

# EXTENDED PHASE ONE HABITAT SURVEY

## ELLESMERE LANE, PENLEY



**GRID REFERENCE: SJ387321**

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**CONTENTS**

	<b>EXECUTIVE SUMMARY</b>	<b>3</b>
1	<b>INTRODUCTION</b>	<b>4</b>
1.1	Background to Development	4
1.2	Scope of Survey	4
	<i>Figure 1: Location</i>	5
	<i>Figure 2: Site Layout</i>	6
2	<b>SITE DESCRIPTION</b>	<b>7</b>
2.1	Location and Landscape	7
	<i>Figure 3: Aerial Photograph</i>	7
3	<b>SURVEY METHODOLOGY</b>	<b>8</b>
3.1	Desk Study	8
3.2	Visual Inspection	8
3.3	Personnel	9
3.4	Constraints	9
4	<b>SURVEY RESULTS</b>	<b>10</b>
4.1	Desk Study	10
4.2	Habitats	10
4.3	Protected Species	10
5	<b>EVALUATION OF RESULTS AND POTENTIAL ECOLOGICAL IMPACT</b>	<b>11</b>
5.1	Habitats	11
5.2	Protected Species	12
6	<b>MITIGATION AND ENHANCEMENT</b>	<b>13</b>
6.1	Habitat Mitigation	12
6.2	Protected Species Mitigation	13
6.3	Ecological Enhancement	13
7	<b>CONCLUSION</b>	<b>13</b>
	APPENDIX 1- Photographs	15



## EXECUTIVE SUMMARY

Planning permission is being sought to build nine new dwellings, garages and associated access on land adjacent to Ellesmere Lane, Penley. A survey of the site was carried out to determine the ecological value of the site in terms of habitats and potential for protected species.

The site comprises improved grassland with one small former pond area and a length of roadside hedge. The proposals will cause the loss of approximately 1.4 ha of intensively farmed improved grassland but this is a negligible ecological impact due to the low importance of the habitat.

Four ponds were identified within 250 metres of the site but none now contain water and held no potential as great crested newt breeding habitats.

The adjacent hedgerow is likely to be used by breeding birds. A small section of hedge may be removed in order to create adequate access to the site. It is recommended that this should be done outside of the bird nesting season.

Bat species have no roosting habitat on the site but may use the hedge line for foraging. Increased illumination of this area could disrupt bat behavior and external lighting should therefore be designed to avoid this.

Recommendations are made for ecological enhancement in the form of tree and hedge planting on the periphery of the site and the erection of artificial boxes for birds and bats.

Overall, the ecological impact of this development is deemed to be minor. Ecological enhancements have the potential to improve the range of habitats and increase biodiversity.



## 1 INTRODUCTION

### 1.1 BACKGROUND TO DEVELOPMENT

The site under consideration in this report is located on land adjacent to Ellesmere Lane in Penley.

The site will be subject to a Planning Application for the construction of nine new dwellings and associated access. Due to the potential disturbance to habitats and protected species, Arbor Vitae were invited to carry out an Extended Phase 1 Habitat Survey, to evaluate the ecological significance of the site.

### 1.2 SCOPE OF SURVEY

This report sets out to establish the base-line ecological condition of the site and to identify and evaluate any potential impacts which the scheme may have, taking into account any mitigation or ecological enhancement which the scheme can offer.

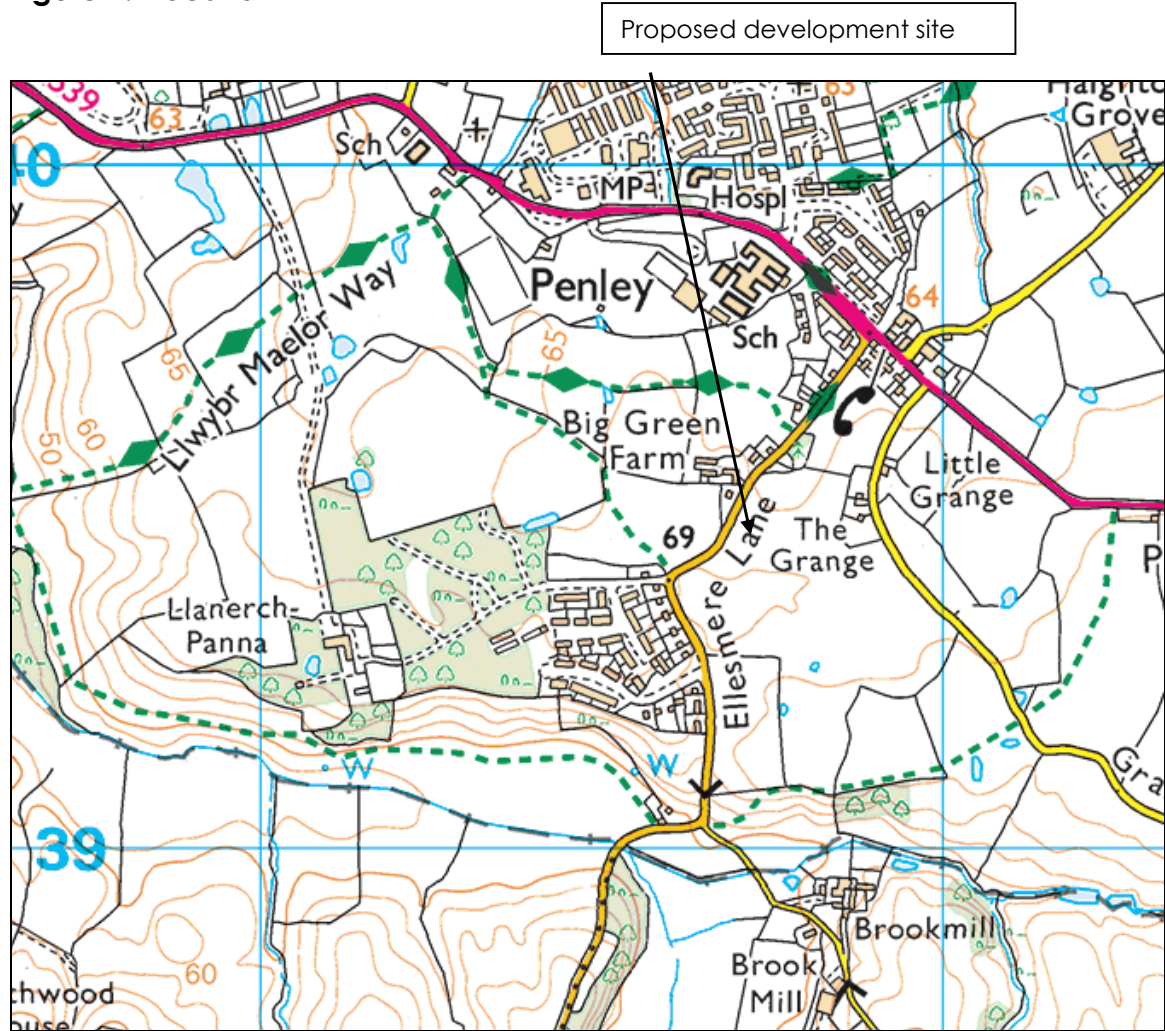
The construction of this housing development and associated access has the potential to remove existing habitat and to physically disturb protected species, if present. A preliminary assessment of the site and immediate surroundings indicated that the following protected species could potentially be affected:

- Badgers
- Bats
- Breeding birds
- Great crested newts





Figure 1: Location



**Figure 2: Proposed Site Layout**



## 2 SITE DESCRIPTION

### 2.1 LOCATION AND LANDSCAPE

The proposed development area is located to the south of the village of Penley. The site is in a rural area and surrounded by grassland and arable fields. These are separated by mature, managed hedgerows and mature boundary trees. There are small blocks of woodland in the surrounding landscape, predominantly made up of broadleaved species.

The landscape character is demonstrated by the aerial photograph shown in Figure 3.

**Figure 3: Aerial Photograph**





The surrounding landscape:

- West:** Small housing development to the south of Tudor Drive. Small areas of broadleaved woodland.
- South:** Both small and large arable fields, dispersed with small areas of broadleaved woodland.
- East:** Both small and large arable fields. Mature boundary trees.
- North:** The village of Penley lies 370m north of the proposed site.

### 3 SURVEY METHODOLOGY

#### 3.1 DESK STUDY

A number of data sets were investigated to ascertain the presence or otherwise of nearby land designations, scheduled sites or protected species. Sources used included MAGIC, Forestry Commission Land Information search and Nature on the Map.

#### 3.2 VISUAL INSPECTION

One visit was made to the site on the 1<sup>st</sup> November 2016 to survey the property. The site was surveyed to identify specific habitats and potential opportunities for protected species. Adjacent land was inspected for evidence of open water, other key habitats or key species.

Particular attention was given to the potential of the site for supporting the following protected species:

- Badgers
- Bats
- Breeding birds
- Great crested newts

The survey methodology was tailored to evaluate the area for these species as follows;

##### **Badgers**

An area within 50 metres of the site was closely searched for the following signs of badger activity: setts, tracks and footprints, latrines, snuffle holes.





### **Bats**

Any nearby potential habitat such as old trees containing cracks and crevices were inspected from the ground for any signs of use by bats. These would be categorised according to the Good Practice Guidelines, set out by the Bat Conservation Trust, 2<sup>nd</sup> Edition.

### **Breeding birds**

The habitat was assessed in terms of suitability for breeding birds, including any nearby hedgerows or trees.

### **Great crested newts**

Any open water within 250 metres of the proposed development site was inspected for their great crested newt habitat (GCN) potential, using the Habitat Suitability Index scoring system.

## **3.3 PERSONNEL**

The survey was carried out by Zoe Adlington BSc Hons Grad CIEEM: an ecologist at Arbor Vitae Environment.

## **3.4 CONSTRAINTS**

There were no constraints to the survey being carried out successfully. The time of year in which the survey took place was suitable for recording most species, although the bird nesting season had finished. However, a good evaluation of habitat was possible.



## 4 SURVEY RESULTS

### 4.1 DESK STUDY

The proposed development lies approximately 3.2 kms north west of the Hanmer Mere, an SSSI, and is therefore located within the outer buffer area of this Ramsar Site.

### 4.2 HABITATS

#### Improved grassland

The proposed houses will be built in a grassland field. This is improved grassland with poor species diversity. It has recently been fertilised and is an intensively managed sward.

#### Ponds

Maps indicate four ponds within a 250m buffer area of the site. These ponds are marked on the aerial photograph in Figure 2.

None of the four ponds now contain water. Photographs of these ponds can be seen in the appendices.

Pond 1 is within the proposed development area. The former pond area is now colonised by an area of swamp vegetation and wet grassland.

#### Hedgerows

A hedgerow forms the western boundary of the site. This is a mixed, predominantly native hedgerow; species include hazel, hawthorn, ash and sycamore.

### 4.3 PROTECTED SPECIES

#### Badgers

There was no indication of any badger activity within the search area.

#### Bats

There was no potential roosting habitat identified on site. It is unlikely that the field would be used for foraging, as the grass field will not



support high numbers of invertebrates. The boundary hedgerow may act as a foraging site or flight line for bats.

### **Breeding birds**

Breeding birds are likely to be using the adjacent hedgerows during the nesting season.

### **Great crested newts**

No HSI scores were calculated for any of the four ponds as none of the ponds held water at the time of the survey. It appears that these ponds had not held water for a number of years.

## **5 EVALUATION OF RESULTS AND POTENTIAL ECOLOGICAL IMPACT**

### **5.1 HABITATS**

#### **Grassland**

An area of approximately 1.6 ha of improved grassland will be removed in order to construct nine new dwellings and associated access. This area of land is of very low ecological value, and is unlikely to support protected species. The impact of the proposed development is regarded as being of minor, negative ecological impact.

#### **Hedgerows**

Breeding birds are likely to use H1 for nesting. A small section of hedge may need to be removed in order to create access to the properties, however the majority of the hedgerow will be unaffected by the proposals. The removal of part of the hedgerow could affect breeding birds, if the work is carried out from March-September.

H1 was not considered to be an 'Important Hedgerow' according to the Hedgerow Regulations 1997.

#### **Open water**

Pond 1 lies within the development area and would be directly impacted by the proposals. The pond is now dry and supports a small area of swamp vegetation and wet grassland. This is of some ecological interest but the area involved is too small to significant. The loss of this



area may result in very limited impact on invertebrates, birds and amphibians. The other three nearby ponds are dry but again support wet grassland or swamp. However, these will not be affected by the proposals.

## 5.2 PROTECTED SPECIES

### Badgers

There was no indication of any badger activity within the area and no impact on this species is predicted.

### Breeding Birds

Breeding birds are likely to be using the adjacent hedgerow for nesting and foraging. There may be a small loss of habitat, in order to create site access. If work commences during the breeding season, a pre-commencement survey would be necessary.

### Bats

There is no potential bat roosting habitat on site. The field is a sub-optimal foraging site but the hedgerow may represent a foraging route or flight path. There will be no significant impact on this hedgerow and it is unlikely that bats will be affected.

Any increased illumination of the houses may disrupt normal bat foraging behaviour.

### Great Crested Newts

The lack of water in any of the four nearby ponds renders them unsuitable breeding habitats and therefore no impact on GCN is anticipated. No further survey work for GCNs is required.





## 6 MITIGATION AND ENHANCEMENT

### 6.1 Habitat mitigation

There will be a loss of approximately 1.4 hectares of improved grassland. No mitigation for the loss of this low quality habitat is necessary.

The retention of the former pond area, perhaps coupled with its restoration as a pond, would be an overall gain for biodiversity

### 6.2 Protected species mitigation

#### Breeding birds

It is an offence to cause damage or destruction to an active nest of breeding birds. Ideally work should be completed outside the nesting season. If work commences on site during the nesting season (mid-March to late-July) a pre-commencement survey would be necessary.

#### Bats

A lighting plan should be adopted which would avoid unnecessary illumination of the boundary hedgerow.

### 6.3 Ecological enhancement

Although the ecological impact of the scheme is deemed to be minor, planning guidance indicates that some ecological enhancement works should be adopted. In this case, additional hedge/tree planting as part of the landscaping would benefit birds, bats and small mammals.

Erection of artificial boxes for birds and bats in nearby trees will further enhance the habitat potential of the site for these species.

## 7 CONCLUSION

The development proposals will remove approximately 1.4 ha of improved grassland. The ecological impact of this development on habitats has been judged to be minor.

There may be some limited disturbance to breeding birds during the construction phase and as a result of the creation of an access road. This is likely to be of minor, temporary significance.



There may be some disturbance to bats as a result of increased exterior lighting but this can be avoided by good design. There will be no impact on any other protected species and no further survey work is required.



## APPENDIX 1: PHOTOS



Proposed development site



Pond 1- no water held within pond. Swamp and wet grassland vegetation now predominate.







Pond 2. No standing water remains. Swamp and wet grassland vegetation predominate.



Pond 3. No standing water remains.



Pond 4. No standing water remains.







H1- the only hedge on site which may be affected by the proposals. It is possible that a small section of hedge will need to be removed in order to create adequate access off Ellesmere Lane.

