



## A Preliminary Ecological Assessment for Land to the North of Stocks Engineering Ltd

**Aim:** To establish the presence or absence of protected species or habitats.

Mr C Morgan  
Stocks engineering ltd,  
Woonton  
Herefordshire  
HR3 6QN

**Reference:** 1CM-Bat & bird's survey.doc  
30<sup>th</sup> March 2022

**Prepared by** Ros Willder  
**Willder Ecology**

**Telephone:** Office 01452 849428, **Mobile** 07920147441

**Email:** [roswillder@yahoo.co.uk](mailto:roswillder@yahoo.co.uk)

**Website:** [www.willderecology.co.uk](http://www.willderecology.co.uk)

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## **1.0 Introduction**

As part of the planning application for the proposed single dwelling on land to the north of Stocks engineering ltd, Woonton, it is necessary to survey the areas to be directly affected by the proposal, to establish whether there are any protected species currently using the site, or any priority habitats on site or any designated sites in the area to be affected.

## **2.0 Methodology of Surveys**

An extended Phase one habitat survey was carried out on the 8<sup>th</sup> March 2022 by Ros Willder a full member of CIEEM, a Chartered Environmentalist and a Licensed Ecologist CLS12870 & Licenced Ecologist 2019-43685-CLS Natasha James. The survey followed the standard Phase One Habitat Survey methodology (JNCC, 2010) and focused on:

- A habitat survey to determine type, quality, and extent of habitats present (using the DAFOR scale, which is Dominant, Abundant, Frequent, Occasional & Rare). Botanical lists of each habitat type where appropriate.
- A survey to determine the presence of, or the potential for the site to support protected animals which include the following:-
- Potential for reptile or amphibians particularly great crested newt.
- Potential for Badgers to use the site such as evidence of setts, latrines, tracks etc
- Potential for breeding birds or bats to use the site

In addition, A desktop study was undertaken using the MAGIC Map Service, from Natural England, to identify any priority habitats, species and designated sites within a 2km radius of the proposed site, the results of which are discussed in Section 4 and shown in Appendix Three.

In addition, a pond search was carried out for all standing bodies of water within 250m and 500m of the location of the proposed site, the results of which are discussed in Section 4 and shown in Appendix four.

## 3.0 Results of Surveys

### 3.1 Examination of the Land

The land North of Stocks engineering ltd, is bordered to the east by A480. To the south by stocks engineering buildings and yard and to the North and west there are agricultural permanent grass fields which have planning permission for several new dwellings approved reference P20554/F (3 dwellings) & P162312F (6 dwellings). The area to be affected by the proposal is a small, enclosed parcel of land as shown below in figure one & in the Phase one habitat plan in appendix two and the proposed plan in appendix five.



Figure 1 – The grassland on the site

The grassland habitat is classed as a species poor semi-improved grassland (as shown in figures 1, 2 & 3). The grassland sward is comprised of the following species; Red Fescue, Common Sorrell, Yorkshire Fog, Cut Leaved Cranes Bill, Dandelion, Creeping Buttercup, Couch Grass, Annual Meadow Grass, Yarrow, Broadleaved Dock, Cleavers, False Oat Grass, Nettles and Cocks Foot.



In addition, there are some areas of disturbed ground on the south of the site (as result of some emergency work carried out to the power lines & a damaged tree following the recent storms), as shown in figure two below. All the grassland habitats are shown on the plan in appendix two on the Phase one habitat map.



Figure 2 – The Grass Sward & bare disturbed ground

The boundaries of the site are a mix of fences, hedgerow & trees with Boundary one being located on the eastern side by the roadside as shown in figure three, Boundary two being located on the southern side by the engineering business buildings and yard as shown in figure four & Boundary three and four being located on the north and western side as shown in figures six and seven.

All the boundary habitats are described over the page and shown on the Phase one habitat plan in appendix two.

**Boundary One** – is a roadside hedgerow which is 2m high, adjacent to the road, on the eastern boundary. The boundary is comprised of; Hazel, Hawthorn, Bramble, Field Maple, Ash, Holly, Spindle, Dog Rose, Dogwood and Blackthorn & would therefore be classed as a species rich hedgerow.

Due to the hedgerow being on the roadside it is trimmed annually as shown below in figure three.



Figure 3 – close up of boundary one

**Boundary two** – is a line of tall Leylandii trees on the south of the site some have been cut back due to the recent storms damaged to some of the trees by the power lines to the adjacent stocks engineering buildings, within this boundary there is a stock fence & a field gate.

The tall leylandli hedge on the southern boundary is shown in figure one & also shown in figure four over the page.





Figure 4 - Boundary two leylandii

**Boundaries three and Four** – Are marked by Stock fencing on the North and Western boundaries as shown in figure five below.



Figure 5 – showing boundaries three and four



All boundaries and trees are to be retained by this proposal & the existing access will be utilised as shown below in figure six so no that no hedgerow habitat will be lost for access onto the site.



Figure 6 – the existing access to the site

All other hedgerows & trees on site will be retained & all building works are outside of their root protection zone as shown in the proposed plans in appendix five.

### **3.2 Designated site search**

A designated site search was carried out using the MAGIC Map Service from Natural England to identify designated sites and priority or legally protected habitats and species records within a 2km radius of the proposed development. There are no sites of special scientific Interest (SSSI) within the 2km radius, or Special areas of Conservation (SAC) within a 2km radius of the site.

The following Priority habitats were recorded within the 2km search radius; Deciduous Woodlands, Good Quality Semi Improved Grassland and Traditional Orchards.

Of the Ancient and Semi Natural Woodland there are several these include; Ash Furlong Coppice, Brickley Coppice, Buttington Wood, Coppice, Crump Oak Wood, Grove, Highfield Wood, Pennsylvania Wood and Sarnesfield Coppice.

The following Grassland Assemblage birds were recorded within the local landscape (2km radius); Curlew, Lapwing and Tree Sparrow as well as records of Common Pipistrelle, Brown Long Eared and GCN.

### 3.3 Pond Search

As a part of the desktop study, a pond search was carried out to a radius of 500m from the site, this identified one pond within a 500m radius of the site as identified in the Pond map in appendix five.

Pond one was identified as being 289m to the east of the site but divided from the site by the main road as shown on the pond map in appendix four & below in figure seven.

The fact that the pond is divided by a road from the proposed site is considered as a physical barrier to newts, this together with the pond being surrounded by tightly grazed paddocks & the proposed site also being tightly grazed further reduces the potential habitats for Great Crested Newts (GCN). The habitat suitability index over the page gives the pond a poor suitability for GCN.

The fact that the pond is divided by a main road from the site & there are no suitable habitats for GCN on the proposed site means that the likelihood of newts being present on the proposed site is negligible.



Figure 7 – Pond One



## ARGUK GCN HSI Calculator

0	Pond Name Grid Ref	<i>Example SK123456</i>	Pond One site at woonton	
SI No	SI Description	SI Value	SI Value	SI Value
1	Geographic location	1.00	1	
2	Pond area	0.50	1	
3	Pond permanence	0.90	1	
4	Water quality	1.00	0.67	
5	Shade	1.00	1	
6	Water fowl effect	1.00	0.01	
7	Fish presence	1.00	1	
8	Pond Density	0.65	1	
9	Terrestrial habitat	1.00	0.33	
10	Macrophyte cover	0.90	0.3	
<b>HSI Score</b>		<b>0.88</b>	<b>0.48</b>	<b>0.00</b>
Pond suitability (see below)		<i>Excellent</i>	Poor	

Categorisation of HSI Score by Lee Brady

HSI Score	Pond Suitability
< 0.50	Poor
0.50 - 0.59	Below average
0.60 - 0.69	Average
0.70 - 0.79	Good
> 0.80	Excellent

Based  
on ARGUK advice note 5 - Great Crested Newt Habitat Suitability Index

## 4. Ecological Assessment

The main habitat to be lost by this proposal is an area of semi-improved grassland that is not considered to be diverse or species rich that is tightly grazed & disturbed & as it does not provide any permanent tall vegetative cover for wildlife it would be considered to be of low ecological value for wildlife.

However, boundary one of the site is of ecological value as it is comprised of boundary hedgerow and is found to be species rich, as it contained more than five woody species as such it would be classed as species rich hedgerows & therefore a Priority Habitat. However, this hedgerow is tightly trimmed as it is a roadside hedge which reduces the suitability for it to be used by bats for foraging.

Boundary two is a line of tall Leylandii trees which would be classed as a species poor hedge which as it is adjacent to stock engineering is subject to light pill & therefore of low ecological value on the south of the site. Boundaries three and four are fences along the north and western boundaries and whilst they are of no ecological value this does mean that they are available for enhancement planting as part of the proposal. The lack interconnecting hedges reduces the suitability for bats & other wildlife to utilise the site.

As a clear enhancement the proposed hedgerow planting will contain a wide variety of native species which will be created to provide additional wildlife cover on the site as well as features created for both bats & birds within the new building as shown in the enhancement plan in appendix five.

No additional lighting is proposed except for downlighters on the entrance to the new house at the front & there will be no light spill onto the existing or proposed new hedgerows on the site & the new building is purposely set back away from the retained & protected trees and hedge.

No Ponds or great crested newt habitats will be adversely affected by this proposal & the pond identified was found to be divided from the site by a main road which are considered to be physical barriers. As such no GCN or their habitats will be affected by this proposal and all boundary habitats will be retained & enhanced by new native planting as shown in the enhancements plans in appendix five.

## **5. Conclusion & Mitigation & Enhancements**

In conclusion the proposed development will not have any adverse effects on any European protected species, priority habitats or designated sites in the wider area. The proposal has been designed to provide sufficient compensation for the loss of an area of species poor semi-improved grassland by the planting of native species rich hedgerows with native trees along boundaries three and four on the site which will provide both landscape & wildlife enhancements see section 5.2 & the proposed plan in appendix five.

No hedge will be removed for this proposal as the existing access will be utilised onto the site & the proposed planting will increase the hedgerow habitat across the site that connects to the wider habitats.

However, a precautionary approach to GCN is always recommended as such the site will be kept close mown/grazed before any ground works begin on site & all contractors will attend a toolbox talk by a Licenced ecologist on site before any works can begin so that they know what to look out for & what to do if any GCN are unexpectedly found (see mitigation in section 5.1).

As part of the proposal enhancements will be included in the proposed new building, it will have integral bat & bird boxes included to provide permanent habitats for bats & birds.

Planting of a mix of native shrubs & trees comprised of Field Maple, Hazel, Hawthorn, Blackthorn, Dog wood & Spindle with Apple trees, Pear trees & Oak trees across the boundaries of the site will provide increased cover & habitats for wildlife across the site as shown in the enhancement plan in appendix five.

In conclusion if all the recommended enhancements are included as part of the proposal a biodiversity gain will be ensured.



## 5.1 MITIGATION

All persons involved in the ground works & new building works shall receive a detailed 'Toolbox Talk' on Nesting birds, Bats & Great Crested Newts from Ros Willder of Willder Ecology, or a similarly qualified ecologist.

The toolbox talk will cover the following: -

- the full legal protection of amphibians (GCN)
- the location of the new boundary hedges (Field Maple, Hazel, Hawthorn, Blackthorn, Spindle, Dog rose, Guelder rose).
- The lifecycle of Great Crested Newts (GCN) & what habitats they will be found in & how to identify a GCN.
- What to do if Great Crested Newts are found during works- all works must stop & a licensed ecologist must attend the site

If any GCN are found during works all works will cease until a licensed ecologist has been contacted and way forward agreed which may include a license application to permit the works to continue, this could include a District licence which would be permitted under a nonmaterial amendment once planning has been granted

No new external lighting are planned on the walls of the new building (house) that could cause additional light spill into the surrounding area. If any external lighting is planned, it will be restricted to low level down lighters on the front of the house as this will reduce light spill away from the boundary habitats.

## **5.2 ENHANCEMENTS**

As an enhancement for bats integral bat soffit boxes will be included behind the barge boards at the edge of the roof of the house to encourage future use of the buildings by bats as shown in Appendix five.

As an enhancement for birds an integral open fronted wooden box will be included at the top of the wall of the house to encourage future use of the building by nesting birds as shown in Appendix five.

Native shrubs such as Field Maple, Hazel, Hawthorn, Blackthorn, Spindle, Dog rose, Guelder rose will be planted along the existing fence line boundaries as shown in Appendix five.

If all the recommendations are followed no harm will occur to either the designated sites or bats or birds and enhanced provision will be made for future use by both bats and birds as an overall enhancement for biodiversity to the site.

## APPENDIX ONE LEGAL STATUS OF BATS & BIRDS

### LEGAL PROTECTION OF BATS

The Wildlife and Countryside Act 1981 (WCA) transposes into UK law the Convention on the Conservation of European Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'. The 1981 Act has been amended several times, most recently by the Countryside and Rights of Way [Crow] Act 2000, which added 'or recklessly' to S 9 (4)(a) and (b). All species of bats are listed on Schedule 5 of the 1981 Act, and are therefore subject to the provisions of section 9, which make it an offence to:

Intentionally kill, injure or take a bat  
Possess or control any live or dead specimen or anything derived from a bat  
Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat  
Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for that purpose

**The Conservation of Habitats and Species Regulations 2017** which consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law and came into force on 30th November 2017.

All bats listed on Annex IV of the Directive and some are also listed on the Annex II. The latter Annex relates to the designation of Special Areas of Conservation (SACs) and covers **Greater** and **Lesser Horseshoe bats**, **barbastelle** and **Bechstein's** bat.

Inclusion on Annex IV ('European protected species) means that member states are required to put in place a system of strict protection as outlined in Article 12; this is done through inclusion on Schedule 2 of the Regulations. Regulation 53 makes it an offence to;

Deliberately capture or kill a bat  
Deliberately disturb a bat  
Damage or destroy a breeding site or resting place of a bat  
Keep, transport, sell or exchange, or offer for sale or exchange alive or dead bat or any part of a bat



## LEGAL PROTECTION OF BIRDS

The Wildlife and Countryside Act 1981 is the main instrument for the protection of wild birds in the law of England, Wales and Scotland.

It protects all wild birds of whatever species (certain exceptions apply within the act).

Barn Owls are listed on Schedule 1 which gives them special protection.

The act makes it an offence "if any person intentionally-

a) Kills, injures or takes (handle) any wild bird;

b) Takes, damages or destroys the nest of any bird while that nest is in use or being built; (barn owls do not 'build' a nest but may make a nest scrape) or

c) Takes or destroys an egg of any wild bird"

It is also an offence "if any persons have in his possession or control-

d) any live or dead wild bird or any part of, or anything derived from, such a bird; or

e) An egg of a wild bird or any part of such an egg" (s 1 (2)).

## **LEGAL PROTECTION OF AMPHIBIANS AND REPTILES**

Reptiles are protected from killing and injury (two species are fully protected, this includes, but is not confined to:

Disturbance and deliberate destruction of their habitat) under The Wildlife and Countryside Act 1981 (as amended).

The Conservation (Natural habitats &c.) regulations 1994 (the habitats Regulations were recently updated by

The Conservation of Habitats and Species regulations 2017

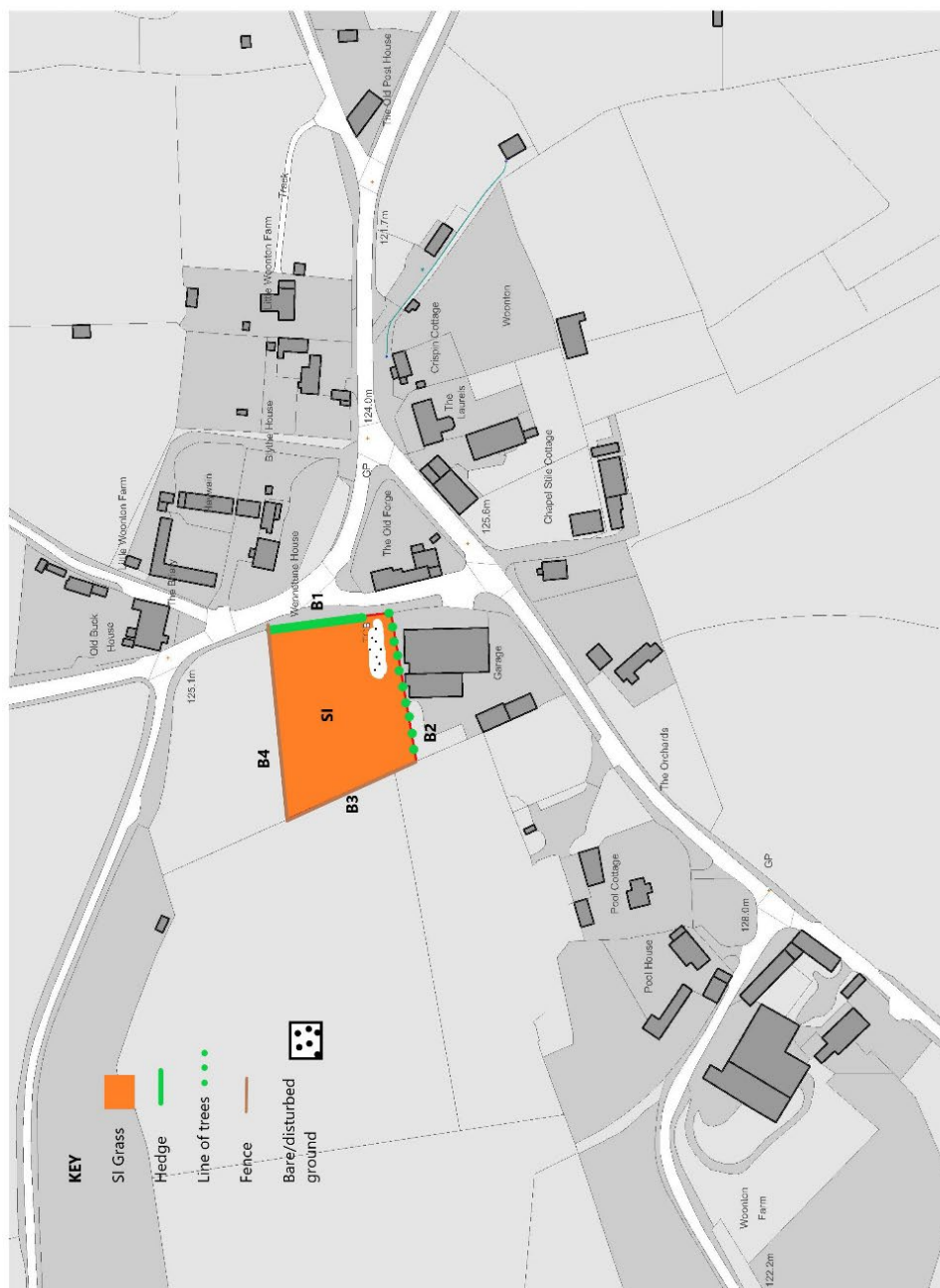
Amphibians such as Great crested newts are fully protected, including protection against:

- Deliberate disturbance
- Deliberately killing or capturing
- Deliberately taking or destroying eggs
- Deliberately damaging or destroying breeding sites and places of shelter.

Licensing from Natural England

A Licence simply permits an action that is otherwise unlawful. A licence should be applied for if, on the basis of survey information and specialist knowledge, it is considered that the proposed activity is reasonably likely to result in an offence (killing, breeding site destruction, etc – see above). No licence is required if, on balance, the proposed activity is unlikely to result in an offence (this is from the great crested newt mitigation guidelines).

SCAL E 11250	Revision	Date	Description
	05.10	05.10	

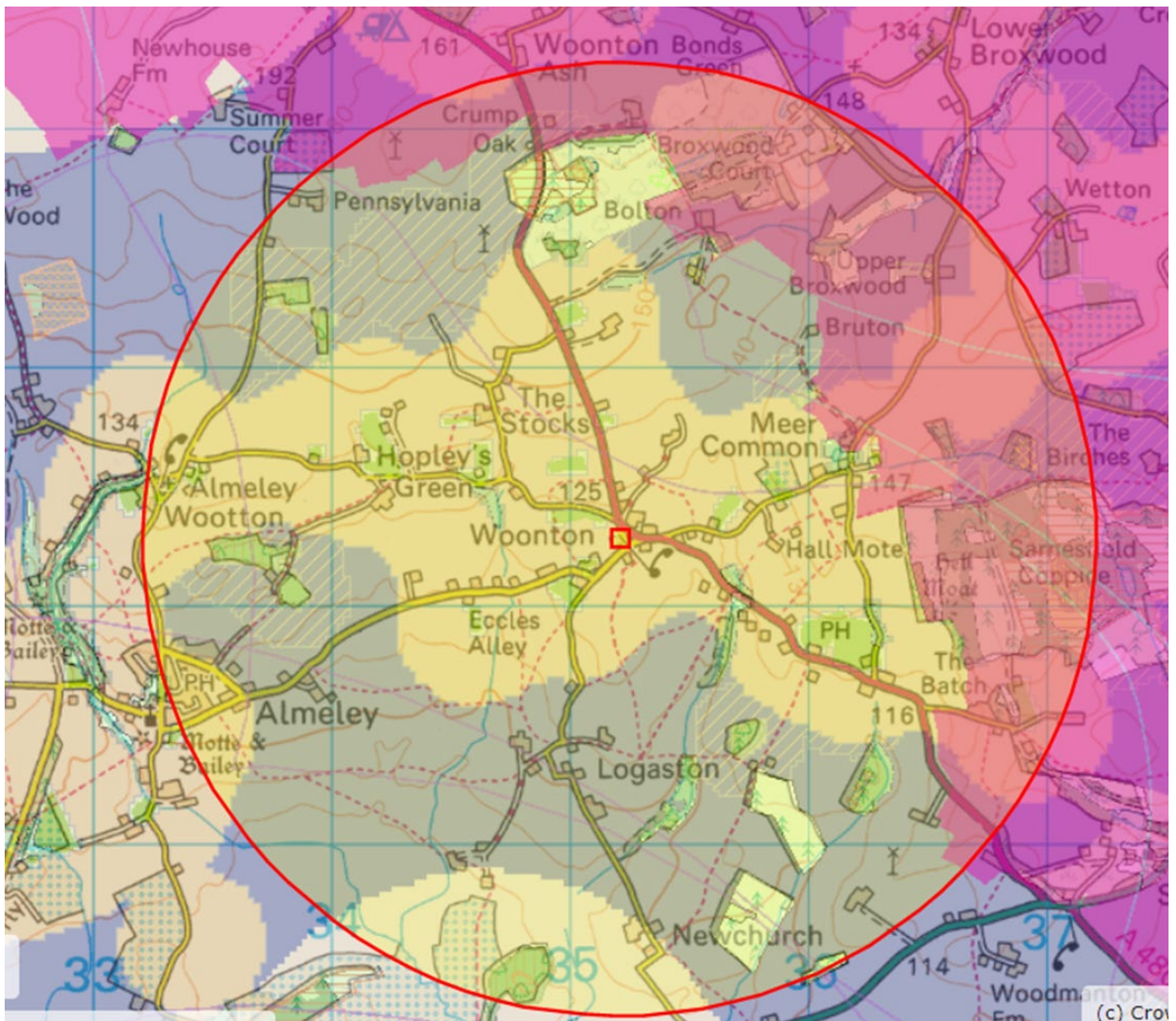


Chris Morgan  
F-160 in Western  
Location Plan  
111250 at A2  
January 2022  
2181 Houlter, Wisconsin  
2181 1000

**GLAZZARD  
ARCHITECTS**  
Grafton Jordan Woods  
Unit 8, 81, Merino Quarter  
Silver Street, Worcester, WRT 2DA

CLIENT PROJECT DRAWING SCALE DATE FILE  
DRAWING NO  
REVISION

## APPENDIX THREE DESIGNATED SITE SEARCH

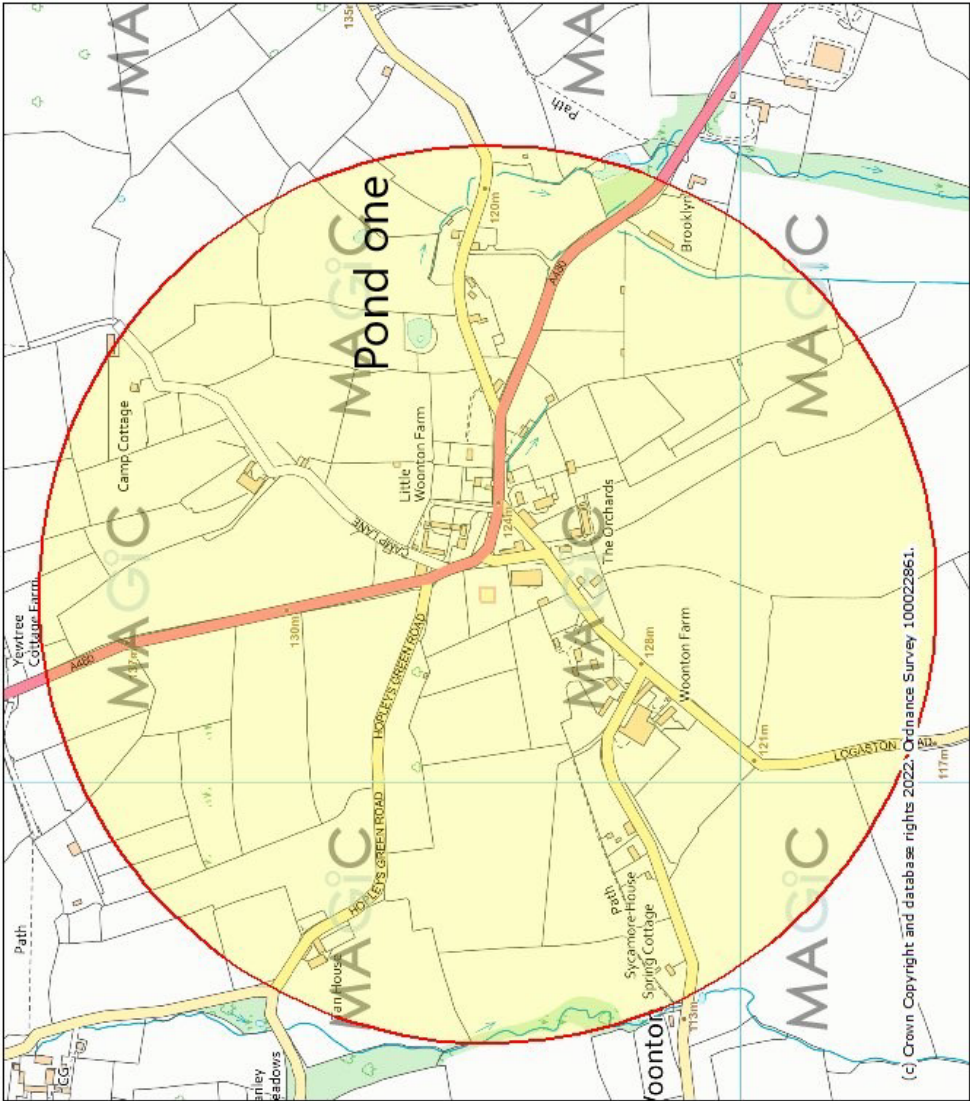




**APPENDIX FOUR & POND SEARCH MAP**

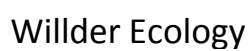
**Pond Search**

MAGiC

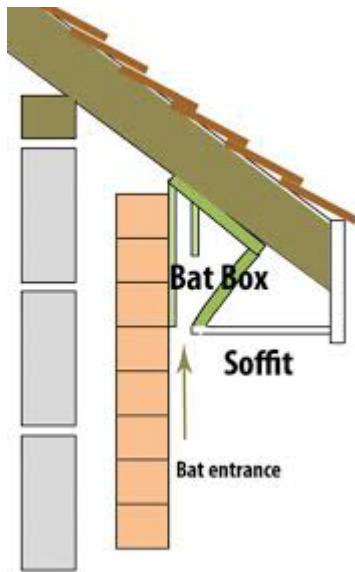


*Red ring shown as 500m radius from Site centre.*

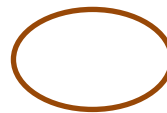
All planting will be native species rich hedgerows as detailed in section 5.2 & integral bat & bird boxes as shown below & over the page



## Bat & Bird boxes on the proposed dwellings



To be sited at the edge of the roof on new dwelling



### WoodStone Build-in Open Nest Box

WoodStone Build-in Open Nest Box is designed for use in new build or renovations. The nest box is intended to be built into walls to provide nesting cavities. This provides much needed nesting cavities for species such as Robins, Wagtails and Black Redstarts. Constructed from FSC certified WoodStone this nest box will not deteriorate like a traditional wooden nest box. NHBS Price: £17.95 including VAT.



To be sited at the top of the wall on new dwelling