



BAT RISK ASSESSMENT AND BAT SURVEY REPORT

**WITCHER WELL
DUNSOP BRIDGE**

**RSC-19-01
OCTOBER 2020**



Naturally Wild Consultants Limited
3 Halegrove Court
Cygnet Drive
Bowesfield
Stockton-on-Tees
TS18 3DB

Email: hello@naturallywild.co.uk

BAT RISK ASSESSMENT AND BAT SURVEY REPORT

WITCHER WELL
DUNSOP BRIDGE
RIBBLE VALLEY
BB7 3AZ

GRID REF
SD 65205 52101

REPORT FOR
JOHN IBISON

Quality Assurance

Version	Prepared by	Date	Checked by	Date	Approved by	Date
R1	Michael Underwood	06/10/2020	Sam Gate	08/10/2020	Matthew Buxton	13/10/2020

This assessment is intended to provide an accurate description of findings from the desktop study and from survey work undertaken on the dates shown; however, it cannot fully account for the reliability of third party data provided or for any changes to site conditions following the completion of the survey work due to activities carried out on site or the dynamic nature of the natural environment. All work carried out by Naturally Wild Consultants Ltd is subject to our Terms and Conditions.

The report has been produced in accordance with current best practice guidelines.

REPORT CONTENTS

EXECUTIVE SUMMARY	4
1 INTRODUCTION.....	5
2 RELEVANT LEGISLATION.....	6
3 METHODOLOGY.....	7
3.1 Overview	7
3.2 Survey Area.....	7
3.3 Survey Constraints	8
3.4 Site Assessment.....	8
3.5 Bat Activity Surveys.....	9
3.6 Other Wildlife.....	10
4 RESULTS	11
4.1 Desktop Study	11
4.2 Bat Risk Assessment.....	11
4.2.1 On-Site Assessment	11
4.2.2 Off-Site Assessment	13
4.2.3 Bat Activity Surveys	13
4.2.4 Assessment Summary	14
4.3 Other Wildlife.....	15
5 CONCLUSIONS AND RECOMMENDATIONS.....	16
5.1 Mitigation Measures	16
5.2 Enhancement Measures.....	17
6 SITE IMAGES	19
7 BIBLIOGRAPHY & REFERENCES.....	24
8 APPENDICES.....	25
8.1 Additional Information for the Legislation of Other Protected Species.....	25
8.2 Development Plans	27

EXECUTIVE SUMMARY

Naturally Wild were instructed to undertake a bat risk assessment and bat activity surveys at Witcher Well, Dunsop Bridge. The survey area is comprised of a fish hatchery building. The proposals are to convert the building into three separate dwellings to be rented out as holiday accommodation.

The assessment comprised a series of site visits. An Ecological Impact Assessment of the site was previously conducted by Naturally Wild in 2019 under the scope of previous proposals for the site. This included a desktop study, an initial walkover survey of the site, and a single bat activity survey, detailed in Naturally Wild's EclA report (RSC-19-01, August 2019). The results of this bat risk assessment should be read in conjunction with the EclA report.

The initial site visit consisted of an assessment of all habitats on site and in the surrounding area to determine their value for bats (as well as other protected/notable species) and was conducted on Thursday 3rd September 2020 by ecologist Michael Underwood MSc. Following the initial survey, two bat activity surveys were conducted: one pre-dawn survey on Thursday 10th September 2020 and one dusk survey on Monday 28th September 2020.

The surveyed area was found to be of overall low ecological value. Notwithstanding this, the fish hatchery was confirmed as being used as a day roost by a single soprano pipistrelle bat. The area of the bat roost is not proposed to be directly impacted, and the roost is planned to be retained; however, the proposed works are likely to result in temporary disturbance to the roost.

Following the site assessment and in review of the findings, a series of ecological mitigation and enhancement measures to be incorporated into the re-development have been outlined. These include carrying out conversion works on the fish hatchery building under a European Protected Species mitigation licence to be obtained from Natural England, along with the provision of appropriate enhanced roosting habitat post-works. Native tree and shrub planting and a sensitive lighting scheme will also be implemented. Full details are provided in section 5.

Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to bats or any other protected species as a result of the proposed works.

BAT RISK ASSESSMENT AND BAT SURVEY REPORT: WITCHER WELL, DUNSOP BRIDGE

1 INTRODUCTION

Naturally Wild were instructed to undertake a bat risk assessment and bat activity surveys at Witcher Well, Dunsop Bridge (Figure 1). The survey area comprised two buildings: one large fish hatchery building; rectangular, brick-built with a tiled pitched roof and large metal shutter door on the front. The other building is a concrete, breezeblock and brick structure with curved metal corrugated roof. The main objective of the assessment was to determine the suitability of the site to support bats (and other protected species) and to check for any evidence of their presence, as well as the presence of any protected or notable habitats.

The proposals are to convert the fish hatchery building, with previous use as a salmon hatchery, into three separate self-contained holiday apartments, with the creation of a car parking area to the north west of the building and replacement of a corrugated metal roof with a green roof on another small structure on site to the east of the main building. Work will involve vegetation clearance for car park creation, and works to the roofs of both mentioned buildings, as well as considerable internal works to the building proposed for conversion.

As part of the planning process, an ecological assessment is required to determine if any European, UK Biodiversity Action Plan (BAP) or other important protected species/habitats are likely to be affected by the proposed works, and to show how any negative ecological impacts would be mitigated and compensated.



Figure 1. Site location plan. Red line shows the area proposed for re-development.

(© Crown Copyright and MAGiC database rights 2020. Ordnance Survey 100022861).

2 RELEVANT LEGISLATION

British wildlife is protected by a range of legislation, the most important being the Wildlife and Countryside Act 1981, the Countryside Rights of Way Act 2000 and The Conservation of Habitats and Species Regulations 2017 (as amended). The Wildlife and Countryside Act, as amended mainly by the Countryside Rights of Way Act, protects species listed in Schedules 5 and 8 of the Act (animals and plants respectively) from being killed, injured, and used for trade. For some species, such as great crested newts and all bat species, the provisions of this act go further to protect animals from being disturbed or taken from the wild and protects aspects of their habitats. The Act also stipulates that offences occur regardless of whether they were committed intentionally or recklessly. The parts of this legislation that apply to most reptile species are in regard to killing, injury and trade only and do not protect their habitat, nor are they protected from disturbance or from being taken from their habitat.

The Conservation of Habitats and Species Regulations is the English enactment of European legislation and provides similar but subtly different protection for species listed on Schedules 2 and 4 of those regulations. A recent change in this legislation means that the provisions of this Act now complement those of the Wildlife and Countryside Act more. Species to which these provisions apply are known as European Protected Species. Activities that might cause offences to be committed can be legitimised by obtaining a licence from the relevant statutory body.

All British bat species are listed on Schedule 5 of the Wildlife and Countryside Act 1981 and are afforded protection under Section 9 of this Act. In addition, all British bat species are listed on Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (amended) and are protected under Regulation 39 of these Regulations. They make provision for the purpose of implementing European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992, under which bats are included on Annex IV. The Act and Regulations makes it an offence, *inter alia*, to:

- Intentionally kill, injure, take (handle) or capture a bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not) – under the Habitats Regulations it is an offence to damage or destroy a breeding site or resting place of any bat; or
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection – under the Habitats Regulations it is an offence to deliberately disturb a bat (this applies anywhere, not just at its roost) in such a way as to be likely to affect its ability to survive, breed, reproduce, rear or nurture its young, or hibernate.

Further details of the above legislation, and of the roles and responsibilities of developers and planners in relation to bats, can be found in Natural England's (formerly English Nature) Bat Mitigation Guidelines (Mitchell-Jones, 2004), and further details on the legislation protecting other species of British wildlife relevant to this assessment can be found in section 8.1 of this report.

3 METHODOLOGY

3.1 Overview

The assessment comprised a series of site visits. All survey and assessment work has been completed in line with official guidelines produced by Natural England and the Chartered Institute for Ecology and Environmental Management, and British Standard document BS 42020: 2013 '*Biodiversity – Code of practice for planning and development.*'

The objective of the surveys was to determine the suitability of the site for roosting bats and check for any evidence of their presence. This took the form of an initial bat risk assessment of the site, which was followed by two bat activity surveys. In accordance with good practice, the assessment would also ascertain if any other protected species may be using the site, document the habitats present and determine any potential ecological impacts during and following the completion of the works. The findings of the assessment would identify the need for any additional survey effort, mitigation measures and/or compensation to be incorporated into the proposed works. The bat activity surveys would be used to confirm the presence of roosting bats on site and determine the numbers and species of bats present, or to confirm likely absence, along with any further mitigation and/or compensation measures that may be required. All survey work would be completed under suitable weather conditions and by an experienced ecologist.

The survey work and the preparation of this report has been conducted by ecologist Michael Underwood MSc (Natural England bat licence ref: 2020-44798-CLS-CLS), who is experienced in protected species survey work, with assistance on survey work provided where necessary.

It should be noted that an Ecological Impact Assessment (EclA) of the site was previously conducted by Naturally Wild in 2019 under the scope of previous proposals for the site. This included a desktop study, an initial walkover survey of the site, and a single bat activity survey, detailed in Naturally Wild's EclA report (RSC-19-01, August 2019). The results of this bat risk assessment should be read in conjunction with the EclA report.

3.2 Survey Area

The application site (Figure 2) is located at Grid Reference SD 65205 52101 and can be accessed via a private access road from the main road through Dunsop Bridge. The assessment focused on the application site, as well as all habitats in the immediate surrounding area (where access was available).



Figure 2. Location of the surveyed area. Site boundary is shown by the red line with surveyed buildings shaded red.

(Image taken from Google Earth Pro: ©2020 Google)

3.3 Survey Constraints

There were no constraints with regards to site access or completion of the survey objectives across the site.

3.4 Site Assessment

The initial survey was carried out on Thursday 3rd September 2020 and consisted of an assessment of the habitats on site to determine their suitability for roosting bats. An assessment of the on-site buildings was carried out in order to identify the presence of any potential roost features (PRFs) for bats, and/or evidence of roosting bats, in accordance with the current Bat Conservation Trust (BCT) survey guidelines (Collins, 2016). An external inspection of the buildings was carried out, focussing on features that may provide roosting opportunities or access points to roosting features internally, such as the roof and ridge tiles. An internal inspection was also carried out, with any roof spaces present checked for any evidence of bats. The buildings were then categorised based on their assessed value for roosting bats, in accordance with the BCT guidelines, detailed in Table 1.

Table 1. Guidelines for assessing bat roosting potential of structures and trees.

Suitability	Habitat description	Further action required?
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further bat risk assessment effort or bat activity surveys are required.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions 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 or hibernation).	Structures: One bat activity survey is required to determine whether the structure is being utilised by roosting bats; this may be a dusk or dawn survey. This survey must occur between May and August. The discovery of a roosting bat during this single bat activity survey will require further survey effort.
	A tree of sufficient size and age to contain PRFs, but with none seen from the ground or features seen with only very limited roosting potential.	Trees: No further bat risk assessment effort or bat activity surveys are required.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection conditions and surrounding habitat, but unlikely to support a roost of high conservation status.	Two bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey. One survey must occur between May and August.
High	A structure or tree 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 and surrounding habitat.	Three bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey, with an additional survey (either dusk or dawn). Two surveys must occur between May and August.

Evidence of roosting bats includes: bat droppings in, around or below an entrance hole; staining around an entrance hole; small scratches around an entrance hole; audible squeaking at dusk or in warm weather; smoothening of surfaces around cavity or an entrance hole; distinctive smell of bats.

The assessment was completed using ladders, binoculars and a powerful torch. An endoscope was also available to check any small gaps/cracks for evidence of bats. The assessment was carried out by Michael Underwood under weather conditions that were considered to be suitable for completing the assessment; with a temperature of 15°C, no precipitation, very light wind (Beaufort scale 1), and low cloud cover (3 oktas).

3.5 Bat Activity Surveys

In addition to the above, as one building was found to contain some evidence of roosting bats during the initial assessment, in accordance with the above guidelines, two activity surveys were carried out. A pre-dawn return to roost survey was carried out on the morning of Thursday 10th September 2020 and a dusk emergence survey was carried out on Monday 28th September 2020. The surveys were carried out by two surveyors using bat detectors (Magenta Bat5, Batbox Duet and Pettersson M500) along with direct visual observation. The surveyors took up suitable vantage points around the building in order to observe any bats emerging/returning to roost, with the detectors used to identify bat calls and confirm species present.

The dusk survey commenced 15 minutes before sunset and ended an hour and a half after sunset and the dawn survey commenced an hour and a half before sunrise and concluded 15 minutes after sunrise. Naturally Wild staff who conducted the surveys were ecologists Michael Underwood and Samantha Gate.

3.6 Other Wildlife

In accordance with good practice, the site and surrounding areas were assessed for their potential to support other protected species and for the presence of any evidence of protected species. Based on the habitats present, the assessment was carried out with regard to badgers (*Meles meles*), great crested newts (GCNs) (*Triturus cristatus*), reptiles and nesting birds.

4 RESULTS

4.1 Desktop Study

As mentioned previously, Naturally Wild undertook a desktop study in 2019 as part of the EclA, which is available upon request. Due to the scope of the current proposed development in relation to the previous proposals for which the EclA was completed, the findings of the desktop study are still considered relevant for the current assessment.

4.2 Bat Risk Assessment

4.2.1 On-Site Assessment

The site comprised one large fish hatchery building, and a second smaller building, which houses a water tank and is comprised of a corrugated single sheet metal roof and concrete block walls. Both of the buildings are set within an area of amenity grassland. The value of these habitats to bats is discussed below, with the locations of each building shown on Figure 3.

Table 2. Building descriptions and assessment of b1at roosting value.

Building Ref.	Description	Assessment	Bat Value
B1	<p>Single-storey stone brick building with a pitched synthetic tiled roof. A number of vent tiles are present along the length of the roof, providing gaps.</p> <p>Internally, several water tanks with flowing water are present which have been previously used as a fish hatchery.</p>	<p>Overall limited access opportunities for bats, apart from the vent openings.</p> <p>Walls in good condition. Possible entry point through gap above roller shutter door.</p> <p>The building is currently used as storage for a caravan and is only frequented occasionally by the owner for general maintenance and security.</p> <p>One hole in roof, other than that the roof was found to be in good condition. The roof is lined with a black felt liner internally.</p> <p>No evidence of bat activity around the exterior.</p> <p>Two bat droppings found inside, indicative of pipistrelle (<i>Pipistrellus sp.</i>) bats.</p> <p>This building is due to undergo internal works to convert it to holiday accommodation.</p>	Confirmed roost

B2	Concrete block walls and curved corrugated metal roof. The building houses the water tank.	Some potential access point between small gaps, but no roosting features internally and the building is likely subject to significant temperature fluctuation due to the structure and construction type of the roof, creating sub-optimal roosting conditions. No evidence of bats observed. This building is due to be retained, with a green roof to be installed.	Negligible
----	--	---	------------



*Figure 3. Building locations.
(Image taken from Google Earth Pro: ©2020 Google).*

Due to the size and construction type of B1, along with disturbance caused by previous active use, this building was considered to be of overall low suitability for use as a hibernation roost. For the same reasons as outlined in Table 2, B2 was considered to be of negligible suitability for hibernation.

A third building is present within the application site boundary, but is due to remain unaffected by the works. There are no other structures or habitats present on site that could offer roosting opportunities for bats.

4.2.2 Off-Site Assessment

Off-site habitats are described in Naturally Wild’s EclA report. An updated site walkover conducted during the bat risk assessment indicated no significant changes. Furthermore, due to the localised, small-scale nature of the proposed re-development, off-site habitats are expected to remain largely unaffected by the proposed works.

4.2.3 Bat Activity Surveys

Due to B1 being found to contain some evidence of roosting bats, two bat activity surveys were carried out on this building. The weather conditions for both surveys were considered suitable for bats to be active and are summarised in Table 3.

Table 3. Bat activity survey weather conditions.

Date	Survey start	Sunset/sunrise	Survey end	Temp. (°C)	Precipitation	Wind (Beaufort)	Cloud (Oktas)
10/09/2020	05:05	06:35	06:50	8	None	2	1
28/09/2020	18:38	18:53	20:23	13	None	3	8

Results of each of the bat activity surveys are provided in the paragraphs below, with notable findings summarised in Figure 4. It should be noted that only a summary of the key findings has been provided, although full results are available upon request.

During the first survey bat activity was low, with three recordings of commuting soprano pipistrelle (*Pipistrellus pygmaeus*) made between 05:31 and 05:45. The direction of flight could not be established due to it being too dark to see and the commuting passes were heard and not seen. No re-entry of bats to the building was recorded.

During the second survey, bat activity was higher than the first survey, with three species being recorded, including noctule (*Nyctalus noctule*; ‘Noc’ on Figure 4), which made a commuting pass at 19:45 along the edge of coniferous woodland to the west of the building. A common pipistrelle (*Pipistrellus pipistrellus*; ‘C. pip’ on Figure 4) was recorded commuting at 19:30 from the woodland to the west in an easterly direction towards the River Dunsop. Another heard not seen commute of a common pipistrelle was made at 19:53. A soprano pipistrelle was recorded commuting at 20:09.

One soprano pipistrelle (‘S. pip’ on Figure 4) was observed emerging from the building at 19:02, on the top of the eastern gable end.

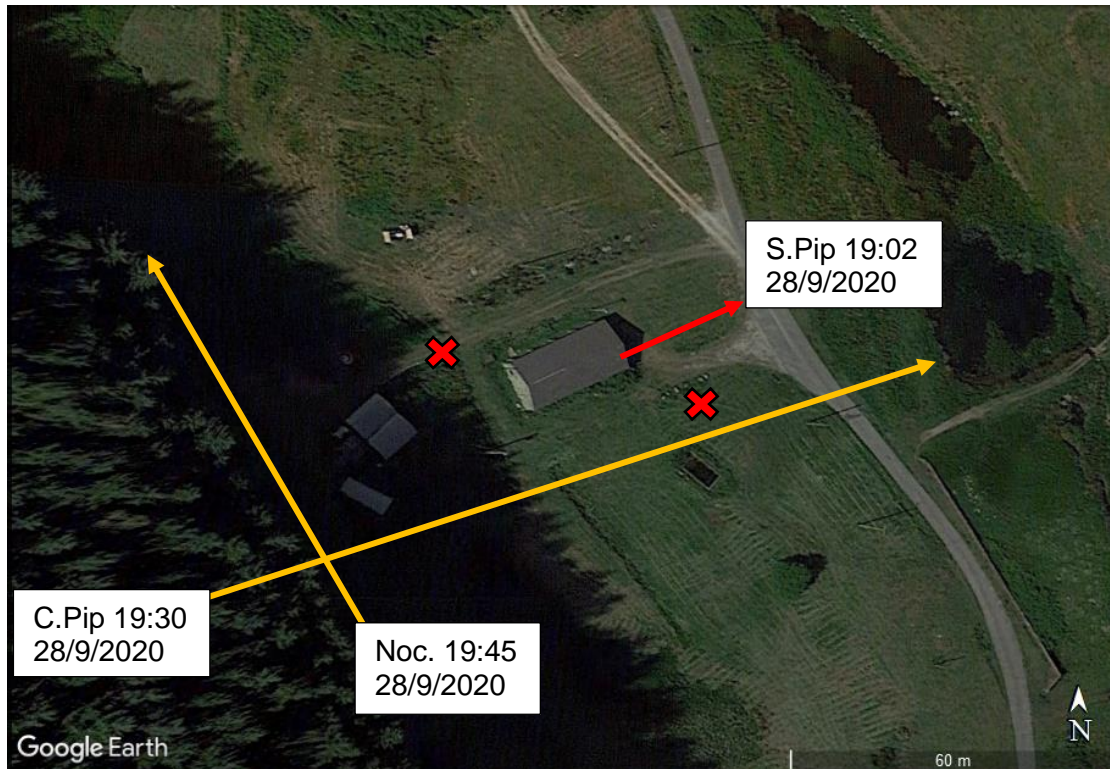


Figure 4. Summary of bat survey results. Red arrow indicates bat emergence, yellow arrows indicate witnessed commuting, and red markers indicate surveyor locations.

(Image taken from Google Earth Pro: ©2020 Map Data Google)

In addition to the above, a single dusk emergence survey had also previously been carried out on site in May 2019 as part of the EclA. No bats were recorded emerging from any of the buildings on site.

4.2.4 Assessment Summary

The results of the building assessments and activity surveys carried out would indicate that B1 is used as an occasional day roost by small numbers of soprano pipistrelle (likely just a single bat) and is not a roost of significant conservation value, such as a maternity or hibernation roost. Due to the nature of the works and location of the roost, the roost is also expected to be retained during and post-works and not directly affected. Notwithstanding this, in the absence of suitable mitigation, any works carried out on this building are highly likely to result in the disturbance of the roosts present due to the proposed internal works and works to the roof for skylight installation. This is considered likely to have a moderate negative impact at site level but, due to the low numbers of relatively common bats present and a low impact at a wider level.

Based on the results of the surveys carried out, it will be necessary to implement appropriate mitigation and compensation measures as part of the re-development works in order to ensure that the proposals do not have a significant negative impact on the roosting bats present on site.

4.3 Other Wildlife

The value of the site in terms of other wildlife has been covered by Naturally Wild as part of the EclA in 2019, with the updated site visit on 3rd September 2020 indicating no significant changes to the habitats present and with no evidence of other protected or notable species found. On this basis, the results of the previous assessment are still considered valid.

5 CONCLUSIONS AND RECOMMENDATIONS

The site was found to be of overall low ecological value. Notwithstanding this, B1 was confirmed as being used as a day roost by a single soprano pipistrelle bat. The area of the bat roost is not proposed to be directly impacted, and the roost is planned to be retained; however, the proposed works are likely to result in temporary disturbance to the roost and, therefore, appropriate mitigation measures will be required to ensure any impacts to roosting bats are avoided during and post works. Conclusions and recommendations relating to the wider site plans have been covered by Naturally Wild in the EclA report. Following the site assessment and in review of the findings, Naturally Wild would recommend the following with regards to the confirmed bat roost:

5.1 Mitigation Measures

- Although not considered to be a roost of significant conservation value, due to the confirmed presence of a roost in B1, it will be necessary to obtain a European Protected Species (EPS) mitigation licence from Natural England to legally permit the conversion works on the building that will result in the likely disturbance of the bat roost. Once a licence had been granted, works would need to be carried out in a precautionary way, with a thorough inspection carried out beforehand by a suitably qualified and licensed ecologist to check for the presence of any roosting bats, and any works considered likely to disturb the roost to be carried under the direct supervision of the ecologist until such time as it is considered that the works can be carried out without disturbing roosting bats.
 - Any bats found during the initial inspection or supervised works would be carefully caught by the attending ecologist and moved to compensatory habitat provided elsewhere on site (see below). A specific methodology for the works, as well as suitable enhanced roosting habitat to provide additional roosting opportunities, would be provided within the EPS licence application documentation to be submitted to Natural England, but an indication of enhanced habitat to be provided is given in section 5.2, below.
 - In accordance with the Bat Mitigation Guidelines, the roost in B1 would be classed as *“individual bats of common species,”* with the proportionate mitigation being *“flexibility over provision of bat-boxes, access to new buildings etc. No conditions about timing or monitoring.”* On this basis, there are not considered to be any timing constraints in relation to bats for carrying out the re-development works; however, as the roosting location will remain in situ post-works, but is expected to be disturbed by internal refurbishment works, it is considered most appropriate to time the works to be carried out over winter, due to the low hibernation suitability of the building, to minimise the likelihood of any bats being present at the time of the works and being unnecessarily disturbed.

-
- Although bat activity on site has been found to be relatively low overall, adjacent habitats have been found to be of some value for commuting and foraging activity. A low-level lighting scheme will be implemented post-works, which will include low-level timber bollard lighting and downward-facing wall-mounted lights. This will help to avoid unnecessary light spill and consequent indirect disturbance to foraging and commuting bats (and other wildlife) that may be using the woodland to the west and river to the east.

5.2 Enhancement Measures

- Installation of a Schwegler 2FE wall-mounted bat shelter, fitted to the western elevation of the building which opens out towards the woodland area, will provide enhanced roosting habitat for bats on site post-works (highlighted in Appendix 8.2).
- Mixed native tree and shrub planting is to be carried out as part of the re-development. The planting will be carried out to assist with visual screening of the site for the surrounding area, but will also provide a habitat enhancement post-works, offering suitable habitat for local populations of invertebrates, birds, bats and small mammals in the long term.

- Any bund areas created around the proposed car park could be created and managed for the benefit of invertebrate species, which would in turn benefit foraging bats and other wildlife. This would involve using a low nutrient substrate such as building sand or chalky rubble to cap the bund, prior to seeding with a suitable wildflower/calcareous grassland seed mix. Vegetation should be managed along the bund to maintain a sparse coverage, with annual strimming of up to half of the overall area recommended, alternating areas on consecutive years. All cuttings should be removed to prevent the accumulation of nutrients. Naturally Wild can provide further details upon request.
- Tree-mounted bat and bird boxes installed in the surrounding area would provide enhanced roosting and nesting habitat post-works.

Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to bats or any other protected species as a result of the proposed works.

6 SITE IMAGES



Image 1. Eastern elevation of B1 with bat emergence location highlighted red.



Image 2. Southern elevation of B1.



Image 3. Western elevation of B1.



Image 4. Internal of B1 workshop/fish hatchery.



Image 5. Hole in roof of B1, highlighted red.



Image 6. Bat dropping found within B1.



Image 7. Internal of B2.



Image 8. Internal of B2.

7 BIBLIOGRAPHY & REFERENCES

Amphibian and Reptile Groups of the UK (2010) *ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index*. Available: <http://www.arguk.org/download-document/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5>

British Standards Institution (2013) *BS 42020:2013. Biodiversity – Code of practice for planning and development*. British Standards Institution, London.

CIEEM (2016b) *Guidelines for Accessing and Using Biodiversity Data*. CIEEM, Winchester.

CIEEM (2017a) *Guidelines for Preliminary Ecological Appraisal (2nd ed.)*. CIEEM, Winchester.

CIEEM (2017b) *Guidelines for Ecological Report Writing (2nd ed.)*. CIEEM, Winchester.

CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland (3rd ed.)*. CIEEM, Winchester.

Collins, J. (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edn*. Bat Conservation Trust, London.

The Conservation of Habitats and Species Regulations 2017 (as amended).

Cresswell, W. and Whitworth, R. (2004) *An assessment of the efficiency of capture techniques and the value of different habitats for great crested newts*. English Nature Research Reports 576. English Nature, Peterborough.

European Commission. Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

European Economic Community. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Ministry of Housing, Communities and Local Government (2019) *National Policy Planning Framework*. Crown Copyright 2019. <https://www.gov.uk/government/collections/revised-national-planning-policy-framework>

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

Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2019]. Ordnance Survey 100022861. Available at: <http://www.magic.gov.uk/>

Oldham, R.S., Keeble, J., Swan, M.J.S. and Jeffcote, M. (2000) *Evaluating the suitability of habitat for the Great Crested Newts (Triturus cristatus)*. Herpetological Journal 10: 143-155.

The Protection of Badgers Act (1992).

Rose, F. and O'Reilly, C. (2006) *The Wild Flower Key*, Revised Edition. Penguin Books, London.

The UK Biodiversity Action Plan. Available: <http://jncc.defra.gov.uk/page-5155>

Wildlife and Countryside Act 1981 (as amended).

8 APPENDICES

8.1 Additional Information for the Legislation of Other Protected Species

Badgers: The badger is geographically widespread across the UK; however, they are still vulnerable to baiting, hunting and detrimental impacts of development to their habitat. Both the badger and its habitat are protected under The Protection of Badgers Act 1992, Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) an Appendix Three of the Bern Convention; therefore, badgers have legal protection against deliberate harm or injury and it is an offence to:

- Interfere with a badger sett by damaging or destroying it
- Kill, injure, take or possess a badger
- Cruelly ill-treat a badger
- Obstruct access to a badger sett
- Disturb a badger whilst it is in a badger sett

Nesting Birds: Birds receive protection under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly kill, injure or take any wild bird; take, damage or destroy a nest of a wild bird whilst it is in use or being built; or to take, damage or destroy an egg of a wild bird. The bird-nesting season is defined as being from 1st March until 31st August with exceptions and alterations for some species.

Great Crested Newts: Great crested newts are a European Protected Species, listed on Annex II and IV of the EEC Directive on the Conservation of Natural Habitats and Wild Fauna and Flora, receiving protection under Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (as amended). This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981. Under such legislation it is an offence to:

- Intentionally or recklessly* kill, injure or capture a great crested newt;
- Possess or control any live or dead specimen or anything derived from a great crested newt;
- Intentionally or recklessly* damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Intentionally or recklessly* disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

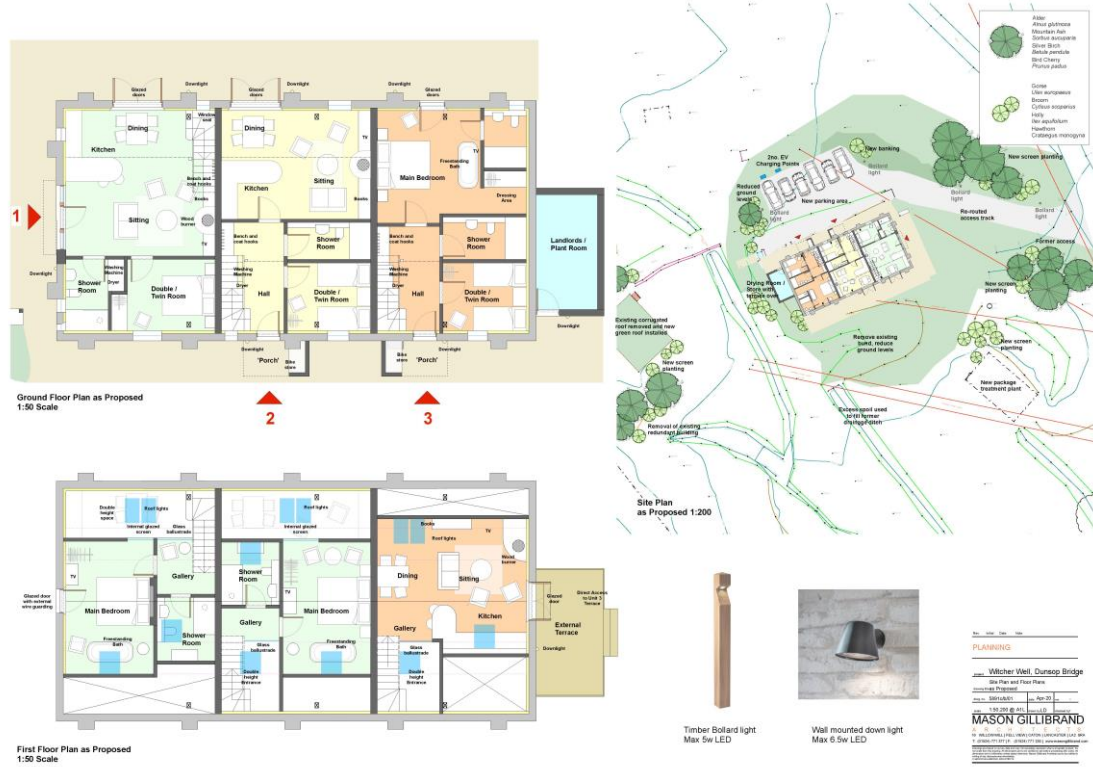
**Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.*

To undertake surveys for great crested newts it is necessary to hold an appropriate licence issued by Natural England.

Reptiles: All native British species of reptile (of which there are 6) are listed on Schedule 5 of the Wildlife and Countryside Act 1981 and, as such, are protected from deliberate killing, injury or trade; therefore, where development is permitted and there will be a significant change in land use, a reasonable effort must be undertaken to remove reptiles off site to avoid committing an offence. The same Act makes the trading of native reptile species a criminal offence without an appropriate licence.

8.2 Development Plans

Site Plan and Floor Plans, Drwg. No. 5891c/b/01, Mason Gillibrand Architects, April 2020



Proposed location of a Schwegler 2FE wall-mounted bat shelter (highlighted blue) to act as a roosting enhancement on site.

