

Cedar Lodge •Wilcott Marsh • Shrewsbury • SY4 1AR

Tel: 01743 741 421 ● 07811 113 250 Email: info@pearce-environment.co.uk Web: www.pearce-environment.co.uk

Registered in England and Wales: 5175771

# **Ecological Appraisal**

Job: Bayston Hill former Oakland School site including Scouts and Glebe land and Bayston Hill Library

Client: Shropshire Council

Date: September 2014

Grid Ref: SJ 482 086 (Oakland School)

N.B. The contents of this report may contain information regarding a protected species.

This document must remain strictly confidential any reproduction of material must have prior permission from the author.

Author: W Macken 2<sup>nd</sup> Reader: T Pearce Proof Reader: T Pearce

Date: 18/9/2014

$\supset$	а	a	е	۱ ا

			3
E	COLO	GICAL APPRAISAL	0
E)	KECU1	TIVE SUMMARY	2
1		ISTRUCTION	
_	1.1		
2		BJECTIVES	
3		JRVEY TYPE - METHODOLOGY	
4		TE DESCRIPTION	
4			
	4.1	LOCATION	
	4.2 4.3	DESCRIPTION	/ م
5		JRVEY RESULTS	
	5.1 5.2	DESKTOP STUDYPHASE 1 OBSERVATIONS:	
	5.2 5.3	REPTILE SURVEY	
	5.4	CONDITIONS ON THE SURVEY DATES	13
	5.5	LOCATION OF REFUGIA	
	5.6	REPTILE SURVEY RESULTS	
	5.7	CLIMBING INSPECTION	
	5.8 5.9	TRANSECT SURVEY RESULTS CONDITIONS ON THE SURVEY DATES	
	5.10	TRANSECT ROUTE	
	5.11	TRANSECT RESULTS:	
	5.12	EVALUATION OF RESULTS FOR SPECIES RECORDED	
	5.13	CONCLUDING REMARKS	
6	RE	ECOMMENDATIONS	19
	6.1	BAT MITIGATION WORK	19
	6.2	BIRDS	19
	6.3	FURTHER ENHANCEMENT OF THE SITE ERROR! BOOKMA	ARK NOT
7	DEFI	NED. FHER	10
Αl		DICES	_
		RDNANCE SURVEY MAP ABSTRACT/ ENVIRONMENTAL MAPS	
		ITE PLAN	
		HOTOGRAPHIC EVIDENCE	

#### **Executive Summary**

#### **Scope of Survey**

Pearce Environment Ltd was commissioned by Mrs J Kenyon of Shropshire Council, to conduct a survey to determine the presence or absence of protected species and potential for the damage or destruction of habitats of ecological value, prior to development of the former Oakland school site including Scouts and Glebe land and Bayston Hill Library in accordance with the guidance given The National Planning Policy Framework (2012).

The survey undertaken comprised a preliminary desktop survey to ascertain local species previously recorded, presence of SSSI's, and a Phase 1 environmental survev.

A phase 1 environmental survey to assess the potential impact on protected species was undertaken at the site, OS grid reference SJ 482 086 (Oakland school) on 29th April 2014, by W Macken BSc(hons) ACIEEM, an experienced biologist, Natural England scientific licence number CLSO1114(GCN/Bats) and T Pearce CLS01127 (GCN), 20132567 (Barn Owl).

Details of the survey protocol and findings are provided, supported with photographic evidence.

No SSSI's notified under Section 28 of the Wildlife and Countryside Act 1981 were found within the vicinity of the site, thus there would be no impact expected from this development.

A local database search revealed protected species previously recorded within 2km include Common pipistrelle (Pipistrellus pipistrellus), Brown long-eared bats (Plecotus auritus), Noctule (Nyctalus noctula), Kingfisher (Alcedo atthis), Red Kite (Milvus milvus), and Barn owl (Tyto alba). No Great Crested Newt GCN (Triturus cristatus) records were identified in the vicinity of the sites.

Potential bird nesting habitat was identified in vegetation and structures on the sites. Evidence of current nesting was identified within vegetation on the sites.

Potential reptile habitat was identified on the former school site and Glebe land.

A single mature Oak (Quercus robur) with potential to support roosting bats was identified on the Glebe land.

Medium quality habitat for bats was identified on the former school and Glebe land sites.

Potential for roosting bats was identified within the roof structure of York House.

No other protected species were recorded in the vicinity of the sites.

## **Opinion**

In the opinion of the surveyor, should this development proceed it will have the potential to affect the conservation status of:

Nesting birds: As nests have been observed in vegetation, a check for nesting birds must be conducted before clearance/demolition work commences if this occurs during the nesting season, February-August.

PearceEnvironment LTD Tel: 01743 741 421 www.pearce-environment.co.uk

Page | 3

If birds gain access to the building and start nesting during the construction phase, work must cease till young birds leave the nest.

- Bats: as medium quality bat habitat has been identified, further survey work will be required in the following areas:
  - Landscape scale activity transect surveys (Former school and Glebe land) Mature tree: climbing inspection (Glebe land)
- Reptiles: As potential reptile habitat was identified on the former school and Glebe land, the site will be subject to a reptile survey, with artificial refugia being checked no less than 7 times throughout the survey period. Surveys will be carried out at the appropriate time of year (March-October, optimally March, April, May, and September).

Phase 2 surveys were instructed by the client and carried out between May-September 2014 by appropriately licensed personnel.

#### 1 Instruction

Pearce Environment Ltd was commissioned by Mrs J Kenyon of Shropshire Council, to conduct a survey to determine the presence or absence of protected species and potential for the damage or destruction of habitats of ecological value, prior to development of the former Oakland school site including Scouts and Glebe land and Bayston Hill Library in accordance with the guidance given The National Planning Policy Framework (2012).

A phase 1 environmental survey to assess the potential impact on protected species was undertaken at the site, OS grid reference SJ 482 086 (Oakland school) on 29th April 2014, by W Macken BSc(hons) ACIEEM, an experienced biologist, Natural England scientific licence number CLSO1114(GCN/Bats) and T Pearce CLS01127 (GCN), 20132567 (Barn Owl).

#### 1.1 Project Background

It is understood that outline planning permission is sought for the development of the sites into residential housing. It is understood that the church and York house will remain and other buildings will be demolished (former school, Scout hut, Library).

#### 2 **Objectives**

The aim of this type of survey is to locate and describe, as far as reasonably practicable, evidence of use or scope for wildlife including all protected species, such as bat species, badgers (Meles meles), barn owls (Tyto alba), nesting birds and amphibians such as great crested newts (Triturus cristatus), otters and water voles in the building and surrounding area, which may be disturbed in the event of development.

This is in accordance with:

The Wildlife and Countryside Act 1981(as amended) – as listed in:

Schedule 1. Birds protected by special penalties at all times

Schedule 5. Protected animals

Schedule 8. Protected plants

The Conservation of Habitats and Species Regulations 2010 - as listed in:

Schedule 2. European protected species of animals

Schedule 4. European protected species of plants

Countryside and Rights of Way Act (2000)

The Protection of Badgers Act 1992.

It involves inspection, as necessary, of all accessible areas, including those that are difficult to reach and a desktop study to ascertain reports of protected species in the vicinity of the site and to look for potential for habitats for species such as great crested newts.

Summary recommendations have been made outlining reasonable avoidance measures and the associated habitat creation/management required to offset any impacts associated with the proposed development.

#### Survey Type - Methodology

The sites and the surroundings were subject to a thorough Phase 1 survey recording evidence of use or scope for habitats and of any signs of protected species.

#### **Mammals**

Daytime surveys for bats may only identify potential roost sites if bats are not visibly present. Bat species may leave little evidence of their presence. Daytime surveys are conducted with the aid of a borescope, torches and binoculars. Evidence for the presence of bats includes:

- Holes, cracks and rot holes used as roosts, marked by streaks of urine and faeces.
- Smoothed, darkened edges where bats have rubbed and left natural body oils when entering and exiting a space.
- Scratches on wooden beams and joints indicating where certain species of bat may have clung to the wood.
- Faeces under a roof access point, a well used feeding point or a resting spot.
- Feeding signs such as discarded insect wings under a feeding point.
- Lack of cobwebs around eaves, roof spaces, beams or ceilings where routes are kept clear by bats.
- Presence of roosting or dead bats in or behind any object.

Methodology used is in accordance with recommendations by BCT, Good Practice Guidelines (2012).

#### **Transect methodology**

During each of the surveys a transect routes illustrated in **5.10** walked by two surveyors at a slow and steady pace. Routes were designed to cover all suitable habitat features for foraging/ commuting bats including areas of woodland, scattered trees, hedgerows and water bodies.

Listening stops lasting 5 minutes were included within each transect, focusing around suitable foraging/commuting features throughout the site to give a comprhesive reflection of the activity on site.

All observations of the time, location, and activity of all bats seen or heard were recorded and marked on survey maps in order characterise the value of habitats on site for foraging and commuting bats.

Each pair of surveyors were equipped with Batbox Duet bat detectors and a Anabat SD2 bat detectors used to provide digital recording to assist and document species identification through computer analysis of recorded echolocation calls.

Bats were identified on the basis of their characteristic echolocation calls using computer sonogram analysis.

#### Climbing inspection methodology

Following the ground inspection a detailed aerial inspection of each feature identified as having bat roost potential will be undertaken by two natural England licensed bat workers both who hold NPTC 38 Tree Climbing and Aerial Rescue Certificated with the aid of an Rigid micro CA300 endoscope and high powered torches. Any evidence of bats/roosts will be documented by photograph. Droppings will be collected for DNA analysis if appropriate.

#### **Badgers:**

Daytime surveys for badgers involve looking for

- Scrapings where badgers have dug for food or used as latrines.
- Signs of a sett, including signs of use such as presence of badger hair
- Tracks and prints.

#### **Birds**

Barn owls

The use of a building or tree by Barn owls can be determined by looking for signs such as

- Highly distinctive droppings or splats under roosting points.
- Presence of owl pellets/feathers

#### Other birds

Evidence of other birds using a building, hedge or tree will be from looking for

- Presence of nests
- Collections of droppings and/or feathers

#### **Amphibians and reptiles**

The assessment of aquatic habitat is based on the Habitat Suitability Index (Oldham et al 2000).

A refugia search is conducted for amphibians and reptiles looking under any logs, large stones and other debris.

#### Reptile survey methodology

During the initial site visit it was noted that the scrub and areas of grass provided a mosaic of habitats considered suitable to support reptile species. A detailed phase 2 survey was undertaken to assess the presence/absence of reptile populations potentially utilising the site in accordance to best practice guidelines.

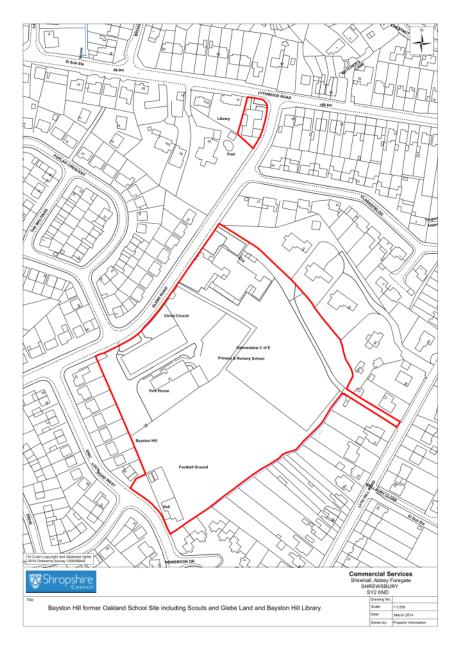
A total of 30 reptile refugia comprising a mix of corrugated onduline and roofing felt were deployed within the main body of the site depicted on in **Section 5.5**. Seven site visits were undertaken during optimal weather conditions timings of the surveys are detailed in **Section 5.3**.

In addition to undertaking the specific refugia searches, visual transects will be carried out on each survey visit, concentrating of areas between the refugia and any other areas considered to be suitable for basking reptiles. Visual checks involved walking slowly and meticulously through habitat with a "look see", method of searching for and recording reptiles.

#### **Site Description**

#### 4.1 Location

The sites are located within the village of Bayston Hill, situated to the south of Shrewsbury.



### 4.2 Description

#### Library

The library building, situated at the Glebe road/Lythwood road junction is a 1960/70's brick and timber built flat roofed (felt covered) community building set in a small plot that is dominated by the building with surrounding hardstanding, amenity grassland and tree and shrub planting (3 mature Silver Birch, Betula pendula, and a single immature ornamental tree). The boundaries of the site are marked by brick built dwarf walls and close boarded fencing.

#### Scout hut

The scout hut, accessed at Eric lock Road West is comprised of a brick built pitched and pent roofed, (felt clad) building. There is no loft space present within either the pitched roof or pent roofed sections. The building is set in a small parcel of land that is dominated by amenity grassland and has two pre cast concrete garages situated to the north of the plot. The boundaries to the site are marked by steel fencing (east) and an unmanaged predominantly hawthorn (Crateagus monogyna) and Holly (Ilex aguifolium) hedgeline. There is a single immature sycamore (Acer pseudoplatanus) within the hedge line. There is a single immature ornamental Cherry (Prunus sp.) planted to the south of the building.

To the west of the site there is a small area of hardstanding, currently utilised for parking. The boundaries are comprised of the continued unmanaged hedgeline to the east, residential housing to the north, and road to the west.

#### York house/Christ church

York house and The Christ Church are modern (1989) brick built structures with slate (Church) and machined clay tile (York house) roof coverings. York house is comprised of two linked single storey buildings. The buildings are linked by an open fronted brick built walkway that has a bitumastic hessian lined machined clay tile roof. There are loft spaces present above both buildings. The roofs are constructed on modern trusses and are lined with bitumastic hessian (1F) felt that is in good condition. The loft spaces are insulated to the floor with modern fibre glass insulation. There is no lighting present within the loft spaces which are currently used for storage.

There are hanging tiles present on a dormer window into a section of the main building which is boarded out and currently used for office space. York House is situated within predominantly amenity grassland and informal ornamental planting. There are small areas of unmanaged grassland containing immature Silver birch, Hazel (Corylus avellana) and willow (Salix sp.) on the western boundary. The southern boundary is marked by a non-native ornamental hedge containing Viburnum sp. and Laurel (Prunus laurocerasus). There is an area of hardstanding to the west of York house that is currently utilised for parking.

The Christ Church building is of double height construction with a slate roof cladding with photovoltaic panels fixed to the southern pitch. It is assumed that the roof is lined with bitumastic hessian felt. There is no loft space present. A hall of similar construction, two storey with no loft space adjoins the church to the west. The building is surrounded by hardstanding, managed amenity grassland and formal planting. Immature Alder (Alnus glutinosa), Prunus sp. and Sycamore were noted within the amenity laws to the north of the buildings.

#### Former school

The site of the former Oakland school is comprised of brick built flat roofed school buildings surrounded in close proximity by hardstanding (playground and parking) and unmanaged former amenity grassland which has subsequently developed a litter layer (it has remained unmanaged for a number of years). A single mature Lime (Tilia × europaea) was identified in the North West corner of the existing playground/yard area. Scattered immature Horsechestnut (Aesculus hippocastaneum) and a single mature Sycamore were identified adjacent to the north eastern boundary of the grassland. Numerous brash piles were also identified in this area. Scattered immature Ash (Fraxinus excelsior) were noted to the south east of the school buildings. To the North West (roadside frontage) of the school buildings lies a further area of unmanaged former amenity grassland containing mature London plane (*Platanus* × acerifolia) and Sycamore. The site is bounded by a managed hedgeline of predominantly hawthorn with scattered holly, blackthorn (Prunus spinosa) and a single mature Ash and Oak

within the hedgeline. The south east boundary is marked by a simple metal security fence, further to this lies an area containing mature oak with a scrub understorey (outside the site). The south western boundary is also marked with a simple metal security fence that has an adjacent area of scrub growth dominated by bramble (*Rubus fruticosus*).

#### Glebe land/sports pitches

This is an area of regularly managed amenity grassland currently utilised as sports pitches. The boundaries are comprised of simple metal security fencing. In the North West corner of the site is a small area of scrub dominated by nettle (*Urtica dioica*), bramble, dock (*Rumex obtusifolius*) and cleavers (*Galium aparine*) with scattered scrub blackthorn and *Salix sp*.

#### 4.3 Description of areas not accessed/Limitations

All areas were accessible for this survey.

The ecological walk-over survey did not try to produce a comprehensive list of plants and animals as any ecological survey is limited by factors that affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The ecological survey did not therefore produce a complete list of plants and animals and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. Nevertheless, the results of this ecological survey allow an initial assessment of the ecological value of the site and the potential for negative impacts from the proposed works.

#### **5** Survey Results

#### 5.1 Desktop Study

The map from Natural England presented in Appendix B indicates that the sites are not adjacent to an SSSI. Therefore no affect is expected from the development at this site.

Scrutiny of the OS map (Appendix A) and a walk around the locality showed there are significant areas of still water in the vicinity of the sites.

Two small lined garden ponds were identified at Number 53 Lythwood Road. A further pool identified on mapping was confirmed as a swimming pool.

The two small garden ponds were investigated and a Habitat Suitability Index was applied.

The ponds were extensively netted, no GCN were discovered. N.B. Smooth Newt, (*Triturus vulgaris*) were identified in the ponds. No suitable substrate for egg laying was identified. No GCN eggs were identified.

No records of GCN were found in the vicinity of the site.

No further survey with respect to great crested newts is deemed necessary.

Pond	Lythwood rd.		
Location	1		
Pond Area	0.2		
Pond			
performance			
years	0.9		
Water quality	0.33		
Shade	1		
Fowl Count	1		
Fish population	1		
Pond Count	0.5		
Terrestrial Map	0.33		
Macrophyte			
cover	0.3		
HSI score	0.55826341		
	0.56		
HSI score	Below		
(rounded)	average		

A local database search revealed protected species previously recorded within 2km include Common pipistrelle (*Pipistrellus pipistrellus*), Brown long-eared bats (*Plecotus auritus*), Noctule (*Nyctalus noctula*), Kingfisher (*Alcedo atthis*), Red Kite (*Milvus milvus*), and Barn owl (*Tyto alba*). No Great Crested Newt GCN (*Triturus cristatus*) records were identified in the vicinity of the sites.

#### 5.2 Phase 1 Observations:

#### Library

Upon investigation of the library building, it was noted that the modern construction and construction materials offered no potential for roosting bats. No evidence of bats was found in any area. This small site offers limited foraging potential to bat species with on a small number of scattered ornamental trees. For this reason, the site also offers limited potential for nesting birds, no evidence of current nesting was identified in this area.

No habitat for any other protected species was identified in this area.

#### **Scout Hut**

Upon investigation of the scout hut and small parcel of land associated with it, no potential for roosting bats was identified in any structure including the felt covered flat roofed scout hut and the modern pre-fabricated pre cast concrete garages. Potential nesting bird habitat was identified in the hedgeline to the east of the site and the pre cast concrete garages. No potential for roosting bats was identified in any trees on the site.

Habitat suitable for common herptiles, such as common lizard (*Zootoca vivipara*) was noted on the small parcel of land to the north west of the scout hut building with areas of brash/log piles noted that could be utilised by basking reptiles. A refugia search was carried out, no herptiles were identified in any area. No evidence of any other protected species was noted in the area or adjacent hard standing associated with the buildings.

#### York House/Christ Church

Upon investigation of the church and adjoining hall, no potential for roosting bats was identified due to the modern construction of the building and the materials used. The roof was clad in slate that was noted as being well fitted with no crevice potential. All soffits/fascias were noted as being well fitted with no gaps present. All masonry was noted as being in good condition with no visible missing pointing/gaps. No evidence of nesting birds was noted in the Church and adjoining building.

Potential nesting bird habitat was noted in the formal gardens surrounding the church building. No trees present on the site offered roosting potential for bats. Upon investigation of York House, clay tile roof covering was seen to offer limited roost potential for crevice dwelling bats. A small number of slipped/lifted tiles were observed as were gaps under the ridge tile which offered potential for crevice dwelling bats.

Lofts were investigated within York house. They were noted as being lined with intact bitumastic hessian (1F), and insulated to the floor with modern fibreglass insulation. No evidence of bats was found in either loft space investigated. Current evidence of nesting birds was identified within the open fronted walkway adjoining the York House buildings.

Potential nesting bird habitat was noted in the gardens, including the hedgerow and immature trees, surrounding the building. No trees present on the site offered roosting potential for bats.

#### **Former School**

Upon investigation of the building, no potential for roosting bats was identified in any area due to the construction of the building. The modern flat roofed construction of the building offered no potential roosting opportunity for bats. No points of potential ingress were noted for either bats or nesting birds. The ivy cladding noted on the western elevation of the building was considered to be of not sufficient coverage to offer roosting potential for bats, this area did however, offer potential bird nesting habitat.

The buildings are surrounded in close proximity by hardstanding to the north and west, and former amenity sports pitches to the south east which have remained unmanaged for a number of years and have become of more ecological value due to the invasion of weed species such as bramble, dock nettle and cleavers, and the development of a substantial litter layer beneath the sward which was seen to be rich in grassland invertebrates. This area was identified as potential reptile habitat with basking areas and areas of cover that could be utilised by common reptile species such as slow worm and common lizard.

The north to south east boundary is marked by a managed native hedge containing mature Ash and Oak. The trees were investigated and were seen to not offer any potential to roosting bats with no features such as cavities, splits and standing deadwood present. The mature hedgeline and associated trees were noted to offer potential bird nesting habitat. Common passerine species including Sparrow (Passer domesticus), Blackbird (Turdus merula), Robin (Erithacus rubecula), and magpie were noted in this area. Evidence of current nesting was observed within the hedgeline. The mature hedgeline and trees were also seen to offer good potential foraging habitat for bat species and was seen to be well connected to the oak wooded area to the south eastern boundary of the site. The grass land to the north east of the site also contained scattered immature Horsechestnut and a single mature Sycamore. These trees provide good foraging for bats and also provide connectivity between the hedgeline to the north east of the site and the mature woodland strip to the south east of the site. No features associated with roosting bats were identified in any tree in this area.

#### **Glebe Land/sports pitches**

Upon investigation of the sports pitches, it was noted that the site was predominantly composed of managed amenity grassland with a short sward height. This area is of low ecological value.

An area containing scrub and ruderal growth was identified in the North West corner of the site (adjacent to the scout hut and adjoining plot). This area was identified as potential reptile habitat with areas of open ground suitable for basking and adjacent cover. This area was also identified as potential nesting bird

The woodland corridor to the south eastern boundary, containing mature Oak, immature Sycamore, Hawthorn, Scots pine and Horsechestnut with an understorey of cleavers, nettle and dock was identified as good foraging habitat for bat species and potential nesting bird habitat.

Mature trees were investigated. The majority of the mature Oaks were seen to be in a good condition with no features suitable for roosting bats. A single specimen (Oak) was identified at SJ 48214 08458 with a large split on a limb. No other features associated with roosting bats were identified on this or any other tree. This single tree will require a climbing inspection.

The habitat was assessed as per the BCT quidelines (Medium sized site (1-15ha, project value £1-20 Million) as MEDIUM quality bat habitat. The site was classified as medium quality due to the features identified which are of value to foraging/roosting bats such as hedge lines, mature trees and potential roost sites These were noted as not being extensive, with only a single tree on the site identified as having potential for roosting bats.

No potential habitat for water vole, otter, or white clawed crayfish was noted on or in the vicinity of the site.

No evidence of any other protected species, such as badger, was noted on or in the vicinity of the site.

# 5.3 Reptile survey

# 5.4 Conditions on the survey dates

Date	surveyor	Time	Temp °C	Condition
22/06/14	TP	1000	15	Dry, no wind
24/06/14	TP	1000	17	Dry, no wind
25/06/14	TP	1000	18	Dry, no wind
27/06/14	TP	1000	14	Dry, no wind
29/06/14	TP	1000	16	Dry, no wind
02/07/14	TP	1000	15	Dry, no wind
09/07/14	GW	1000	17	Dry, no wind

# 5.5 Location of refugia



# 5.6 Reptile Survey results

Date	Common lizard	Slow worm	Grass snake	Adder	other
22/06/14	0	0	0	0	0
24/06/14	0	0	0	0	Field volex1
25/06/14	0	0	0	0	0
27/06/14	0	0	0	0	0
29/06/14	0	0	0	0	Field volex2
02/07/14	0	0	0	0	0
09/07/14	0	0	0	0	0

Surveys revealed the likely absence of reptiles on the site. Works can proceed with no further constraint in regard to reptiles.

If reptiles are discovered on site during development, all works will halt and Pearce Environment will be informed.

#### 5.7 Climbing inspection

An aerial inspection of the over mature oak OSGR SJ 48214 08458 was carried out by appropriately licensed personnel (WM/DW) on 27<sup>th</sup> August 2014. A full inspection revealed no evidence of roosting bats within the structure. It was noted that the features identified during the initial site visit provided limited opportunity for crevice dwelling bats. Therefore the mature oak can be downgraded to Low potential for roosting bats.

## 5.8 Transect survey results

## 5.9 Conditions on the survey dates

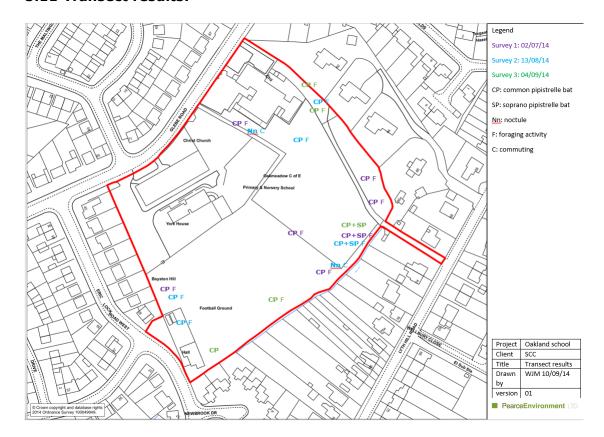
Date	surveyor	Time	sunset	Temp °C	Condition
02/07/14	WM/GW	2138-2325	2138	17	30% light cloud cover, no wind, no rain.
13/08/14	WM/RC	2050-2240	2042	15	Overcast, slight breeze, no rain.
04/09/14	WM/DW	2000-2145	1953	14	Clear, no wind, no rain.

Tel: 01743 741 421 www.pearce-environment.co.uk

# **5.10 Transect route**



#### 5.11 Transect results:



#### **Transect results:**

Survey findings show that the activity from the common species assemblage identified on site (Common pipistrelle bat, Soprano pipistrelle and Noctule) was concentrated around boundary vegetation, with the most concentrated activity around the north east and south east boundaries.

Numbers of individual bats was recorded as low, with a maximum count of three bats recorded foraging at one point (common pipistrelle bat). Noctule and soprano pipistrelle bat were recorded as single bats in all instances.

Surveys were carried out to gain a representation of activity over the active period. Survey results show that activity was relatively constant throughout the survey period with activity concentrated around boundary features.

Survey work identified that the majority of foraging activity by common pipistrelle bat and soprano pipistrelle bats was recorded along boundary features containing hedgerows and mature trees.

## 5.12 Evaluation of Results for species recorded

# **Consideration of Conservation status of species**

Species	Justification	Impact
Nesting birds	Nesting habitat identified	<b>LOW</b> if works are carried out outside the nesting season or supervised by an Ecologist.
Bats	Good foraging habitat identified.	Further survey revealed activity concentrated around boundary features containing hedgerows and mature trees. <b>LOW</b> if tree/hedge lines are retained on site and sensitive lighting plan is followed.
	Roost potential identified in York House.	No Further survey work required as to remain unaffected by development. <b>LOW</b>
	Roost potential identified in mature Oak, Glebe land.	Climbing inspection revealed the likely absence of roosting bats within the structure.
Reptiles	Potential habitat identified	Survey work revealed a likely absence: works can proceed with no further constraint in regard to reptiles. <b>LOW</b>

#### Bats

All British bat species are protected by law under UK and European legislation: They are listed under schedule 5 of the Wildlife and Countryside Act 1981 and Schedule 2 of The Conservation of Habitats and Species Regulations 2010. It is an offence to:

- 1. Deliberately\* capture, injure or kill a bat
- 2. Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
- 3. Damage or destroy or obstruct access to a bat roosting place (even if bats are not occupying the roost at the time)
- 4. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
- 5. Intentionally or recklessly obstruct access to a bat roost

\*In a court, 'deliberately' will probably be interpreted as someone who, although not intending to capture/injure or kill a bat, performed the relevant action, being sufficiently informed and aware of the consequence his/her action will most likely have.)

#### Birds

As nests have been observed in the buildings a check for nesting birds must be conducted before work commences if this occurs during the nesting season, February-August.

#### 5.13 Concluding remarks

In the opinion of the surveyor, should this development proceed it will have the potential to affect the conservation status of:

- Nesting birds: As nests have been observed in vegetation, a check for nesting birds must be conducted before clearance/demolition work commences if this occurs during the nesting season, February-August.
   If birds gain access to the building and start nesting during the construction phase, work must cease till young birds leave the nest.
- Bats: survey work revealed usage of boundary features containing hedgerows and mature trees. If trees and hedgerows are retained, and a sensitive lighting scheme implemented, impacts are considered low.

#### Recommendations

#### **6.1** Bats

On production of plans, a suitable enhancement strategy will be produced by Pearce Environment Ltd and agreed by Shropshire Council. This is likely to include recommendation for retention of trees, details of a sensitive lighting scheme, integration of bird/bat boxes and native planting of hedgerows and trees on the site.

It is recommended that boundary hedge lines and mature trees within boundary hedge lines are retained and incorporated into the development.

It is recommended that a lighting plan is drawn up, following guidance from 'Bats and Lighting in the UK, BCT, 2009'. It is recommended that lighting will have no impact upon boundary vegetation.

It is recommended that the enhancement strategy contains details of erection of bat boxes including boxes integrated into the development and erected on mature trees.

#### 6.2 Birds

As potential nesting habitat has been observed within vegetation, a check for nesting birds must be conducted before work commences if this occurs during the nesting season, February-August.

Suitable compensation for the loss of nesting habitat will be made when plans become available.

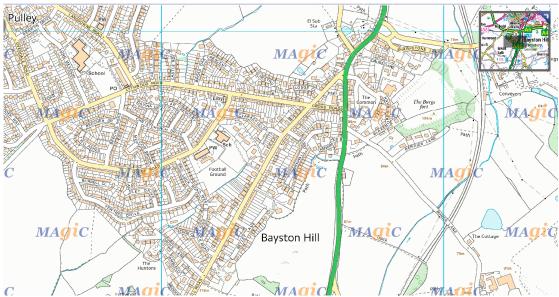
On production of plans, a suitable enhancement strategy will be produced by Pearce Environment Ltd and agreed by Shropshire Council. This is likely to include integration of bird boxes and native planting of hedgerows and trees on the site.

If birds gain access to the building and start nesting during the construction phase, work must cease till young birds leave the nest.

#### Other

- This report may not be reproduced other than in full. The report should be read in its entirety.
- Questions arising from the survey report should be directed to the author of this report, who will be pleased to clarify any technical issues raised.
- Whilst the surveyors make every reasonable effort, Pearce Environment cannot guarantee that all protected species have been identified and survey results are definitive.
- Surveys are valid for 1 year after which a check should be made for the change of status of protected species.
- Records of Protected/priority species will be submitted to the local records centre.

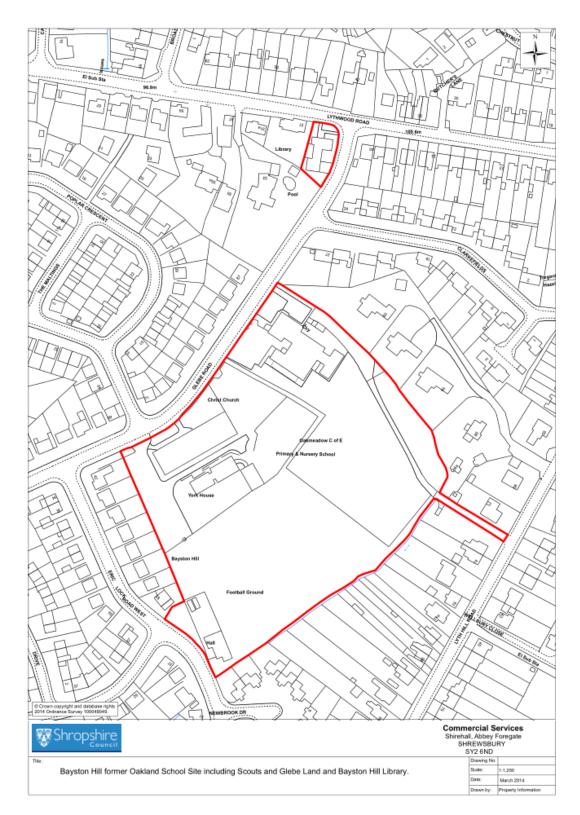
# A Ordnance Survey Map Abstract/ Environmental Maps



Environmental map for proposed works from "http://magic.defra.gov.uk/".

This shows that the site is not in the vicinity of an SSSI as notified under Section 28 of the Wildlife and Countryside Act 1981.

#### **Site Plan** В





York House to remain unaffected.



Showing gaps under ridge.



Showing surrounds to York House.



Showing gaps in roof covering.



Showing construction of lofts.



Showing Christ Church, no bat potential, buildings to remain.



Former school buildings



Unkempt amenity grassland.



Mature oak within hedgerow.



Potential reptile habitat, former school grounds.



Swimming pool, No.53. Shown on OS mapping as a pond.



Mature hedgerow with mature



Unkempt amenity grassland to the rear of school.



Scattered trees: no bat potential.



Small garden pond at No 53.



Showing scout hut, no bat potential.



Car parking associated with scout hut.



Mature trees within woodland belt



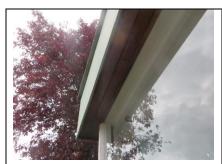
Land adjacent to scout hut, reptile habitat potential. No reptiles identified on site.



Scrub adjacent to scout hut: reptile potential. No reptiles identified on site.



Single mature oak with split out limb. No evidence of bat roosts



Showing well sealed building: no potential for bats.

#### D Bibliography

Brown, Lawrence and Pope (1984) Animals of Britain and Europe – Their Tracks, Trails and Signs

Middlesex, Country Life Books

Bat Conservation Trust (2012) Bat Surveys Good Practice Guidelines, 2<sup>nd</sup> Edition, BCT

English Nature (2001) *Great crested newt mitigation guidelines* English Nature

Entwhistle, A.C, <u>et al</u> (2001) Habitat management of bats JNCC

HMSO (2000) Countryside and Rights of Way Act 2000 HMSO, London

HMSO (1981) Wildlife and Countryside Act 1981 HMSO, London

Gent, T and Gibson, S (2003) Herpetofauna Workers' Manual JNCC

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

Mitchell-Jones, A. J. & McLeish, A. P. (2004) Bat Worker's Manual (3<sup>rd</sup> Edition) JNCC, Peterborough

Robertson, James (1990) *The Complete Bat* Chatto & Windus, London.

Russ, J. (2012) British bat calls: a guide to species identification, Pelagic.