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**LAND AT 9 DOWNHAM ROAD  
CHATBURN  
LANCASHIRE**

**EXTENDED PHASE 1 HABITAT SURVEY**

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CHATBURN  
LANCASHIRE**

**EXTENDED PHASE 1 HABITAT SURVEY**

*A report for*

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**July 2015**

**LAND AT 9 DOWNHAM ROAD  
CHATBURN  
LANCASHIRE**

**EXTENDED PHASE 1 HABITAT SURVEY**

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## **PART 1 INTRODUCTION:**

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### **1.1 REASONS FOR SURVEY:**

PENNINE *Ecological* have been commissioned by Avalon Chartered Town Planning and Architectural Consultancy, on behalf of Mr. Alan Jackson, to undertake an Ecological Survey and Evaluation of land at 19 Downham Road, Chatburn, Lancashire.

The study includes a vegetation survey, badger survey, water vole survey and also includes a full evaluation of the ecological significance of the survey findings. A statement of potential impact and recommended mitigation measures are provided where appropriate.

The surveys are required due to a proposal to develop the site.

### **1.2 SITE LOCATION:**

The site is located at to the rear of 19 Downham Road, Chatburn. The habitats surveyed are shown on Map 1 in the Appendix.

Reference to the proposed site plan as submitted in support of the application should be made in respect of the development's layout.

### **1.3 SURVEY METHODOLOGY:**

#### **1.3.1 Extended Phase 1 Habitat Survey:**

An Extended Phase 1 Habitat Survey (*Nature Conservancy Council 1990*) of the study area was undertaken on 10<sup>th</sup> July 2015. The site's habitats were fully mapped and higher vascular plant species were recorded and given abundance values according to the standard DAFOR scale, where:

D = Dominant  
A = Abundant  
F = Frequent  
O = Occasional  
R = Rare

Where appropriate these values can be prefixed by the letter L (locally) or V (very), to provide more subtle biogeographical data.

#### **1.3.2 Badger Survey:**

The badger survey focused on land directly affected by the proposed development and land. With the exception of the stream corridor to the south, the land outside of this area was residential or railway land and could not be accessed.

The survey used standard techniques for establishing the use of the site by badger, and includes searches for evidence of badgers including:

- Setts

- Pathways
- Footprints
- Latrines
- Foraging areas
- Scratching posts

### 1.3.3 Water Vole Survey:

The water vole survey was undertaken on the 10<sup>th</sup> July 2015 following the methodology outlined in the *Water Vole Conservation Handbook 2<sup>nd</sup> Edition*. Strachan & Moorhouse (2006).

The survey included standard searches for animals, burrows, latrines, feeding stations and runs on the ditch adjacent to the site.

The survey was undertaken within the optimum period for water vole survey.

### 1.3.4 Other Species:

In addition to the above, general assessments of the suitability of the site to support breeding birds and great crested newt were also undertaken as part of this study.

It is understood that a bat survey has been undertaken independently of this study.

### 1.3.5 Surveyor Experience:

The surveyor and author of this report, Ian Ryding, has 27 year experience in ecological survey and evaluation. Key skills include the following.

- Extended Phase 1 Habitat Survey and National Vegetation Classification Survey.
- Highly proficient field botanist, including some difficult plant groups.
- Breeding bird survey.
- Mammal surveys including surveys for badger, water vole\*, otter\*, brown hare and preliminary bat survey.

\*Over 250km of river reaches surveyed in England.

- Extensive experience in great crested newt (GCN) survey, evaluation, licensing and mitigation. Natural England Class Licence WML-CL08 held.
- Ecological Evaluation and Impact Assessments in association with large scale commercial development and civil engineering.

**1.4 SURVEY CONSTRAINTS:**

**1.4.1 Extended Phase 1 Habitat Survey:**

There were no constraints to survey.

**1.4.2 Badger Survey:**

There were no constraints to survey.

**1.4.3 Water Vole Survey:**

The water vole survey was constrained due to steep/vertical banks preventing access to the channel. However a good assessment of the stream's suitability could be undertaken and the constraint is considered to be moderate.

**1.4.4 Other Species:**

There were no constraints to the evaluation of the site in respect of breeding birds and great crested newt.

## **PART 2 SURVEY RESULTS:**

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### **2.1 DESK BASED STUDY:**

A request for ecological data was made to Lancashire Environment Record Network (LeRN) to obtain details of any biological records relating to the site. The extent of the study is shown on the LeRN Downham Road, Chatburn, Ecology Plan in the appendix.

Desk based studies were also undertaken to establish the presence of ponds within a 250m radius of the site, as part of a scoping study relating to great crested newt (GCN)

The results of the desk study revealed the following information;

- The site has no statutory wildlife or ecological designations.
- There are no Sites of Special Scientific Interest (SSSI) within 300m of the site. The nearest SSSI is Clitheroe Knoll Reefs on the A59 approx. 400m from the site.
- The site is not a Biological Heritage Site (BHS) and the nearest BHS, A59 Road Cutting, Worston to Chatburn (74SE10), is approximately 300m south-east of the site.
- There is a record of common pipistrelle and a non-specific bat record from residential areas within 250m of the site.
- There are no known waterbodies capable of supporting GCN within 250m of the site.
- The LeRN data search returned no protected species records for the site.
- Other records between 250m and 500m of the site include Japanese knotweed and bee orchid.

### **2.2 EXTENDED PHASE 1 HABITAT SURVEY:**

#### **2.2.1 General Description:**

The site of the proposed development is a builders/contractors yard to the rear of houses on Downham Road, Chatburn. The yard is typically composed of areas of hardstanding with localised patches of ephemeral/rank vegetation as well as small patches of improved grassland. Small shelter type buildings and old shipping containers are present as well as a large brick building/workshop.

There is a stream, Heys Brook, immediately adjacent to the southern boundary of the site which is heavily shaded by an immature secondary broad-leaved woodland.

A narrow strip of tall ruderal herb dominated by rosebay willowherb and containing many bramble vines forms the interface between the yard and the woodland.

#### **2.2.2 Extended Phase 1 Habitat Survey Target Notes:**

*Survey locations, Target Notes and the proposed working area locations are shown on Map 1 in the Appendix. All species nomenclature follows Stace, C. (1996) 'New Flora of the British Isles' – definitive English names.*

**Target Note No: 1**

Several small patches on 'improved' grassland located on the edges of the builders yard. The grassland is very coarse locally and floristic diversity is poor, partly on account of a lack of management and disturbance. Several small ash and willow saplings are becoming established very locally.

<b>Species:</b>	<b>Abundance:</b>
Perennial rye-grass	D
White clover	LD
Common bent	A
Crested dog's-tail	A
Yorkshire-fog	LA
Dock spp.	LA
Field horsetail	LA
Ribwort plantain	F
Common nettle	LF
Dandelion agg.	LF
Red clover	LF
Creeping thistle	LF
Great willowherb	VLF
Colt's-foot	VLF
Greater plantain	O
Selfheal	O
Lady's mantle agg. ( <i>A. mollis</i> )	O
Scarlet pimpernel	VO
Nipplewort	VO
Hedge woundwort	VO
Herb-Robert	VO

**Target Note 2:**

A narrow, strip of riparian semi-natural broad-leaved woodland on the outside of the southern boundary of the site. The woodland is secondary, immature, and located on the steep slopes adjacent to Heys Brook.

<b>Species:</b>	<b>Abundance:</b>
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**Canopy:**

Sycamore	D
Wych elm	D
Ash	R

**Understorey:**

Wild privet	F
Ash	F
Sycamore	F



**Target Note 2 Continued:**

<b>Species:</b>	<b>Abundance:</b>
Wych elm	O
<i>Ribes</i> sp.	O

**Ground Flora:**

Ivy	D
Common nettle	LD
Male-fern	VO

**Target Note 3:**

A stand of rosebay willowherb with locally frequent common nettle and developing bramble scrub.

**Site Photographs - Habitats:**



**Photograph 1: Typical view of the site affected by the proposal.**

*Land at 19 Downham Road, Chatburn, Lancashire  
Extended Phase 1 Habitat Survey*

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**Photograph 2: Typical view of the improved grassland on the site.**



**Photograph 3: The woodland (off-site) and Heys Brook below.**

## **2.3 BADGER SURVEY:**

### **2.3.1 Survey Details and Results:**

The badger survey employed standard techniques to establish if badgers are present on site or use the site for foraging/commuting. (See Section 1.3 Survey Methodology)

The following searches were undertaken.

- Searches for setts on site.
- Searches for foraging signs and pathways.
- Boundary searches for runs, pathways and latrines.

The survey results are outlined below.

#### **Sett Search:**

The survey found no setts on the site or on the surrounding land

#### **Search for Foraging Signs and Pathways:**

The site was thoroughly searched for badger pathways or signs of foraging. No sign of badger activity was found therefore it can be concluded that the species is not using this area for foraging or commuting.

#### **Boundary Search:**

All of the boundaries of the site were walked and examined for potential runs, pathways and latrines. The search found no evidence to suggest badger activity along any of the site boundaries. The absence of any obvious means of ingress indicates that badgers are not entering the site. The absence of latrines indicates a lack of territorial activity in the near vicinity of the site.

### **2.3.2 Survey Conclusions:**

The survey found no evidence of historic, recent or current use of the site by badgers for foraging, commuting or occupation and the species is considered to be absent on site.

## **2.4 BIRDS:**

### **2.4.1 Bird Evaluation:**

Breeding bird surveys were not undertaken as the site affected by the proposal has very limited nesting opportunities for breeding birds due to a lack of on-site trees and shrubs.

No bird species were noted during the survey. The open shelter type buildings were checked for swallow nests but no old or current nests were found.

## **2.5 WATER VOLE SURVEY:**

### **2.5.1 Survey Details and Results:**

Heys Brook is located off-site adjacent to the southern site boundary. The river channel sits approximately 4m lower than the bank top and is modified locally through reinforcement.

The water is shallow and swift flowing and there is no emergent/aquatic vegetation probably on account of the high levels of shade generated by the overhanging woodland canopy.

The channel couldn't be fully accessed due to the excessively steep banks, however from the various vantage points it could be determined that no burrows, latrines or feeding stations were present on the southern bank.

None of the bank toe on the development-side of the stream could be accessed.

Despite the lack of access, conditions for water vole are considered to be very sub-optimal for the following reasons.

- The stream is shallow and swift flowing.
- There is no in-channel vegetation, the food source of water vole and areas used for cover.
- There is over 90% shade over the channel.
- The bank is reinforced locally.

The section is also culverted at each end by the railway line and Clough Bank.

## **2.6 GREAT CRESTED NEWT:**

### **2.6.1 Great Crested Newt Evaluation:**

There are no ponds on the site and reference to Ordnance Survey maps and online aerial photographs indicate that there are no ponds or other waterbodies capable of supporting GCN within 500m of the site.

The desk study also revealed no records of GCN within 2km.

Therefore there are no potential impacts generated on GCN or its habitat resulting from the proposals for the site.

## **PART 3 ECOLOGICAL EVALUATION:**

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### **3.1 EVALUATION OF SURVEY FINDINGS:**

The following section evaluates the site in relation to statutory/non-statutory sites, protected species and species/habitats listed under Section 41 Species/Habitats of Principal Importance in England (NERC) Act 2006.

- The site has no statutory wildlife or ecological designations.
- There are no Sites of Special Scientific Interest (SSSI) within 300m of the site. The nearest SSSI is Clitheroe Knoll Reefs on the A59 approx. 400m from the site.
- The site is not a Biological Heritage Site (BHS) and the nearest BHS, A59 Road Cutting, Worston to Chatburn (74SE10), is approximately 300m south-east of the site.
- There is a record of common pipistrelle and a non-specific bat record from residential areas within 250m of the site.
- There are no known waterbodies capable of supporting GCN within 500m of the site.
- The LeRN data search returned no protected species records for the site.
- Other records between 250m and 500m of the site include Japanese knotweed and bee orchid.

#### **3.1.1 Statutory Sites:**

There are no statutory wildlife sites within 300m of the site. The nearest SSSI is Clitheroe Knoll Reefs on the A59 approx. 400m from the site.\*

*\*Source: LeRN*

#### **3.1.2 Biological Heritage Sites:**

The area affected by the proposals fails to meet any of the guidelines for selection associated with the Lancashire Biological Heritage Site scheme. There are no Biological Heritage sites within 250m of the site.

#### **3.1.3 Protected Species:**

There are no badger setts on site and there is no evidence of badger foraging on site or runs entering the site through boundaries.

Nesting bird potential is limited to the off-site woodland on the southern boundary of the site.

No sign of water vole occupation/use was found during the survey, and the stream is highly sub-optimal for water vole on account of the prevailing conditions. A moderate constraint to survey applies.

There are no potential GCN breeding sites within 500m of the site, and the site is relatively isolated by roads and urban development.

**3.1.4 Section 41 (S41) Habitats and Species of Principal Importance in England  
Natural Environment and Rural Communities (NERC) Act 2006:**

There are no S41 habitats or species on the site. The stream is considered to be off site.

**3.2 SUMMARY EVALUATION:**

**3.2.1 Vegetation – Habitats and Species:**

The survey found no habitats that are obviously higher than site value. The habitat present is entirely composed of coarse improved grassland and hardstanding with a minor strip of tall ruderal herb. The narrow strip of off-site woodland on the southern side of the site is small, isolated, secondary and immature.

All of the habitats present are common on a local-national scale.

**3.2.2 Badgers:**

There is no evidence of badger occupation/use on the site.

**3.2.3 Birds:**

The site has no value for nesting birds outside of the woodland which is of site value for birds only.

**3.2.4 Water Vole:**

The survey found no evidence of occupation or use by water vole on the stream and the conditions are highly sub-optimal. However, a moderate constraint to survey applies.

**3.2.5 Great Crested Newt:**

There are no ponds on site and no potential GCN breeding sites within 500m of the site. The site is also relatively isolated by roads and urban development.

Therefore adverse impacts on GCN are not predicted.

## **PART 4 RECOMMENDATIONS:**

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### **4.1 HABITATS:**

The proposed works will directly affect very common habitats of **site value only** and no further habitat surveys are recommended.

### **4.2 FAUNA:**

#### **4.2.1 Badger:**

There was a total absence of any evidence of activity that could be associated with badger on the site. Therefore no further survey or precautions in respect of badger are recommended.

#### **4.2.2 Birds:**

There is no suitable nesting habitat present on the site, therefore additional surveys or precautions are not recommended.

#### **4.2.3 Water Vole:**

The stream is relatively isolated from the site on account of the height/distance between the site and bank toe. In addition, conditions are highly sub-optimal and the likelihood of impact on water vole is considered to be reasonably unlikely. No further precautions are required.

#### **4.2.4 Great Crested Newt:**

There are no potential GCN ponds within 500m of the site which is isolated due to barrier effects, and there is also no suitable GCN habitat on the site.

There is no reasonable possibility of impacting on GCN or its habitat therefore additional surveys or precautions are not recommended.

## **PART 5 REFERENCES:**

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### **5.1 REFERENCES:**

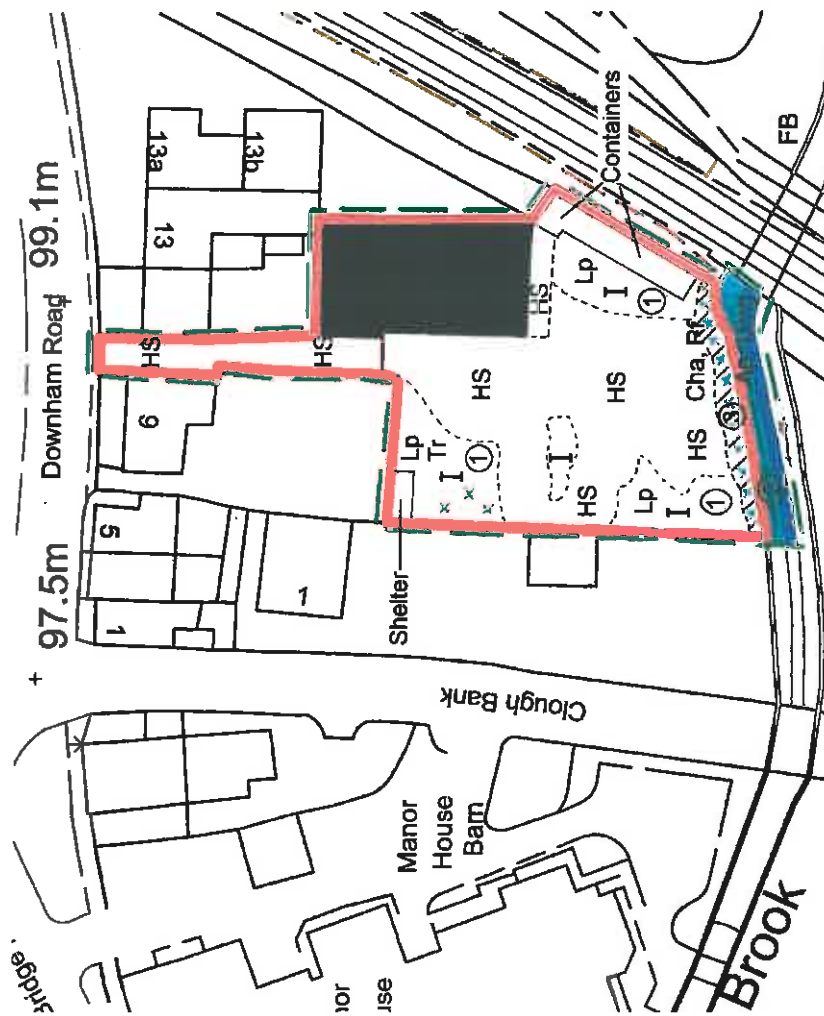
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**APPENDIX:**

*Map 1: Extended Phase 1 Habitat Survey*

*LeRN Downham Road Ecology Plan*



<b>Key: Colour Habitat Codes:</b> Semi-natural broad-leaved woodland (secondary) Scattered scrub Improved grassland Tall ruderal herb Running water (Heys Brook) Hardstanding Building Target Note Study area boundary Proposal area boundary		
<b>Key: Species Codes:</b> Ap Sycamore Cha Rosebay willowherb Lp Perennial rye-grass Rf Bramble Tr White clover Umg Wych elm		
Job title: <b>Land at 9 Downham Road          Chatburn Lancashire</b> Extended Phase 1 Survey Job Ref: N/A		
DRAWN: Ian Pyling	SCALE: Not to scale	DATE: 10 <sup>th</sup> July 2015
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Map 1: Extended Phase 1 Survey Map

**Project**  
Downham Road

**Client**  
Pernine Ecological Preston  
Grid Ref 376970 444070

- Legend**
- 250 m Buffer
  - 500 m Buffer
  - 1 km Buffer
  - 2 km Buffer
  - Lancashire Key Species
  - Biological Heritage Sites
  - Local Nature Reserve
  - SSSI



The symbols of statutory designations (Planning 2000, SSSI, etc) are used to indicate the location of the sites. The location for these designations should be obtained from Natural England. Lancashire Key Species records are plotted at the bottom. Affluents of the area to which they relate. The precision of each record is given in the accompanying attribute data and spreadsheet.

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