DARWIN ECOLOGY
integrating nature conservation

Unit 13 & 14, Sandy Farm Business Centre,
Sands Road, Farnham, GU10 1PX

Email: info@darwin-ecology.co.uk
www.darwin-ecology.co.uk

Preliminary Roost Assessment and Preliminary Ecological Appraisal

11 Oak View
Tilehurst
Berkshire
RG31 5HF

May 2019

Darwin Ecology Ltd
Registered Office: 8 Layton Lane, Shaftesbury, Dorset SP7 8EY
Company No. 07654823

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1. EXECUTIVE SUMMARY

1.1. This report documents the results of a Preliminary Roost Assessment (PRA) and Preliminary Ecological Appraisal (PEA) at 11 Oak View, Tilehurst, Berkshire. The survey and report were required to support of the proposed planning application for the site.

1.2. The proposed planning application consists of demolition of an existing conservatory and construction of a new extension onto an area of existing hard standing.

1.3. The building was assessed for its potential to support bat roosts and due to a lack of features is considered to be of negligible value for roosting bats.

1.4. The habitats to be impacted by the proposed extension were assessed for their potential for use by protected species and found to hold low ecological value.

1.5. No habitats of ecological value are due to be impacted by the proposed works and no further survey is therefore considered to be necessary.

2. INTRODUCTION & BACKGROUND

2.1. This report documents the results of a Preliminary Roost Assessment and Preliminary Ecological Appraisal at 11 Oak View. The survey and report were required to support of the proposed planning application for the site to demolish an existing conservatory and create a new extension on an area of hardstanding at the rear of the property.

Site Overview

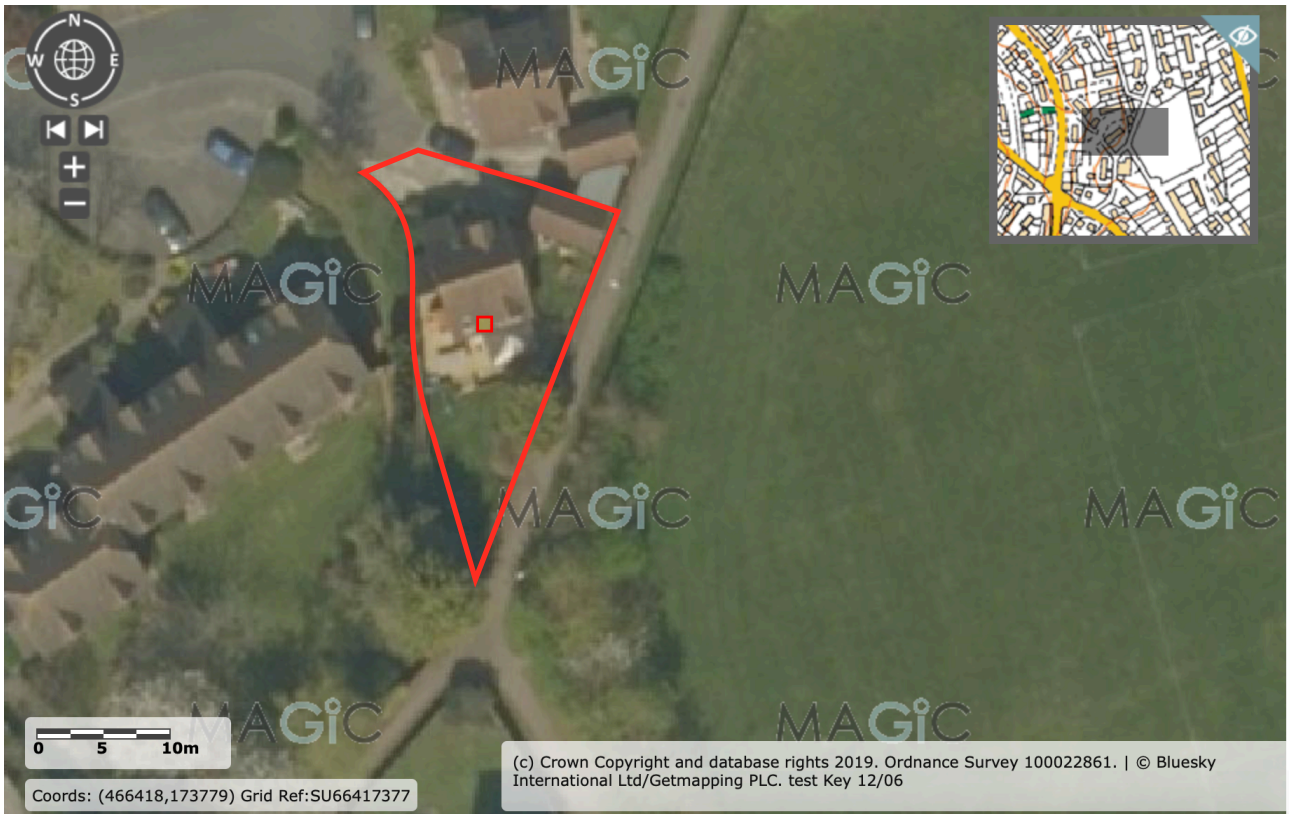
2.2. The proposed development site at 11 Oak View sits within an urban area and is immediately surrounded by residential housing with associated gardens, in addition to industrial areas and amenity recreation areas.

2.3. The site comprises a detached dwelling and associated gardens.

2.4. The habitats surrounding the site supports some potential roosting, foraging and commuting habitat for a number of common species of bat, common garden birds, common amphibians and reptile species.



Picture 1: 11 Oak View within the context of the wider landscape.



Picture 2: 11 Oak View with red line boundary

3. LEGISLATION & POLICY

National Planning Policy Framework (NPPF) 2018

3.1. NPPF aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.

3.2. Planning policies and decisions should contribute to and enhance the natural and local environment by:

170 a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

170 d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

174 b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

175 a) 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;

175 d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

UK Biodiversity Action Plan & Habitats and Species of Principal Importance

3.3. The UK Biodiversity Plan (BAP) was a programme designed to help conserve the UK's biodiversity. It led to the production of 436 action plans between 1995 and 1999 to help many of the UK's most threatened species and habitats to recover. A review of the UK BAP priority list in 2007 led to the identification of 1,150 species and 65 habitats that met the BAP criteria at UK level. Currently 56 Habitats of Principal Importance and 943 Species of

Principal Importance are included within Schedule 41 of the NERC Act and these include species and habitats which were identified in the UK BAP and which continue to be considered to represent the conservation priorities of England in the UK Post-2010 Biodiversity Framework.

3.4. Species of Principal Importance and Habitats of Principal Importance are those identified as the most threatened and requiring conservation action under the Schedule 41 of the UK Biodiversity Action Plan & Habitats and Species of Principal Importance

3.5. The UK Biodiversity Plan (BAP) was a programme designed to help conserve the UK's biodiversity. It led to the production of 436 action plans between 1995 and 1999 to help many of the UK's most threatened species and habitats to recover. A review of the UK BAP priority list in 2007 led to the identification of 1,150 species and 65 habitats that met the BAP criteria at UK level. Currently 56 Habitats of Principal Importance and 943 Species of Principal Importance are included within Schedule 41 of the NERC Act and these include species and habitats which were identified in the UK BAP and which continue to be considered to represent the conservation priorities of England in the UK Post-2010 Biodiversity Framework.

4. METHODOLOGY

Desk Study

4.1. A web-based desk study was undertaken for designated sites and protected species and habitat records within 2 km of the site. The following online resources were consulted:

- The MAGIC website, to obtain information on any designated sites of nature conservation interest within 2 km of the site and details of any European Protected Species licences issued within 2km (http://www.magic.gov.uk/MagicMap.aspx); and
- Google Maps, to view aerial photographs and maps, to assess the ecological context of the site (http://acme.com/planimeter/).

Preliminary Ecological Appraisal and Preliminary Roost Inspection

4.2. Senior Ecologist Annika Binet BSc (Hons) ACIEEM undertook a Preliminary Roost Assessment and Preliminary Ecological Appraisal on 2nd May 2019.

4.3. The PEA and PRA identified the habitats present and their potential for protected species, particularly bats, birds, hedgehogs, badgers, dormouse, amphibians and reptiles, following the standard guidelines set out by the Chartered Institute of Ecology and Environmental Management (CIEEM).

Bats

4.4. The trees were assessed visually for evidence of bats and assessed for features which increase the likelihood of bats roosting, such as storm damage, rot holes, ivy cover, flaying bark and splits in the trunk.

4.5. Linear habitat features, both within and connecting to the site, were visually assessed for their likely use as foraging and commuting corridors.

4.6. Other habitats on site were visually assessed for their likely use as foraging sites.

4.7. Annika Binet BSc (Hons) ACIEEM, licensed bat ecologist (2018-38642-CLS-CLS and 2018-38643-CLS-CLS), carried out a bat building inspection of all buildings at 11 Oak View in accordance with the following methodology.

Internal Survey:

4.8. An investigation was carried out of all roof and wall features for signs of bats roosting and the access potential of the roof for bats. The surveyor looked for bats, bat droppings, likely access points, signs of feeding, dead bats, scratch marks and staining, and made a suitability assessment of the structure of the roof.

External Survey:

4.9. An investigation was carried out of features that may indicate bat presence. For example; gaps under roof and ridge tiles, or behind soffit boards and wooden fascias. A search for bat droppings was made beneath each potential entry/exit point identified. The surveyor used a powerful, low heat LED torch and binoculars.

Amphibians

4.10. Waterbodies were assessed for their potential for use by amphibians and for features which increase likelihood of use as breeding sites for Great crested newts, such as suitable emergent vegetation, low water turbidity, absence of fish and low levels of water fowl.

4.11. Other habitats on site were assessed for their likely use out side of the breeding season for both foraging and shelter purposes.

Reptiles

4.12. Open areas of habitat were visually assessed for suitability for reptiles and features which increase likelihood of use by reptiles, including the presence of tussocky vegetation, log and rock piles, basking spots and compost heaps.

Mammals, excluding bats

4.13. Areas of dense vegetated cover on site and adjacent to the site were assessed for their likely use by badgers, including the presence of setts and latrines. Open areas of habitat were visually assessed for signs of mammal tracks, push throughs and latrines.

4.14. Areas of woodland, copse, tree lines, hedgerows and other boundary vegetation were assessed for their likely use by hazel dormice, or increased likelihood of use due to presence of hazel and other suitable food species.

4.15. Moving water bodies were visually assessed for their suitability for otters and water-voles, including the presence of latrines, holt entrances and food stores.

5. SURVEY RESULTS AND POTENTIAL IMPACTS

Desk Study

5.1. Several statutory designated sites have been identified within 2km of the site, Blundells Copse Local Nature Reserve (LNR), located approximately 700m to the West south west of the site, Louisehill Copse LNR, located approximately 1.2km West of the site, Round Copse LNR, located approximately 1.2km to the West north west of the site, Mcilroy Park LNR. The site also lies within the North Wessex Downs AONB.

5.2. Priority habitats within 2km include ancient woodland, deciduous woodland and woodpasture and parkland.

5.3. The habitats immediately surrounding the site support low potential for a number of protected species including;

- Roosting, foraging and commuting habitat for a number of common bat species
- Roosting, nesting and foraging habitat for a number of common garden bird species
- Foraging, basking and shelter for reptiles
- Terrestrial phase habitat for common amphibians

5.4. No habitats of moderate or high ecological value are located within or immediately adjacent to the proposed development site, and the development will not result in increased occupation of the site and is of a small scale, therefore there is considered to be no negative ecological impact of the proposed development.

Habitat Assessment

5.5. Habitats identified within the site boundary include buildings (Images 1-3), hardstanding and amenity planting.

5.6. It should be noted that not all botanical species present could be observed due to the time of year.

Planting, trees and hedgerows

5.7. The majority of the site was dominated by hard standing and amenity planting.

Grassland

5.8. One area of amenity grassland was present within the site (see Figure 1), to the rear of the house which is been used as a garden and has therefore been subject to regular mowing and is considered to be of low ecological value.

Hardstanding

5.9. A driveway leads from the road up to the house, hardstanding areas also surround the house.

5.10. The hardstanding consisted of tarmac and patio (Images 2 and 3). This habitat was considered to be of negligible ecological value.

Ecological value

5.11. The boundary habitats were considered to be of high ecological value providing roosting and foraging opportunities for a range of species, including bats, nesting birds, badgers, reptiles, common amphibians and hedgehog. Overall the site was considered to be of moderate ecological value in the context of the wider landscape.

Habitat Status and Impacts

5.12. The plants and habitats recorded within the working footprint are common and widespread in the UK. The site is dominated by hardstanding and amenity planting but is considered to be of moderate ecological value within the context of the wider landscape.

5.13. The site has the potential to support a small number of protected species, including bats for foraging, hedgehogs for foraging and nesting, nesting birds and common amphibians.

5.14. Trees to be retained should be protected throughout the development in accordance with British Standards BS 5837:2012. Root protection areas should be 12 x the diameter at breast height (DBH), or to the extent of the longest branch for unpruned trees, unless otherwise advised by a qualified arboriculturalist.

5.15. No materials should be allowed to be stored within these root protection areas and no heavy machinery should run over them.



Image 1: The house.



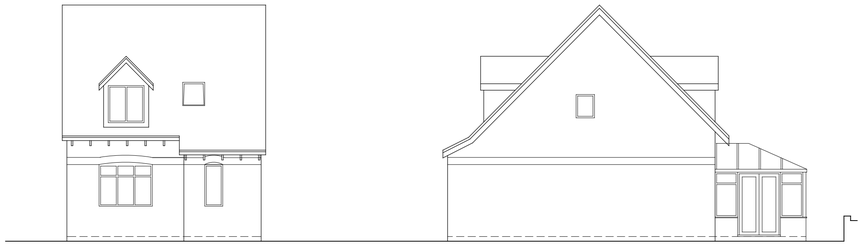
Image 2: The garage and hardstanding driveway.



Image 3: Hardstanding patio to the rear of the house.

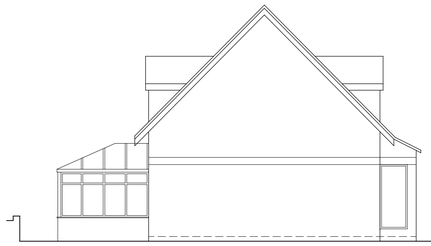
Buildings on Site

Building	Photos	Description	Potential bat roost features and evidence of use	Assessment of bat potential	Further survey requirements
House	 	Brick built cottage with clay tile roof	No evidence of bats. No roosting opportunities identified	Negligible	No further surveys required
Garage		Brick built garage with clay roof and tight fitted wooden cladding	No evidence of bats. No roosting opportunities identified	Negligible	No further surveys required



Existing Front Elevation

Existing Side Elevation

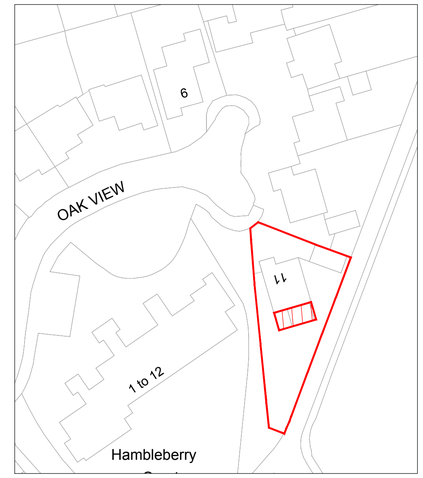


Existing Side Elevation



Existing Rear Elevation
Scale 1:100

1 0 1 2 3 4 5
SCALE 1:100 m



Block Plan
scale 1:500

5 0 5 10 15 20 25
SCALE 1:500 m



NORTH

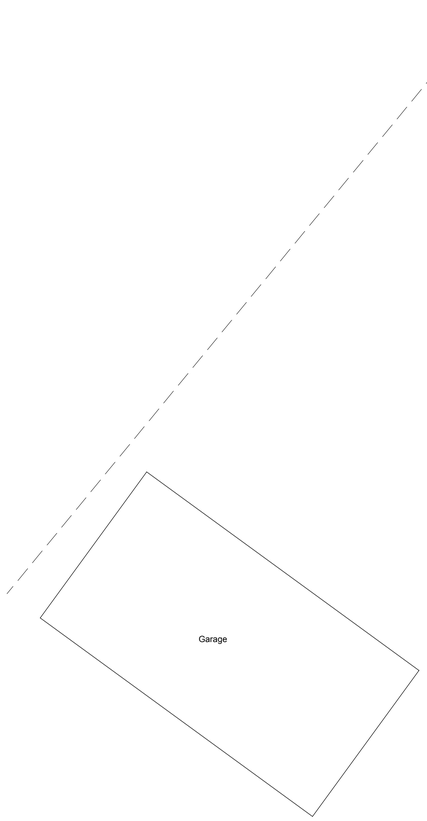


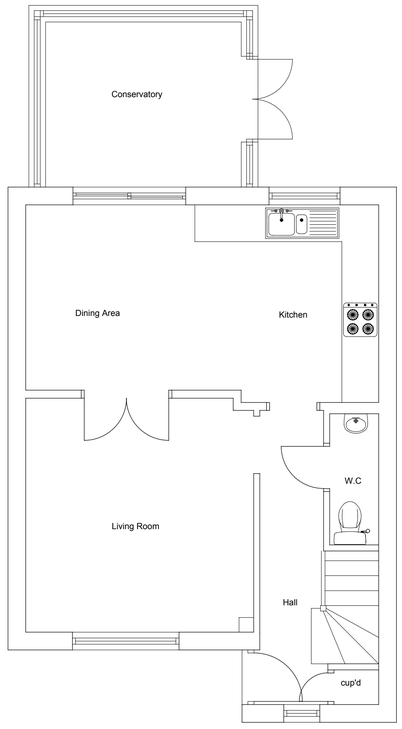
Existing Site Plan
scale 1:1250



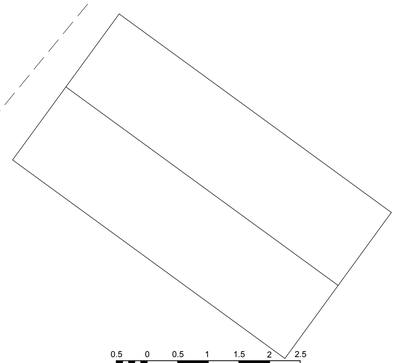
Location Plan
scale 1:1250

10 0 10 20 30 40 50
SCALE 1:1250 m

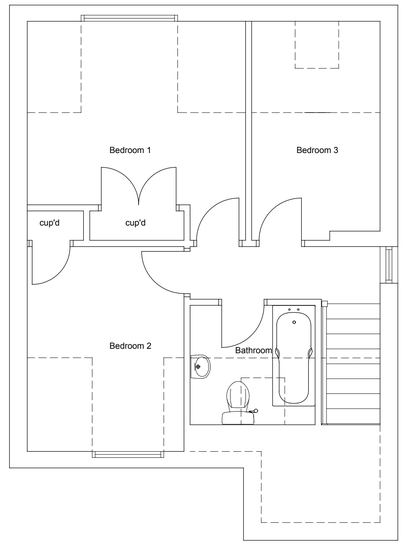




Existing Ground Floor Plan
Scale 1:50



0.5 0 0.5 1 1.5 2 2.5
SCALE 1:50 m



Existing First Floor Plan
Scale 1:50

REV	DATE	NOTES	BY

FOR ISSUE AS PLANNING APLICATION

David Tingle
Building Design & Surveying Services

17 Woodland Drive,Tilehurst,Reading
Berkshire, RG30 4RT.
T: 0118.9419311 M: 07711902344

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MR & MRS K. SMITH
11 OAK VIEW,TILEHURST
READING BERKSHIRE RG31 5HF

PROPOSED
TWO STOREY REAR EXTENSION
EXISTING
PLAN & ELEVATIONS

Scale: 1:100 & 1:50 A1 Date: March 2019
Dwg No: **11OV.MP01** Rev:

Protected species

Bats

5.16. During the Preliminary Roost Assessment no evidence of bats or potential for roosting bats was found in the house or the garage.

5.17. No further survey work with regards to bats is required.

Impact of Proposals and Recommendations

5.18. The proposed works are to demolish the existing conservatory and construct a new extension at the rear of the property.

5.19. Due to the lack of potential at the property works on the house are not considered likely to impact on bats and so no further survey work with regards to this species is required.

Mitigation, Compensation and Enhancement

5.20. In order to enhance the suitability of the site for bats, a 2F double front panel Schwegler Bat Box is recommended to be installed on a retained tree within the site at a height of at least 3m.

Birds

5.21. The vegetation within the site provides suitable foraging opportunities for common garden bird species which may be found in the local area.

Impact of Proposals and Recommendations

5.22. The development has the potential to impact on a number of native species of bird. It is therefore recommended that all vegetation clearance and demolition should be undertaken outside of the nesting bird season (March to September inclusive for most species in the UK).

5.23. All occupied birds nests have legal protection from damage and destruction under the Wildlife & Countryside Act (1981).

Mitigation, Compensation and Enhancement

5.24. If vegetation clearance must be undertaken during the nesting season, a breeding bird survey by a suitably qualified ecologist must be carried out to confirm that no active nest sites will be destroyed by the works.

Hedgehogs

5.25. The habitats within the site and in the surrounding area are considered to be suitable for hedgehogs. Records of hedgehogs were found within 600m of the site on hedgehog street.

Impact of Proposals and Recommendations

5.26. It is considered possible that this species may be present within the site during the development works, and safeguarding recommendations with respect to this species are therefore set out below.

Mitigation, Compensation and Enhancement

5.27. As a precaution, all contractors should be inducted by an ecologist in a tool box talk to ensure they are aware of the risks to protected wildlife on site prior to the commencement of any development works.

5.28. All dense vegetative areas and brash piles should be cleared by hand in a sensitive manner to ensure the welfare of any hedgehogs that may be utilising these habitats.

5.29. If any new fence-lines are proposed, these should include wildlife access holes so that they can freely access / exit the site. 13cm by 13cm is sufficient for any hedgehog to pass through and will be too small for most pets.

5.30. During all construction works it is recommended that any trenches or excavations be covered overnight, or that a ramp is provided to allow any animal to escape the hole should they fall in. All excavations should be investigated immediately prior to infilling to ensure no animals are trapped.

Reptiles

5.31. The site contains limited features suitable for use by common reptile species.

Impact of Proposals and Recommendations

5.32. All British reptiles are listed under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are therefore protected from intentional killing or injury. This is largely as a consequence of a national decline in numbers associated with habitat loss.

5.33. If the boundary habitat which is considered to be suitable for common reptiles is to remain in situ, it is considered unlikely that reptiles with be affected during the development.

Mitigation, Compensation and Enhancement

5.34. If the boundary habitat is to remain in situ, the recommended mitigation measures outlined with respect to hedgehogs above such as, tool box talk, dismantling vegetation sensitively and taking precautions with trenches, will safeguard this species group in the unlikely event that they are present on site.

Amphibians

5.35. The boundary habitat on site is considered to have moderate potential to support common amphibians such as the common toad *Bufo bufo* and common frog *Rana temporaria*.

Impact of Proposals and Recommendations

5.36. On this basis, precautionary mitigation measures are recommended at Section 6 below in order to ensure that this species group is safeguarded throughout the proposed development works.

5.37. No breeding ponds were present on site.

5.38. With regard to great crested newts *Triturus cristatus,* no still waterbodies have been identified on site. No water bodies were identified within 250m of the site.

Mitigation, Compensation and Enhancement

5.39. If the boundary habitat is to remain, the recommended mitigation measures outlined with respect to hedgehogs above such as, tool box talk, dismantling vegetation sensitively, taking precautions with trenches, and directionality of supervision of ground clearance works will safeguard this species group in the event that they are present within the working footprint.

Badgers

5.40. No evidence of use by badgers was seen within the proposed development site and the site is therefore considered to be of negligible ecological value to this species.

6. SITE ENHANCEMENT FOR DISCUSSION

Wildlife Beneficial Landscaping Scheme

6.1. Due to the suitability of the site for protected species any future landscaping planting should seek to complement the surrounding habitats and provide food and shelter for a wide range of faunal species.

6.2. All amenity planting and formal landscaped areas should be created from a palate of wildlife beneficial plants (not necessarily native) chosen for nectar or fruit.

6.3. Care should be taken to manage habitats in a suitable way to encourage a wide variety of insects and other wildlife to use the site.

6.4. Non-invasive species should be planted. Invasive species currently on site should be removed with care during vegetation clearance and disposed of appropriately.

7. REFERENCES

Bat Conservation Trust (2016). Bat Surveys – Good Practice Guidelines. BCT London.

Edgar, P., Foster, J. and Baker, J. (2010). *Reptile Habitat Management Handbook*. Amphibian and Reptile Conservation, Bournemouth.

English Nature (2001). *Great Crested Newts – Mitigation Guidelines*. English Nature.

Froglife (2001). *Great Crested Newt Conservation Handbook.*

Gunnell, K., Murphy, B. & Williams, C. (2013). *Designing for Biodiversity: A technical guide for new and existing buildings.* Second Edition. RIBA Publishing.

JNCC (2010), *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit.* JNCC, Peterborough.

MiddleMarch Environmental (2015) Preliminary Ecological Assessment Report.

Mitchell-Jones, A.J., (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). Bat Workers' Manual (3rd Edition). JNCC, Peterborough.

Natural England (2011). *Reptile Mitigation Guidelines*. Natural England.

Rose, F., (2006). *The Wildflower Key*. Fredrick Warne.

Schofield, H. W. & Mitchell-Jones, A.J. (2004). The Bats of Britain and Ireland. Vincent Wildlife Trust, Ledbury.

Wembridge, D. (2011). *The State of Britain's Hedgehogs*. British Hedgehog Preservation Society and Peoples Trust for Endangered Species.

APPENDIX 1 - PROTECTED SPECIES LEGISLATION

Bats

In England and Wales, all bat species and their roosts are legally protected under the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2010). You will be committing a criminal offence if you:

- 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
- Intentionally or recklessly obstruct access to a bat roost

Barbastelle, Bechstein's, greater horseshoe, lesser horseshoe, brown long-eared, soprano pipistrelle, and noctule bats are all priority species under the UK Biodiversity Action Plan (UK BAP) and have also been adopted as species of principal importance in England under Section 41 of the NERC Act 2006.

Badgers

Badgers and their setts are afforded strict protection under the Protection of Badgers Act 1992. This Act consolidates past badger legislation and, in addition to protecting the badger itself, makes it an offence to damage, destroy or obstruct badger setts. Badgers are also protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended), and listed under Appendix III of the Bern Convention, as a species that is in need of protection but may be hunted in exceptional instances. Only badger setts that are currently in use are covered by wildlife legislation.

Birds

All wild birds in the UK are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy the nest or its eggs.

Some bird species, such as the barn owl *Tyto alba*, are listed in Schedule 1 of the 1981 Act and receive further protection, making it an offence to intentionally or recklessly disturb these birds whilst building a nest or in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird.

The NERC Act (2006) inserts a new schedule into the Wildlife and Countryside Act (1981) to protect the nests of some bird species that regularly re-use their nests, even when the nests are not in use. This protection currently applies to golden eagle, white-tailed eagle and osprey.

Reptiles

All British reptiles are listed under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are therefore protected from intentional killing or injury. This is largely as a consequence of a national decline in numbers associated with habitat loss.

Two scarcer native British reptiles (smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis*), are afforded 'full' protection. This legislation makes it an offence to intentionally or recklessly kill, injure, disturb, take, possess or sell these species (in all life stages). It is also illegal to damage, destroy or obstruct access to places they use for breeding, resting, shelter and protection.

All species of reptile are priority species in the UKBAP and have been adopted as Species of Principal Importance under Section 41 of the NERC Act (2006) in England (Section 42 in Wales).

Amphibians

Great crested newts (GCN's) *Triturus cristatus* and their habitats are fully protected by the Conservation of Habitats and Species Regulations (2010) and partially protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill, injure or capture GCN's, their young or eggs, or destroy / damage their ponds or places of shelter used for breeding or protection. The great crested newt is also a Priority species in the UK Biodiversity Action Plan (UKBAP), and had been adopted as a Species of Principle Importance in England under Section 41 of the NERC Act 2006.

The natterjack toad *Epidalea calamita* is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats and Species Regulations 2010 making it a European Protected Species. The natterjack toad is also a priority species under the UK Biodiversity Action Plan.

The pool frog *Rana lessonae* is protected under the Conservation (Natural Habitats &C.) Regulations 1994 (as amended). As a European protected species the deliberate capturing, disturbing, injuring or killing of this species is prohibited, as is damage or destruction of its breeding sites or resting places. The pool frog is also a priority species under the UK Biodiversity Action Plan due to a 100% decline over 25 years (1980-2005).

Common toads *Bufo bufo* are also designated UKBAP species due to a serious decline of populations across large areas of southern, eastern and central England, thought to be mainly due to changes in habitat management, mortalities on the roads, and climate change.

Dormice

Common dormice *Muscardinus avellanarius* and their habitats are fully protected by both the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations (2010). This legislation makes it an offence to kill, injure, disturb or capture dormice, or destroy or obstruct their resting or breeding places.

The dormouse is also a priority species under the UK Biodiversity Action Plan and has been adopted as a species of Principal Importance in England under Section 41 of the NERC Act 2006 (section 42 in Wales) and so is protected from any adverse effects as a result of development.

Otters

Otters *Lutra lutra* are protected by both the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010. This legislation makes it is illegal to; deliberately or recklessly kill, injure or capture an otter, deliberately or recklessly disturb or harass an otter, damage, destroy or obstruct access to a breeding site or resting place of an otter.

The otter is also a UK BAP Priority Species and has been adopted as a Species of Principal Importance in England under Section 41 of the NERC Act 2006 (Section 42 in Wales) and the Conservation (Scotland) Act in Scotland.

Water Voles

Water voles *Arvicola terrestris* are fully protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill or injure water voles, and to damage, destroy or obstruct access to places used for protection or shelter, and to disturb water voles whilst they occupy such a place.

The water vole is also a Priority species in the UK Biodiversity Action Plan, and had been adopted as a Species of Principle Importance in England under Section 41 of the NERC Act 2006.

White-clawed Crayfish

The white-clawed crayfish *Austropotamobius pallipes* is protected under the Wildlife and Countryside Act 1981 (as amended), making it a criminal offence to; intentionally or recklessly kill or injure a white-clawed crayfish, or sell or

attempt to sell any part of this species. The Habitats Regulations (2010) provide further protection through the declaration of Special Areas of Conservation (SAC). This protection aims to prevent commercial harvesting of white-clawed crayfish and prohibits their capture without a licence.

The white-clawed crayfish is also a Priority species in the UK Biodiversity Action Plan (BAP), and has been adopted as a Species of Principal Importance in England under Section 41 of the NERC Act 2006.

Hedgehogs

Hedgehogs are UK Biodiversity Action Plan (BAP) species, and therefore must be taken into consideration as part of development planning. A recent report (Wembridge, 2011) shows that hedgehog numbers have declined by 25% in the last ten years.

APPENDIX 2 - SURVEY AND REPORTING LIMITATIONS AND EXCEPTIONS

This report and its survey results should be considered in conjunction with the terms and conditions proposed and scope of works agreed between Darwin Ecology Ltd and the client.

This report has been produced in the context of the proposals stated in the Introduction & Background section of this report (Section 2) and should not be used in any other context.

Darwin Ecology Ltd have endeavoured to identify the likely presence / absence of protected species wherever possible on site, where this falls within the agreed scope of works. Current standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility can be accepted where these methodologies fail to identify all species or significant species on site.

Extended Phase 1 and Preliminary Ecological survey techniques provide a preliminary assessment of the likelihood of protected species occurring on the development site, based on the suitability of the habitats and any field signs found during the site visit. A Phase 1 survey should not be taken as providing a full and definitive survey of any protected species group.

Extended Phase 1 and Preliminary Ecological Appraisals represent a snapshot of conditions at the time of survey and are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. Surveys should therefore not be considered a comprehensive list of all plant species or as conclusive proof that certain protected species are not present or will not be present in the future.

Where the presence/absence of a certain species is in question our ecologists must apply a precautionary approach until further survey data can be sought to better inform the decision.

Darwin Ecology Ltd will advise on the optimum survey season for a particular habitat or protected species prior to undertaking the survey work. Darwin Ecology Ltd cannot accept responsibility for the accuracy of surveys undertaken outside this period.

The potential impacts, mitigation and enhancement sections of the report provide an overview and is for guidance only. This section should not be solely relied upon, but should be considered in the context of the whole report.

Interpretations of survey results and recommendations outlined in the report represent our professional opinions, expressed in accordance with recognised industry practices and current legislation at the time of reporting. The results of survey work undertaken by Darwin Ecology Ltd are representative at the time of surveying.

Where the client had supplied us with data from previous reports, it has been assumed that this information is valid. No responsibility can be accepted by Darwin Ecology Ltd for inaccuracies within any previous data supplied.

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Amendments to this report after its submission may be necessary in light of new, relevant information and / or legislation. This report should be referred to us for re-assessment if any such amendments are necessary or after the expiry of one year from the date of the report.