practice and Licensing. www.naturalengland.org.uk/Images/badgers-dev-guidance_tcm6-4057.pdf, Natural England (2009) Interpretation of 'Disturbance' in relation to badgers occupying a sett www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf, Scottish Natural Heritage (2002) Badgers & Development. www.snh.org.uk/publications/online/wildlife/badgersanddevelopment/default.asp and Countryside Council for Wales (undated) Badgers: A Guide for Developers. www.ccw.gov.uk.

- deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

A European Protected Species Mitigation (EPSM) Licence issued by 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 activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Breeding Birds

Under the Wildlife & Countryside Act, 1981 (as amended), a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds, however, are not included in this definition (except for limited parts of the Act). They are covered by the Games Acts, which fully protect them during the closed season.

Under the Wildlife & Countryside Act, 1981 (as amended), all birds, their nests and eggs are protected under Sections 1-8 of the Act and it is an offence, with certain exceptions, to:

- intentionally (or recklessly in Scotland) kill, injure or take any wild bird;
- intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act;
- have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act;
- use traps or similar items to kill, injure or take wild birds;
- have in one's possession or control any bird (dead or alive) unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations; and
- in Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest.

Certain rare species 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;

- in Scotland only, intentional or reckless disturbance whilst lekking; and
- in Scotland only, intentional or reckless harassment.

The British Trust for Ornithology (BTO) has a list of birds that are Species of Conservation Concern. These birds are not legally protected but where they are found on site they should be given planning consideration. The criteria for birds listed as amber (medium conservation concern) include:

- historical population decline during 1800-1995, but recovering: population has more than doubled over last 25 years;
- moderate (25-49%) decline in UK breeding population over last 25 years;
- moderate (25-49%) contraction of UK breeding range over last 25 years;
- moderate (25-49%) decline in UK non-breeding population over last 25 years;
- species with unfavourable conservation status in Europe (Species of conservation Concern);
- five year mean of breeding pairs in the UK;
- ≥50% of UK breeding population in 10 or fewer sites;
- ≥50% of UK non-breeding population in 10 or fewer sites;
- ≥20% of European breeding population in UK; and
- ≥20% of NW European (wildfowl), East Atlantic Flyway (waders) or European (others) non breeding populations in UK.

Hazel Dormice

The hazel dormouse (*Muscardinus avellanarius*) is fully protected under The Conservation of Habitats and Species Regulations 2017 through its inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring or capturing;
- deliberate disturbance as to impair its ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of this species.

The hazel dormouse is also currently protected under the Wildlife and Countryside Act 1981 (as amended) through its inclusion on Schedule 5. Under this Act, this species is additionally protected from:

- intentional or reckless disturbance;

-  intentional or reckless obstruction of access to any place of shelter or protection; and
-  selling, offering or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence will allow derogation from the relevant legislation but will also to enable appropriate mitigation measures to be put in place and monitored.

Herpetofauna (Reptiles and Amphibians)

The following species receive full protection under the Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2.

-  sand lizard (*Lacerta agilis*);
-  smooth snake (*Coronella austriaca*);
-  natterjack toad (*Epidalea calamita*);
-  great crested newt (*Triturus cristatus*); and
-  pool frog (*Pelophylax lessonae*).

Under this legislation, Regulation 41 prohibits:

-  deliberate killing, injuring or capturing of species listed on Schedule 2;
-  deliberate disturbance of any Schedule 2 species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
-  deliberate disturbance of any Schedule 2 species as 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; and
-  keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of a species.

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; and

- ☞ 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). These species include:

- ☞ adder (*Vipera berus*);
- ☞ grass snake (*Natrix natrix*);
- ☞ common lizard (*Zootoca vivipara*); and
- ☞ slow-worm (*Anguis fragilis*).

Under this legislation, for these species it is prohibited under Section 9(1) & (5) to:

- ☞ intentionally (or recklessly in Scotland) kill or injure these species; or
- ☞ sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

The following species are listed in respect to Section 9(5) of Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) which only affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale:

- ☞ common frog (*Rana temporaria*);
- ☞ common toad (*Bufo bufo*);
- ☞ smooth newt (*Lissotriton vulgaris*); and
- ☞ palmate newt (*L. helveticus*).

Water Voles

The water vole (*Arvicola amphibius*) (= *terrestris*) is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- ☞ intentionally kill, injure or take (capture) this species;
- ☞ intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- ☞ intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection; and
- ☞ sell, offer or expose for sale, or have in his possession or transport for the purpose of sale, any live or dead water vole or part of this species.

Where development works are liable to affect habitats known to support water voles, Natural England must be consulted. All alternative design options must have been explored and communicated to Natural England in order to demonstrate that works have tried to avoid contravening the legislation e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable etc. Conservation licences for the capture and translocation of water voles may be issued by Natural England for the purpose of development activities if it can be shown that the

activity has been properly planned and executed and thereby contributes to the conservation of the population.

Otters

Otters (*Lutra lutra*) are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- 🌿 deliberate killing, injuring or capturing of otters;
- 🌿 deliberate disturbance as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- 🌿 deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- 🌿 damage or destruction of a breeding site or resting place; and
- 🌿 keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of this species.

Otters also receive protection 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; and
- 🌿 selling, offering or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect breeding or resting places or for activities likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Wild Mammals

All wild mammals are protected against intentional acts of cruelty under the Wild Mammals (Protection) Act 1996. Under this legislation it is 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 of this legislation, due care and attention should be taken when carrying out works that have the potential to impact any wild mammal as described above.

Plants

Wild plants are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Some rare plant species also receive full protection under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits:

- 🌿 intentionally (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only); and
- 🌿 selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or parts.

In addition to the legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2017. Regulation 45 makes it an offence to:

- 🌿 deliberately pick, collect or destroy a wild Schedule 5 species; and
- 🌿 be in possession of, or control, transport, sell or exchange any wild live or dead Schedule 5 species or anything derived from it.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect species of plant listed under The Conservation of Habitat and Species Regulations 2017.

Invasive Plant Species

Certain plants are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Species include:

- 🌿 Japanese knotweed (*Reynoutria japonica*);
- 🌿 giant hogweed (*Heracleum mantegazzianum*);
- 🌿 Himalayan balsam (*Impatiens glandulifera*);
- 🌿 certain species of rhododendron (*Rhododendron* sp.); and
- 🌿 certain species of cotoneaster (*Cotoneaster* sp.).

Species listed are 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.

This legislation makes it is an offence to cause species listed to grow in the wild. Therefore, if they are present on site and development activities 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.

Habitats

International Statutory Designations

-  Special Protection Areas (SPAs): Terrestrial SPA's are afforded protection by The Conservation (Natural Habitats, &c. Regulations 1994 (as amended) and offshore SPA's are afforded protection under The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). SPAs are designated under the EC Birds Directive (Council Directive 2009/147/EC on the Conservation of Wild Birds). SPAs are areas recognised as important habitat for rare and migratory birds within the European Union (rare birds as listed on Annex I of the Directive).
-  Special Areas of Conservation (SACs): These areas are designated under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora), designated for the habitats and (non-bird) species listed on Annexes I and II to the Directive under the same regulations as detailed for SPA's.
-  Ramsar sites: These areas are wetlands designated under the Convention on Wetlands of International Importance (1971). Wetlands can include areas of marsh, fen, water or peatland and may be natural or artificial, permanent or temporary. 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.

National Statutory Designations

-  Sites of Special Scientific Interest (SSSIs): These sites are designated by the countryside agencies (for example Natural England) under the Wildlife & Countryside Act 1981 (as amended). Prior to 1981 these were designated under the National Parks and Access to the Countryside Act 1949. Improved mechanisms for the protection of SSSIs have also been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).
-  National Nature Reserves: These sites are also designated by the countryside agencies under the Wildlife & Countryside Act 1981 (as amended).

Local Statutory Designations

-  1949 Local Nature Reserves (LNRs): These sites are designated by local authorities under the National Parks and Access to the Countryside Act 1949. These are sites recognised for their wildlife or geological interest at a local level and are managed for nature conservation.

Non-Statutory Designations

-  Local Wildlife Sites: Areas of local conservation interest may be designated by local authorities. The terminology for these sites varies depending on the county. They can be called Sites of Nature Conservation Importance (SNCI's), Sites of Importance for Nature Conservation (SINCs), County Wildlife Sites (CWS), Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), Sites of Biological Importance (SBIs). The designation criteria may vary between counties. Local Wildlife Sites are of material consideration when planning applications are being determined.
-  The Hedgerow Regulations 1997: These have been compiled to protect 'important' countryside hedgerows from damage or removal. A hedgerow is considered important if (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. Hedgerows covered by these regulations include those on or adjacent to common land, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys.

National Planning Policy

-  The National Planning Policy Framework (NPPF) (2019) replaces the former NPPF 2018 and 2012, and the former PPS9 document and emphasises the need for sustainable development. The Framework specifies the need to protect and enhance biodiversity and geodiversity. Identify and safeguard components of local wildlife-rich habitats and wider ecological networks including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors; and stepping that connect them. Plus partnerships for habitat management, enhancement, restoration or creation. The Framework aims to promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; appropriate mitigation or compensation measures are in place where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

Local Planning Policy

Eastleigh Borough Local Plan (Adopted 2016 - 2036)

Strategic Policy S9 – Green Infrastructure

1. Through new development and other initiatives the Borough Council will seek to achieve the provision, retention and/or enhancement of the following forms of multifunctional green infrastructure, including provision of:

- a. landscape scale strategic links across the Borough boundary, to and between the Borough's settlements, the countryside, the coast, and the major areas of open space including the country parks (see strategic policy S12);
- b. interlinked publicly accessible open space through new and existing development including for example formal sports facilities and informal amenity spaces and cemeteries (see policies DM32-DM34, Chapter 5 and detailed proposals in Chapter 6);
- c. green infrastructure incorporated into all new development with multifunctional spaces connected by primary, secondary and tertiary green links;
- d. interconnected urban green infrastructure within the fine grain of existing and new development including green, cycle ways, paths and linkages between community facilities and open spaces to link community facilities;
- e. green stepping stones such as street trees, green roofs and walls, pocket parks and urban copses (see policy DM1, Chapter 5);
- f. connected habitats linking the network of designated sites and existing priority habitats, taking account of the Hampshire ecological network map (see policy DM11, Chapter 5);
- g. incorporation of historic buildings and landscapes, including historic parks and gardens within the wider Green Infrastructure to protect their setting (see policy DM12, Chapter 5); and
- h. opportunities for local food growing including allotments, community orchards and farms (see policies DM32 to DM34, Chapter 5 and detailed proposals in Chapter 6).

4.48 Green infrastructure incorporates spaces and habitat with varying functions which are connected by green and blue links that can be accessed by people and wildlife. Green infrastructure can include accessible countryside and coast, publicly owned land, cemeteries, community allotments and orchards, nature reserves, sustainable urban drainage etc. The aim of green infrastructure is to link these areas for people and wildlife by using linear corridors such as rivers, paths, cycle ways roads, railway, green verges and green links and stepping stones such as green roofs, street trees, pocket parks and village greens.

4.49 The term 'multi-functional' refers to the variety of functions that the network can satisfy. These could include providing safe green links between community facilities such as GPs, schools, places of work and local shopping centres, encouraging active lifestyles by providing leisure spaces within walking distance of people's homes, improving physical and mental wellbeing through exercise and physical activity. As well as complying with the Council's policies and strategies, this would also help to meet the vision, strategic aims and objectives of the Hampshire County Council Physical Activity Strategy 2018-21. These could also help with providing opportunities for local food production, flood alleviation, mitigating climate change, safeguarding and linking valued habitats and providing safe routes through the urban environment for biodiversity. The framework of green spaces and other natural features will support the sustainable development of settlements and increase the environmental capacity of the locality and region as a whole.

4.50 The plan aims to protect, enhance, expand and connect green infrastructure and biodiversity networks. Given the wide-ranging nature of green infrastructure, its provision is addressed through a range of development management policies which also set out the requirement for a Green Infrastructure Checklist to be completed by developers to demonstrate how their new development delivers improvements to green infrastructure.

Policy DM11 – Nature Conservation

General Approach

1. The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:
 - a. protect, conserve and enhance all:
 - i. international, national and local nature conservation designations; and
 - ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character; and facilitate their adaptation to climate change wherever possible;
 - b. assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);
 - c. seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and
 - d. contribute to major elements of the PfSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).

International Designations

2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A 'project level' Habitat Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.

3. The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:

a. implementing:

i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and

ii. the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site specific measures to address recreational disturbance;

b. preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;

c. protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and

d. seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.

National and Local Designations

4. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:

a. there are no alternative solutions;

b. the adverse effects are unavoidable;

c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;

d. there is an overall biodiversity net gain; and

e. if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.

Priority habitats, protected and priority species and the local ecological network

5. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:

- a. there are no alternative solutions;
- b. the adverse effects are unavoidable;
- c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;
- d. there is an overall biodiversity net gain; and
- e. if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.

Irreplaceable habitats

6. Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Buffers

7. Buffers free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.

Surveys

8. Development will not be permitted unless it can be demonstrated that:
- a. there have been thorough habitat and species surveys;
 - b. the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and
 - c. the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.

International Nature Conservation Designations

5.61 The Borough contains parts of four European/international nature conservation sites as follows:

- River Itchen Special Area of Conservation (SAC);
- Solent Maritime Special Area of Conservation (SAC);
- Solent and Southampton Water Special Protection Area (SPA); and
- Solent and Southampton Water Ramsar site.

(The Solent Maritime SAC and the Solent and Southampton Water SPA and Ramsar site together comprise the Solent European marine sites).

5.62 In respect of the New Forest, the Council will continue to work together with partners to assess the impact of development proposals on protected areas and measures to mitigate any impacts as necessary. Eastleigh will also continue to work in partnership with New Forest District Council to help to deliver the Green Halo.

5.63 Under the E.U. Habitats Directive and the E.U. Birds Directive (as transposed into national law as the Habitat Regulations) and the Ramsar Convention the Council has a duty to give these areas the strongest protection against damaging development. If a development proposal is likely to have a significant effect on one of these sites, either alone or in combination with other projects, the Council will carry out an appropriate assessment to establish the implications of the scheme for the identified nature conservation interests of the site. The Council will seek to avoid any damage to the integrity of these areas and the species they support. This may entail the negotiation of mitigation measures or contributions to such measures from new development.

5.64 The Local Plan's habitat regulations assessment has identified circumstances in which mitigation measures will be required to ensure there is no adverse effect on international designations. Such measures must be implemented with the development. Developments may also require project level HRAs to address their specific impacts.

5.65 Where mitigatory provision is needed, the over-riding principle is that as a minimum, no net loss should occur to biodiversity and a net gain should be secured where possible. This should factor in the uncertainty around achieving the requisite habitat quality and the loss of biodiversity value for the period before the requisite value has been attained for European sites. Compensatory provision can only be considered where there are no alternative solutions and if 'imperative reasons of overriding public interest' (IROPI) for the project to proceed can be demonstrated.

5.66 Through its Annual Monitoring Report the Council will monitor the effectiveness of the joint strategic approach to avoidance and mitigation of effects on European sites. It will respond to the findings of new evidence where necessary in order to preserve the integrity of European sites. National and Local Nature Conservation Designations

5.67 There are five Sites of Special Scientific Interest (SSSIs) in the Borough at: • Moorgreen Meadows;

- Lincegrove and Hacketts Marshes; • Upper Hamble Estuary and Woods;
- Lee-on-the-Solent to Itchen Estuary; and
- River Itchen

These sites are of national importance and protected from damaging activities by the Wildlife and Countryside Act 1981 and the Countryside and Rights of Way Act 2000.

5.68 In addition to the statutorily designated nature conservation sites there are others that are of local nature conservation value. Sites of Importance for Nature Conservation (SINC) are identified on the policies maps during the Local Plan process, and are monitored and reviewed frequently. On-going surveys can reveal new areas that warrant such protection. Policy DM11 will be applied to any new sites or extensions to existing sites until the policies maps can be updated in the next review of the Local Plan. Up-to-date information about SINCs within the Borough should be sought from Hampshire Biodiversity Information Centre. The appropriate size of buffers free from development will be considered on a site by site basis and informed by the results of surveys undertaken for each proposed development.

5.69 Local Nature Reserves protect habitats of local significance. There are currently six Local Nature Reserves (LNR) in the Borough:

- Hocombe Mead Local Nature Reserve (Chandler's Ford);
- Mercury Marshes Local Nature Reserve (Bursledon);
- Hackett's Marsh Local Nature Reserve (Bursledon);
- Netley Common Local Nature Reserve (near Thornhill, Southampton);
- Westwood Woodland Park Local Nature Reserve (Netley Abbey); and
- Manor Farm Local Nature Reserve (Botley/Bursledon)

5.70 The Council will consider the designation of further Local Nature Reserves on sites in the Borough in the Council's ownership or legal control if the land is already being managed as a nature reserve, and is of sufficient nature conservation interest to provide beneficial opportunities for environmental education/research and/or enjoyment by the public. Local Nature Reserves can also be designated by the County Council - also by town/parish Councils if powers are delegated to them for this purpose.

Other species and habitats

5.71 The protection of certain species, and often the habitat and other features that sustain them, is a legal obligation under the Habitats Regulations, the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and The Protection of Badgers Act 1992. The presence of such species is a material consideration in dealing with planning applications, and the Council will follow all Natural England guidance and standing advice or recognised best practice guidance. Where protected species could be present applicants will be required to undertake survey work, assessment and propose mitigation before their proposals can be considered.

5.72 Threatened habitats and species, known as Habitats and Species of Principal Importance (and also as priority habitats and species) have been identified within s41 lists within the Natural Environment and Rural Communities Act 2006. S40 states that Local Authorities and a number of other public bodies have a duty to conserve biodiversity and must have regard to these lists.

5.73 Habitats and features that are important for wildlife but outside designated nature conservation sites are also necessary to maintain the biodiversity of the Borough. The revised Eastleigh Borough Biodiversity Action Plan (July 2012⁴⁵) sets out ways in which the Borough's biodiversity can be conserved and enhanced, and defines Priority Biodiversity Areas and Priority Biodiversity Links. These are areas with the greatest concentrations of priority habitats and species or potential to enhance or restore priority habitats and links where there is opportunity to enhance, restore or create areas, corridors or stepping stones of habitat to facilitate the movement of priority species.

5.74 There are ten priority biodiversity areas in the Borough at: Flexford and Hocombe, Chilworth, Allbrook, Lakeside and Fleming Park, Itchen Valley, Wyvern, Stoke Park, Moorgreen, Netley and Bursledon Commons, Solent Coast, Hamble Estuary and Ford Lake. Priority biodiversity links have been defined at the Hampshire Corporate Business Park (Chandler's Ford), Monks Brook, the M3 and M27 corridors, all the rail corridors, Bowlake (Bishopstoke), Knowle Park (Fair Oak), Chalcroft (Horton Heath), Moorgreen Stream (West End), Cricket Ground (adjoining the Ageas Bowl), Wildern (Hedge End), Marks Farm (Botley), Old Netley, Tickleford Gully (Netley), and Hamble Airfield.

5.75 The local ecological network comprises the international, national and locally designated sites of importance for biodiversity, land functionally linked to these designations, local nature reserves, ancient woodland and veteran trees, protected and notable species and their habitats, sites identified for habitat restoration and/or the creation of compensatory measures for the adverse effects on biodiversity, appropriate buffer zones, and wildlife corridors that connect the above features (for example important hedgerows and watercourses). Planning applications should be supported by an adequate and proportionate assessment of their effect on the network, and by mitigation or compensation and biodiversity net gain proposals as required.

5.76 In accordance with the Biodiversity Action Plan 2012-2022 and the NPPF, the Council will through the planning process (including financial contributions through CIL or other mechanisms) secure the enhancement of existing and the creation of new areas of nature conservation value- for example as part of landscape schemes, environmental improvements and countryside management schemes associated with new development. Such enhancement and creation of biodiversity interest will be sought particularly within the Eastleigh Biodiversity Priority Areas and Priority Links. The Council will also have regard to opportunities to manage wetland habitats in ways that assist delivery of the Environment Agency's River Basin Management Plan⁴⁶.

5.77 All applications affecting greenfield sites or known biodiversity interests should be accompanied by a Biodiversity Mitigation and Enhancement Plan (BMEP), agreed by the Council Ecologist at an early stage in the planning process. This will demonstrate how the proposal delivers a net gain in biodiversity.

5.78 Other policies in this Local Plan, for example those seeking to limit the use of the private car, and those relating to climate change and sustainable drainage will also assist with the mitigation of impacts on biodiversity interests.

Appendix D

Plant Species List

Plant Species List

Scientific nomenclature follows Stace (2010) for vascular plant species and British Bryological Society (BBS) Special Volume No. 5 *English Names for British Bryophytes* for bryophyte species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, www.bsbi.org.uk. The plant species list was generated as part of a Phase 1 Habitat survey and does not constitute a full botanical survey.

Abundance was estimated using the DAFOR scale as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally

Key to qualifiers: G=garden origin, P=planted, Y = young, S=seedling or sucker, T=tree, H=hedge, W=water, ? = identification uncertain.

Scientific Name	Common Name	Abundance	Qualifier
<i>Acer pseudoplatanus</i>	Sycamore	O	T
<i>Buddleja davidii</i>	Buddleia	O	
<i>Dactylis glomerata</i>	Cocksfoot	D	
<i>Dipsacus fullonum</i>	Teasel	O	
<i>Equisetum arvense</i>	Horsetail	O	
<i>Erigeron canadensis</i>	Canadian fleabane	O	
<i>Heracleum spondylium</i>	Hogweed	O	
<i>Juncus effusus</i>	Soft rush	O	
<i>Prunus laurocerasus</i>	Cherry laurel	O	
<i>Quercus robur</i>	English oak	O	T
<i>Rubus fruticosus</i> agg.	Bramble	F	
<i>Rumex</i> sp	Dock	F	
<i>Salix babylonica</i>	Weeping willow	R	T, P
<i>Salix</i> sp.	Willow	O	
<i>Ulex europeus</i>	Gorse	O	

Urtica dioica

Nettle

F

Appendix E

Suggested Compensatory Planting

Suggested Compensatory Planting

This section provides a list of plants which are of proven value to wildlife. The list is not exhaustive and merely provides a guide for suggested planting for wildlife value. Planting should be tailored on a site by site basis. The list includes some native and ornamental species however the emphasis should always be on the use of predominantly native species.

N = Native, NN = Non-native.

This list includes species that may be harmful if handled or ingested. Schedule 9 (Part 2) of the Wildlife and Countryside Act, 1981 (as amended) includes a list of invasive plants, including aquatic species, that should always be avoided in planting schemes.

Large Shrubs

Hedge veronica/Hebe (*Veronica* spp.) NN

Hawthorn (*Crataegus monogyna*) N

Blackthorn (*Prunus spinosa*) N

Rose: dog rose (*Rosa canina*), field rose (*R. arvensis*), burnet rose (*R. pimpinellifolia*) N

California lilac (*Ceanothus* spp.), (*C. arborea*) NN

Wild privet (*Ligustrum vulgare*) N

Common holly (*Ilex aquifolium*) N

Barberry (*Berberis* spp.) (*B. darwinii*), (*B. thunbergii*), (*B. x stenophylla*) NN

Daisy Bush (*Olearia* spp.), (*O. x hastii*), (*O. macrodonta*) and (*O. traversii*) NN

Firethorn (*Pyracantha coccinea*) NN

Hazel (*Corylus avellana*) N (*C. maxima*) NN

Viburnum (*Viburnum* spp.), wayfaring tree (*V. lantana*) N, guelder rose (*V. opulus*) N, laurustinus (*V. tinus*) E Note: *V. lantana* can become invasive in more open habitats.

Dogwood (*Cornus sanguinea*) N

Broom (*Cytisus scoparius*) N

Escallonia (*Escallonia macrantha*) NN

Hardy fuchsia (*Fuchsia magellanica*) NN

Buckthorn (*Rhamnus cathartica*) N

Spindle (*Euonymus europaeus*) N

Tutsan (*Hypericum androsaemum*) N

Yew (*Taxus baccata*) N

Trees

Cherry (*Prunus* spp.), wild cherry (*P. avium*), bird cherry (*P. padus*), domestic plum (*P. domestica*) N or cherry plum (*P. cerasifera*) NN

Ash (*Fraxinus excelsior*) N

Apple (*Malus* spp.), edible apple (*M. domestica*), crab apple (*M. sylvestris*) N

Pear (*Pyrus* spp.), edible pear (*P. communis*) NN

Small-leaved lime (*Tilia cordata*) N

Silver birch (*Betula pendula*) N

Yew (*Taxus baccata*) N

Black poplar (*Populus nigra*) N

Foxglove tree (*Paulownia tomentosa*) NN

Beech (*Fagus sylvatica*) N

Climbers

Jasmine (*Jasminum* spp.), summer jasmine (*J. officinale*), winter jasmine (*J. nodiflorum*) NN

Ivy (*Hedera helix*) N

Climbing hydrangea (*Hydrangea anomala* ssp. *petiolaris*) NN

Honeysuckle (*Lonicera* spp.) (*L. periclymenum*) N

Clematis (*Clematis* spp.) NN

Hop (*Humulus lupulus*) N

Firethorn (*Pyracantha atalantioides*) NN

Bulbs

English bluebell (*Hyacinthoides non-scripta*) N

Squill species (*Scilla* spp.) N/NN

Snowdrop (*Galanthus nivalis*) N

Winter aconite (*Eranthis hyemalis*) E

Crocus species (*Crocus* spp.) NN

Wild Daffodil (*Narcissus pseudonarcissus*) N

Onion species (*Allium* spp.) N/NN. N.B. *Allium triquetrum* (three cornered leek) and *Allium paradoxum* (few-flowered leek) are Schedule 9 invasive plant species.

Wood anemone (*Anemone nemorosa*) N

Lesser celandine (*Ficaria verna*) N

Appendix F

Bird and Bat Box Designs

Bird and Bat Box Designs

Bird Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	Schwegler Nest Box 1B Hole-fronted 26mm entrance hole	16 x 16 x 23	Multi-purpose, including: blue-, marsh-, coal and crested tit and possibly wren. All other species are prevented from using the nest box due to the smaller entrance hole.	Suitable walls or semi-mature/mature trees and shrubs; attached to a tree trunk or hung from branches. Ideal points include discrete areas away from predators, such as against walls, plant and metal supports.
	Schwegler Bird House 32mm entrance hole	15 x 21 x 33	Multi-purpose, including: great-, blue-, marsh- and coal tit, redstart, nuthatch, pied flycatcher and sparrows.	Fixed to a semi-mature/mature tree trunk, wall or fence using the hanging bracket on the back. Between 1.5 m and 3 m high, and should be sited higher if your area has a particularly high cat population.

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	Schwegler Sparrow Terrace 1SP	20 x 43 x 24.5	House sparrow. It may also occasionally attract tits, redstarts and spotted flycatchers.	In an elevated position such as on post/platform within dense shrub/tree planting or on top of lighting columns. Alternatively, they could be attached to the side of a building. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds. Ideally place the terrace two metres or more above the ground. Either install on the surface of the wall using the plugs and screws provided, or install directly into the wall. Cleaning is not necessary. The front panel can be removed by turning the screw hook.

Bat Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	2F Schwegler Bat Box (General Purpose) with or without Double Front Panel	16 x 16 x 33	Without panel: Particularly successful with brown long-eared bat. Also used by noctule. With panel: Ideal for crevice-dwelling species: pipistrelles, Myotis species (particularly Daubenton's), Leisler's and serotine.	On trees or buildings and at a height of 3 to 6m. In open sunny positions and in groups of 3 to 5 facing different directions. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.
	Chavenage Bat Box	10 x 18 x 38	Small crevice-dwelling bats e.g. pipistrelles.	On trees in gardens or woodland and also on house walls. 2.5 - 5m high on a building, mature tree or vegetation line (trees/tall hedge) or on a feeding/flight route in partial daytime sun. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.



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