New Waitrose Store, Southam Road, Banbury

Ecological Appraisal

On behalf of **Barwood Capital and Mondelez International**

Project Ref: 26004/001 | Rev: 01 | Date: April 2015

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Document Control Sheet

Project Name: **Site off Southam Road, Banbury**

Project Ref: **26004**

Report Title: **Ecological Appraisal**

Doc Ref: **26004 Waitrose Banbury Ecological Appraisal v2 200415**

Date: **April 2015**

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Revision	Date	Description	Prepared	Reviewed	Approved
2	200415	Revision for planning submission	HE	ES	MP

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Executive Summary

The site that is the subject of this report is the Land at Mondelez International, located off Southam Road, Banbury, Oxfordshire. The site is bordered to the west and north by factory buildings, to the east by Southam Road and to the south by a cemetery.

It is proposed that a new Waitrose retail store be constructed on site along with an area of car-parking of sufficient size to accommodate 220 vehicles, with pedestrian and vehicular access and areas of soft-landscaping.

The desk study undertaken to inform this ecological assessment highlighted that there are no statutory or non-statutory sites designated for their ecological interest present within a 2 km radius of the site. The desk study results did however confirm records of protected species and species of conservation importance within a 2 km radius of the site. These records related to invertebrates, amphibians, reptiles, birds, bats, badgers and hedgehogs.

The ecological walkover survey undertaken on 19th November 2014 found the site primarily to comprise closely mown amenity grassland of low intrinsic ecological value, dominated by common and widespread, readily established botanical species. A number of ornamental shrub beds are also present in the south-west and west of the site. These areas support non-native species and are also considered to have limited intrinsic ecological value. A stream bisects the northern portion of the site and flows from west to east. A native intact hedgerow (a habitat of principal importance) is present in the east along with a more defunct (gappy) hedgerow present on the eastern boundary. Native and non-native tree are scattered across the site, the intrinsic value of which varies depending on species and maturity.

Taken together the results of the desk study and field survey confirms the site includes foraging and nesting habitat suitable for a range of common species of birds, and foraging and sheltering habitats suitable for hedgehogs. An external inspection of buildings B1 and B2 (as shown on Figure 1) confirmed that B1 had a small area of lifted bitumen felt in the south-western corner of the building (a feature with the potential to be exploited by roosting bats). However, this area was thoroughly inspected with a fibre-optic scope and no signs of use by roosting bats were found. Building B2 was assessed as having negligible potential to support roosting bats. The trees on site are generally young/semi-mature and do not have features capable of supporting roosting bats with the exception of one ash tree to the south of the stream that has dense ivy cover that has some potential to provide transitory roosting opportunities for individual bats.

Building B1 has a number of mammal burrows underneath that could potentially have been made by either badgers or foxes. However, it is thought that these were unlikely to have been made by badgers given a lack of evidence of badger activity on site (no latrines, well-used paths or piles of spoil). Approximately 2 cm of water was also visible in the excavations of each burrow meaning that current use by badgers or foxes is unlikely.

The habitats and botanical species present within the site are generally of limited intrinsic ecological value. However, the loss of the amenity grassland, introduced shrub beds, scattered trees and open stream habitat will result in the loss of some habitats that have the potential to support legally protected species or species of conservation importance, including breeding birds and hedgehogs.

In order to ameliorate these impacts, ensure no net biodiversity loss and provide opportunities for biodiversity gain in line with local and national planning policy, mitigation and compensatory measures are recommended as follows:

- Protection of retained trees and hedgerows through adequate root protection zones (during development) in accordance with BS 5837: 2012 Trees in Relation to Construction – Recommendations (as a minimum);

- The creation of ecologically valuable habitats within the soft-landscaping proposals (e.g. inclusion of native species and/or species which provide a foraging resource and/or provide shelter/movement corridors for invertebrates and other native species) in order to compensate for the loss of stream habitat;

- To avoid impacts on nesting birds which can be expected to be present in the scrub or trees within the site, clearance works should avoid the bird nesting season (March-August inclusive as a guide) to protect nesting birds. If this is not possible, clearance work should only be undertaken with an ecological watching brief. In the event that nesting birds are present a buffer zone will need to be established to avoid disturbance. If this cannot be achieved effectively clearance work may need to cease until the young have fledged;

- The lifted bitumen felt in the south-west corner of building B1 has the potential to be used by roosting bats. As a precautionary measure it is recommended that this be further inspected prior to demolition in order to confirm the absence of roosting bats;

- The ash tree with dense ivy cover should be soft-felled in the presence of a licenced batworker;

- Hedgehogs should be watched for during site clearance works. If hedgehogs are found they should be moved to retained areas of vegetation outside of the development area;

- Given the high levels of lighting that are already present within the site, it is unlikely that the proposed development will significantly impact upon foraging and commuting activity. However, it is recommended that use of the areas of soft landscaping by bats be encouraged by using luminaires or other directional light accessories to help manage light spillage, where possible.

- Prior to demolition of building B1 the panelling around the base of the building should be removed and inspected by an ecologist to search for signs of recent use by badgers. If no recent evidence of use is evident, the remainder of the building should then be carefully demolished with the floor to be carefully lifted. Any excavations present should be assessed by the ecologist in order to determine the nature of current use. If active badger sett or tunnels are uncovered, works will cease and a licence will be applied for from Natural England to allow legal closure of the sett; and

- Harm to foraging badgers and foxes that may be using the site during the construction phase will be avoided by ensuring that any trenches within the working area of the site are either covered overnight, or planks of wood placed within the trench to allow escape as necessary.

In line with NPPF, saved relevant Policies of the Cherwell District Local Plan (1996) and the emerging Cherwell District Local Plan (2006-2031) – submission 2014, biodiversity enhancement measures for the site have also been proposed. These include:

- installation of bird boxes for starlings and bat boxes on suitable retained trees, where possible; and

- planting of flowering and/or fruit- bearing shrubs as part of the landscaping scheme to provide foraging and movement opportunities for badgers, birds and invertebrates.

The recommendations for mitigation and enhancement given in this report should be taken into consideration as the scheme moves forward to ensure no net biodiversity loss and to provide opportunities for biodiversity gain in line with local and national planning policy.

1 Introduction

1.1 Site Description

1.1.1 The site which is the subject of this report is 1.6 ha in extent, centred on National Grid Reference SP 453 414 and lies in the north of Banbury, Oxfordshire. The site is bordered to the west and north by factory buildings; to the east by the A361 (Southam Road) and commercial development and to the south by a footpath with a cemetery further to the south.

1.1.2 The site predominantly comprises closely mown amenity grassland with scattered trees, a stream in the north which bisects the site from west to east, buildings and species-poor hedgerow on the eastern site boundary which has become defunct in places.

1.2 Description of Project

1.2.1 A new Waitrose store is proposed on the site along with 220 car-parking spaces, pedestrian and vehicle access and areas of soft landscaping. The stream is to be fully culverted beneath the car-park, and a number of trees are also to be removed in order to facilitate the proposed development.

1.3 Ecological Background to the Project

1.3.1 An ecological appraisal was undertaken in 2010 by Ecosulis (Ecosulis Ltd, 2010). This found the site primarily to comprise closely mown amenity grassland of low intrinsic ecological value, scattered trees and a short section of stream.

1.3.2 No field signs or other evidence of protected/notable species were recorded on site. However, the habitats present were assessed as being suitable for nesting and foraging birds, roosting and foraging bats, hibernating and foraging reptiles and amphibians, white-clawed crayfish and other mammals.

1.3.3 The report recommended that an endoscope check of the building on site for bats be undertaken along with a pre-felling dawn swarming survey of the tree classified as having potential to support roosting bats. The report also recommended that a precautionary survey for white-clawed crayfish be undertaken if the works to the watercourse are likely to impact the banks or cause significant dust pollution. Finally, the report recommended the retention of trees, hedgerows and the stream corridor where possible, with the sensitive timing of works and/or supervision of works by an Ecological Clerk of Works in respect to nesting birds, reptiles, amphibians and hedgehogs under a Precautionary Method of Working. Recommendations for enhancement were also made that included planting within the hedges, grassland management and creating a more naturalized bank profile within the opened up section of stream. The report also stated that consideration should be given to incorporating features such as bat/bird boxes and refuges for reptiles, amphibians and small mammals within the proposed development.

1.4 Aims of Study

1.4.1 Peter Brett Associates was commissioned to undertake an ecological appraisal of the site comprising a desk study and an extended Phase 1 habitat survey. The main aims of this report are to:

- Confirm the outcome of the review of biological records obtained during the desk study;
- Describe the habitats present within the site;

- Assess the potential for the site to support protected or notable species;
- Set out the legislative and/or policy protection afforded to any habitats present or any species potentially associated with the site;
- Present a preliminary assessment of any potential ecological impacts of development within the site based on the survey findings and current proposals;
- Provide recommendations for any further surveys if considered necessary; and
- Provide recommendations for mitigation, compensation and/or enhancement measures to ensure that the proposed development will remain acceptable in planning terms.

2 Methods

2.1 Desk Study

2.1.1 Existing ecological information for the site and its surrounding area was requested from the Thames Valley Environmental Records Centre (TVERC). Information on statutory and non-statutory designated sites and protected species and species of conservation importance were requested covering the site and land up to 2 km from the site boundary. In this case, species of conservation importance were defined as species listed in accordance with Section 41 of the Natural Environment and Rural Communities (NERC) Act. In addition, on-line resources including the Multi Agency Geographic Information for the Countryside (MAGIC, www.magic.gov.uk) website and online aerial photography of the area were also reviewed.

2.2 Field Survey

2.2.1 The field survey was undertaken by Stephen Foot MCIEEM on 19th November 2014. Habitats within the site were identified and described following standard JNCC Phase 1 habitat survey methodology as detailed in the Phase 1 Habitat Survey Handbook (JNCC, 2010). This uses a system of codes to describe different habitat types based on the dominant vegetation present. The survey was extended to give particular consideration to the potential of the habitats present to support protected species or species of conservation importance.

2.2.2 An external inspection survey of all buildings (where access was possible and deemed safe) was undertaken by Stephen Foot who is a licenced bat worker (Class Licence No. 001611) following standard survey guidance (BCT, 2012)). The exterior of all buildings were searched from the ground using a high powered torch, a fibre-optic scope and close-focusing binoculars (where necessary) for:

- Features which could provide bats with access into roosting spaces or provide roosting spaces (such as gaps under roofing tiles, gaps in ridge tiles, gaps in soffit boxes, gaps under lead flashing, and cracks and crevices in the stonework); and
- Evidence of the presence of bats such as bat droppings on windows, windowsills, walls and the ground, or scratch marks or staining from bat's fur around possible roost access/ egress points.

2.2.3 The weather conditions on the site visit were dry and overcast (cloud cover was 7/8 *octas*) with calm conditions (Beaufort Scale F1) with air temperature ranging between 8˚C and 10˚C.

2.3 Limitations to Methods

2.3.1 Although records secured through the desk study and supplied by third parties provide useful background information for initial ecological assessment, they often comprise individual records supplied by members of the public or are the result of *ad hoc* surveys. The desk study information can therefore help to further inform the likelihood of species being present in the area, but should not be relied upon to definitively determine presence or absence of individual species.

2.3.2 The survey was undertaken outside of the optimal time of year for extended Phase 1 habitat survey. However, given the highly modified intensively managed nature of the site it was possible to fully characterise the habitats present, obtain a representative species list and undertake a robust assessment of the site's potential to support protected and notable species. As such there are not considered to be any constraints or limitations associated with this assessment.

3 Results and Interpretation

3.1.1 This section sets out the results of the desk study and field survey. The implications of the results are then explored with reference to current legislation and planning policy.

3.2 Designated Sites

Statutory Designated Sites

3.2.1 One statutory designated Site of Special Scientific Interest (SSSI) is located within a 2 km radius of the site. Neithrop Fields Cutting SSSI lies approximately 1.25 km to the north-west and is designated for geological reasons. As such it is outside of the scope of this assessment and will not be included further.

3.2.2 There are no statutory designated areas of nature conservation interest of European importance within 10 km of the site.

Non-statutory Designated Sites

3.2.3 There are no non-statutory designated sites present within a 2 km radius of the site.

3.3 Habitats

3.3.1 The following Phase 1 habitat types were recorded within the site during the survey:

- Scattered trees
- Running water
- Amenity grassland
- Introduced shrubs
- Species-poor hedgerow
- Species-poor defunct hedgerow with trees
- Buildings and Hardstanding

3.3.2 The distribution of these habitats is shown on Figure 1 with summary descriptions given below. Site photographs are provided in Appendix B; target notes (TNs) referred to in the text below and on Figure 1 are also provided in Appendix B.

Scattered trees

3.3.3 Semi-mature and mature trees are scattered throughout the site (see Target Note 2 in **Appendix B** and on **Figure 1**). Species present include frequent Lombardy poplar *Populus lombardii* and black poplar *Populus nigra* with occasional silver birch *Betula pendula*, Norway maple *Acer platanoides*, sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior* and lime *Tilia* sp.

Running water

3.3.4 A stream bisects the site from west to east in the northern half of the site (see TN15 in Appendix B and on Figure 1 and TN18). On the day of survey the stream ranged from

between 5 cm in depth to 30 cm in depth averaging at approximately 10 cm in depth. This watercourse has a silt/gravel substrate and supports limited aquatic macrophytes with only a small number of individual fool's water-cress *Apium nodiflorum* plants evident. The banks are generally shallow and range between 30 cm to a maximum 1 m in height (adjacent to the culvert) with marginal vegetation limited to occasional elder *Sambucus nigra* and pendulous sedge *Carex pendula*. The watercourse is culverted at its eastern extent and in the west allowing pedestrian access over the stream. Outside of the site boundary to the west the stream is culverted and runs beneath the factory buildings.

Amenity grassland

3.3.5 The majority of the site consists of closely mown, amenity grassland (see Target Note 1 in Appendix B and on Figure 1). This is dominated by perennial rye-grass *Lolium perenne* with occasional red fescue *Festuca rubra,* and Yorkshire fog *Holcus lanatus* locally frequent creeping bent *Agrostis stolonifera*. Herbs and forbs within the sward are limited. Creeping buttercup *Ranunculus repens* is abundant with occasional creeping cinquefoil *Potentilla reptans*, dandelion *Taraxacum* agg. and white clover *Trifolium repens*.

Introduced shrubs

3.3.6 Small introduced shrub beds lie adjacent to the western aspect of building B1 with a further parcel adjacent to the stream on the western site boundary. The planted beds to the west of B1 support non-native ornamental species including choisya *Choisya ternata,* hebe *Hebe* sp., euonymus *Euonymus* sp. and shrubby honeysuckle *Lonicera nitida* (see Target Note 3 in Appendix B and on Figure 1).

3.3.7 The shrub parcel by the stream on the western site boundary is dominated by snowberry *Symphoricarpos alba* with frequent dogwood *Cornus sanguinea* and occasional *holly Ilex aquifolium* and bramble *Rubus fruiticosus* agg (see Target Note 12 in Appendix B and on Figure 1).

Species-poor hedgerow

3.3.8 A length of beech hedgerow *Fagus sylvatica*, borders a substation on the north-eastern site boundary (see Target Note 13 in Appendix B and on Figure 1). This hedgerow is well-managed and is approximately 2 m in height and 25 m in length.

Defunct Species-poor hedgerow with trees

3.3.9 A defunct species-poor hedgerow with trees borders the eastern boundary of the site. This hedgerow is more established (less gappy) in its northern extent and consists of abundant hawthorn *Crataegus monogyna* with occasional sweet chestnut *Castanea sativa*, hazel *Corylus avellana* and elder *Sambucus nigra*. Lime trees are present along the full extent of the hedgerow (see Target Note 14 in Appendix B and on Figure 1). In its southern extent the hedgerow becomes more defunct with occasional Leyland cypress *Cupressocyparis x leylandii* also recorded (see Target Note 20 in Appendix B and on Figure 1). The ground flora associated with the hedgerow supports abundant ivy *Hedera helix* with occasional ground ivy *Glechoma hederacea,* cleavers *Galium aparine* and bramble.

Buildings and hard-standing

3.3.10 Two buildings are present on site. These are described in more detail in Section 3.4 below in order to inform the assessment in relation to bats. A car-parking area is present in the south of the site and a concrete footpath leads north along the western boundary.

Habitat Summary

3.3.11 The site comprises highly modified and intensively managed habitats (amenity grassland, introduced shrub beds and hardstanding) supporting common and widespread plant species. As a result, these habitats are considered to have limited intrinsic ecological value. However, the mature black poplar trees and stream on site are of greater ecological value, with the native intact hedgerow classified as a Habitat of Principal Importance in England on a list drawn up in response to the requirements of Section 41 of the Natural Environment and Rural Communities Act, 2006 (see Appendix C). As such the presence of this hedgerow may be a material consideration in the planning process.

3.4 Protected Species and Species of Conservation Importance

3.4.1 Records of 25 protected species and species of conservation importance (species of principal importance) from within a 2 km search area were supplied by TVERC. None of these records were made from within the site itself. The results of the desk study are summarised in Table 2 in Appendix A. Please note that records dated pre-2004 have been excluded as over 10 years has now passed making this data less relevant. In addition to this, where a species has been recorded multiple times, only the most recent and closest record to the site has been included.

3.4.2 This section presents any evidence of protected species or species of conservation importance identified during the survey and evaluates the potential for the site to support species listed in Table 2 Appendix A. The relevant legislation and policy for each species or species group is also briefly summarised below with detailed legislation and policy information presented in Appendix C.

Invertebrates

3.4.3 The Ecosulis report stated that:

One old record (from 1980) of white-clawed crayfish Austropotamobius pallipes exists within the Oxford Canal, into which the stream on site flows. Although this is an old record it pertains to an under recorded species and as such has been given consideration within this report. The stream on site is considered to be suboptimal habitat for white-clawed crayfish due to the long stretches of culvert (approximately 300 m between the site and the Oxford Canal and 400 m to the west of the site) and the limited refuges within the stream bed and banks where the pebbles and gravel offer little refuge and tree roots and crevices in the bank adjacent to the water are limited" (Ecosulis Ltd, 2010).

3.4.4 The white-clawed crayfish and its habitats are afforded protection under the Conservation of Species and Habitats Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended). In broad terms these pieces of legislation jointly mean that the animals themselves are protected against killing, injury, taking (capture) and disturbance. In addition their places of shelter are protected against damage, destruction and obstruction. This species is also a Species of Principal Importance (SPI).

3.4.5 In recent years the white-clawed crayfish has significantly decreased in number due to the introduction and subsequent spread of the invasive North American signal crayfish *Pacifastacus leniusculus* which is likely to be a contributory factor to a lack of recent records of this species in the local area.

3.4.6 The stream does support a small number of rocks/stones and overhanging soil banks that could provide some limited sheltering habitat to crayfish however, given the lack of recent records of this species from the local area, the short length of stream present on site (100 m), the largely unsuitable nature of the watercourse (providing only a small number of limited sheltering opportunities) and the presence of long culverted sections between the stream on site and other open lengths of the stream present offsite (approximately 300 m between the

site and the Oxford Canal and 400 m of culvert to the west of the Kraft Factory site) it is considered extremely unlikely that this species is present on site. For these reasons white-clawed crayfish will not be considered further in this assessment.

Great crested newts

3.4.7 The desk study did not provide any records of great crested newts *Triturus cristatus* from within a 2 km radius from the site. Great crested newts spend a proportion of the year in aquatic habitats where they breed. The remainder of the year is spent foraging and sheltering in terrestrial habitats including woodland, scrub and rough grassland (Inns, 2009). The site does not support any water-bodies that could be used by great crested newts. A review of aerial photography revealed a pond approximately 470 m to the north of the site. However, this pond is separated from the site by the A361, the A422 and a canal all of which are significant barriers to great crested newt migration.

3.4.8 The site supports limited suitable terrestrial habitat for this species being highly modified and intensively managed. In addition, the site is isolated to the north, west and east by busy roads and built development. For these reasons the site is considered to have negligible potential to support great crested newts and this species is therefore not considered further in this assessment.

Common toads

3.4.9 A single record of common toads *Bufo bufo* was provided in the results of the desk study approximately 1.7 km to the north. As with great crested newts, this species also spends a proportion of the year in aquatic habitats where they breed. The remainder of the year is spent foraging and sheltering in terrestrial habitats including woodland, scrub and rough grassland (Inns, 2009). The site does not support any water-bodies that could be used by breeding common toads and the site also supports limited suitable terrestrial habitat for this species being highly modified and intensively managed. In addition, to this the site is isolated to the north, west and east by busy roads and built development. For these reasons the site is also considered to have negligible potential to support common toads and this species is therefore not considered further in this assessment.

Reptiles

3.4.10 Records grass snakes *Natrix natrix* were returned by TVERC from within 2 km of the site. The closest of these was approximately 1.6 km to the north.

3.4.11 Reptiles prefer a mosaic of habitats with a varied vegetation structure providing conditions suitable for both sheltering and foraging (Edgar *et al.*, 2010). The site consists of intensively managed amenity grassland which offers no foraging and sheltering habitats suitable for reptiles.

3.4.12 The site is largely isolated from suitable habitats in the wider area by built development, busy roads and concrete footpaths. A cemetery to the south of the site may support common species of reptiles which may move through contiguous suitable habitat in the direction of the site. However, the unsuitability of the habitats on site is such that reptiles can be expected to be absent, or present in only very low numbers. In this context the site is not important in sustaining local reptile populations and this species group is not therefore considered further in this assessment.

Breeding birds

3.4.13 A total of 9 species of bird were incidentally recorded on site during the extended Phase 1 habitat survey (see Table 1 for a list of these species).

Table 1: Birds recorded on site during extended Phase 1 Habitat Survey

Common Name	Scientific Name
Blackbird	*Turdus merula*
Carrion crow	*Corvus corone*
Grey wagtail	*Motacilla cinerea*
Long-tailed tit	*Aegithalos caudatus*
Magpie	*Pica pica*
Pied wagtail	*Motacilla alba*
Robin	*Erithacus rubecula*
Wood pigeon	*Columba palumbus*
Wren	*Troglodytes troglodytes*

3.4.14 The scattered trees, introduced shrub beds and hedgerows are likely to provide suitable nesting habitat for these and other common species of breeding birds (see Target Notes 2, 3, 12, 13, 14 and 22 in Appendix B and on Figure 1).

3.4.15 The potential for the site to support birds may be a material consideration as all wild birds, their nests and eggs receive protection under the Wildlife and Countryside Act 1981 (as amended) in respect of intentional killing and injury or damage and destruction (see Appendix C).

Schedule 1 Bird Species

3.4.16 Records of one species of Schedule 1 bird (the kingfisher *Alcedo atthis*) have been recorded from within a 2 km radius of the site (approximately 1.5 km to the north). This species receives additional protection under Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended) which prohibits disturbance of individuals or their dependent young at or near an active nest site (see Appendix C).

3.4.17 Kingfishers nest within burrows made in steeply sloping sand/earth banks (Holden and Cleeves, 2002). The banks of the stream are shallow being only 30 cm-1 m above the water level at most and as such are not considered suitable to support nesting kingfisher. For this reason kingfisher will not be considered further within this assessment.

Birds of Conservation Importance

3.4.18 A number of bird Species of Principal Importance (SPI's) have been recorded within 2 km of the site (see Table 2 in Appendix A). Of the species recorded on site and in the desk study the dunnock *Prunella modularis*, bullfinch *Pyrrhula pyrrhula*, song thrush *Turdus philomelos,* house sparrow *Passer dometicus* and starling *Sturnus vulgaris* may nest on or close to the site as suitable habitat is present for these species. The presence of these species may be a material consideration in the planning process. However, these species receive no specific legal protection over and above the general protection given to all birds by the Wildlife and Countryside Act 1981 (as amended).

Bats

3.4.19 Records of species of bat were provided in the results of the desk study. The closest of these was a brown long-eared bat *Plecotus auritus* located approximately 1.55 km to the north-east.

3.4.20 Two buildings are present on site. A description of each of these follows along with an assessment of their potential to support roosting bats.

3.4.21 Building B1 is a prefabricated building with pebble dash cladding and a pitched, bitumen felt covered roof (see Target Note 5 in Appendix B and on Figure 1). Building B1 measures approximately 34 m in length by 20 m in width by 4.5 m in height. This building has soffit boxes around the periphery all of which are tightly sealed preventing access to roosting bats and/or nesting birds. A small section of felt is lifted above the porch on the south-western edge of the building. This area was thoroughly inspected with a fibre-optic scope and no evidence of use by roosting bats was identified. However, this cavity is still considered to offer a possible roosting resource to small numbers of crevice dwelling species of bats.

3.4.22 Building B2 lies to the north of building B1 adjacent to the western boundary of the site. This small building houses the gas system for the site and has a cavity brick wall construction with a flat bitumen felt covered roof. This building measures approximately 6 m in length by 2 m in width by 2 m in height. Weather boarding lines the apex of the walls, however, this is all tightly secured to the walls offering no possible roosting opportunities for bats. As such this building is classified as having negligible potential to support roosting bats.

3.4.23 The trees present on site are generally young and semi-mature in good condition and do not support features capable of supporting roosting bats. A mature black poplar adjacent to the stream in the west of the site has some dead wood in the canopy and some rot holes. These rot holes were inspected from the ground using close-focusing binoculars and a powerful torch and it was evident that the rot holes do not lead to any significant cavities. As such this poplar is classified as having negligible potential to support roosting bats (see Target Note 19 in Appendix B and on Figure 1). A semi-mature ash tree present on the southern boundary of the stream in the east of the site had dense ivy cover which has some very limited potential to provide a transitory roost for individual bats (see Target Note 17 in Appendix B and on Figure 1).

3.4.24 The amenity grassland and surrounding buildings and hardstanding offer limited foraging and commuting opportunities for bats. However, the scattered trees, shrub beds, hedgerows and stream are likely to be used as a foraging and commuting resource by bats present in the wider landscape. Given the high levels of lighting already present from the adjacent factory to the west and the A361 to the east it is likely that only species of bats (predominantly noctule and pipistrelle bats) that typically tolerate high levels of lighting and may come to light sources to feed on insects attracted to the lights, will be present (Rich and Longcore, 2005).

3.4.25 Both bats and their roosts are afforded protection under the Conservation of Species and Habitats Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended). In broad terms these pieces of legislation jointly mean that the animals themselves are protected against killing, injury, taking (capture) and disturbance. In addition their places of shelter are protected against damage, destruction and obstruction. Several species are also classified as SPIs including soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula* and brown long-eared bat *Plecotus auritus* which are likely to be present in the area (see Appendix C).

Badgers

3.4.26 A number of records of badgers *Meles meles* were provided in the results of the desk study the closest of which was approximately 1.5 km to the west of the site. Badgers tend to build setts in areas where there is some form of cover. Woodland copses, scrub and hedgerows are preferred locations for setts as they allow badgers to emerge inconspicuously and young cubs to play near the sett entrances without being visible to potential predators and people (Neal & Cheeseman, 1995). The badger's preferred food source is the earthworm and therefore they predominantly forage on areas of grassland and pasture. Badgers are omnivorous and they supplement their diet with carrion and fruits from hedgerows, trees and shrubs (Neal & Cheeseman, 1995 and Roper, 2010). Both badgers and their setts are protected under the

Protection of Badgers Act 1992 making the intentional or reckless destruction, damage or obstruction of a badger sett an offence (see Appendix C).

3.4.27 A number of mammal burrows were evident around the base of building B1 which lead to a void beneath the building (see Target Note 6-11 in Appendix B and on Figure 1). No field signs to indicate current use by badgers were identified and there were no evident well-used paths leading to this building. In addition, the excavations were holding approximately 2 cm of water at the time of survey reflecting the high ground water level present and further reducing the likelihood that a badger sett is present beneath the building. A very small number (two) of possible badger snuffle holes were identified on site indicating that the site may be used by foraging badgers on occasion (see Target Note 4 and 21 in Appendix B and on Figure 1). The remains of a wood pigeon was found by the stream (see Target Note 16 in Appendix B and on Figure 1), indicating possible foraging by foxes which are also regularly seen by the site security personnel (Pers comm). The excavation of the burrows by foxes (rather than badgers) cannot therefore not be ruled out. All mammals receive limited protection under the Wild Mammals (Protection) Act, 1996 (as amended), see Appendix C.

3.4.28 Given the presence of water beneath the building, a lack of evidence of badger activity associated with the building/site (a well-used path, significant spoil, badger hairs/prints or badger latrines) it is considered unlikely that the area beneath the building is used by either badgers or foxes at the current time. However, a precautionary approach has been detailed within Section 4 to ensure that mammals that may be using these burrows in the future are protected from harm during demolition of building B1.

Hedgehogs

3.4.29 The closest record of a hedgehog *Erinaceus europaeus* was from approximately 1.1 km to the west of the site. Hedgehogs are found in virtually all lowland habitats but preferentially use grassland in close proximity to woodland, scrub or hedgerows (Harris & Yalden, 2008). This species predates upon slugs, snails, insects and amphibians. The hedgerows, shrub beds and amenity grassland areas may offer foraging and sheltering opportunities for this species.

3.4.30 The hedgehog is a SPI and therefore the potential presence of this species on site may be a material consideration in the planning process (see Appendix C).

Otters and water voles

3.4.31 No records of either of these species were returned in the results of the desk study. The watercourse is considered to be unsuitable for both species due to the isolation of the open section on site by extensive lengths of culvert to the east and west. The site is also extremely isolated from other suitable habitats for these species by busy roads and existing built development. Bankside marginal vegetation was also very limited offering a suboptimal foraging resource for water voles. For these reasons the site is considered to be of negligible, if any, value to both species. Otters and water voles are not therefore considered further in this assessment.

4 Recommendations

4.1.1 The presence of the species described as potentially associated with the site and the legislation and planning policies relating to them are such that they may be a material consideration as the planning application for the proposed development is determined. The likely impacts of the proposed development on those species identified as being present, or likely to be present, within the site are therefore discussed below along with the appropriate mitigation and compensation that will be required to ensure that the proposed development is in compliance with National and local planning policy and legislation.

4.2 Designated Sites

4.2.1 There are no statutory or non-statutory sites designated for their biodiversity value present within a 2 km radius of the site. The proposed development is small in size and is to be contained entirely within the site boundary therefore direct or indirect impacts to statutory or non-statutory designated sites outside of this 2 km radius during the construction and operational phases will not occur.

4.3 Habitats

4.3.1 The site is currently dominated by closely mown amenity grassland, a common and widespread habitat type supporting readily established species considered to have limited intrinsic value. The native scattered broadleaved trees and native intact hedgerow should be retained and protected where possible. However, it is understood that a small number of trees are likely to be felled in order to facilitate the proposed development. Advice from an arboriculturalist should be sought with regard to the removal of trees or construction works in the vicinity of any retained scattered trees and retained hedgerows. As a minimum works should adhere to British Standard: 5837:2012 “Trees in Relation to Design, Demolition and Construction” which prescribes the need for the following protection measures:

- Erection of stout fencing around each tree or hedgerow in advance of site clearance, to safeguard the Root Protection Area;
- Prohibition of construction activities, material storage, use of vehicles, fires, etc within the fenced area to prevent damage to tree roots and compaction of the soil; and
- Maintenance of an adequate water supply to the trees and hedgerows both during and after construction.

4.3.2 The section of stream where it passes through the site is to be culverted in order to facilitate construction of the car-parking area which will result in the loss of this habitat from the site. Although not a particularly ecologically rich section of stream it could still act as a corridor for movement by species using the site. The loss of this watercourse is compensated through the creation of new ecologically valuable habitats elsewhere on site. A list of suitable hedgerow shrubs and trees that would be appropriate for this location and which would provide some ecological benefit to the landscaping scheme has been provided in Table 3 in Appendix D. The landscaping plans for the proposed development (see drawing number 5419/ASP4-1 and -2 included as part of the landscape proposals) have taken these recommendations into account and include native-species (hornbeam *Carpinus betulus*) and other shrub and herbaceous species which will provide cover and a foraging resource for bird, invertebrate and small mammal species. The incorporation of these species within new areas of soft landscaping will also contribute to the enhancement of biodiversity on the site, in-line with relevant national and local planning policy (see Appendix C).

4.3.3 In the absence of appropriate mitigation measures direct impacts to the stream and other watercourses further downstream could arise during the construction phase of the

development through dust and possible contamination of the ground water. A Construction Environmental Management Plan (CEMP) should set out measures to avoid and manage the risk of pollution incidents.

4.4 Protected Species and Species of Conservation Importance

Breeding birds

4.4.1 The scattered trees, introduced shrubs and hedgerows provide nesting habitat for common, widespread species of breeding birds. Given the context of the site and its proximity to similar habitats in the surrounding area (the cemetery to the south and Spiceball Park to the south-east), it has a capacity to support relatively low numbers of common and widespread species of birds. The impact of the loss of potential nesting habitat (a small number of trees and shrub beds) when considered in the context of its abundance in the surrounding area is considered to be negligible.

4.4.2 To avoid damage or destruction of nests and eggs, or killing or injury of young birds in nests, site clearance within suitable habitat should be timed to avoid the breeding season of common bird species. In practice, this means that clearance of such areas should be undertaken within the period from 1st September until 28th February, as a guide. If this is not possible, all areas to be cleared should first be checked by an ecologist or other suitably qualified individual for active nests. This would involve watching the areas for signs of bird activity and undertaking a search to look for active nest sites; in the event that nesting activity was identified the clearance works in the vicinity of the nest would need to be modified or cease until the bird had finished nesting.

4.4.3 In order for the development to achieve a net gain in biodiversity in line with the NPPF (see Appendix C) the site could be enhanced for other species of nesting birds following the proposed development through the provision of additional nesting opportunities on retained mature/semi-mature trees on site.

4.4.4 A number of designs of bird boxes are commercially available. It is recommended that, where possible, specific nesting opportunities be provided for starlings which is an SPI; three larger wood or woodcrete boxes with an entrance hole around 45 mm in diameter should be placed on retained mature trees on the site periphery.

Bats

4.4.5 Building B1 has some very limited potential to be used as a roosting resource by small numbers of crevice dwelling bats on a transitory basis. Inspection of this roosting feature was undertaken at the time of survey and no signs of use by roosting bats were identified. As a precautionary measure it is recommended that this feature be further inspected prior to demolition in order to establish the continued absence of roosting bats. This small section of roof (in the south-west) of the building should be carefully removed by hand in presence of a licenced batworker. In the extremely unlikely event that a bat is found at this stage all works will need to cease and the licenced bat worker will provide advice on how best to proceed.

4.4.6 The ash tree with dense ivy cover is to be removed as part of the proposed development works. This tree has a very low potential to support a transitory roosting feature used occasionally by individual bats. As a precaution this tree should be soft-felled by suitably qualified arborists in the presence of a licenced batworker. This process involves the tree being felled in sections which will be carefully lowered to the ground and inspected by the licenced bat worker. As above, in the extremely unlikely event that a bat is found during this process, works will cease and the licenced bat worker will provide advice on how best to proceed.

4.4.7 The site boundaries, scattered trees and watercourse provide habitat that may be used for foraging and commuting by bats. Given the high levels of lighting that are already present it is unlikely that the proposed development will significantly impact upon foraging and commuting activity. However, it is recommended that use of the areas of soft landscaping by bats be encouraged by keeping the area free from light spillage/external lighting by using luminaires or other directional light accessories to help manage light spillage (BCT and ILE, 2008).

4.4.8 In line with the NPPF (see Appendix C) enhancements to benefit bats using the site could include the incorporation of roosting opportunities into the proposed scheme. A total of three bat boxes should be installed on suitable retained trees on the site peripheries, where possible. It is recommended that these comprise:

- 1 Schwegler 2FN box (also suitable for a range of species including noctule bats, *Myotis* and pipistrelle bats)
- 1 Schwegler 1FF bat box
- 1 Schwegler 2F (double-fronted option) box (suitable for both pipistrelle species and noctule bats)

4.4.9 The bat boxes should be installed in positions where they are out of reach of people from the ground (so as to limit interference) and high enough to deter cats and other predators (without being placed too high as this makes maintenance more difficult and can leave the boxes exposed to weather, particularly strong winds). In practice, placing them between 3 and 4.5 metres from the ground is optimal. The direction of the boxes should be selected to avoid facing them into the prevailing weather and will preferably be positioned facing in a southerly direction (i.e. south-west through south to south-east) where they will receive sunlight through much of the day.

Badgers and Other Mammals

4.4.10 Given that there is a very low likelihood that badgers/foxes are present in the space beneath building B1 the following recommendations will ensure that harm to these species is avoided:

- Prior to demolition of building B1 the panelling around the base of the building should be removed and inspected using a high-powered torch and fibre-optic scope by an ecologist to search for signs of recent use by either badgers or foxes (bedding material left by badgers or feeding remains left by foxes);
- If no recent evidence of use by badgers is noted, the remainder of the building will then be carefully demolished with the floor to be carefully lifted to expose the ground beneath the building;
- Any burrows or tunnels revealed (if present) will be assessed by the ecologist in order to determine the species that made them and current usage;
- If tunnels in current use by badgers are uncovered works will cease and a licence will be sought from Natural England to allow legal closure of the sett.

4.4.11 Please be aware that licensed works in relation to badgers can only be undertaken outside of the badger breeding season (i.e. licencing can be undertaken between 1st July and 30th November).

4.4.12 If a fox earth is found to be present it will be necessary to carefully excavate the earth by hand between July and February when the fox cubs have become independent and are likely to have left the earth (Harris & Yalden, 2008).

4.4.13 To avoid any badgers or foxes that forage on site at night becoming trapped in excavations during the construction phase the following precautionary measures should be adopted:

- Any trenches within the working area of the site should be securely covered over-night, and
- Any temporarily exposed open pipe system will be capped/covered in such a way as to prevent badgers foxes from gaining access.

4.4.14 The proposed planting scheme provides cover and foraging opportunities for badgers and other mammal species post development.

Hedgehogs

4.4.15 If any hedgehogs are disturbed during the removal of features that provide potential sheltering habitat for this species (i.e. small sections of hedgerow or introduced shrub beds), the animals should be carefully moved to retained areas of vegetation outside the footprint of the development works.

5 Conclusion

5.1.1 This Ecological Appraisal has found that the site largely comprises amenity grassland, a common and widespread habitat supporting readily established botanical species with limited intrinsic ecological value. The native species-poor intact hedgerow, the native mature scattered trees and the stream that bisects the site from west to east do however have some intrinsic ecological value.

5.1.2 The habitats on site have the potential to support common species of nesting birds, hedgehogs, foxes and/or badgers and limited roosting, foraging and commuting opportunities for bats.

5.1.3 Recommendations have been included to ensure that future development on the site minimises potential adverse impacts to protected species that may be present on or adjacent to the site. Further inspection of building B1 is recommended to confirm the continued absence of roosting bats prior to demolition. Recommendations are also made with regards to the construction work methods and timing to ensure that the legislation protecting nesting birds, badgers and hedgehogs is not contravened. Providing these measures are observed, ecological resources do not pose a constraint to redevelopment of the site.

5.1.4 The scheme has the potential to deliver biodiversity gain in line with the NPPF and local planning policies through the inclusion of plant species within the landscaping scheme of native provenance and through the inclusion of those plant species which provide shelter and/or foraging resource for invertebrate and small mammal species. In addition, where possible, bird boxes and bat boxes will be provided on retained trees within the proposed development site. These will provide new nesting and roosting opportunities of potential benefit to local starlings and local populations of bats.

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KEY:

- INTRODUCED SHRUB
- SCATTERED BROADLEAVED TREES
- AMENITY GRASSLAND
- SPECIES-POOR INTACT HEDGEROW
- SPECIES-POOR DEFUNCT HEDGEROW
- RUNNING WATER
- BUILDINGS
- HARDSTANDING
- (1) TARGET NOTE
- SITE BOUNDARY

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PHASE ONE HABITAT SURVEY

Date	16.03.2015
A3 Scale	1:1000
Drawn by	smr
Checked by	SM
Figure Number	FIGURE 1

Appendix A Desk Study Results

Table 2: Protected Species/Species of Conservation Importance.

Common name	Scientific name	Date	Grid ref.	Location and distance from the site
Common toad	*Bufo bufo*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Grass snake	*Natrix natrix*	2012	SP 451 431	Approximately 1.6 km to the north of the site,
Mallard	*Anas platyrhynchos*	2006	SP 460 403	Approximately 1.25 km to the south-east of the site.
Swift	*Apus apus*	2010	SP 452 409	Approximately 300 to the south of the site.
Black-headed gull	*Chroicocephalus ridibundus*	2010	SP 459 429	Approximately 1.5 km to the north of the site.
Kingfisher	*Alcedo atthis*	2011	SP 459 429	Approximately 1.5 km to the north of the site.
Kestrel	*Falco tinnunculus*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Skylark	*Alauda arvensis*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Bullfinch	*Pyrrhula pyrrhula*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
House martin	*Delichon urbicum*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Grey wagtail	*Motacilla cinerea*	2006	SP 460 403	Approximately 1.3 km to the south of the site.
House sparrow	*Passer domesticus*	2010	SP 451 423	Approximately 850 m to the north of the site.
Dunnock	*Prunella modularis*	2010	SP 451 423	Approximately 850 m to the north of the site.
Starling	*Sturnus vulgaris*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Whitethroat	*Sylvia communis*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Willow warbler	*Phylloscopus trochilus*	2008	SP 464 423	Approximately 1.4 km to the north-east of the site.
Song thrush	*Turdus philomelos*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Mistle thrush	*Turdus viscivorus*	2011	SP 459 429	Approximately 1.5 km to the north of the site.
Green woodpecker	*Picus viridis*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Daubenton's bat	*Myotis daubentonii*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Noctule bat	*Nyctalus noctula*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Common pipistrelle	*Pipistrellus pipistrellus*	2012	SP 458 431	Approximately 1.7 km to the north of the site.
Brown long-eared bat	*Plecotus auritus*	2008	SP 466 423	Approximately 1.55 km to the north-east of the site.
Badger	*Meles meles*	2011	SP 437 416	Approximately 1.5 km to the west of the site.
Hedgehog	*Erinaceus europaeus*	2006	SP 441 410	Approximately 1.1 km to the west of the site.

Appendix B Target Notes and Photographs

Target Note 1

The majority of the site consists of closely mown amenity grassland. This grassland is dominated by perennial rye-grass *Lolium perenne* with locally frequent creeping bent *Agrostis stolonifera* and occasional red fescue *Festuca rubra* and Yorkshire fog *Holcus lanatus*. Herbs and forbs present include abundant creeping buttercup *Ranunculus repens* with occasional dandelion *Taraxacum* agg., creeping cinquefoil *Potentilla reptans* and white clover *Trifolium repens*.

Photograph 1: The amenity grassland covering the majority of the site

Target Note 2

A number of semi-mature and mature trees are scattered throughout the site. Species present include frequent Lombardy poplar *Populus lombardii* and black poplar *Populus nigra* with occasional silver birch *Betula pendula*, Norway maple *Acer platanoides*, sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior* and lime *Tilia* sp.

Target Note 3

Small introduced shrub beds lie adjacent to the western aspect of building B1. The planted beds to the west of B1 support non-native ornamental species including choisya *Choisya ternata*, hebe *Hebe* sp., euonymus *Euonymus* sp. and shrubby honeysuckle *Lonicera nitida*.

Target Note 4

A possible badger snuffle hole in the south of the site.

Target Note 5

Building B1 in the south of the site. B1 is a prefabricated buildings with pebble dash cladding and a pitched bitumen felt covered roof. Building B1 measures approximately 34 m in length by 20 m in width by 4.5 m in height. This building has soffit boxes around the periphery all of which are tightly sealed preventing access to roosting bats and/or nesting birds. A small section of felt is lifted above the porch on the south-western edge of the building.

Photograph 2: The exterior of building B1

Photograph 3: Small section of lifted felt offering some limited roosting opportunities for bats.

Target Note 6

A mammal burrow (possibly excavated by badgers or foxes) beneath building B1 on the eastern aspect of the building.

Photograph 4: A mammal burrow beneath building B1 on the eastern building aspect.

Target Note 7

Another mammal burrow beneath building B1 on the eastern aspect of the building.

Target Note 8

Another mammal burrow beneath building B1 on the eastern aspect of the building.

Target Note 9

Another mammal burrow beneath building B1 on the eastern aspect of the building.

Target Note 10

Another mammal burrow beneath building B1 on the eastern aspect of the building.

Target Note 11

Another mammal burrow beneath building B1 on the eastern aspect of the building. The burrows on the eastern aspect of the building hold approximately 2 cm of water highlighting the high water table present.

Photograph 5: A mammal burrow beneath building B1 on the western building aspect showing high water levels.

Target Note 12

A parcel of introduced shrub by the stream on the western site boundary. This shrub bed is dominated by snowberry *Symphoricarpos alba* with frequent dogwood *Cornus sanguinea* and occasional holly *Ilex aquifolium* and bramble *Rubus fruiticosus* agg.

Target Note 13

A length of beech hedgerow *Fagus sylvatica*, borders an substation on the north-eastern site boundary. This hedgerow is well-managed and is approximately 2 m in height and 25 m in length.

Target Note 14

A defunct species-poor hedgerow with trees borders the eastern boundary of the site. This hedgerow is more established (less gappy) in its northern extent and consists of abundant hawthorn *Crataegus monogyna* with occasional sweet chestnut *Castanea sativa*, hazel *Corylus avellana* and elder *Sambucus nigra*. Lime trees are spread along the full extent of the hedgerow. In its southern extent the hedgerow becomes more defunct with occasional Leyland cypress *Cupressocyparis x leylandii* also recorded. The ground flora associated with the hedgerow supports abundant ivy *Hedera helix* with occasional ground ivy *Glechoma hederacea*, cleavers *Galium aparine* and bramble.

Photograph 6: A defunct species-poor hedgerow with trees on the eastern boundary of the site.

Target Note 15

A stream bisects the site from west to east in the northern half of the site. The stream ranges from between 5 cm in depth to 30 cm in depth averaging at approximately 10 cm in depth. This watercourse has a silt/gravel substrate and supports limited aquatic macrophytes with only a small number of individual fool's water-cress *Apium nodiflorum* plants evident. The banks are steep in places and approximately 1 m in height with marginal vegetation limited to occasional elder *Sambucus nigra* and pendulous sedge *Carex pendula*.

Photograph 7: The stream in the north of the site

Target Note 16

The remains of a wood pigeon *Columba palumbus* likely evidence of a fox kill.

Target Note 17

A semi-mature ash tree with dense ivy cover offering some limited, transitory roosting opportunities for individual bats.

Photograph 8: An ash tree with dense ivy cover.

Target Note 18

The stream adjacent to the culvert forms a pool approximately 30 cm in depth.

Target Note 19

A black poplar tree with some dead wood in the canopy and some rot holes. However, on inspection the rot holes do not appear to lead into or form cavities suitable for roosting bats.

Target Note 20

The hedgerow on the eastern site boundary becomes more defunct (gappy) in its southern extent.

Target Note 21

A possible badger snuffle hole, possible evidence that badgers use the site as a foraging resource on occasion.

Target Note 22

A bird nest (likely pigeon) present in the polar tree.

Appendix C Summaries of Relevant Planning Policy and Legislation

This section briefly summarises the relevant national and local planning policies and legislation pertaining to habitats and species mentioned within this report. Please note that the following text does not constitute legal advice.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) was published in March 2012. This document states that, "*the planning system should contribute to and enhance the natural and local environment by*:

Protecting and enhancing valued landscapes, geological conservation interests and soils;

Minimising impacts on biodiversity and providing net gains in biodiversity, where possible contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; and

Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability".

Planning – land allocation and policies

The NPPF states that '*in preparing plans to meet development needs, the aim should be to minimise pollution and other adverse effects on the local and natural environment. Plans should allocate land with the least environmental or amenity value, where consistent with other policies in this Framework*.'

Local planning authorities are advised in paragraph 113 to '*set criteria-based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks*.'

In paragraph 111, the NPPF refers to brownfield land as follows: '*planning policies and decisions should encourage the effective use of land by re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value*.'

Local planning authorities are advised further to '*set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure*…'

The NPPF also states that, "*to minimise impacts on biodiversity and geodiversity, planning policies should:*

- Plan for biodiversity at a landscape-scale across local authority boundaries;
- Identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;
- Promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets; and identify suitable indicators for monitoring biodiversity in the plan; and

- Where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas."

Planning applications and biodiversity

"*When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles*:

- If significant harm 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;

- Proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;

- Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;

- Opportunities to incorporate biodiversity in and around developments should be encouraged;

The Government Circular 06/2005 remains valid and Paragraph 99 provides guidance stating "*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision*".

Species and Habitats of Principal Importance

The NPPF (paragraph 117) indicates that local authorities should take measures to "*promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species*" linking to national and local targets through local planning policies. Priority species are those species shown on the England Biodiversity List published by the Secretary of State in accordance with Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Planning authorities have a duty under Section 40 of the NERC Act to have regard to priority species and habitats in exercising their functions including development control and planning.

Emerging Local Planning Policy

Cherwell District Local Plan (2006-2031)-submission 2014

The Local Plan (October 2014) (SLP) was submitted to the Secretary of State for examination in January 2014, with the examination beginning in June 2014. This plan does not have the status of a Development Plan but is a material planning consideration for decision-making. The following policy is of relevance to ecology and biodiversity:

Policy ESD 10 – Protection and Enhancement of Biodiversity and the Natural Environment

Protection and enhancement of biodiversity and the natural environment will be achieved by the following:

- *In considering proposals for development, a net gain in biodiversity will be sought by protecting,managing, enhancing and extending existing resources, and by creating new resources;*

- *The protection of trees will be encouraged, with an aim to increase the number of trees in the district*

- *The reuse of soils will be sought*

- *Ensuring that development proposals are assessed against the avoidance-mitigation-compensation hierarchy set out in paragraph 118 of the NPPF. If significant harm 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 development will not be permitted.*

- *Development which would result in damage to or loss of a site of international value will be subject to the Habitats Regulations Assessment process and will not be permitted unless it can be demonstrated that there will be no likely significant effects on the international site or that effects can be mitigated*

- *Development which would result in damage to or loss of a site of biodiversity or geological value of national importance will not be permitted unless the benefits of the development clearly outweigh the harm it would cause to the site and the wider national network of SSSIs, and the loss can be mitigated to achieve a net gain in biodiversity/geodiversity*

- *Development which would result in damage to or loss of a site of biodiversity or geological value of regional or local importance including habitats of species of principal importance for biodiversity will not be permitted unless the benefits of the development clearly outweigh the harm it would cause to the site, and the loss can be mitigated to achieve a net gain in biodiversity/geodiversity*

- *Development proposals will be expected to incorporate features to encourage biodiversity, and retain and where possible enhance existing features of nature conservation value within the site. Existing ecological networks should be identified and maintained to avoid habitat fragmentation, and ecological corridors should form an essential component of green infrastructure provision in association with new development to ensure habitat connectivity*

- *Relevant habitat and species surveys and associated reports will be required to accompany planning applications which may affect a site, habitat or species of known or potential ecological value*

- *Air quality assessments will also be required for development proposals that would be likely to have a significantly adverse impact on biodiversity by generating an increase in air pollution.*

- *Planning conditions/obligations will be used to secure net gains in biodiversity by helping to deliver Biodiversity Action Plan targets and/or meeting the aims of Conservation Target Areas. Developments for which these are the principal aims will be viewed favourably*

- *A monitoring and management plan will be required for biodiversity features on site to ensure their long term suitable management.*

European Legislation – Bats

The original (1994) *"Habitat Regulations"* transposed the EC Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC) into national law. The Conservation of Habitats and Species Regulations 2010 (as amended) consolidates the various amendments that have been made to the Regulations.

"European protected species" (EPS) are those which are present on Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). These habitats and species are subject to the provisions of Regulation 41 of those Regulations. All EPS are also protected under the Wildlife and Countryside Act 1981 (as amended). Taken together, these pieces of legislation make it an offence to*:*

- intentionally or deliberately capture, injure or kill any wild animal included amongst these species
- possess or control any live or dead specimens or any part of, or anything derived from a these species
- deliberately disturb wild animals of any such species
- deliberately take or destroy the eggs of such an animal, or
- intentionally, deliberately or recklessly damage or destroy a breeding site or resting place of such an animal, or obstruct access to such a place

For the purposes of paragraph (c), disturbance of animals includes in particular any disturbance which is likely—

- to impair their ability to survive, to breed or reproduce, or to rear or nurture their young,
- or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- to affect significantly the local distribution or abundance of the species to which they belong.

Although the law provides strict protection to these species, it also allows this protection to be set aside (derogation) through the issuing of licences. The licences in England are currently determined by Natural England (NE) for development works. In accordance with the requirements of the Regulations (2010), a licence can only be issued where the following requirements are satisfied:

- the proposal is necessary '*to preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment'*
- '*there is no satisfactory alternative'*
- the proposals '*will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*".

National Legislation

Breeding birds

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

Schedule 1 Bird Species

Bird species listed on Schedule 1 of the WCA receive additional protection from disturbance at or near an occupied nest site. Schedule 1 of the Act makes it an offence to intentionally or recklessly disturb this species while it is building a nest or is in, on or near a nest containing eggs or young. It also makes it an offence to intentionally or recklessly disturb dependent young of this species.

The Protection of Badgers Act, 1992

Badgers are protected under the Protection of Badgers Act 1992. This makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A licence can be granted by Natural England to permit works that would otherwise result in an offence (e.g. to allow sett closure where activities close by may otherwise result in disturbance or damage to the sett).

Wild Mammals (Protection Act, 1996 (as amended)

Under the Wild Mammals (Protection) Act 1996 it is an offence to cause unnecessary suffering to wild mammals, including crushing and asphyxiating. This Act is primarily concerned with animal welfare and aims to prevent cruelty. As a result, offences include those actions with the intent to inflict unnecessary suffering. A wild mammal includes any mammal which is not domestic or captive. Red foxes, wild deer and other mammals such as rabbits are therefore covered by the Act.

Appendix D List of Species Recommended in Landscaping Proposal

Table 3: List of Species Recommended for Soft Landscaping

Common Name	Scientific Name	Native or benefit to wildlife
Trees		
Silver birch	*Betula pendula*	Native
Field maple	*Acer campestre*	Native
Dogwood	*Cornus sanguinea*	Native
Hedgerow Planting		
Field maple	*Acer campestre*	Native
Hazel	*Corylus avellana*	Native
Beech	*Fagus sylvatica*	Native
Hornbeam	*Carpinus betulus*	Native
Elder	*Sambucus nigra*	Native
Holly	*Ilex aquifolium*	Native
Wild privet	*Ligustrum vulgare*	Native
Shrubs and Herbaceous plants		
Holly	*Ilex aquifolium*	Native
Hazel	*Corylus avellana*	Native
Hawthorn	*Crataegus monogyna*	Native
Blackthorn	*Prunus spinosa*	Native
Wild privet	*Ligustrum vulgare*	Native
Yew	*Taxus baccata*	Native
Spindle	*Euonymus europaeus*	Native
Lavender	*Lavandula hidcote*	Provides a foraging resource for invertebrates (bees in particular, BBKA).
Hebe	*Hebe sp.*	Provides a foraging resource for invertebrates, bees in particular (BBKA).
Mahonia	*Mahonia sp.*	Provides a foraging resource for invertebrates, bees in particular (BBKA).
Viburnum	*Viburnum tinus and opulus*	Provides a foraging resource for invertebrates, bees in particular (BBKA).

Key: BBKA = British Bee Keeper Association Leaflets

*= Emorsgate seeds (http://wildseed.co.uk)