EXTENDED PHASE 1 HABITAT SURVEY REPORT
September 2012

FYNNEY FIELDS
BASFORD LANE
LEEKBROOK
STAFFORDSHIRE
ST12 7QG

PREPARED FOR

CENTRAL MEDICAL SUPPLIES

Surveyor: MATT HAYDOCK (MIEEM)

Natural England Bat Licence Number: 20091044

Notice to readers

This report has been prepared by BlueSky Environmental Solutions Ltd with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the Institute of Ecology and Environmental Management (www.ieem.org.uk).

Non-technical summary

BlueSky Environmental Solutions Ltd were commissioned to undertake an Extended Phase I Habitat Survey of Fynney Fields, Basford Lane, Leekbrook, for Central Medical Supplies. The Phase I survey was undertaken on 10 September 2012 by an experienced and licensed ecologist who is a full member of the Institute of Ecology & Environmental Management (IEEM).

The site comprises a workshop and offices which are currently in use. Much of the remainder of the site consists of hard standing with scattered individual trees and ornamental shrubbery which is adjacent to the office block, and to the eastern boundary there is scattered scrub and tall ruderal vegetation in an area 78 m in length and 0.5 m in width.

The workshop buildings had low or negligible potential for roosting bats and do not require any further survey. However, the office had high potential for bat roosts, as evidence of bats was found within the roof void on the north-west elevation of the building. The inspection found a concentration of Pipistrelle species droppings on the floor and walls, some possibly from the 2011 and 2012 seasons. As bats are present, a European Protected Species licence will be required from Natural England to enable works to proceed. The office block should be further surveyed with at least three activity surveys comprising dusk / dawn bat surveys between May and August, the results of which will accompany the licence application.

Nesting birds may be present in the trees. If vegetation removal is planned during the months of March to August, inclusive, a prior check for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed. Recommendations are given to provide a variety of bird nesting opportunities (e.g. bird boxes) within the site.

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1.0 Introduction

Background

1.1 BlueSky Environmental Solutions Ltd were commissioned to undertake an Extended Phase I Habitat Survey of Fynney Fields, Basford Lane, Leekbrook, for Central Medical Supplies. The Phase I survey was undertaken on 10 September 2012 by an experienced and licensed ecologist who is a full member of the Institute of Ecology & Environmental Management (IEEM).

1.2 The objective of this report is to provide the client with information on any known or potential protected or rare species that may be using the site, and to outline recommendations on how to proceed with the works in a legal and ecologically sensitive manner.

1.3 Unless the client indicates to the contrary, information on the species found to be present on the site will be passed to the County biological records centre to update records held for the area.

1.4 The aim of the survey was to identify features of ecological interest, undertake a basic search of habitats present for evidence of use, or potential use, by protected species, and to identify any other possible ecological constraints to the development.

Site Description

1.5 The western part of the site comprises a warehouse and office buildings which are currently in use. The remainder of the site consists of hard standing with a small area of ornamental shrubbery adjacent to the offices, building materials and rubble to the north-west, scattered individual trees along the northern boundary, and an area of sparse tall ruderal vegetation and scrub. To the north-east, the site is surrounded by large buildings, including factories and business offices. To the north-east is a woodland and a brook at 40 m from the site. There is open countryside of arable fields in the wider landscape.

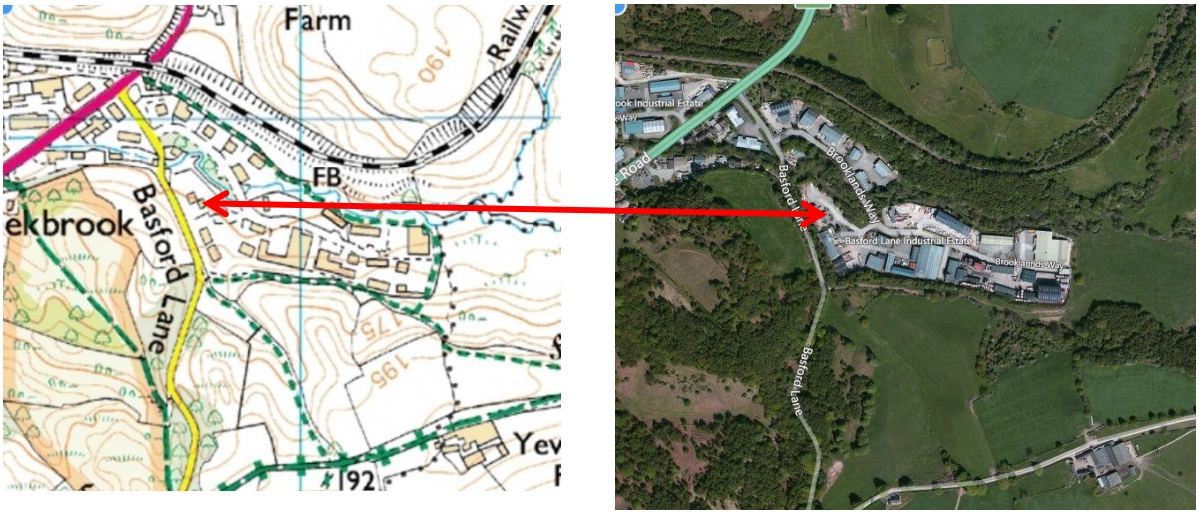

Figure 1: Location of site (left) and aerial view of site (right)

2.0 Methodology

Desk Study

2.1 In order to compile background information on the site and immediate surroundings, the Staffordshire Ecological Record (SER) was contacted.

2.2 Information requested was as follows:

- Records of protected species within 1 km of the site.
- Records of rare or notable species within 1 km of the site.
- Non-statutory site designations on or within 1 km of the site.

2.3 Additionally, MAGIC (Multi-Agency Geographic Information for the Countryside, 2010) was used to establish whether any of the following were present:

- Statutory site designations on or within 1 km of the site.
- Statutory sites designated for bats within 5 km of the site.

Habitat Survey

2.4 The site was visited on 10 September 2012 and was surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2007). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.

2.5 The observable higher plant species in each habitat type within the site, and their abundance, were recorded using the DAFOR scale:

D Dominant

A Abundant

F Frequent

O Occasional

R Rare

Fauna

2.6 Habitats present on the site were searched for obvious signs of faunal activity, *e.g.* presence of badger setts, mammal tracks or herpetofauna under refugia. Any buildings and mature trees on site were visually examined from the ground to identify features with the potential to support roosting bats.

Valuation of Ecological Features

2.7 The value of areas of habitat and plant communities has been measured against published criteria where available. Biodiversity Action Plans (BAPs) have been searched to identify whether action has been taken to protect all areas of a particular habitat and to identify current factors causing loss and decline of particular habitats. The presence of injurious and legally controlled weeds has also been taken into account.

2.8 When assigning a level of value to a species, its distribution and status (including a consideration of trends based on available historic records) has been taken into account. Other factors influencing the value of a species are: legal protection, rarity and Species Action Plans (SAPs). Guidance, where it is available, for the identification of populations of sufficient size for them to be considered of national or international importance has also been taken into account.

Nomenclature

2.9 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2011) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

3.0 Legislation

3.1 The United Kingdom Biodiversity Action Plan (BAP) 1994 sets out a strategy for implementing the Convention on Biological Diversity, which was signed by the United Kingdom at the Rio de Janeiro Earth Summit in 1992. The published report contains action plans for the United Kingdom's most threatened species and habitat plans for the most vulnerable areas.

3.2 The Local BAP sets out the county's part in the UK biodiversity planning process, in the form of local habitat and species action plans. Local BAPs are intended to focus resources and to conserve and enhance biodiversity by taking account of national and local priorities.

3.3 Schedule 1 Part 1 of The Wildlife and Countryside Act 1981 (as amended) lists birds protected by special penalties at all times. It prohibits intentional killing/injuring, taking, possessing, disturbing and selling (including parts and derivatives, eggs, nests, *etc.* as applicable) as well as damaging, destroying or disturbing nests in current use or dependent young, *etc.*

3.4 Schedule 5 of The Wildlife and Countryside Act 1981 (as amended) prohibits deliberate killing, injuring, taking, possessing, disturbing and selling (including parts and derivatives) as well as damaging, destroying or obstructing any structure or place of refuge of listed fauna, such as Dormouse, Otter and bat species.

3.5 The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is illegal to kill, disturb, destroy eggs, breeding sites or resting places, to pick, collect, take cuttings, uproot or destroy in the wild as well as keep, transport, sell/exchange and offer for sale/exchange species listed.

3.6 The Countryside and Rights of Way (CRoW) Act 2000 increases the protection given by The Wildlife and Countryside Act 1981 (as amended). The offence to intentionally damage any structure or place that a wild animal listed in Schedule 5 of the Act uses for shelter or protection or to deliberately disturb any such animal while in such a structure or place is extended so that the offence also covers reckless damage or disturbance. The CRoW Act also places a duty on Ministers and Government Departments to have regard for the purpose of conserving biological diversity in accordance with the Convention on Biological Diversity.

3.7 The Protection of Badgers Act 1992 makes it illegal to wilfully kill, injure or take any badger, or attempt to do so, and it is an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a badger sett.

3.8 The Natural Environment and Rural Communities Act 2006, as well as creating Natural England, gives all public authorities the duty to have regard for conserving biodiversity within the commission of their duties. This includes a duty to restore and enhance as well as maintain biodiversity. The Act also strengthens protection for Sites of Special Scientific Interest (SSSI) and makes authorities liable for allowing damage to such sites or their features.

4.0 Results

Desk Study

4.1 There are no statutory designated sites within 1 km of the site.

4.2 There are no statutory designated sites for bats within 5 km of the site.

4.3 There are no non-statutory sites within 1 km of the site.

4.4 SER provided the following records for protected and notable species within 2 km of the site boundary:

Plants – 32 records of plants

Mammals – 27 bat records, 3 otter records, 23 badger records, 1 polecat record, 1 water vole record

Reptiles/Amphibians – 6 records of great crested newts, 3 records of slow worm, 15 records of grass snake, 2 records of common lizards, 1 record of adder

Birds – 31 records of birds

Habitats

4.5 The following habitats or vegetation types were identified on the site during the course of the habitat survey:

- Buildings
- Scrub
- Tall ruderal vegetation
- Individual broadleaved trees

Buildings

4.6 There were numerous buildings on the western part of the site, which was a working business park. The buildings are numbered (locations shown on Figure 2) and described in Table 1.

Table 1: Description of buildings

Building No.	Building description	Potential for bats / birds
1	Office block with ridged roof and brick walling.	**High** potential for bats and nesting birds.
2	Warehouse of metal walls and roof. Internally open to roof, with no roof void	**Negligible** potential for bats. **Low** potential for nesting birds.

Scrub

4.7 On the northern boundary, there is a sparse and scattered scrub which consists of bramble and an individual butterfly bush *Buddleia* sp.

Tall ruderal vegetation

4.8 The northern boundary of the site was lined with tall ruderal vegetation, including Stinging Nettle *Urtica dioica* and Rosebay Willowherb *Chamerion angustifolium.*

Individual broadleaved trees

4.9 There were eight young to mature broadleaved trees on the northern boundary of the site: Horse Chestnut *Aesculus hippocastanum,* Field Maple *Acer campestre*, Sycamore *Acer pseudoplatanus*, Crack willow *Salix fragilis*.

Fauna

Bats

4.10 SER provided twenty-seven records of bat species within 2 km of the site. There are 2 buildings on site; the warehouse, which was constructed of metal sheeting, provided no potential access or roosting opportunities for bats, and the roofing of the building is ridged with gable ends and skylights. Some access points were identified at the edges of the roof, but due to their height could not be inspected. The interior of the building, which is open-plan and currently used for storage of equipment and vehicles, provided no roof void or any potential crevices for bats. It was also noted that, due to the skylights, the building was extremely light providing only limited dark areas which would be suitable for bats. Overall the potential for roosting bats was low.

4.11 The office block on site is mainly constructed of brick and metal sheeting; the main body of the building showed very little opportunity for utilisation by bats for roosting or gaining entry to the interior of the building. The roof of the building is ridged with brick; at the gable ends of the roof there was flashing, which in areas was slightly raised providing potential access for bats. Overall the roofing provided suitable access points for utilisation by bats.

4.12 The internal inspection of the roof void within the office block showed there was a height of approx. 2.5 m from the base of the floor to the ridge of the roof, a width of approx. 7.5 m and length of approx. 12 m, which is a suitable area for pre-emergence flight. The roofing is of rafters with tightly fitted foam and insulation, which prevented any inspection for bat activity. The body of the building internally consisted of brick and breeze blocks, which provided cavities which would be ideal for use by particular cavity-using species of bats. During the inspection, evidence of old and new bat droppings was identified on the north-west elevation of the building. The bat droppings were within a crevice and a concentration of droppings was located on the base of the floor, indicating that bats have used the building for roosting. Observation of the size, shape and texture of the droppings would suggest a Pipistrelle species of bat.

4.13 None of the trees on site appeared to offer any features suitable for roosting bats, such as rot holes, or cracked or split limbs.

4.14 The adjacent woodland, and the close proximity of the brook, is likely to be used by foraging bats as well as for navigational flight lines.

Badgers

4.15 SER provided records of badger within 2 km of the site. The site provides low foraging habitat for badgers. A 50 m radius was searched for badger activity, such as setts, hairs, dung pits, latrines or snuffle marks, but no observations were made.

Dormice

4.16 There are no records of dormice occurring within 2 km of the site. The potential for the site to support dormice is low.

Water Voles and Otters

4.17 There are records of water voles and otters occurring within 2 km of the site. No evidence of otter was found along the banks of the brook. The habitat along the brook is suitable for water vole, although no evidence was found during the initial search (a 50 m search either side of the brook was conducted). It is considered that as the minor development is more than 30 m from the brook, and as there would be no disturbance to the vegetation along the brook, there will be no disturbance to otters or water voles.

Other mammals

4.18 One record of polecat exists, but no records of other mammal species were provided by SER.

Birds

4.19 Records of kingfisher were provided by SER. The following were all either observed or heard on site during the survey: Blackbird.

4.20 The site as a whole provides poor foraging, though nesting habitat such as trees provides potential nesting opportunities.

Reptiles

4.21 SER did provide records of reptiles. The site is generally unsuitable for reptiles and lacks extensive areas of scrub with open basking areas typically associated with reptiles. There were piles of tarmac and concrete but this is regularly moved from site, and therefore unsuitable as refugia for reptiles.

Amphibians

4.22 SER provided records of amphibian species within 2 km of the site. No water bodies such as ponds were identified within 500 m and, given the site provides limited habitat for great crested newts and the proposed development causes the loss of only a small area of scrub, it is considered that the potential impact on great crested newts is low.

Invertebrates

4.23 SER did not provide any records of protected or notable invertebrate species. The woodland on site is listed on the Ancient Woodland Inventory and has potential for more rare species of invertebrates. The remaining habitats on site are generally common and do not provide much potential for rare invertebrate species although they are expected to support a number of more common species.

5.0 Development Constraints and Recommendations

5.1 The site is the subject of a possible planning application for development of buildings. Ecological constraints and recommendations with regard to any development are discussed below.

Habitats

5.2 Botanically the site itself does not appear to have any rare species and it is not particularly diverse.

5.3 Adjacent to the site is woodland and 30 m away is a running brook. It is not envisaged that the works will have any impact on the sensitive habitats adjacent to the Application Site, though the adoption of best-practice measures during the construction phase should be implemented.

- Suitable and appropriate measures or precautions should be taken to avoid any issues relating to fuel spillage. This could involve the use of spill kits (absorbent materials) on site.
- Good site practice should be employed to ensure that concrete is not released into the river and that all chemical and fuels on site are stored within a locked, sealed and bunded container. The refuelling of vehicles should occur in one location, a drip tray should always be used.

Protected and Notable Species

Bats

Further bat survey

5.4 At least three activity surveys, which would include emergence (dusk) and re-entry (dawn) surveys within the peak activity season (May to August), are recommended to confirm the species present, the status of the roosts, location of roosts, access points and numbers of bats present. This information is necessary to inform the EPS licence adequately and to develop an appropriate mitigation plan to enable works to proceed.

Further bat survey

5.5 As bat roosts will be affected by the proposed works, a European Protected Species (EPS) licence will be required from Natural England prior to work commencing. The licence includes a detailed Method Statement that describes how the works will be undertaken to avoid harming bats and to compensate for any loss of roosts. The EPS licence application process can take up to ten weeks to complete

Mitigation for bats

5.6 The appropriate level of mitigation can be gauged once further information on the type of roosts and species present has been confirmed through further survey. It is likely that a replacement roost will be required, preferably within the new build itself, for example by creating bat access into a roof space. Depending on the status of the roosts (e.g. summer breeding roost / hibernation / transitional), there may be timing restrictions to avoid certain works when bats are most likely to be present (e.g. re-roofing, pointing etc).

Legislation

5.7 All 18 British bat species and their roost sites are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended) and are included in Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 2010 (the Habitats Regulations). Combined, this legislation means that it is illegal to:

- Deliberately or intentionally kill, injure or take a bat.
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not)
- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

Birds

5.8 Nesting birds may be present in buildings or trees, during the bird breeding season (March to August, inclusive). If either tree or building removal is planned during these months, a prior check for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed.

5.9 It would be of conservation benefit to install a variety of nesting boxes for different bird species within the site in future (buildings and trees where suitable) to enhance the site for nesting birds and encourage bird diversity. Information on bird nesting boxes can be found at: http://www.rspb.org.uk/advice/helpingbirds/nestboxes/.

5.10 Nesting birds are protected under The Wildlife and Countryside Act 1981 (as amended), and therefore removal of nesting habitat should be undertaken outside of the bird-nesting season of March to August. Where this is not possible, it is recommended that suitable nesting habitat is surveyed for nesting birds by a suitably qualified ecologist prior to works commencing. If they are found, then the nest and surrounding habitat must remain intact until the young have fledged.

6.0 References

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7.0 Plans

Extended Phase I Habitat Survey

Figure 2 – Site plan and locations of buildings

Target Note 1: Bat droppings located within the office building.

8.0 Photographic Plates

Plate 1: View of proposed development site.

Plate 2: View of warehouse.

Plate 3: View of office block.

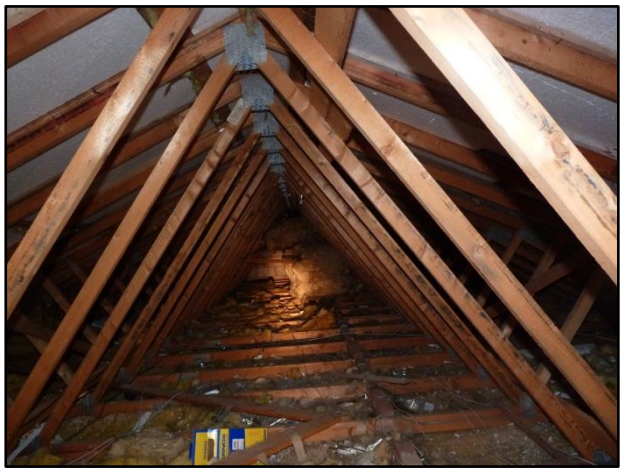

Plate 4: View of roof void within the office block.

Plate 5: View of bat droppings within roof void.