Ecological Consultant - Colin N Wills

PEA SURVEYS - SITES - BUILDINGS - REPORTS

1 South Street, Denbury, Newton Abbot, Devon TQ12 6DH

[redacted]

Ms S Goodwin

c/o E J T Architectural Surveyors

26th May 2021

Preliminary Ecological Appraisal 'Bat and Bird Survey'

Proposed development 1 Brady Close, Sandford, Crediton, EX17 4LQ

I confirm that I carried out an inspection of the above property on 21st May 2021 looking for evidence of use by bats, nesting birds or other protected wildlife.

I understand that the proposal will entail the creation of a 2-storey extension to the northern end of the house.

Bats

The semi-detached house has block cavity walls with render to the exterior. The roof is of interlinking concrete tile lined with bitumastic underfelt and insulated with a double layer of rockwool loft insulation.

The loft space was accessed via a hatch in the landing ceiling, with all areas fully accessible for inspection. The area was partially boarded for storage and access to the boiler; however this did not impede the survey.

Careful search within the roof void did not reveal any signs of use by bats, such as indicative droppings or insect remains, wear markings or grease staining; sounding of the bitumastic underfelt also revealed no signs of use by bats. There were no signs noted on the interior gable walls or in walltop areas.

Outside, few gaps or potential roost sites were found within the roof or ridge and the UPVC fascias and barge boards and soffits were tightly fitted and in good condition with no visible entry points. No wear marks were seen and no bat droppings were found on the walls or window ledges.

As there were few areas which would offer opportunities for use by bats and no evidence of use by

bats was found, it is deemed unnecessary to carry out further surveys at this time.

Due to recent dramatic declines in numbers, all bats and their roosts are fully protected under the 1981 Wildlife and Countryside Act (as amended), through inclusion in Schedule 5 and under The Conservation of Habitats and Species Regulations 2019. This legislation makes it an offence to intentionally kill, injure, possess, take, disturb or destroy their place of shelter.

The findings confirm that the building is not a bat roost.
A European Protected Species Licence will **not** be required for works to this building, and provided the precautions noted below and the law regarding nesting birds are observed, works could proceed at any time of year.

Although the site is not covered by any statutory designations protecting the landscapes used by bats, external lighting should ideally be of low-lumen intensity (this is not the same as low wattage), shielded to the ground with a cowl to ensure that only the target areas are illuminated and that light spill into other areas such as the open countryside and hedgerows to the north of the property is prevented.
This is important not only because some species of bat are light averse and will actively avoid lit areas, but an increasing body of evidence is pointing towards the extremely detrimental effects of artificial lighting on the nocturnal landscape, enjoyment of dark skies and our own wellbeing.
The use of PIR sensors set on short timers or infra-red security technology will all help to reduce periods of unnecessary illumination at night.

PRECAUTIONS DURING BUILDING WORKS

Bats are highly mobile creatures and as there is always a possibility of individual bats being present at any time of the year, I recommend the following when the works to the building commence;

> Builders/contractors working on site must be made aware of the possibility of individual bats being present in the building at any time of the year.
> Breaking into the existing roof coverings of the building should proceed with caution: Special care should be taken when removing any ridge tiles and tiles above the wall tops which should be loosened and lifted vertically rather than being slid off; this will avoid crushing any bats which may be roosting underneath. The underside of all tiles should be checked for a roosting bat before being stacked or discarded into a skip.
> Fascia and soffit cladding/boarding should be pulled free of the wall and checked for signs of bats either on the board, or in a hidden crevice.

Removal of any of the underfelt from within the existing roof should be undertaken with care as individual bats may be able to access the gaps between this material and the tiles.

Removing any areas of flashing should also be done with care, as individual bats may be able to access gaps or creases in these materials.

Bats should not be handled, and never without gloves. If bats are encountered during any of these operations please contact me for advice before proceeding.

Timber Treatment:

If pre-treated timber is used, either for replacement or for battens;

There is no evidence that any pre-treatment of timbers is harmful to bats, probably because the method of application results in much lower concentrations of pesticides on the wood surface compared with remedial applications.

If remedial timber treatment is found to be necessary;

Only a fluid containing permethrin or cypermethrin, flufenoxuron or boron based fluid, to treat wood-boring insects; with copper, zinc or boron compound to prevent rot, preferably in emulsion or aqueous solution, should be used.

These fluids are much less toxic to bats than other commercially available alternatives and will not kill bats that may use the roof in the future.

Nesting birds/other wildlife

There was no evidence to suggest that the property was being/had been historically used by nesting birds, with few opportunities available for this activity.

Although no nest sites were identified on the property at the time of survey:

The nesting season is between the beginning of March and the end of August, and nesting may take place at any time within this period.

Under present UK legislation birds and their nests are fully protected under the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird. It is an offence to intentionally take, damage or destroy the eggs, or young or nest, of any bird whilst it is being built or in use.

A check of the building and adjacent garden for nesting birds should be made before work commences, and if nesting activity is discovered, the nesting area should be protected and all works in the area of the nest should be delayed until the young birds have fledged.

In common with most garden areas, low potential exists for individual **reptiles** and **amphibians** such as Common Frogs and Slow Worms which are protected under the Wildlife and Countryside Act from ‘reckless harm’. Developers are legally obliged to ensure that all reasonable efforts are

made to protect such creatures from harm during development works.
In practice, for a small area of low-potential garden this means that once it has been established that there are no nesting birds in the affected area, stored items should be carefully removed by hand and undergrowth around the present storage area should be cut back by hand during warm summer weather in a phased programme, reducing the undergrowth and planted areas and exposing the ground. This will deter any individuals from remaining in the area and they will move off to adjacent areas.
The use of strimmers should be avoided in the earlier phases, as they will destroy larger amounts of cover and reduce the undergrowth too quickly for the operative to be able to avoid fragile creatures sheltering beneath.
Any individual creatures found should be carefully captured and moved with gloved hands to a similar but safe area such as the hedgebank to the immediate north where they will reorientate themselves.
Care should be taken to ensure that any foundation trenches are not left open for long periods with regular inspection to ensure that individual creatures have not fallen into the trenches.

No potential for other protected species was noted in this small garden area.

The National Planning Policy Framework February 2019

The Revised National Planning Policy Framework February 2019 requires that sustainable development should protect and enhance the natural environment by minimising impacts and providing *net gains* for biodiversity, whilst preventing risk from pollution. Conservation or enhancement of existing biodiversity and creation of further opportunities is thus encouraged through the policy.

Ecological Enhancement suggestions:

Bats

British bats are small, harmless mammals that feed exclusively on insects. Bats do not damage property, they only use existing or purpose made holes for access. Unlike mice they do not nibble cables, wires or the fabric of the building.

The successful conservation of these endangered mammals depends on the availability of a range of roost sites which provide suitable conditions to meet their needs throughout the year. In summer females carefully select warm secure sites where they gather to raise their single young. During the winter period bats require a safe secure environment with a stable temperature regime in which to hibernate.

Making provision for bats within the proposed development it will create a ‘wildlife gain’ and help to offset the planning application. Bat boxes can be fitted within or onto the walls and should be placed on sunny southerly or westerly facing aspects as high as possible in an apex or under the eaves and away from light spill; however, those placed on northerly or easterly elevations may be highly beneficial to bats at transitional times of year when they require opportunities with more stable, cooler temperatures. Please see information sheets and links below.

Nesting Birds

The creation of dedicated opportunities for nesting birds will also make a positive contribution to wildlife conservation – a Sparrow terrace for example, Swift bricks or similar nest boxes for garden birds would create opportunities where none currently exist and help to offset the impact of the development work on the environment, in an area of relatively good habitat. Nest boxes are best erected on northerly or easterly-facing elevations, under the soffits, in order to be sheltered from our prevailing weather.

Please see attached information and links for details of both attached and integrated solutions.

Note: In areas where Squirrel predation of fledglings is likely, small protective metal plates should be affixed over the entrance holes of the nest boxes. When positioning nest boxes lower down walls or at eaves height of a lower building, please ensure that attending birds and fledglings will not be predated by cats accessing the nest box via the roof, an adjacent fence, water butt, wheelie bin or garden shed.

In order to help meet biodiversity policies it would be appropriate to condition the provision of one bat box/integrated roosting tube and two integrated nesting opportunities within planning consent.

There were no signs of use by any other protected wildlife at the time of the survey.

If you require further assistance or clarification of this report, please do not hesitate to contact me.

Yours sincerely,

Colin N Wills BSc [Hons]

Natural England Class Licence Nos: 2016-23490-CLS-CLS & CL29/00307

Useful Contacts:

Bat Conservation Trust

www.bats.org.uk

www.froglife.org

https://www.hedgehogstreet.org/

Integrated nest boxes: http://www.birdbrickhouses.co.uk/brick-nesting-boxes/nesting-boxes/

www.nhbs.com/equipment/integrated-bird-boxes

https://www.nhbs.com/4/bat-boxes

https://www.nhbs.com/4/bird-boxes

Bats and Artificial Lighting in the UK, 2018, Bat Conservation Trust and Institute of Lighting professionals (available for free download online)

Enc:

Providing Access for Bats

Bird Boxes

Please note:

The results of an ecological assessment intended to inform a planning application are generally valid for 12 months from the date of survey; however, please bear in mind that wildlife has its own priorities and rhythms dictated by many factors. This survey can only serve as a snapshot of the site on the date of survey. No liability may therefore be inferred upon the surveyor for protected species not recorded during the survey, or subsequently found to be present on site.

Bats have the ability to roost in very small spaces, consequently it is possible that individuals may be missed during the survey as not every crevice or void can be fully inspected.

As the county of Devon supports most of our 17 species of bats, an inspection is made for all bat species which are likely to be found within buildings, and the surrounding habitat of each site is assessed for the likely potential to support breeding, commuting and foraging bats, and this also informs the survey.

A data search has not been carried out as bats are highly mobile creatures and it is assumed that numerous bat species are likely to be present in the vicinity, and this was taken into consideration whilst surveying the site. It is therefore unlikely that a data search would provide any additional meaningful information.

Proportionality in survey effort and professional judgement in the assessment of potential for protected species on a site-specific basis are in line with BS:42020:2013; guidelines for ecological survey from CIEEM and Bat Survey Good Practice Guidelines, BCT 2012 & 2016.

Bat Boxes Suitable for House Walls

Beaumaris
Woodstone Bat Box

1FQ Schwegler Bat Box

1FR Schwegler Bat Tube

Bat Tube 1FR

[Pic. 1]: 1FR installed

This Tube system meets the characteristic behavioural requirements of the types of bats that inhabit buildings. The design maintains excellent climatic conditions inside the Tube allowing the animals to either hang onto the wooden rear or onto the wood-concrete front. It requires no maintenance because droppings fall out of the entrance ramp.

Installation: Can be installed on external walls – either flush or beneath a rendered surface in concrete and, during renovation work, under wooden paneling or in building cavities (e.g., slab-type building structures, bridges, etc). If required, it can be painted using standard air-permeable exterior paint. Birds will not occupy this box. To allow access into existing cavities in buildings, use the 2FR model below.

Suitable for: Bat species that inhabit buildings

[Pic. 2]: 1FR Bat Tube

Material: SCHWEGLER wood-concrete with integrated wooden panel onto which the bats can cling.

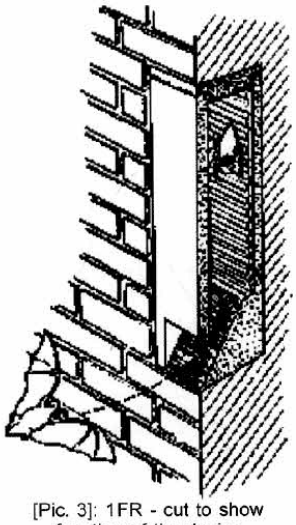
Colour: grey material, paintable with standard air-permeable wall-paint

Dimensions: height 47.5 x width 20 x depth 12.5 cm

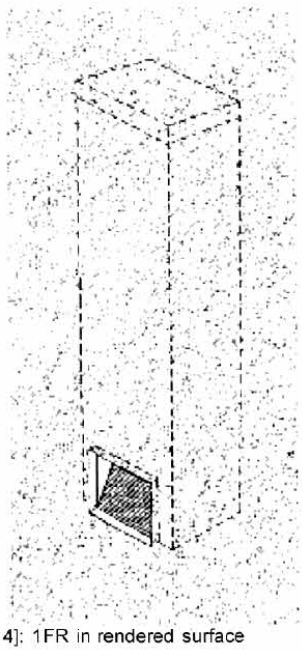
Entrance: width 15 x height 2 cm

Weight: ca. 9,8 kg

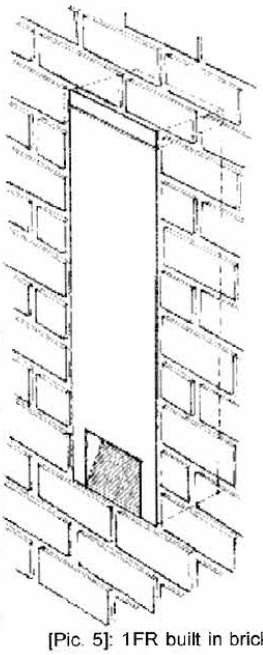
Bat Tube 1FR *order no.* *00 750 / 6*



[Pic. 3]: 1FR - cut to show function of the device



[Pic. 4]: 1FR in rendered surface



[Pic. 5]: 1FR built in brickwork

Nest Boxes for Garden Birds

1SP Schwegler Sparrow Terrace

The Sparrow Terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population of 6 million pairs is half what it was in 1980 and this is thought to be due to habitat destruction and lack of suitable nesting spaces. Sparrows are social birds and like to nest in company. This terrace provides ideal nesting opportunities for three families. Made of Schwegler's revolutionary wood-concrete mix, this terrace is durable, breathable and will last many decades. It may also occasionally attract tits, redstarts and spotted flycatchers.

The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds and factories. Ideally place the terrace two meters or more above the ground. Either install on the surface of the wall using the plugs and screws provided, or install directly into the wall. Cleaning is advisable but not necessary. The front panel can be removed by turning the screw hook.

Great Tit

House Martins

Swallow Platform

Blue Tit