

Preliminary Ecological Appraisal

Severn Hospice,

Bicton heath,

Shrewsbury,

SY3 8HS

January 2022

# Notice to readers

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The results of the survey and assessment work undertaken by Absolute Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

Absolute Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

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Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

# Non-technical summary

Absolute Ecology LLP was commissioned to undertake a Preliminary Ecological Appraisal of a site known as Severn Hospice, Bicton Heath, Shrewsbury, SY3 8HS. Grid Reference: SJ45871389.

The Preliminary Ecological Appraisal was undertaken on 12<sup>th</sup> January 2022 by Helen Staton an experienced and licensed ecologist who is a Member of the Chartered Institute of Ecology & Environmental Management (ACIEEM).

The survey area is situated in a rural location, on the western edge of the town of Shrewsbury. The immediate landscape consists of woodland, farmland with scattered residential properties. Habitats onsite comprise introduced shrub, scattered trees, amenity grassland, a hedgerow, a building and hard standing. Proposals have been made to extend the building and relandscape.

There are no statutory and three non-statutory sites located within 2km of the site boundary, all of which are well removed and isolated from the application site. Therefore no impacts are envisaged.

The Preliminary Ecological Appraisal confirmed the presence or potential presence of the following (see section 5 for further details):

- Bats Building: the onsite building was assessed to be of moderate bat roosting potential. Presence/absence surveys should be undertaken during the optimal survey period which runs from May-September. Trees; one onsite tree (T1) was assessed to be of potential for supporting roosting bats. Ecological advice should be sought should any alterations be required to the tree i.e. branch removal, crown lift etc.
- Nesting birds –With regards for nesting birds the introduced shrubs and scattered trees are of value for nesting and foraging birds. Therefore, any vegetation clearance works should be done outside of the bird breeding season which runs March-August inclusive, or subject to a nesting bird check prior to the start of works.
- Hedgehogs –the onsite vegetation holds potential for supporting hedgehogs (*Erinaceus europaeus*). Any vegetation clearance should be done under a Precautionary Working Method Statement (PWMS) to avoid harm to any individuals residing onsite.

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## 1.0 Introduction

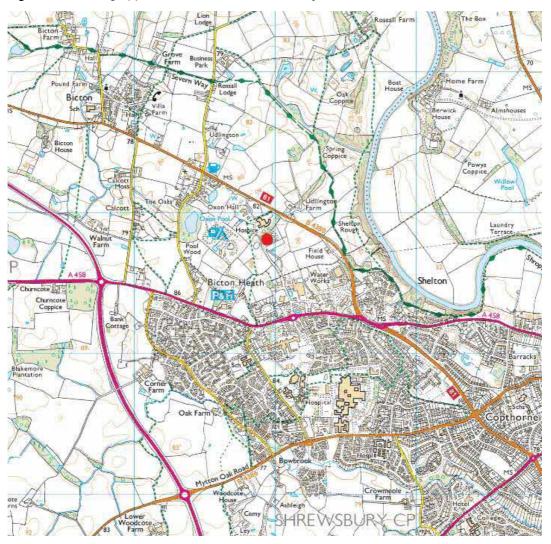
## Background

- 1.1 Absolute Ecology LLP was commissioned to undertake a Preliminary Ecological Appraisal of a site known as Severn Hospice, Bicton Heath, Shrewsbury, SY3 8HS. Grid Reference: SJ45871389.
- 1.2 The Assessment was undertaken on the 12<sup>th</sup> January 2022 by Helen Staton an experienced and licensed ecologist who is a Member of the Chartered Institute of Ecology & Environmental Management (ACIEEM). Helen holds a Natural England Class 1 Bat Licence and Class 1 Great Crested Newt Licence.
- 1.3 The scope of this appraisal has been determined in line with the proportional approach to ecological survey, assessment and subsequent recommendations for avoidance and mitigation of impacts, which is encouraged in the emerging 'BS 42020: Biodiversity –Code of practice for planning and development'. This report has been prepared with due consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012)) and the emerging BS 42020.
- 1.4 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.
- 1.5 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.

## Site Description

- 1.6 The survey area is situated in a rural location, on the western edge of the town of Shrewsbury. The immediate landscape consists of woodland, farmland with scattered residential properties. Habitats onsite comprise introduced shrub, amenity grassland, a building and hard standing.
- 1.7 Within the wider landscape are several woodlands, waterbodies, River Severn (780m to the east), hedgerows and tree lines, grassland fields.

Figure 1: Showing approx. site location (indicated by the red circle).



# 2.0 Methodology

## Desk Study

- 2.1 In order to compile background information on the site and immediate surroundings ecological data was obtained from Telford & Wrekin Council (TEDS).
- 2.2 Information requested was as follows:-
  - Records of protected species within the 2 km of the site.
  - Records of rare or notable species within the 2 km of the site.
  - Non-statutory site designations on or within 2 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 2 km of the site.
  - Statutory sites designated for bats within 5 km of the site.

## Habitat Survey

- 2.4 The site was visited on the 12<sup>th</sup> January 2022 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 Target notes (TN) were used to illustrate key features of interest (i.e. over mature trees / hedgerows) or to draw attention to areas considered too small to map or for the purpose of highlighting the location of an invasive plant species. Photographic plates have also been taken to help illustrate key site features.
- 2.6 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

2.7 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

- 2.8 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.
- 2.9 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.

## Survey Constraints

#### Data Search

2.10 Desk study data provides information on recorded species in the area and can be helpful for targeting survey. However, it is possible that protected species that have not been identified within the data search may occur on or adjacent to the site.

#### Field survey

- 2.11 The survey was carried out during the winter months when not all plant species are visible. An update botanical survey should be undertaken during spring/summer.
- 2.12 Habitats within 50m of the site boundary were inspected as far as access allowed. Ponds up to 500m from the site were viewed where there was public/land owner access.
- 2.13 Fauna species present may not always leave field signs and in addition, species may take up residence on site subsequent to the survey. If no development takes place within 2 years of this survey report, the findings should be reviewed and may need updating, and a full survey should be repeated within three years

#### Nomenclature

2.14 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, 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 (and amendments) –this 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 (and amendments) –this 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 Act 2000 –this increases protection given by The Wildlife and Countryside Act 1981 (and amendments). 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 deliberately disturbing 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 this Act 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, this act 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 – Map of sites and species shown within Appendix 1

#### Sites

- 4.1 There are no statutory designated site within 2 km of the site.
- 4.2 There are three non-statutory sites within 2km of the site.

#### Table 1: Non-statutory sites within 2km

Reference	Site Name	Site Type	Details
		Local Wildlife	
SJ41.09	Oxon Pool	Site	Open pool with alder carr. Interesting flora.
SJ41.02	Shelton Rough	Local Wildlife Site	Large meadow with damper eastern edge. Riverside oak and elm dominated woodland.
SJ41.80	River Severn (Montford - Shrewsbury)	Local Wildlife Site	Riparian habitats with a rich variety of species.

4.3 All non-statutory sites are well removed from the application site, as such no impacts are envisaged as a result of the sites redevelopment.

#### Fauna/Flora

4.4 TEDS provided the following records for protected and notable species within 2km of the site boundary (individual records discussed in detail within the Fauna section of the report):

**Bats** –two species of bat recorded within the search area –common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmeaus*). All bat species are UK and EU protected.

**Amphibian** –one UK or EU protected species recorded in the search area –great rested newt (*Triturus cristatus*). Two UKBAP species –smooth newt (*Lissotriton vulgaris*) and common toad (*Bufo bufo*)

Birds – no bird species returned.

**Mammal** +wo UK protected species recorded in the search area - badger (*Meles meles*) and polecat (*Mustela putorius*). Two UKBAP species –hedgehog (*Erinaceus europaeus*), brown hare (*Lepus europaeus*).

Reptiles -- no retile species returned.

Flowering plants –one UK protected species returned –Bluebell (*Hyacinthoides non-scripta*) and three UKBAP species.

Invertebrates -- no EU/UK protected species returned and two UKBAP species.

## Habitats

- 4.5 The site is Hospice and comprises of a large single storey building surrounded by well maintained and managed gardens.
- 4.6 Within the application area, the following habitats or vegetation types were identified during the course of the habitat survey (photographic plates shown in section 9.0);
  - A3 Scattered trees
  - J1.2 Amenity grassland
  - J1.4 Introduced shrub
  - J2.1 –Hedgerow
  - J3.6 –Building
  - J4 Hard standing

#### A3-Scattered trees

- 4.7 Scattered onsite are four trees comprising one semi mature pine (*Pinus* sp.), one mature horse chestnut (*Aesculus hippocastanum*), a young silver birch (*Betula pendula*) and a young *Acer* sp.
- 4.8 All onsite trees were assessed in terms of their bat roosting potential as shown within the Fauna section of the report.

#### J1.2 – Amenity grassland

4.9 Onsite are areas of amenity grassland which is dominated by *Lolium perrenne.* The grassland is managed and maintained to a short sward.

#### J1.4 – Introduced shrub

4.10 On the eastern side of the site are areas of introduced shrub. The areas towards the southern side of the site are well established and form part of the garden area. The shrubs vary in height. The planting around the building comprises lower growing species forming flower beds. Species recorded onsite include *Rosa* sp., *Viburnum* sp., *Helleborus* sp., honeysuckle (*Lonicera* sp.), *Arbutus* sp., *Weigela* sp., *Hydrangea* sp.

#### J2.1 – Hedgerow

4.11 Bounding the garden are on the western site (bounding Clayton Way) is a managed Laurel hedgerow measuring approx. 30m.

#### J3.6 – Building

4.12 The onsite building will be extended on the south west elevation. The building is single storey, brick built with a tiled roof. The building has been assessed in terms of its bat roosting potential as shown within the Fauna section of the report.

#### J4 – Hard Standing

4.13 Hard standing forms the car park and access areas which is devoid of vegetation.

### Fauna

#### Bats

4.14 TEDS provided two records of bats relating to two species: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmeaus*). The common pipistrelle record dates 1990 so is considered historic and the soprano pipistrelle record dates 2015.

#### Buildings

4.15 The onsite building has been assessed in terms of its potential for supporting roosting bats as shown below in Table 2. As the proposals involve an extension to the building south west elevation only, and that the remainder of the building will be unaffected, the survey focussed on this area only.

Reference	Description	Bat roost potential category
В1	The onsite building is single storey, constructed out of brick with a pitched tiled roof. The building is in use as a hospice and subsequently well maintained with all doors and windows secure. The proposed extension will adjoin the south west elevation. Here the 'gable end' is triangular with a brick façade extending above the roof. Centrally is a large vent above which sits a plastic soffit. The soffit has external gaps which from ground level appear to provide access into the void behind, creating a Potential Roosting feature (PRF). Lead flashing connects the soffit to the brick façade, which on both sides is lifted creating PRF's. The vent itself is wooden and while it is unknown what is behind, the gaps between the slats are suitable for bat access. The roof tiles are pantile and interlocking minimising roosting potential. The ridge tiles all appear intact although from ground level it is difficult to determine if any gaps beneath are present (gaps beneath ridge tiles are considered a PRF).	Moderate based on the number of PRF's identified externally

#### Table 2: Building assessment for bats

Trees

4.16 All onsite trees were assessed in terms of their potential for supporting roosting bats. One tree was assessed to be of value - T1 a horse chestnut tree located towards the southwest boundary. T1 is mature and while no obvious features were observed from ground level, due to its age, there is a likelihood that features such as split limbs, dead wood, rot holes etc may be present within the trees canopy.

#### Foraging

4.17 The site as a whole offers moderate bat foraging opportunities with the mature gardens and neighbouring habitats been of particular interest.

#### Badgers

- 4.18 TEDS provided records of badger within 2km of the site (locations confidential).
- 4.19 No badger setts were recorded on or immediately offsite.

#### Dormice

- 4.20 TEDS returned no records of dormice within the search area.
- 4.21 Given the dominant habitats present onsite, it is considered that dormice are likely to be absent from the site who prefer deciduous woodland.

#### Water Voles and Otters

- 4.22 TEDS returned no records of riparian mammals within the area.
- 4.23 There are no watercourses/features on site. The nearest pond is located approx. 90m to the north west. it is located within a woodland area, densely shaded and lacking in aquatic vegetation. Therefore deemed unsuitable for supporting riparian mammals.
- 4.24 The nearest water course is the River Severn located approx. 800m to the east, which given its distance away, will not be impacted be the proposed extension. Therefore no issues relating riparian mammals envisaged.

#### Other mammals

- 4.25 TEDS returned seven records of hedgehog ranging in dates from 2012-2017, one brown hare record dating 1997 and two polecat records dating 1995.
- 4.26 The onsite habitats are of value for hedgehogs offering foraging/commuting, shelter and hibernation features. Care will need to be taken during any site clearance to avoid accidental injury/harm.
- 4.27 The onsite habitats are of sub optimal value for brown hare (who prefer grassland, arable land) as such, no impacts envisaged.
- 4.28 The onsite habitats are of some value for polecat who prefer urban & gardens, deciduous woodland, grassland, mixed woodland, arable land. Although given the small size of the application area, no impacts are envisaged.

#### Birds

- 4.29 TEDS returned no records of birds within the search area.
- 4.30 During the survey an abundance of birds were seen or heard –robin (*Erithacus rubecula*), blackbird (*Turdus merula*), wood pigeon (*Columba palumbus*), blue tit (*Cyanistes caeruleus*), dunnock (*Prunella modularis*), chaffinch (*Fringilla coelebs*), wren (*Troglodytes troglodytes*), coal tit (*Periparus ater*), great tit (*Parus major*), long tailed tit (*Aegithalos caudatus*) and nuthatch (*Sitta europaea*).
- 4.31 The onsite introduced shrub, hedgerow and trees offer ample nesting and foraging potential.

#### Reptiles

- 4.32 TEDS returned no reptile records within the search area.
- 4.33 The onsite habitats are of suboptimal value for supporting reptiles. The maintained introduced shrubs and amenity grassland offer little in the way of foraging/shelter. Therefore no issues envisaged.

#### Amphibians

- 4.34 TEDS returned one record of great crested newts (*Triturus cristatus*) within the search area, dating 2010 and for a site located approx. 650m to the south west.
- 4.35 There are no ponds on site. Using mapping software, it is shown that nine ponds are located within 500m of the application site (Figure 2).



Figure 2: Ponds within 500m of the application boundary

- 4.36 eDNA surveys carried out in 2017 by Guma (report –'Living Well Centre, Severn Hospice, Bicton heath, Shrewsbury, SY3 8HS. Great Crested newt eDNA Analysis') confirmed absence within P1, P3, P5 and P7 and deemed the remainder of the ponds unsuitable, dry or inaccessible.
- 4.37 While the 2017 report is no longer valid (results last for 18 months) it does give some indication as to previous conditions.

4.38 The terrestrial habitats within the application boundary are largely of sub optimal value for great crested newts. The hard standing and managed amenity grassland offers no shelter/foraging. The introduced shrubs and hedgerow are of some value although given the lack of immediate connectivity to other suitable habitats, the likelihood of amphibians been present onsite is considered low and no further surveys deemed necessary.

#### Invertebrates

- 4.39 TEDS returned no EU/UK protected species returned and two UKBAP species –cinnabar moth (Tyria jacobaeae) and white leter hairstreak butterfly *(Satyrium w-album)*.
- 4.40 The 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 Proposals have been made to extend the building (on the south west elevation) and relandscape. Ecological constraints and recommendations with regard to any development are discussed below.

## **Designated Sites**

5.2 There are no statutory and three non-statutory sites present within 2km of the site. Given their distances away from the application site, no impacts envisaged.

## Potential Impacts of Works without Mitigation - Fauna

5.3 Potential impacts associated with the sites redevelopment are likely to include the following;

#### Bats

5.4 Loss of bat roost(s) through the extension of the building and through any alterations (i.e. branch removal, crown lift) to T1.

#### Nesting Birds

5.5 Vegetation clearance carried out during the nesting season has the potential to destroy nests and kill/injure wild birds.

#### Hedgehog

5.6 Vegetation clearance has the potential to kill/injure any residing hedgehogs.

## Recommendations

#### Bats

#### Building

- 5.7 The building was assessed to be of moderate bat roosting potential based on the presence of several Potential Roosting Features located where the new extension will adjoin.
- 5.8 In order to confirm the presence/absence of roosting bats, further surveys will be required comprising one dusk emergence and one dawn re-entry. Both surveys need to be carried out during the optimal bat survey season which runs from May to September.
- 5.9 If following the completion of the survey, no bat roost is confirmed, the proposed extension can commence without any restrictions/mitigation.
- 5.10 If a bat roost is confirmed to be present, a third activity survey will be required (to help characterize the roost) and any works which will result in the disturbance, obstruction, destruction of the roost will need to take place under a licence from Natural England. To obtain a licence, full planning permission needs to be in place and a mitigation strategy devised detailing how the roost will be maintained onsite (i.e. through the installation of alternative roosting features within the new extension).

#### Trees

5.11 T1 was assessed to be of value for supporting roosting bats. In accordance with current plans (drawing no. 19-1788-03r0) the tree will remain onsite and protected. Therefore no further surveys are required. However, should plans change and/or any branch removal, significant alterations be required, ecological advice should be sought.

#### Lighting

- 5.12 Particular consideration should be given to potential light spill that can affect the foraging and commuting strategy of many species and should be avoided onto nearby habitats.
- 5.13 Where possible, any security lighting should be on a timer setting and faced down to prevent spillage onto nearby habitats. Height of any lighting columns around the development should not exceed eight meters to further reduce any ecological impact of light pollution.
- 5.14 The Institution of Lighting Professionals and the Bat Conservation Trust produced a guidance note on 'Bats and Artificial Lighting in the UK' (2018) which can be viewed at <u>file:///C:/Users/User/Downloads/ilp-guidance-note-8-bats-and-artificial-lighting-oct-18-compressed%20(1).pdf</u> The guidance note is intended to raise awareness of the impacts of artificial lighting on bats, with mitigation suggestions included for various scenarios.

#### Scaffolding

5.15 As a further precautionary measure, it is recommended that no plastic sheeting or mesh be used on any scaffolding erection during the development, to prevent potential snaring and entanglement of volant bats.

#### Biodiversity enhancement

- 5.16 It is recommended that bat boxes are incorporated into the development, in order to provide additional roosting opportunities. Bat boxes can be fitted externally, or integrated into the walls.
- 5.17 Further information of providing access for roosting bats can be found on Bat Conservation Trust website: <u>https://www.bats.org.uk/our-work/buildings-planning-and-development/bat-boxes</u> see also <u>https://www.nhbs.com/ and/or https://www.wildcare.co.uk/wildlife-nest-boxes/bat-boxes.html</u> for bat box examples and pricing.
- 5.18 It is encouraged that any landscaping relating to the proposed development should encompass native tree and shrub species to encourage foraging potential for species. No plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 should be planted during any landscaping within this development. For further details of Schedule 9 plants visit <a href="https://www.legislation.gov.uk/ukpga/1981/69/schedule/9">https://www.legislation.gov.uk/ukpga/1981/69/schedule/9</a>

#### Birds

- 5.19 With regards for birds, the introduced shrub, trees and hedgerow are of value for nesting and foraging birds. Therefore, any vegetation clearance should be done outside of the bird breeding season which runs March-August inclusive. Where this is not possible and works are to be scheduled during the bird breeding season, a nesting bird check should be carried out by a competent surveyor. Should active nests be present, an exclusion zone will need to be established around the nest(s) and works within this area will need to be avoided until the young have fledged.
- 5.20 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 <a href="https://www.bto.org/how-you-can-help/providing-birds/putting-nest-boxes-birds">https://www.bto.org/how-you-can-help/providing-birds/putting-nest-boxes-birds and https://www.nbbs.com/equipment</a>

#### Hedgehogs

- 5.21 The introduced shrub is of suitability for hedgehogs offering potential for shelter and foraging.
- 5.22 Hedgehogs are protected in England under Schedule 6 of the Wildlife and Countryside Act (1981) and are also listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). This lists English species that were formerly identified as requiring action under the UK Biodiversity Action Plans and which continue to be regarded as conservation priorities under the current UK Post-2010 Biodiversity Framework.
- 5.23 A Precautionary Working Method Statement should be in place to avoid accidental killing/injury of this species during any vegetation/site clearance;
  - Contractors made aware of the potential presence of hedgehogs;

• Vegetation clearance to be carried out by hand, slowly and methodically, particularly any areas of scrub/woodland understorey;

• Should any hedgehogs be discovered onsite, they should be picked up (with a gloved hand) and relocated offsite, away from the working areas. They should be placed under a hedgerow/vegetation;

• If any hibernating hedgehogs are discovered during the works, they must be recovered with vegetation and works must temporarily cease in that area. Site contractors should contact an ecologist, who will visit site to ensure that suitable replacement refugia (e.g. leaf litter pile or accumulation of material most resembling what the hedgehog has been found in) can be constructed in an undisturbed part of the site that will remain unaffected for the rest of the winter, likely beneath one of the hedgerows. The ecologist, wearing suitable thick gloves, will then carefully translocate the hedgehog to the hibernacula. If there is any doubt over translocating the hedgehog to a different part of the site, or if the hedgehog appears to be harmed or underweight, the ecologist will take the hedgehog into care and will contact the local wildlife hospital/vets.

• During construction works, any excavations left open overnight should be installed with a mammal ladder (piece of wood) to allow any hedgehogs (or other mammals including badger) an ease of escape.

## 6.0 References

Anon (1995) *Guidelines for Baseline Ecological Assessment*. Institute of Environmental Assessment. Chapman & Hall.

Anon (1995) The UK Biodiversity Action Plan. Joint Nature Conservation Committee, Peterborough.

Anon (1999) Advice Sheet 10: Reptile Survey. Froglife, Peterborough.

Anon (2002) Badgers and Development. English Nature, Peterborough.

- Anon (2003) *Handbook for Phase 1 Habitat Survey–A Technique for Environmental Audit* (Revised reprint). Joint Nature Conservancy Council, Peterborough.
- Anon (2004) Reptiles: Guidelines for Developers. English Nature, Peterborough.
- Foster, J. (2001) Great Crested Newt Mitigation Guidelines. English Nature, Peterborough.
- Gent, T. & Gibson, S. (1998) *Herpetofauna Workers Manual*. Joint Nature Conservation Committee, Peterborough.
- Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust.

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

Mitchell-Jones, A.J. & McLeish, A.P. [Eds.] (2004). *The Bat Workers Manual* (3rd edition). Joint Nature Conservancy Council, Peterborough.

Rose, F. (1991). *The Wild Flower Key*. Frederick Warne, London.

#### Websites used:

Protected Sites: www.magic.gov.uk

Protected Species: http://data.nbn.org.uk/

Rotherham Biodiversity Action Plan: http://www.rotherham.gov.uk/info/1009/wildlife/946/biodiversity\_action\_plan/1

UKBAP: http://jncc.defra.gov.uk/page-5155

www.rspb.org.uk

www.streetmap.co.uk

www.maps.google.co.uk

www.bing.com/maps

Web addresses for access to full UK legislation and policy text:

Conservation (Natural Habitats &c.) Regulations 1994: http://www.opsi.gov.uk/si/si1994/uksi\_19942716\_en\_1

Conservation (Natural Habitats &c.) (Amendment) Regulations 2007: http://www.opsi.gov.uk/si/si2007/uksi\_20071843\_en\_1 Conservation (Natural Habitats &c.) (Amendment) Regulations 2009: <u>http://www.legislation.gov.uk/uksi/2009/6/pdfs/uksi\_20090006\_en.pdf</u>

Habitats Directive:

http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\_en.htm

Wildlife and Countryside Act 1981: http://www.legislation.gov.uk/ukpga/1981/69

Countryside and Rights of Way Act 2000: http://www.legislation.gov.uk/ukpga/2000/37/contents

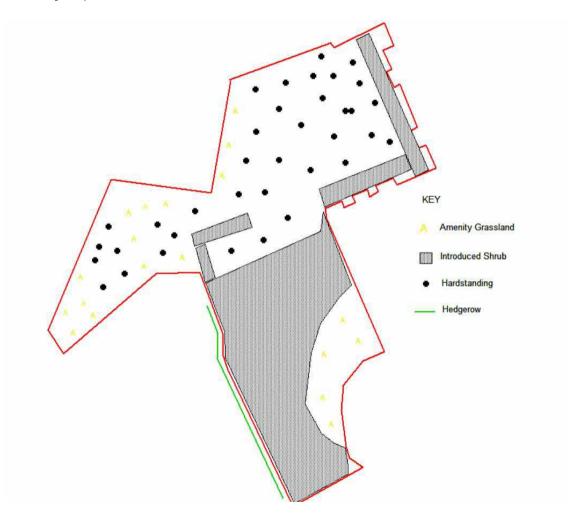
Protection of Badgers Act 1992: http://www.opsi.gov.uk/ACTS/acts1992/ukpga\_19920051\_en\_1

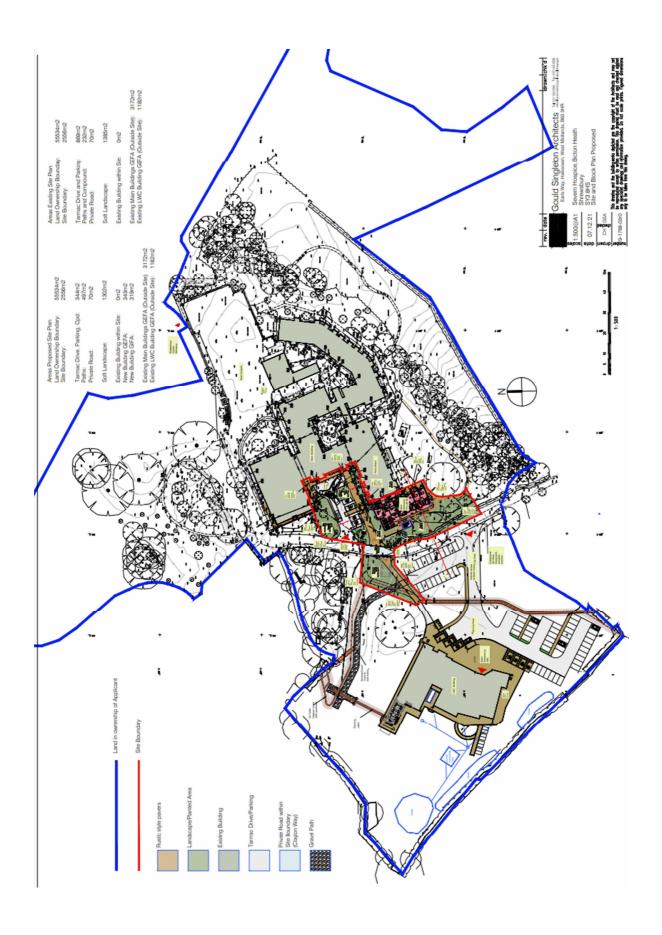
Natural Environment and Rural Communities Act 2006: <u>http://www.legislation.gov.uk/ukpga/2006/16/contents</u>

National Planning Policy Framework 2012: http://www.communities.gov.uk/publications/planningandbuilding/nppf

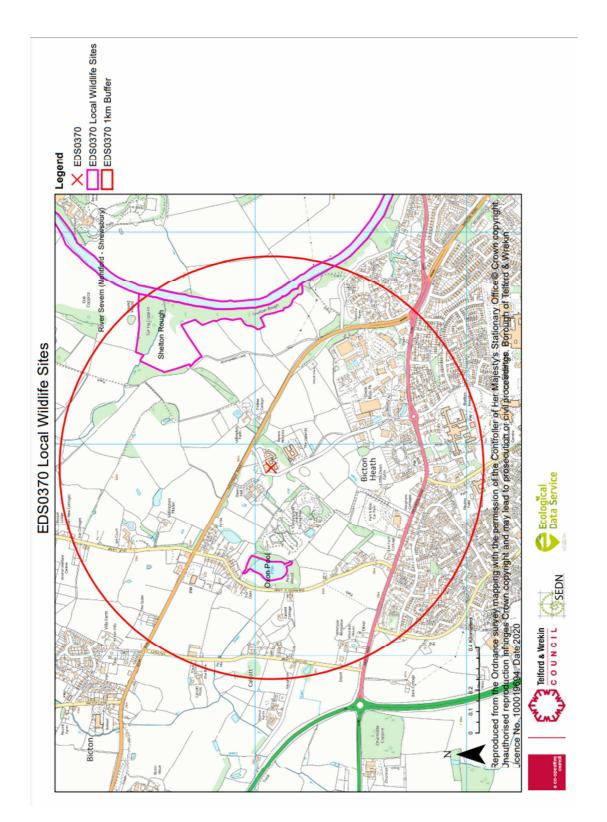
# 7.0 Plans

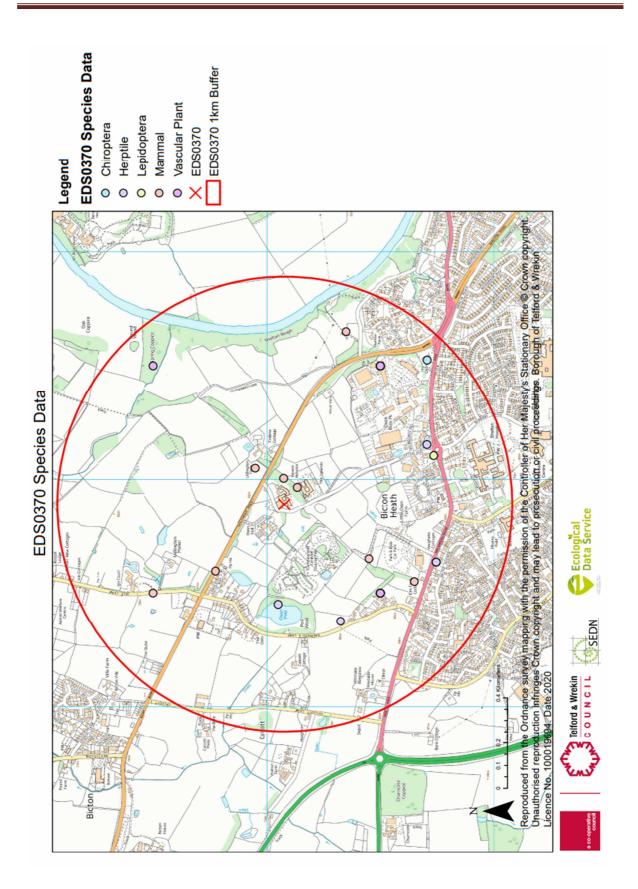
Phase I Habitat Survey Map





# 8.0 Appendix 1: Desk Study





# 9.0 Photographic Plates

Plate 1: South west elevation of the building (location of the new extension) and hard standing



Plate 2: Introduced shrub





Plate 3: Introduced shrub and amenity grassland (southern side of the site)

Plate 4: Introduced shrub and scattered tree (western side of the site)





Plate 5: Amenity grassland and scattered tree (north section of the site)

Plate 6: Amenity grassland and hard standing (west side of Clayton Way)



Plate 7: T1 with bat roosting potential

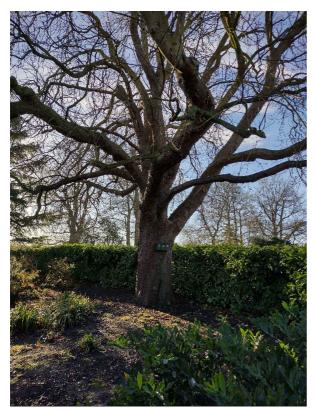


Plate 8: Soffit features on the building (close up)

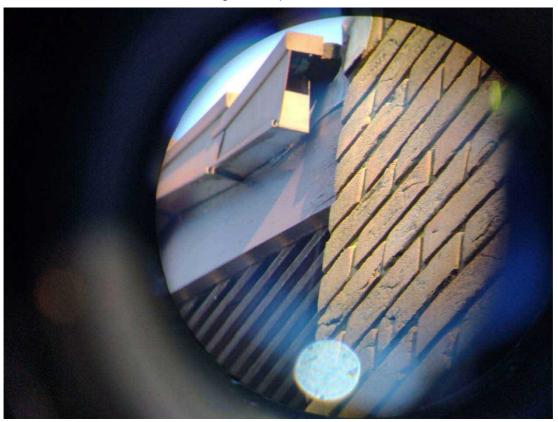


Plate 9: Gaps beneath the lead flashing



Plate 10: Soffit and lead flashing feature on the building (close up)

