



Brighter strategies
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Client: Frasers Property
Project: Lindenwood, Chineham, Basingstoke
Report: Preliminary Ecological Appraisal

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1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd was commissioned to undertake a Preliminary Ecological Appraisal by Fraser's Property of a site known as Lindenwood in Chineham, Basingstoke.

This document is a report of this survey and has been produced to inform a planning submission for the site which seeks the erection of terrace of commercial units within Use Classes E(g), B2 and B8, with associated car parking, servicing arrangements, hard and soft landscaping and associated infrastructure.

This survey aimed to establish the ecological value of this site and the potential presence of legally protected species to inform appropriate mitigation, compensation and enhancement actions in light of proposed development works.

The survey area extends to 1.55ha and comprises predominantly developed land; sealed surface with scattered trees, woodland, introduced shrub and modified grassland.

The site is bordered by woodland, an area that has two separate non-statutory designations. This woodland boundary also provides good foraging habitat for a range of species, in particular bats. On site, the potential for protected species is limited to nesting birds in the scattered trees. A previously undertaken preliminary bat roost assessment of the buildings undertaken by Jon Wenman Ecology Consultancy concluded that the proposals were highly unlikely to have an impact on bats and their roosts.

To avoid impacts on the non-statutory designated sites/woodland habitat immediately offsite, a Construction Environmental Management Plan (CEMP) and Arboricultural Method Statement (AMS) should be produced and implemented. These documents could be secured through a planning condition.

The woodland, scattered trees and introduced shrub habitat on the periphery of the site has potential to support nesting birds. Should this habitat require removal to facilitate the development, any clearance work should be timed to occur outside of the nesting bird season (the season generally considered to fall between March to August inclusive) or be subject to a nesting bird check no more than 48hrs prior to any site clearance being started. Should nesting birds be confirmed present, the ecologist will provide advice accordingly.

Ecological enhancement recommendations are set out in this report with the intention of delivering net gains for biodiversity. Specifically:

- Landscaping at ground level should incorporate native shrubs and herbs of value for pollinators and foraging birds.
- Tree canopy cover should be increased through planting of street trees where possible; and
- Bird and Bat boxes suitable for species in a Hampshire context should be included, where possible, on trees on and around the site.

Should the recommendations set out in this report be followed, the proposals stand to be fully compliant with relevant planning policy and legislation pertaining to biodiversity conservation.

2.0 INTRODUCTION

Greengage Environmental Ltd was commissioned to undertake a Preliminary Ecological Appraisal by Fraser's Property of a site known as Lindenwood in Chineham, Basingstoke.

This document is a report of this survey and has been produced to inform a planning submission for the site which seeks the erection of terrace of commercial units within Use Classes E(g), B2 and B8, with associated car parking, servicing arrangements, hard and soft landscaping and associated infrastructure.

This survey aimed to establish the ecological value of this site and the potential presence of legally protected species to inform appropriate mitigation, compensation, and enhancement actions in light of proposed development works.

2.1 SITE DESCRIPTION

The survey area extends to approximately 1.55 hectares and is centred on National Grid Reference SU6501055586, OS Co-ordinates 465010 155586.

The Site is located in the north of Chineham Business Park, which itself is located in the north west of Chineham, approximately 3.5km north east of the centre of Basingstoke, Hampshire. The site is bordered by Crockford Lane to the East, buildings associated with the wider Chineham Business Park to the South, Carpenters Wood to the west and Petty's Brook to the north. The wider area comprises the suburban area of Chineham to the east, industrial and retail dominated land to the south and woodland leading to open fields to the west and north.

The site is connected to significant greenspace through tree lines and the presence of Carpenters Wood immediately west. The site itself has limited green habitat and where present this is generally heavily managed. The exception to this would be the northern and western boundary of the site.

3.0 METHODOLOGY

The PEA was undertaken in accordance with guidance in the UK Habitat Classification System (UKHab)¹ and the Chartered Institute of Ecological and Environmental Management (CIEEM) (2017) Guidelines for Preliminary Ecological Appraisal², in accordance with BS42020:2013: Biodiversity³. The overall assessment consisted of:

- Site specific biological information gained from statutory and non-statutory consultation; and
- A site walkover, protected species scoping assessment and UKHAB habitat survey.

The site-specific consultation provided the ecological context for the site survey carried out on the 12th July 2023.

The survey boundary and existing site is shown at Figure A.1.

Greengage undertook the site walkover during sunny weather conditions. Features within the site boundary and accessible features immediately bordering it were evaluated and the extent and distribution of habitats and plant communities were recorded and supplemented with target notes on areas or species requiring further commentary. Fauna using the area were recorded and areas of habitat suitable for statutorily protected species were identified where present, with an active search carried out for evidence of such use.

3.1 DESK TOP REVIEW

A review of readily available ecological information and other relevant environmental databases (included Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) website⁴) was undertaken for the site and its vicinity. In addition, a biological records search from Hampshire Biodiversity Information Centre (HBIC) was reviewed to identify the location and citations of local non-statutory designated sites and presence of records for notable and protected species. This provided the overall ecological context for the site, to better inform the UKHAB Survey.

3.2 ON SITE SURVEYS

Flora

The extent and distribution of different habitats on site were identified and mapped according to the standard UKHAB Survey methodologies, supplemented with target notes describing the dominant botanical species and any features of interest. Any present protected plant species and invasive/non-natives were also noted. A habitat map has been produced to illustrate the results, as shown at Figure A.1

Fauna

The PEA Survey specifically included assessments to identify the potential value for notable, rare and protected species at site. This involved identifying potential habitats in terms of refugia, breeding sites and foraging areas in the context of species known to be present locally and regionally.

The likelihood of occurrence is ranked as follows:

- Negligible - While presence cannot be absolutely discounted, the site includes very limited or poor-quality habitat for a particular species. The site may also be outside the known national range for a species;
- Low - On-site habitat is poor to moderate quality for a given species, with few or no information about their presence from desk top study. However, presence cannot be discounted due to the national distribution of the species or the nature of on-site and surrounding habitats;
- Moderate - The on-site habitats are of moderate quality, providing most or all of the key requirements for a species. Several factors may limit the likelihood of occurrence, habitat severance, habitat disturbance and small habitat area;
- High - On-site habitat of high quality for given species. Site is within a regional or national stronghold for that particular species with good quality surroundings and good connectivity; and
- Present - Presence confirmed for the survey itself or recent, confirmed records from information gathered through desk top study.

The species surveyed for included:

Badger (*Meles meles*)

The potential for badger to inhabit or forage within the study area was assessed. Evidence of badger activity includes the identification of setts (a system of underground tunnels and nesting chambers), grubbed up grassland (caused by the animals digging for earthworms, slugs, beetles etc.), badger hairs, paths, latrines and paw prints.

Bat Species (*Chiroptera*)

The site visit was undertaken in daylight and the evaluation of bat potential comprised an assessment of natural features on site that aimed to identify characteristics suitable for bat roosts, foraging and commuting. In accordance with Bat Conservation Trust's Good Practice Guidelines⁵ and methods given in English Nature's (now Natural England) Bat Mitigation Guidelines⁶ consideration was given to:

- The availability of access to roosts for bats;
- The presence and suitability of crevices and other places as roosts; and
- Signs of bat activity or presence.

Definite signs of bat activity were taken to be:

- The bats themselves;

- Droppings;
- Grease marks;
- Scratch marks; and
- Urine spatter.

Signs of possible bat presence were taken to be:

- Stains; and
- Moth and butterfly wings.

Features with potential as roost sites include mature trees with holes, crevices or splits (the most utilised trees being oak, ash, beech, willow and Scots pine), caves, bridges, tunnels and buildings with cracks or gaps serving as possible access points to voids or crevices.

Additionally, linear natural features such as tree lines, hedgerows and river corridors are often considered valuable for commuting and semi-natural habitats such as woodland, meadows and waterbodies can provide important foraging resources. Consideration was given to the presence of these features both immediately within and adjacent to the assessment area.

Great Crested Newt (*Triturus cristatus*)

An assessment was carried out to identify any potential habitats that may support great crested newt (GCN) and other native amphibians. The aquatic and terrestrial habitats required generally include small, still ponds or water bodies suitable for breeding; and woodland or grassland areas where there is optimal invertebrate prey potential.

Reptiles

The potential for reptile species on site was assessed during the walkover survey. Possible species include grass snake (*Natrix natrix*), smooth snake (*Coronella austriaca*), adder (*Vipera berus*), common and sand lizard (*Lacerta vivipara* and *L. agilis*) and slow worm (*Anguis fragilis*). These native reptile species generally require open areas with low, mixed-height vegetation, such as heathland, rough grassland, and open scrub or, in the case of grass snake, waterbody margins. Suitable well drained and frost-free areas are needed so they can survive the winter.

Dormouse (*Muscardinus avellanarius*)

During the walkover survey the potential for dormouse to be present on site was assessed. This included observations for suitable habitat such as well-layered woodland, scrub and linking hedgerows, particularly those comprised of species offering suitable food sources such as honeysuckle and hazel, in addition to direct evidence such as characteristically gnawed hazelnuts, chewed ash keys and honeysuckle flowers, or nests.

Water Vole (*Arvicola terrestris*)

Water vole potential was assessed during the walkover survey. The potential is identified by the presence of ditches, rivers, dykes and lakes with holes and runs along the banks. Latrines, footprints or piles of food can also be noted.

Otter (*Lutra lutra*)

Where desktop review or consultation indicates the presence of otter in a river catchment, the presence of water bodies with good cover and potential holt (den) sites would be noted. Spraint, footprints or food remains can also be noted.

Birds

During the walkover survey, the potential for breeding, wintering and migratory birds was assessed. In particular, this includes areas of trees, scrub, heathland and wetlands that could support nests for common or notable species.

Invertebrates

As part of the walkover survey the quality of invertebrate habitat and the potential for notable terrestrial and aquatic invertebrate species was considered. There is a wide variety of habitats suitable for invertebrates including wetland areas, heathland, areas of bare sandy soil, ephemeral brownfield vegetation and meadows.

Biodiversity Action Plan priority species/ Species of Principal Importance

Where consultation and desk-study indicates the presence of BAP priority species (Species of Principal Importance) not protected by statute, effort was made to establish the potential for the site to support these species.

3.3 SURVEYORS

Mitch Cooke has a degree in Ecology (Hons), an MSc in Environmental Assessment and Management, and is a Full member of CIEEM with over 35 years' experience in ecological survey and assessment. Mitch has set up and developed ecological and environmental teams for nearly 20 years and has undertaken and managed numerous ecological surveys and assessments. He is the Director at Greengage and manages the team.

Mike Harris, who undertook the survey and wrote this report, has a Bachelor's degree in Environmental Biology (BSc Hons), a Natural England Great Crested Newt Licence and Dormouse Licence, is a Chartered Environmentalist (CEnv) and Full member of CIEEM. Mike has over 20 years' experience in ecological surveying and has undertaken and managed numerous ecological surveys and assessments.

This report was written by Mike Harris and reviewed and verified by Mitch Cooke who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;

- Reports and recommends correctly, truthfully and objectively;
- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased and exaggerated statements.

3.4 CONSTRAINTS

The PEA was undertaken during an optimal time of year during ideal conditions by a suitably qualified ecologist. It was possible to access all areas of the site.

An element of site clearance had occurred on site prior to the PEA survey being undertaken on the 12th July 2023. This site clearance is understood to have been undertaken in early 2023. As such, photographic evidence of the habitats pre-clearance have been used to prepare this PEA and will be used for Biodiversity Net Gain calculations in due course. Significant information has been provided of the habitats pre-clearance to assess them adequately for this report and assessment.

No further significant constraints that stand to impact conclusions drawn in this report therefore presented themselves.

4.0 RESULTS

4.1 DESK TOP REVIEW

Designations

Consultations with the local biological record centre (HBIC) and the MAGIC dataset have confirmed that there are no statutory designations of national or international importance within the boundary of the site.

There are however three Local Nature Reserves (LNR) within a 2km radius. The site is also within the Impact Risk Zone of surrounding SSSIs, however, the proposals do not fall in to one of the categories listed as being of concern.

Records from HBIC also identified 49 non-statutory Sites of Importance for Nature Conservation (SINC) within 2km of the site boundary. SINC are recognised by LPAs as important wildlife sites.

Table 4.1 below gives the locations and descriptions of a selection of the nearest/most relevant local designations.

Table 4.1 Statutory and Non-Statutory Designated Sites within Search Radius

Site Name	Approximate Location	Description
Statutory Designations		
Chineham Woods Local nature Reserve (LNR)	0.5km east	A LNR of 9.17ha comprising Great Sorrell's Copse, Tollhouse Copse, Long Copse and Guinea Copse, four semi-natural ancient woods, all support a huge range of wildlife, and have done so for the past 400 years. Birds and plants, such as the great spotted woodpecker, herb paris and early purple orchid thrive in the woodland habitat. Great Sorrell's Copse and Long Copse are managed to restore the coppice cycle and regular work parties carry out coppicing and other conservation work.
Popley Fields LNR	1.5km south west	A LNR of 1.44ha Popley Ponds is colonised by an interesting range of trees and plants, which are home to a wide collection of creatures including an outstanding range of amphibians. At the bottom of the quarry there is a pond which fills in winter. The pond contains a large colony of Great-Crested Newts, which are protected by law.
Daneshill Park Woods LNR	1.75km south	A LNR of 4.43ha. The woodland offers a rich tapestry of habitats to explore. Hazel coppice, the remains of an old orchard, a sunken lane, and areas of scrub all provide homes

Site Name	Approximate Location	Description
		for many different plants and animals. In spring, wood anemone, celandine and bluebells carpet the woodland floor.
Non-Statutory Designations		
Chineham Business Park / Petty's Brook SINC	Immediately north of the site	No description
Carpenter's Down Wood (East) SINC	Immediately west of the site	No description
Basing Forest 20: Martin's Bushes (B) SINC	100m north west of the site	No description
Long Swains Row SINC	250m north of site	No description

Biodiversity Action Plans

UK Biodiversity Action Plans (BAPs) have been developed which set priorities for nationally important habitats and species. To support the BAPs, Species/Habitat Statements (otherwise known as Species/Habitat Action Plans) were produced that provide an overview of the status of the species and set out the broad policies that can be developed to conserve them. A list of priority species of conservation importance was also developed.

The UK BAP was succeeded in 2012 by the UK-Post 2012 Biodiversity Framework which informed the creation of the Biodiversity 2020 strategy: England's contribution towards the UK's commitments under the United Nations Convention of Biological Diversity.

Despite this, the UK BAP priority species lists, and conservation objectives still remain valid through integration with local BAPs (which remain valid), and in the form of the Habitats and Species of Principle Importance list (as required under section 41 of the Natural Environment and Rural Communities (NERC) Act).

The following UK BAP priority habitats were present at site or in the immediate vicinity:

- Deciduous woodland (on periphery and immediately offsite and frequent in surrounding area)

Local Biodiversity Action Plans (LBAPs) ensure that national action plans (the UK BAP/Biodiversity 2020) are translated into effective action at the local level and establish targets and actions for locally characteristic species and habitats.

Hampshire BAP

The Hampshire Biodiversity Partnership has been formed to advance the conservation and enhancement of biodiversity in Hampshire, and preparation of the Biodiversity Action Plan is the first main task. The Plan will provide a strategy for action in two volumes: Volume 1, the strategic framework and main courses of action, and Volume 2, the detailed action required for priority habitats and species in the county. Habitats and species listed that are relevant to this report are:

- Broadleaved Woodland
- Road Verges
- Urban

Species Record

The information provided in the biological data search from HBIC identified records of a number of protected and BAP priority species within 2km search radius of the site. Among others, these include the following species of relevance to the site:

- Amphibian and Reptiles: slow worm (*Anguis fragilis*), common toad (*Bufo bufo*), grass snake (*Natrix helvetica*), great crested newt (*Triturus cristatus*) and common lizard (*Zootoca vivipara*).
- Birds: Lesser redpoll (*Acanthis cabaret*), tree pipit (*Anthus trivialis*), short-eared owl (*Asio flammeus*), long-eared owl (*Asio otus*), Cuckoo (*Cuculus canorus*), Lesser Spotted Woodpecker (*Dryobates minor*), Yellowhammer (*Emberiza citrinella*), Brambling (*Fringilla montifringilla*), House Sparrow (*Passer domesticus*), Black Redstart (*Phoenicurus ochruros*), starling (*Sturnus vulgaris*), amongst others.
- Invertebrates: stag beetle (*Lucanus cervus*).
- Mammals (Bats): Barbastelle (*Barbastella barbastellus*), serotine (*Eptesicus serotinus*), Daubenton's (*Myotis daubentonii*), Whiskered (*Myotis mystacinus*), Natterer's (*Myotis nattereri*), noctule (*Nyctalus noctula*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared (*Plecotus auritus*).
- Mammals (not bats): hedgehog (*Erinaceus europaeus*), badger (*Meles meles*) and Hazel dormouse (*Muscardinus avellanarius*).

The species listed above are primarily those known to be in the area that may be impacted by any proposals at the site, or that stand to benefit as a consequence of potential ecological enhancements at the site and inform site-specific mitigation and enhancement recommendations described in the following chapter.

4.2 DETAILED DESCRIPTION OF SITE: HABITATS

The habitats presented across the assessment site consist of the following UKHab categories, as mapped at Figure A.1:

- g4 modified grassland

- u1b Developed land; sealed surface
- u1b5 Buildings
- u11 Scattered trees
- u1160 Introduced shrub
- w1g Lowland mixed deciduous woodland

The survey was undertaken in July 2023 , prior to the demolition of buildings on site.

Modified Grassland

Modified grassland was present across the site in small pockets, which in most cases were unconnected. The largest expanses of this habitat were along the eastern and southern boundaries where the site borders Crockford Lane and the Lindenwood access road. Modified grassland also existed along the western and northern boundary of the site but to a lesser extent. Finally, sporadic patches of modified grassland were also present within and around the centre of the site associated with the edges of car parking.

The modified grassland was heavily managed and was dominated by annual meadow grass (*Poa annua*) with occasional creeping buttercup (*Ranunculus repens*), common bent (*Agrostis capillaris*), ribwort plantain (*Plantago lanceolata*), daisy (*Bellis perennis*) and ground ivy (*Glechoma hederacea*). The occasional species did not occur in all pockets of modified grassland.

Figure 4.1 Modified grassland with introduced shrub and scattered trees



Developed Land; sealed surface

Most of the site comprises developed land; sealed surface in the form of buildings and hardstanding associated with roads, car parks and footpaths.

Figure 4.2 An example of developed land; sealed surface on site with modified grassland and introduced shrub also shown



Buildings

There are seven buildings in total on site, three of which are joined. All buildings were two storey brick and glass buildings used as office space. All buildings had hipped roofs with slate tile with the exception of Building 1 in south east corner of the site which had a hipped roof with a flat roof section at the top. The buildings were in generally good condition with limited damage to the roof, soffits, and facia.

Scattered Trees

There are numerous scattered trees on site both around the periphery and within the site itself. At the time of the survey, the scattered trees that were present in early 2023 within the centre of the site had been felled. However, their indicative locations are shown on Figure A1 through analysis of aerial photography, site plans and site photographs taken prior to the felling works. These scattered trees have been included on Figure A1 as they are required to be considered within any future Biodiversity Net Gain (BNG) Assessment.

Scattered trees on site ranged from early mature to mature and comprised oak (*Quercus robur*), black pine (*Pinus nigra*), lime (*Tilia x europaea*), ash (*Fraxinus excelsior*), Scots pine (*Pinus sylvestris*), silver birch (*Betula pendula*), field maple (*Acer campestre*) and silver maple (*Acer saccharinum*).

The most mature trees were confined to the periphery of the site, in particular along the western and northern periphery where the site abuts mature woodland and tree belts. As the canopies of these trees are connected with the woodland area of site, these trees have been included as woodland.

Figure 4.3 Example of scattered trees in the centre of the site (photo taken prior to site clearance on site and provided by ASA Landscape Architects)



Introduced Shrub

Introduced shrub beds exist across the site in pockets. The most abundant areas are along the eastern and southern boundaries and within the centre of the site. Small areas of introduced shrub are also present around the outskirts of many of the buildings on site. The introduced shrub on site included viburnum sp., lavender (*lavandula* sp.), laurel (*laurus* sp.), snowberry (*Symphoricarpos* sp.) and box (*Buxus sempervirens*).

Since the clearance of some of these areas, opportunistic and widespread and common plant species had started to dominate. Such species included rosebay willowherb (*Chamerion angustifolium*), groundsel (*Senecio vulgaris*), common ragwort (*Senecio jacobaea*), spear thistle (*Cirsium vulgare*), Canadian fleabane (*Erigeron canadensis*), creeping thistle (*Cirsium arvense*) and field bindweed (*Convolvulus arvensis*).

Figure 4.4 Example of introduced shrub on site



Lowland Mixed Deciduous Woodland

Lowland mixed deciduous woodland exists on the northern and western boundaries. Although the main woodland habitat is considered to be offsite, the scattered trees that are within the site boundary connect with the woodland through their canopies. The main woodland habitat along the northern boundary of the site is dominated by mature oak trees with an understorey of hazel (*Corylus avellana*) and hawthorn (*Crataegus monogyna*). The trees along the western boundary, which connect in to the woodland offsite, included ash, birch, oak, lime and pine with an understorey of beech and hazel hedge/understorey.

Figure 4.5 Scattered Trees and woodland along the northern boundary of the site



4.3 DETAILED DESCRIPTION OF SITE: SPECIES

Badger

The site itself is dominated by developed land; sealed surface, heavily mown modified grassland, introduced shrub and scattered trees. All these habitats have **negligible** value for badgers for sett building. There is some value for foraging within the grassland and to a lesser extent the introduced shrub beds, however, no evidence of foraging was recorded during the site visit. Based on this, the site is considered to have **negligible** potential to support badgers.

The surrounding habitats, in particular the woodland, is likely to have high value for badgers. However, these habitats will all be protected and retained as part of the development proposals.

Bats

Foraging

The site has limited value for foraging bats given the dominance of developed land; sealed surface and heavily managed habitats. The exception to this will be the northern and western boundaries where dense tree lines and woodland are present here and beyond. These peripheries are likely to provide optimal foraging habitat for a range of bats. Therefore, the potential for the site to support foraging bats is considered to be **high**, albeit, this potential is confined to the northern and western boundaries only.

Roosting

A stand alone Preliminary Bat Roost Assessment was undertaken by John Wenman Ecological Consultancy in November 22, see Appendix B (report Ref: R3319/a). The survey comprised a systematic external and internal survey of the buildings on site to assess their potential to support protected species. The survey was undertaken by a licensed bat ecologist.

It was reported that no evidence of bats was recorded and the commercial buildings lacked potential roost features suitable for crevice dwelling species. John Wenman Associates concluded that the proposed works, including the demolition of the buildings, were highly unlikely to have any impact on bats or their roosts.

Trees on site that could be impacted by the development were either not mature enough or lacked features that could be used by a roosting bat e.g. holes, cracks, missing branches etc. The potential for the trees on site to support roosting bats is **negligible**.

Great Crested Newt

There is no habitat on site suitable to support great crested newts. The potential for the site to support great crested newts is **negligible**.

Habitat immediately offsite offers potentially suitable terrestrial habitat, however these habitats will not be impacted by the development proposals.

Reptiles

There is no habitat on site suitable to support reptiles. The potential for the site to support reptiles is **negligible**.

There is also limited habitat in the immediate surrounding area to support reptiles given the presence of managed grassland and woodland.

Dormouse

There is no habitat on site suitable to support dormice. The potential for the site to support dormice is **negligible**.

Habitat immediately offsite offers potentially suitable habitat for dormice, in particular the woodland. Dormice have also been recorded in the surrounding area. However, these habitats will not be impacted by the development proposals.

Water Vole and Otter

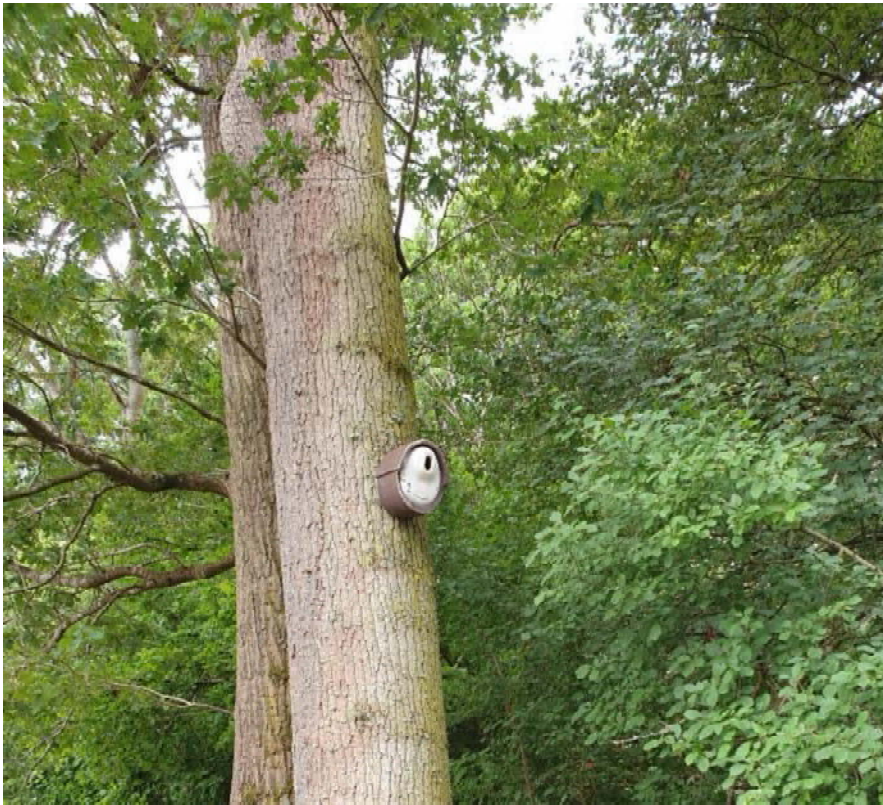
There is no habitat on site suitable to support water vole or otter. The potential for the site to support water vole or is **negligible**.

There is also limited habitat in the immediate surrounding area to support water vole and otter given the presence of managed grassland and woodland.

Birds

No evidence of nesting birds was observed whilst on site. However, the scattered trees on site, particularly those that are more mature in nature, offer **high** potential to support nesting birds. The buildings have limited potential given that they are generally in good condition with a lack of nesting sites. A nest box on a large oak tree in the north west corner of the site, close to the offsite woodland, was noted during the survey (see Figure 4.6).

Figure 4.6 Bird box on oak tree in NW corner of site



Invertebrates

The habitats on site are common, widespread with little to no value for notable invertebrates. There are small pockets of lavender (*lavandula* sp.) around some of the buildings, which could offer some value for pollinator species, however these occurrences are sporadic and unconnected to other habitats of value. Therefore, the potential for the site to support notable invertebrates is **negligible**.

Protected Plant Species

Habitats on site are all common, widespread and under a regime of heavy management. The site has **negligible** potential to support protected plant species.

Invasive/Non-native species

No invasive or non-native species of concern were noted during the walkover survey. Therefore, invasive and non-native species of concern are considered **likely absent**.

Other BAP Species

Habitats on site are all common, widespread and under a regime of heavy management. The site has limited potential to support UKBAP species. There is low potential for hedgehog, however significantly better habitat for this species exists in the immediate surrounding area.

5.0 EVALUATION AND DISCUSSION

5.1 BASELINE SUMMARY

The assessment site and its surroundings have potential to support the following ecological receptors of note, which could therefore be impacted upon by any future prospective development proposals, as indicated in Table 5.1 below. Comment on further recommendations for each receptor is provided; further detail and discussion can be found at paragraph 5.2 onward:

Table 5.1 Baseline Summary

Receptor	Presence/Potential Presence	Comments
Designated Sites: Statutory	Present within 0.5km	There are three statutory designated sites within 2km, all of which are designated as LNRs. The closest of these, Chineham Woods LNR is approximately 0.5km from the site and separated by industrial space, a railway and significant urban development. For this reason, the proposed development is not expected to have an impact on the surrounding statutory designated sites. Statutory designated sites are considered no further in this appraisal.
Designated Sites: Non-Statutory	Immediately offsite to the north and west	The site is bordered to the north and west by two different SINC. In the absence of mitigation both these SINC could be negatively impacted by the proposed development through indirect impacts from the production of additional emissions (dust, noise, contaminant spillage) during demolition. They could also be impacted from increased lighting on site during the demolition, construction and operational phases of the proposed development. Measures to minimise and where possible eliminate the indirect impacts are provided below.
Notable/Rare Habitats	On periphery and immediately offsite (Woodland)	The UK Priority BAP habitat of deciduous woodland exists immediately offsite to the west and to a lesser extent to the north.

Receptor	Presence/Potential Presence	Comments
		Both these areas are covered under the above mentioned SINC designations. The recommendations to minimise and where possible eliminate the indirect impacts of the proposed development on the SINC's apply here to the woodland habitat as well.
Badger	Negligible on site but high value immediately offsite	As a precaution, to prevent any badgers who may occasionally access the site for foraging or commuting purposes from getting stuck, recommendations on good site management are made below.
Foraging bats	High (albeit confined to the northern and western boundary)	<p>The woodland and tree lines immediately offsite to the west and north provide suitable foraging and commuting habitats for a range of bat species. Increased lighting associated with the demolition, construction and operational phases of the proposed development could impact upon the suitability of the foraging and commuting habitat.</p> <p>Recommendations regarding lighting design and levels is provided below in order to minimise and where possible eliminate the impact of the proposed development upon foraging and commuting bats.</p>
Birds	High	The trees on site, now confined to the periphery of the site, have high potential to support nesting birds. Measures are detailed below to minimise the impact of the proposals on nesting birds.

5.2 DISCUSSION AND RECOMMENDATIONS

Discussion is provided below on the key ecological receptors that stand to be impacted/benefit from proposed works; high level commentary on appropriate mitigation, compensation and enhancement actions is also provided.

An Ecological Management Plan (EMP) and Construction Environmental Management Plan (CEMP) should be produced and implemented for the site providing greater detail on the below, which should be secured through planning condition in accordance with BS 42020: 2013 Biodiversity.

Designated sites

Non-Statutory

To ensure no impact on the adjacent non-statutory designated sites from construction, a Construction Environmental Management Plan (CEMP) should be prepared and implemented.

The CEMP should cover how emissions from the demolition and construction will be minimised and eliminated, how any removal of suitable nesting bird habitat should be undertaken and construction lighting as a minimum.

The CEMP should also summarise the protection and monitoring measures to be installed on site to protect the retained trees. The detail of the protection measures and regularity of monitoring should be detailed within an Arboricultural Method Statement (AMS).

These documents could be secured through a planning condition.

Notable/Rare habitats

The site is bordered by woodland. A large proportion of this woodland is under the above mentioned non-statutory designation. The implementation of the above measures for non-statutory designations will also ensure that any impact on the woodland is minimised/eliminated.

Badger

The woodland habitat immediately off site has high potential to support badger. Given the close proximity of this habitat to site it is possible that badgers will occasionally forage and/or commute across the site. As a precaution, in order to avoid negative impacts on badger, where any trenches or required to be dug on site, these should be sufficiently covered each night or have an exit route (wood plank etc) placed within them to allow any badgers (and other mammals) to easily escape should they fall in.

Bats

Foraging and Commuting

Bats are a highly photosensitive species. Alterations to lighting levels on site as a result of the development proposals may stand to negatively impact their established flight paths and foraging grounds on site.

Therefore, the below bullet points provide high level recommendations for the design of wildlife friendly lighting on site. These are based on guidance provided by the Institute of Lighting Professionals (ILP) and BCT⁷:

- Do not increase lighting levels above the current level on site (as of July 2023 prior to buildings being removed) and reduce where possible;
- Use of low-UV warm-white LED bulbs (< 2,700k) with directional, downward facing and shielded lights which point away from green features such as trees, and areas of soft landscaping;
- External lights should be subject to curfew controls where possible with lights on movement sensors to reduce light pollution when not needed; and
- Green infrastructure should remain unlit, particularly between April and October, inclusive.

It is recommended that any new lighting design is modelled (to create a lighting contour plan) to estimate spill levels. This should then be reviewed and approved by a Suitably Qualified Ecologist (SQE).

Birds

To minimise/eliminate the impact of site clearance on birds, the removal of any trees or shrubs with potential to support nesting birds should be undertaken outside of the nesting bird season, which is generally considered to run from March to August inclusive. Should clearance of suitable nesting bird habitat be required during the months of March - August inclusive, the habitat should first be checked by a SQE to confirm the absence of nesting birds. This check should be carried out within 48hrs of the proposed habitat clearance. If during this check nesting birds are recorded, the ecologist should advise the next steps accordingly.

Biodiversity Enhancements

In accordance with the National Planning Policy Framework, local policy drivers and emerging changes to the legislative context, (Appendix C), proposals should seek to provide measurable net gains in biodiversity. This should be evidenced through a Biodiversity Impact Assessment (BIA) using the Natural England Biodiversity 4.0 metric⁸ or similar.

To enable proposals to deliver the desired net gains, the following measures should be considered for incorporation into the landscaping plans:

- Landscaping at ground level should incorporate native shrubs and herbs of value for pollinators and foraging birds.
- Tree canopy cover should be increased through planting of street trees where possible; and
- Bird and Bat boxes suitable for species in a Hampshire context should be included, where possible, on trees on and around the site.

Should the above enhancements be included, the proposals stand to deliver net gains for biodiversity and the development stands to be in full compliance with planning policy and legislation relating to biodiversity conservation.

6.0 SUMMARY & CONCLUSION

Greengage was commissioned by Fraser's Property to undertake a PEA of a site known as Lindenwood in Chineham, Basingstoke to establish the ecological value of this site and its potential to support notable and/or legally protected species.

The PEA identified that the site was generally of low ecological value except for breeding birds and foraging bats. The site was however bordered by areas of woodland which are likely to have significantly more ecological value than the site itself, this value being reflected through there being two non-statutory designations on the offsite woodland.

Key mitigation, compensation and enhancement actions are described to enable legislative and policy compliance (see context at Appendix BC), aiming to achieve net gains in biodiversity for the site.

Key actions should be included within EMP and CEMP documents for the site which could be secured through planning condition.

APPENDIX A SITE PLAN AND HABITAT MAP

Figure A.1 Site plan and habitat map

LINDENWOOD

Red Line Boundary



HABITATS

Habitats

Developed land; sealed surface

Introduced shrub

Modified grassland

Other woodland; broadleaved

Building

Urban trees

Title: Appendix A - UK Hab Plan

Drawn by: DP

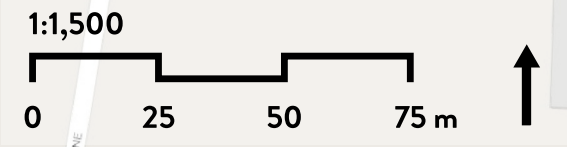
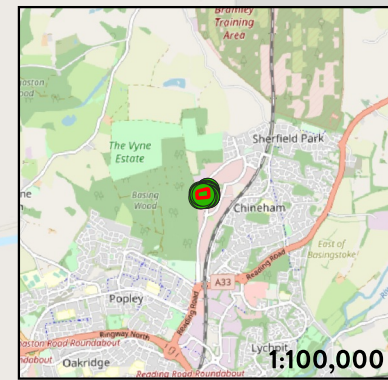
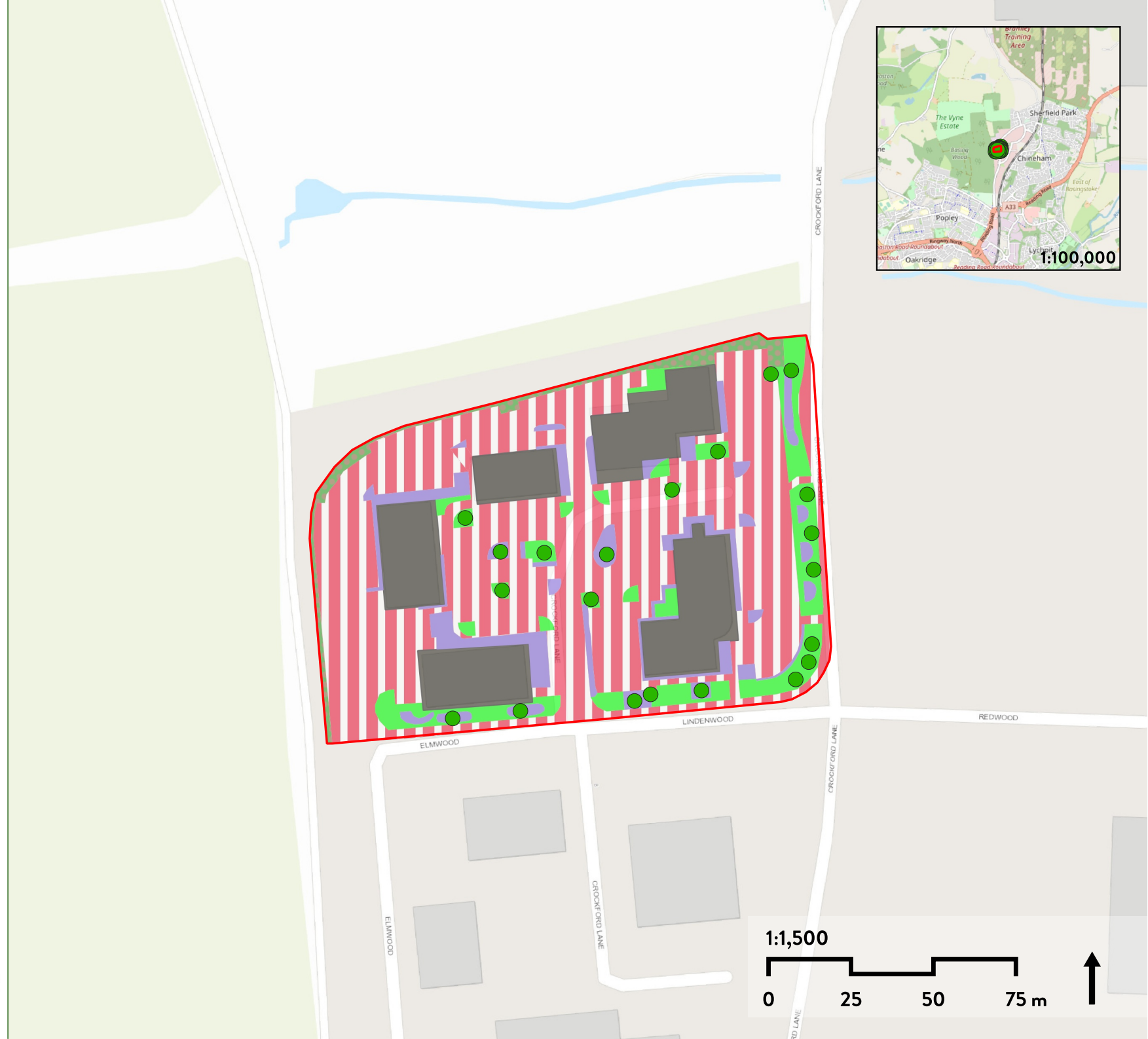
Date: 25/07/2023

Reviewed by: MH

Date: 25/07/2023

Project number: 552417

Sources: ESRI World Topo, Natural England, OSM



**APPENDIX B PRELIMINARY BAT ROOST ASSESSMENT
REPORT BY JON WENMAN ECOLOGICAL CONSULTANCY**

APPENDIX C RELEVANT LEGISLATION AND POLICY

C.1 LEGISLATION

Current key legislation relating to ecology includes The Environment Act⁹ Wildlife and Countryside Act 1981 (as amended)¹⁰; The Conservation of Habitats and Species Regulations 2019 ('Habitats & Species Regulations')¹¹, The Countryside and Rights of Way Act 2000 (CRoW Act)¹², and The Natural Environment and Rural Communities Act, 2006¹³.

The Environment Act, 2021

The Environment Act, 2021 will mandate the requirement for new development in England to deliver a minimum 10% biodiversity net gain (BNG), as measured by the agreed metric (the current relevant version being the Statutory Metric), secured through planning condition as standard (as per schedule 14 of the Act). Approach to the delivery of BNG must follow the mitigation hierarchy, with avoidance of impact and on-site compensation/gains prioritised, ahead of the use of offsite biodiversity unit offsets, or the purchase of biodiversity credits.

The Act introduces the condition that no development may begin unless a biodiversity net gain plan has been submitted and approved by the local planning authority (LPA).

The Act also amends requirements of the NERC Act, 2006, adding the need to not just conserve, but enhance biodiversity through planning projects. Furthermore, it introduces the need for the LPA to have regard to relevant local nature recovery strategies and relevant species/protected site conservation strategies, when making their decision.

Under the Act, the enhancements must be maintained for at least 30 years.

At the time of writing the above is not in force and is expected to apply to planning applications submitted from January 2024 onwards.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats & Species Regulations replace The Conservation (Natural Habitats, etc.) Regulations 1994 (as amended)¹⁴, and transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive')¹⁵, and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive')¹⁶ into UK law (in conjunction with the Wildlife and Countryside Act).

Regulation 43 and 47 respectively of the Conservation of Habitats & Species Regulations makes it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2 (European protected species of animals), or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5 (European protected species of plant). Development that would contravene the protection afforded to European protected species requires a derogation (in the form of a licence) from the provisions of the Habitats Directive.

Regulation 63 (1) states: 'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which –

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and

(b) is not directly connected with or necessary to the management of that site;

must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.'

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the principal mechanism for the legislative protection of wildlife in Great Britain. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats¹⁷ (the 'Bern Convention') and the Birds Directive and EU Habitats Directive are implemented in Great Britain.

The Countryside and Rights of Way Act 2000

The Wildlife and Countryside Act has been updated by the CRoW Act. The CRoW Act amends the law relating to nature conservation and protection of wildlife. In relation to threatened species it strengthens the legal protection and adds the word 'reckless' to the offences of damaging, disturbing, or obstructing access to any structure or place a protected species uses for shelter or protection, and disturbing any protected species whilst it is occupying a structure or place it uses for shelter or protection.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities Act 2006 states that every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Biodiversity Action Plans provide a framework for prioritising conservation actions for biodiversity.

Section 41 of the Natural Environment and Rural Communities Act requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity. The list, a result of the most comprehensive analysis ever undertaken in the UK, currently contains 1,149 species, including for example, hedgehog (*Erinaceus europaeus*), and 65 habitats that were listed as priorities for conservation action under the now defunct UK Biodiversity Action Plan¹⁸ (UK BAP). Despite the devolution of the UK BAP and succession of the UK Post-2010 Biodiversity Framework¹⁹ (and Biodiversity 2020 strategy²⁰ in England), as a response to the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020²¹ and EU Biodiversity Strategy (EUBS)²², this list (now referred to as the list of Species and Habitats of Principal Importance in England) will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 41 of the Natural Environment and Rural

Communities Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions.

Biodiversity Action Plans

Non-statutory Biodiversity Action Plans (BAPs) have been prepared on a local and regional scale throughout the UK over the past 15 years. Such plans provide a mechanism for implementing the government's broad strategy for conserving and enhancing the most endangered ('priority') habitats and species in the UK for the next 20 years. As described above the UK BAP was succeeded in England by Biodiversity 2020 although the list of priority habitats and species remains valid as the list of Species of Principal Importance for Nature Conservation.

Regional and local BAPs are still valid however and continue to be updated and produced.

Detail on the relevant BAPs for this site are provided in the main text of this report.

Legislation Relating to Nesting Birds

Nesting birds, with certain exceptions, are protected from intentional killing, destruction of nests and destruction/taking of eggs under the Wildlife and Countryside Act 1981 (as amended) and the CROW Act. Any clearance of dense vegetation should therefore be undertaken outside of the nesting bird season, taken to run conservatively from March to August (inclusive), unless an ecologist confirms the absence of active nests prior to clearance.

Legislation Relating to Bats

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

Although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats such as flight corridors and foraging areas.

The Wildlife & Countryside Act 1981 (WCA) was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annex IV of the Habitats Directive, 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species Regulations 2019, which transposes the Habitats Directive into UK law.

Consequently, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

Legislation Relating to Reptiles

All species of reptile native to the UK are protected to some degree under national and/or international legislation, which provides mechanisms to protect the species, their habitats and sites occupied by the species.

Sand lizards and smooth snakes are European protected species and are afforded full protection under Section 9 of the Wildlife and Countryside Act 1981 and Regulation 43 of the Conservation of Habitats and Species Regulations 2019. However, these species are rare and highly localised. Their occurrence is not considered as relevant in this instance, as the ranges and specialist habitats of these species do not occur at this site.

The remaining widespread species of native reptiles (adder, grass snake, slow worm and viviparous lizard) are protected under part of Section 9(1) and all of Section 9(5) of the Wildlife and Countryside Act 1981. They are protected against intentional killing and injury and against sale, transporting for sale etc. The habitat of these species is not protected. However, in terms of development, disturbing or destroying reptile habitat during the course of development activities while reptiles are present is likely to lead to an offence under the Wildlife and Countryside Act 1981. It is therefore important to identify the presence of these species within a potential development site. If any of these species are confirmed, all reasonable measures must then be taken to ensure the species are removed to avoid the threat of injury or death associated with development activities.

Each species of native reptile has specific habitat requirements but general shared features include a structurally diverse habitat that provides for shelter, basking, foraging and hibernating.

All reptiles are BAP species and as such are also of material consideration in the planning process due to the NPPF.

Legislation Relating to Dormice

Dormice are given full protection under Schedule 5 of the Wildlife and Countryside Act 1981, as amended. Protection to the species is also afforded by Regulation 43 of the Conservation of Habitats and Species Regulations 2019, making the hazel dormouse a European Protected Species. These two pieces of legislation operate in parallel, although there are some small differences in scope and wording. Under the provisions of Section 9 of the Wildlife & Countryside Act, it is an offence to:

- Intentionally kill, injure or take a dormouse;

- Possess or control and live or dead specimen or anything derived from a dormouse (unless it can be shown to have been legally acquired);
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a dormouse; and
- Intentionally or recklessly disturb a dormouse while it is occupying a structure or place which it uses for that purpose.

Regulation 43 of the Conservation of Habitats and Species Regulations 2019 makes it an offence to:

- Deliberately capture or kill a dormouse;
- Deliberately disturb a dormouse;
- Damage or destroy a breeding site or resting place of a dormouse; and
- Keep transport, sell or exchange, or offer for sale or exchange a live or dead dormouse or any part of a dormouse.

Legislation Relating to Great Crested Newts

Great crested newts are given full protection under Schedule 5 of the Wildlife and Countryside Act 1981, as amended. Protection to the species is also afforded by Regulation 43 of the Conservation of Habitats and Species Regulations 2019, making the great crested newt a European Protected Species. These two pieces of legislation operate in parallel, although there are some small differences in scope and wording. Under the provisions of Section 9 of the Wildlife & Countryside Act, it is an offence to:

- Intentionally kill, injure or take a great crested newt;
- Possess or control and live or dead specimen or anything derived from a great crested newt (unless it can be shown to have been legally acquired);
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.

Regulation 43 of the Conservation of Habitats and Species Regulations 2019 makes it an offence to:

- Deliberately capture or kill a great crested newt;
- Deliberately disturb a great crested newt;
- Damage or destroy a breeding site or resting place of a great crested newt; and
- Keep transport, sell or exchange, or offer for sale or exchange a live or dead great crested newt or any part of a great crested newt.

Legislation Relating to Natura 2000 Sites and Habitats Directive Annex I/II Species

European Commission Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive'), and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive') form the cornerstones of nature conservation legislation across EU member states. Priority species requiring protection across Europe are listed in the Annexes of these Directives. Regulation 63(1) of the Conservation of Habitats and Species Regulations 2019 and Offshore Marine Conservation Regulations, 2007 (as amended) transpose these directives into UK law and set the basis for the designations of protected sites (known as Natura 2000 sites; Special Areas of Conservation under the Habitat Directive and Special Areas of Protection under the Birds Directive) that are of importance for habitats, species or assemblages listed on the directive Annexes. In the UK Ramsar sites are also offered the same level of protection as SPAs and SACs however the qualifying species for the designation may differ; Ramsar sites being designated specifically as important wetland habitats.

Under article 6(3) of the Habitats Directive, where projects stand to have likely significant effect (in accordance with the European Court of Justice ruling of C-127/02 Waddenzee cockle fishing) upon the integrity of conservation objectives (i.e. conservation status of the qualifying species or habitats) within the designated sites then the Competent Authority must undertake an Appropriate Assessment.

C.2 PLANNING POLICY

National

National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2021²³ sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: 'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

Local

Basingstoke and Deane Local Plan (2011 - 2029) adopted May 2016

Policy EM4 – Biodiversity, Geodiversity and Nature Conservation

1. Development proposals will only be permitted if significant harm to biodiversity and/ or geodiversity resulting from a development can be avoided or, if that is not possible, adequately mitigated and where it can be clearly demonstrated that:

- a) There will be no adverse impact on the conservation status of key species; and
- b) There will be no adverse impact on the integrity of designated and proposed European designated sites; and
- c) There will be no harm to nationally designated sites; and
- d) There will be no harm to locally designated sites including Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs); and
- e) There will be no loss or deterioration of a key habitat type, including irreplaceable habitats; and
- f) There will be no harm to the integrity of linkages between designated sites and key habitats.

The weight given to the protection of nature conservation interests will depend on the national or local significance and any designation or protection applying to the site, habitat or species concerned.

2. Where development proposals do not comply with the above they will only be permitted if it has been clearly demonstrated that there is an overriding public need for the proposal which outweighs the need to safeguard biodiversity and/ or geodiversity and there is no satisfactory alternative with less or no harmful impacts. In such cases, as a last resort, compensatory measures will be secured to ensure no net loss of biodiversity and, where possible, provide a net gain.

3. Applications for development must include adequate and proportionate information to enable a proper assessment of the implications for biodiversity and geodiversity.

4. In order to secure opportunities for biodiversity improvement, relevant development proposals will be required to include proportionate measures to contribute, where possible, to a net gain in biodiversity, through creation, restoration, enhancement and management of habitats and features including measures that help to link key habitats.

Approaches to secure improvements could be achieved through:

- a) A focus on identified Biodiversity Opportunity Areas and Biodiversity Priority Areas as identified in the councils Green Infrastructure Strategy (and subsequent updates) where appropriate; and through
- b) On-site and/ or off-site provision linked to new development in accordance with the council's adopted green space standards.

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