Internal /External Bat Survey

Workshops (the Wheatsheaf)



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1.0. Introduction

Two detached workshop buildings at The Wheatsheaf Workshops, Rhosymedre, Cefn Mawr, Wrexham, LL14 3YE were subject to survey in relation to the potential for presence of bat species and roost sites in relation to works, which will result in conversion of existing structure to residential (refer to Planning Application).

The brief of this survey was as follows;

- An external/Internal evaluation of the buildings for utilization signs by bat species.
- To determine whether any buildings and trees within the site had potential for use by bats for roosting or as a place of shelter, with consequent implication for development work with respect to Schedule 5 of the *Wildlife and Countryside Act 1981 and the conservation (Natural Habitats &c.) Regulations (and subsequent amendments).*
- To determine the presence of any roosts within the site.
- To make an overall assessment of the value of the site as foraging, feeding and commuting areas.
- To make recommendations for the development work to take place including any mitigation/ compensation required.

Background

Bats and the Law

Prior to August 2007, all bat species in the UK were fully protected under the *Wildlife and Countryside Act 1981* (as amended) through an inclusion in Schedule 5. The amendment of the *Conservation (Natural Habitats) Regulations 1994,* in August 2007 now is the regulatory protection mechanism. In addition there are obligations within the Conservation of Species and Habitat Regulations (2017) and National Planning Policy Framework (2023) which replaced the former Planning Policy Statement 9 (PPS 9).

In England, Scotland, Wales and Ireland all bat species are fully protected by the Conservation (Natural Habitats &c.) Regulations, which defines 'European protected species of animals' (EPS). This gives protection to bats and their roosts.

The Regulations have slightly different amendments in the different countries. Under the regulations it is an

offence to:

a) Deliberately or recklessly to capture, injure, or kill a EPS.

b) Deliberately or recklessly –

i. To harass a wild animal or group of wild animals of a EPS.

ii. To disturb while it is occupying a place of shelter (roosts).

iii. To disturb while it is rearing its young or caring for its young.

iv. To obstruct access to a breeding site or resting place, or otherwise deny the animal use of that site or resting place.

v. To disturb a EPS in a manner that is, or circumstances which are likely to significantly affect the local distribution or abundance of the species.

vi. To disturb a EPS in a manner that is, or circumstances which are likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for young.

In this interpretation, a bat roost is "*any structure or place which any bat uses for shelter or protection*". As bats tend to reuse the same roosts, legal opinion is that the roost is protected whether or not the bats are present at the time.

Planning and Development

All British bat species and their roosts are protected under the Wildlife and Countryside Act 1981, through inclusion on Schedule 5. They are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2.

The Act and Regulations include provisions making it illegal to:

- Intentionally or deliberately kill, injure or capture bats.
- Deliberately disturb bats.
- Damage, destroy or obstruct access to a roost.

Local Planning Authorities consult the Government's guidance notes, National Planning Policy Framework (2023) and the Conservation of Species Habitat Regulations (2017) in England, and equivalents in Scotland and Wales, before making a planning decision where there may be protected species on a site.

The presence of a protected species should be a material consideration when considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat. If bats use the site, appropriate Statutory Nature Conservation Organization (Natural England, Scottish Natural Heritage or Natural Resources Wales) must be consulted before any work is carried out. Where necessary, a bat expert should visit and assess the site.

If planning permission is being sought from the local authority, any observations of bats should be reported to them and they can be reminded of their obligations within the National Planning Policy Framework (2021). If a bat roost is present and is affected by a proposed development, licensing will be required from the Statutory Nature Conservation Body, in England this is Natural England.

The Legislative Process (England)

In determining whether or not to grant a license Natural England must apply the requirements of Regulation 535 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b)6 .

(1) Regulation 53(2)(e) states: a licence can be granted for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment".

(2) Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied "that there is no satisfactory alternative".

(3) Regulation 53(9)(b) states: the appropriate authority shall not grant a licence unless they are satisfied "that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."

In determining applications for licenses under the Regulations Natural England is also aware of and, where appropriate, has regard to the following:-

 Planning Policy Statement 9 Circular 06/05 "Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System"

 Circular 2/2002 New Guidance for Local Planning Authorities on European Protected Species and Changes in Licensing Procedures

 the EU Guidance Document on the protection of animal species: February 2007, Managing Natura 2000, EU Guidance Document on Hunting under Council Directive 79/409/EEC on the conservation of wild birds (Chapter 3) and The Report of the Article 12 Working Group under the Habitats Committee "Contribution to the interpretation of the strict protection of species (Habitats Directive article 12)".

Developers need to be aware that:

- Assessment of current use, likely effects and mitigation or habitat enhancement should be incorporated into development proposals at an early stage.
- Where changes in land use could affect bats, the implications to bats should be considered and advice sought.
- When considering planning applications, authorities are required to take account of protected species, including all bats, and their habitats.

Bat feeding habitats can be some distance from their roost sites, therefore, bats seen in flight may roost nearby or some miles away. Bats use a range of sites for roosting, including buildings and trees. Signs of roosts, which are visible from the outside, include bats emerging from the roost (timing varies from before sunset to up to about an hour after) and bat droppings on surfaces near emergence points.

1.1. Site Location

Two detached workshop buildings at The Wheatsheaf Workshops, Rhosymedre, Cefn Mawr, Wrexham, LL14 3YE.All internal and external areas were available for survey.

1.2. General Site Description and Status

The site is centred on SJ 28432 42582 and has an area of 0.16ha. It is formed of disused workshops/industrial buildings. Beyond the immediately adjacent houses, the local area has connectivity to areas of woodland, giving bat commuting and foraging value. See aerial image below:



B1 Exterior: B1 is a large brick building currently in a state of disuse. The building has slate tiles that are mostly obscured due to the elevations of the building and adjacent streets. However, externally there are limited features suitable for bats, such as gaps around the windows and ridge/hip

tiles though these are generally under 10mm in extent.

Generally, the building appears well maintained externally and does not appear to have any suitable access points for bats. It is noted that swift and house sparrow, feral pigeons were noted around the building. 3 x apertures on the frontage appeared to be highly suitable as bird nesting positions, see below:



B1 Interior Internally, B1 had a single loft hatch into a multitude of loft spaces. The initial loft is composed of plastered walls and leads into another large space above with access through an open hatch. This loft space then leads into a further two either side. No evidence of bats or potential access points for bats were noted during the survey. The presence of disused birds' nests (Jackdaw) within all spaces indicates that there is potential access at a point not accessed during the survey. No roof felt was present in the loft space and the interior was composed of wood. This appeared very well sealed, and the wooden ridge beams appeared very cobwebbed indicating a lack of use.

B2 Exterior: B2 is comprised of three conjoined warehouses in a state of disuse, these are all brick-built structures with open interiors. Externally, the buildings were generally the same as B1, with slate tiles generally in good condition. There were gaps in the eaves, but these were examined with a torch and found not to lead anywhere. It is also noted that half of the roof was corrugated metal on the furthest west of these three conjoined buildings.

B2 Interior All three buildings were inspected internally, and no bats or evidence of bats was discovered. The open interiors were generally wood, with the corrugated metal roof being unsuitable for roosting bats. The ridge beams were again cobwebbed. No access into the interior of these buildings was clearly visible, a gap was present between the corrugated metal portion of the roof and the slate tile roof, however, this did not appear to be large enough for bat access.

A cellar space was also examined in the most western of these buildings. The cellar had flooded and

was examined with a torch. The walls appeared plastered, and it did not appear an extensive cellar space, as there is no clear access point into the building and no evidence thereof, this is therefore deemed to be unsuitable for hibernating bats.

1.3. Wider Landscape Context in Relation to Bats

The site lies in a rural location, within nearby extensive native woodlands providing good bat roosting and foraging opportunities, (mature deciduous woodland immediately NE) . Appendix 1 and below shows aerial photographs and Appendix 2: site images.



1.4. Bat Ecology (a Summary)

Where do bats build roosts?

Different species of bat prefer different places; some creep into tiny spaces, cracks and crevices. Only occasionally do they hang free or are easily visible.

Outside they may roost:

- Under weather boarding or hanging tiles
- Above soffits and behind fascia and barrage boarding
- Between window frame and wall brickwork
- In gaps behind cladding tiles or wood
- Between underfelt and boards or tiles, Inside cavity walls

Inside roof spaces they may roost

- Along the ridge beam
- Around the gable end
- Around the chimney breast

Looking for the evidence

Bats do not make nests or cause structural damage. The most obvious sign of their presence is droppings.

- Bat droppings consist largely of insect remains and crumble easily between your fingers to a powder of semi-shiny fragments.
- Rodent droppings are smooth and plastic, quickly becoming hard. They cannot be crumbled.
- Bat droppings do not present any known health hazards.
- Droppings may not always be readily visible in a loft.
- Large accumulations may reflect use over a number of years rather than large numbers of bats at any one time.

When do bats use buildings?

Bats use buildings at any time, but are most often found in houses between May and August.

- Mother bats have only one baby a year, suckling it for several weeks. The mothers gather in maternity roosts to have their young in summer, and this is the time they are most likely to be seen using buildings.
- The bats move away when the young can fly and feed themselves, and have usually left by September.
- Immature individuals, adult males and non- breeding females will occupy a variety of roosts, individually or in small groups, at any time of year.
- Disturbance or the use of chemicals at maternity roosts in houses can have a major impact on bat populations gathered from a wide area.
- Bats do roost in houses in winter, usually individually, but are difficult to see.

Which bats use buildings?

All UK species have been recorded in houses, but some very rarely. Pipistrelles and Long-eared bats are the species most usually found.

Pipistrelle bats

There are three different species of Pipistrelle; the common Pipistrelle, Soprano Pipistrelle and the rarer Nathusius' Pipistrelle. They sometimes use houses as maternity roosts, choosing confined spaces. These are usually on the outside of buildings, such as under the soffits or behind barge boards or hanging tiles, where the bats can rarely be seen.

Brown long-eared bats

This species mostly prefers older houses with large roof spaces. Small clusters may be seen at junctions of roof timbers or under the ridge. It is the bat most frequently seen inside lofts, small numbers may stay longer than the other species.

1.5Description of Works

Refer to Planning Application. It is understood B1 is to be refurbished internally and that B2 may be demolished.

1.6 Bat Species Records

In relation to bat species the following were recorded from various web based data sources, the authors own records,) and other sources, presented here with the approximate distances of the nearest record. In addition, a number of Ecological survey reports within the area have been interrogated for protected species records. All records are post-2000 unless otherwise stated. In this case, all records derive from the previous PEA (Arbtech, 2024):

Bat species search

A 2km biological record data search from COFNOD is detailed below: Bat records within 2km of the site boundary: • 1 x noctule, ~860m west

• 1x common pipistrelle, ~860m west • 1x soprano pipistrelle, ~860m west All records are of commuting bats. No bat roost records can be found within the last 10 years within 2km of the site boundary.

Statutory protected sites: (Source: MAGIC)

Statutory and Non-Statutory Sites. Below are designated sites within 2km of the site boundary:

• Clwydian Range and Dee Valley, Area of Outstanding Natural Beauty (AONB)- ~850m to the south

• Afon Dyfrdwy (River Dee) Site of Special Scientific Interest (SSSI) - ~785m to the south.

• River Dee and Bala Lake Special Area of Conservation (SAC) - ~785m to the south.

• Acrefair Railway Cutting - ~278m to the north.

Designated Habitats

• There are four sections of ancient woodland within 2km of the site boundary with closest located ~83m to the East.

• There is one section of coastal and floodplain grazing marsh, located ~923m to the southeast.

• There are three sections of traditional orchard, with the closest ~614m to the east.

2.0. Survey Methodology

The survey consisted of two elements:

- A day-time visual external assessment of the buildings and their potential in relation to use by bats as roosts.
- A day-time visual internal assessment of the buildings and their potential in relation to use by bats as roosts

2.1. Personnel

The survey was conducted by Dr. Stefan Bodnar, assisted by Dr. Louise Sutherland. Dr. Stefan Bodnar is a full time member of the Chartered Institute of Ecology and Environmental Management, an experienced ecologist with over 38 years experience of bat surveys, working under Natural England class license: Level 2, survey: bats.

2.2. Visual External Assessment

The external building inspection (from the ground using binoculars) focused particularly on roof areas, soffits, areas of wall with cracks and apertures, vents, openings into the building and the overall structure of the buildings including any features such as crevices or cavities that may be suitable for bats to roost in. Evidence of roosting such as droppings or staining around entrances was also recorded. Where appropriate gaps and cavities were checked using an endoscope.

The date of site visit was 8th July 2026

Methods of survey used have been based on those outlined in Joint Nature Conservation Committee's Bat Workers Manual (Mitchell-Jones & McLeish, 2004), Bat Surveys for Professional Ecologists (3rd Edition) , BCT (2016), and English Nature's Bat Mitigation Guidelines (Mitchell-Jones, 2004).

2.3. Visual Internal Assessment

The interior of the building was examined on 8th July 2026.

3.0. Results

3.1. External Visual Assessment

The assessment was carried out using the guidance provided within the publication: Bat Surveys for Professional Ecologists (4th Edition), BCT (2023), which states:

Bat Conservation Trust

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible[a]	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[b] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats[c]).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[b] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[b] and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

a Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2016 and Jansen *et al.*, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

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There is no evidence of bat use of the buildings either current or historic.

Internal Visual Assessment for birds and bats:

No evidence of bats.

Overall categorization for former workshop at The Wheatsheaf is: Negligible bat roost potential (BRP). (following inspection).

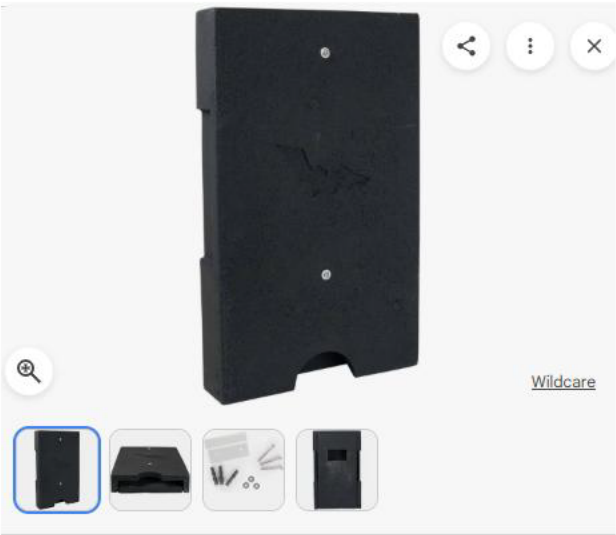
4.0. Conclusion

The survey determined that the buildings are conclusively not being used as a bat roost site. The building overall was categorized as negligible bat roost potential (BRP) in respect of potential use by bats.

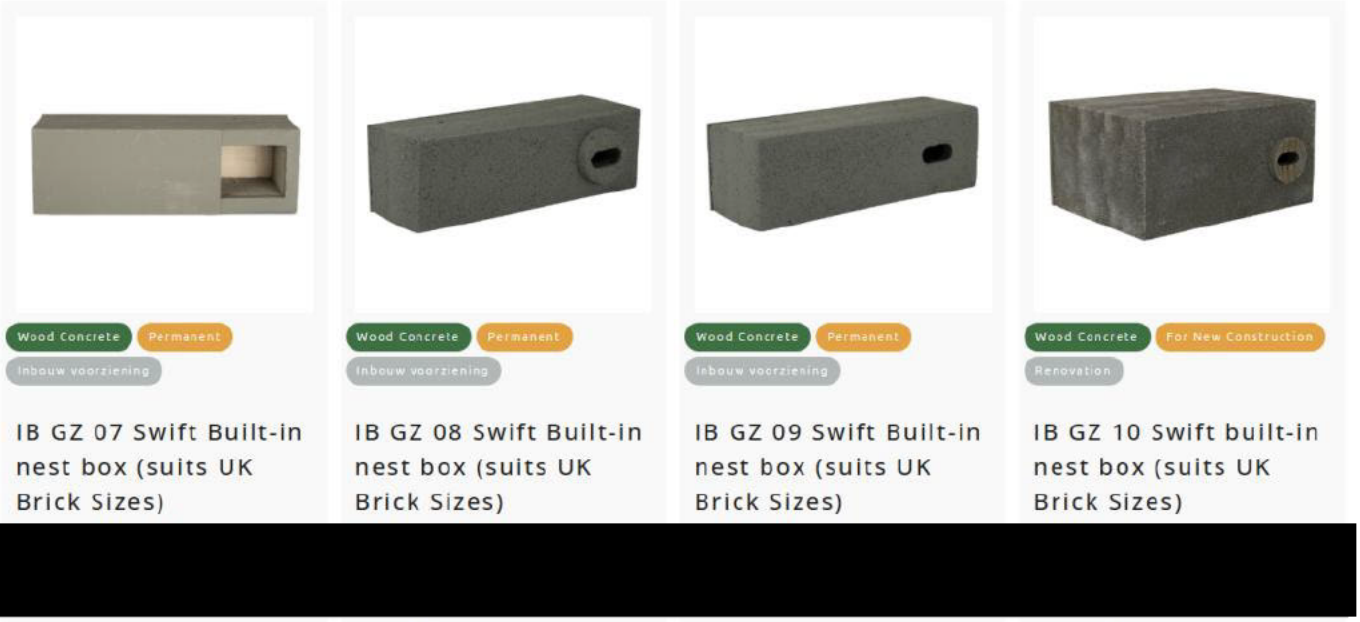
5.0. Mitigation/Compensation

In relation to the National Planning Framework (2024) there will be no requirement for Mitigation/ Compensation measures for bats or further surveys required.

.As a basic biodiversity enhancement the provision of 2 x bat box and 3 x sift nesting boxes (in recesses on front elevation on the converted building) is recommended. A selection of suitable types are shown below:



Vivara Pro Granada Wall-Mounted Facade Bat Box



In addition, external lighting should be restricted and should conform with BCT guidelines (Appendix 3 has a summary) though more recent guidance 'Bats and External lighting, BCT, 2018', last updated in 2025 should be followed.

6.0. References

Bats in Roofs. A guide for surveyors. English Nature, Peterborough, Mitchell-Jones, A.J. (2004).

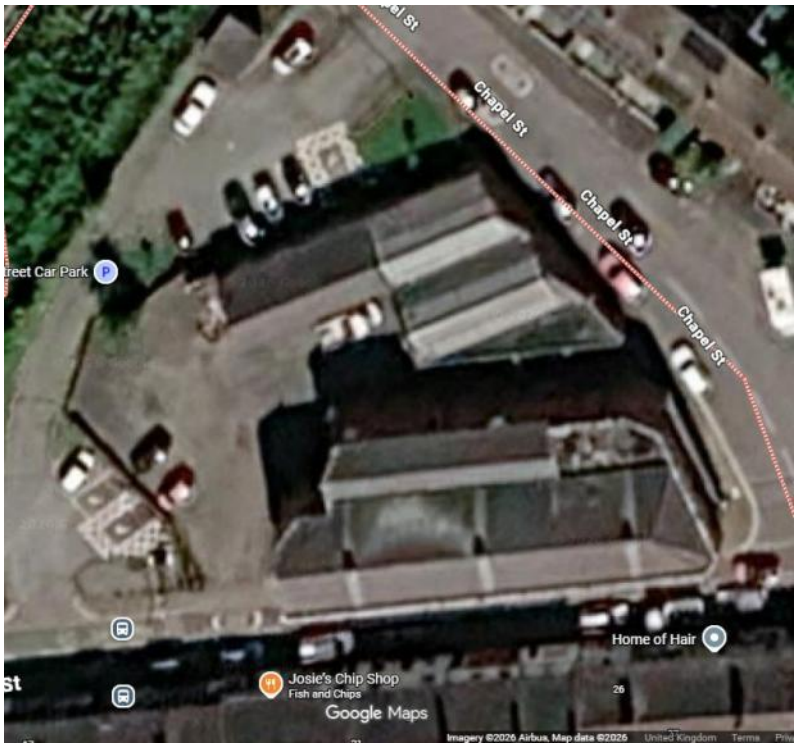
Bat Mitigation Guidelines. English Nature, Peterborough, Mitchell-Jones, A.J.& Mcleish, A.P. (Eds)(2004).

Bat workers Manual, 3rd Edn. Joint Nature Conservation committee, Peterborough.

Bat Survey guidelines (2023), Bat Conservation Trust

NPPF, 2024

Appendix 1: Aerial Photographs: detail of area and location, existing layout



Wider landscape context



Appendix 2: Site images

External and internal images:



B2 exterior



Car parking area



B2



B2



B1 rear



B2







B1



B2



B1 internal



B1 internal



B1 internal



B1 showing cobwebbing



B1



Remnant jackdaw nest 9old)



B2 internal





B2 internal





Cellar area



B1 frontage



B1 frontage




Wheatsheaf
Workshops
Gweithdai
Wheatsheaf
EACH FOR ALL
ALL FOR EACH
1901 – 1981


WHEATSHEAF WORKSHOPS
Pugh
0345 505 900
AUCTION




WHEATSHEAF WORKSHOPS
Pugh
0345 505 1200
AUCTION



B1/B2 side





B2 exterior



B2 exterior



B1 showing roof





B1 and B2 in situ

Appendix 3: External lighting guidance

MITIGATION OF LIGHTING IMPACTS ON BATS

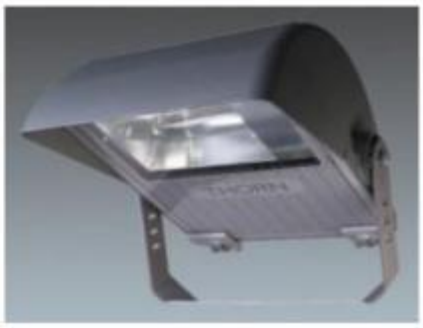
- FORAGING AND COMMUTING Type of lamp (light source) The impact on bats can be minimised by the use of low pressure sodium lamps or high pressure sodium instead of mercury or metal halide lamps where glass glazing is preferred due to its uv filtration characteristics.

- Luminaire and light accessories Lighting should be directed to where it is needed and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned so as to form a barrier. **Suitable examples shown below:**

Double Asymmetric Luminaire



Simple Hood



- Lighting column The height of lighting columns in general should be as short as is possible as light at a low level reduces the ecological impact. However, there are cases where a taller column will enable light to be directed downwards at a more acute angle and thereby reduce horizontal spill. For pedestrian lighting this can take the form of low level lighting that is as directional as possible and below 3 lux at ground level.

- Light levels The light should be as low as guidelines permit. If lighting is not needed, don't light. Timing of lighting The times during which the lighting is on should be limited to provide some dark periods. Roads or trackways in areas important for foraging bats should contain stretches left unlit to avoid isolation of bat colonies. These unlit stretches should be 10 metres in length either side of commuting route.

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- SECURITY LIGHTING Power It is rarely necessary to use a lamp of greater than 2000 lumens (150 W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for bats.
- Movement sensors Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed. Timers If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.

- Aim of light The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. This lit area must avoid being directed at, or close to, any bats' roost access points or flight paths from the roost. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats as well as people and other wildlife.
- **Suitable types shown below (note that these are wall mounted and directed downwards**

Circular Louvre



Cowl & Louvre



Cowl (or Hood)



References: Bats and lighting BCT guidance and Guidance notes for the reduction of obtrusive lighting.