

**Bat Survey Report for
Riverside Dental Practice,
20 Bridge Street,
Caversham,
Reading, RG4 8AA**



NKM Associates

9th May 2017

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SUMMARY

At Riverside Dental Practice at 20 Bridge Street in Caversham, Reading planning permission is being sought to extend the building.

As this could impact on features typically used by bats as roosting places, a diurnal inspection was undertaken on 9th May 2017, to assess the building for signs of bat occupation.

A desk study revealed a number of bat species records within 1.0km of the site, including Common Pipistrelle *Pipistrellus pipistrellus* and Daubenton's Bat *Myotis daubentonii*, within 5.0 km of the site records of Brown Long-eared Bat *Plecotus auritus*, Noctule *Nyctalus noctula* and Soprano Pipistrelle *Pipistrellus pygmaeus* were noted.

If any suitable features were present on/within the buildings, the property could be utilised by roosting bats. .

All the external structures, especially those associated with the roofs and walls of the buildings were examined.

No signs of bat activity or occupation were found, and the suitability of roosting pipistrelles *Pipistrellus sp* or other bat species was considered negligible.

At the time of the survey the Riverside Dental Practice at 20 Bridge Street was not considered to be a bat roost and as such no further surveys or mitigation measures are required.

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There were no signs of nesting birds in or on the building.

1. INTRODUCTION

In early May 2017, NKM Associates was instructed by TW 2 Architects to undertake a bat survey of Riverside Dental Practice at 20 Bridge Street in Caversham, Reading. On 9th May 2017, a visit to the property to carry out a diurnal inspection of the building to check for signs of bat occupation was made.

The result of the survey is contained in this report.

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- ❑ *Intentionally or deliberately kill, injure or capture (or take) bats*
- ❑ *Deliberately disturb bats (whether in a roost or not)*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts*
- ❑ *Damage or destroy roosts*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally*
- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal...uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

2. METHODOLOGY

In order to fully assess bat occupation of a particular site, the Bat Conservation Trust (2016) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal surveys.

The diurnal walkover provides an opportunity to check for signs of occupancy, such as droppings, scratch marks, feeding remains, carcasses, or even animals in residence, whilst nocturnal surveys (if required) allow numbers and species of bats to be confirmed. The latter are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent but likelihood of roosting is considered to be medium to high.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats, Myotis bats (Natterer's *Myotis nattereri* and Whiskered/Brandt's *M. mystacinus/M. brandtii*), and Lesser Horseshoes *Rhinolophus hipposideros*, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where these butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Diurnal walkovers can be carried out at any time of the year, but nocturnal surveys should only be undertaken when bats are out of hibernation and in their summer roosts. The recommended period is from May to September inclusive, with May to August optimum and September sub-optimum. The season can be extended into October, although particularly cold weather will render this inadvisable. Indeed, the air temperature at the start of each survey must be at least 10°C or above.

Visits will be a minimum of two weeks apart, and the number of surveys is dependent on the evidence found or the suitability of the site to bats.

Where bats are found, or there is evidence of bat occupation or activity, i.e. that bat use is confirmed, the number and timing of visits will be decided by the ecologist, and will be appropriate for the type of roost. In general at least two nocturnal surveys will be carried out, both of which can be emergence surveys, or one emergence and one dawn re-entry.

Where there is no evidence of bat presence, and no suitability for roosting, no nocturnal surveys will be needed.

For a site with no evidence but low suitability, just one nocturnal emergence survey is required, this to be in the optimum period.

For medium suitability a minimum of two visits are needed, of which one must be in the optimum period, and one must be a dawn re-entry survey. With high suitability, three visits will be necessary, of which two must be in the optimum period. At least

one of these must be a dawn re-entry survey, with the third visit either an emergence or a dawn re-entry.

For sites < 5 ha in size, and/or regularly shaped structures, at least two surveyors must be present, with more surveyors at larger sites and more complex buildings, e.g. those with multiple elevations and/or roof structures.

On 9th May 2017 a thorough inspection of the Riverside Dental Practice was made by Neil Musgrave (Natural England bat licence No. 2015-12094-CLS-CLS), including the exterior walls, roof covering, roof void, eaves, gables, window casements and door frames.

8x42 binoculars and a Clulight CB2 torch were used for the inaccessible/unreachable areas. On this occasion, an endoscope was not used, as there were no crevices and cavities that could not be inspected with a torch or by use of binoculars from a ladder.

The result of the survey is detailed in Section 3.

3. RESULTS

3.1 Location

Caversham is located to the north of Reading on the north bank of the River Thames. Bridge Street is the A4155 north from Reading to Caversham. 20 Bridge Street is approximately 80 m meters from the bridge on the west side of the street. The Ordnance Survey Grid Reference of the site is SU 71162 74715 (Appendix 1).

3.2 Site Description

The survey site comprised a detached pitched roofed building with a flat roofed extension to the rear (Figs. 1 and 2).



Figs. 1 & 2 Front and rear views of the building

To the front the building opened straight onto Bridge Street (Figs. 3 and 4).



Figs. 3 & 4 Views to the north and south of Bridge Street

To the rear of the building was a hard surfaced public car park with mature trees beyond (Fig. 5).



Fig. 5 View to the rear of the building

The River Thames flows approximately 85 m to the south.

The layout of the site is shown in the aerial photograph in Appendix 2.

3.3 Building Survey

The daytime inspection was undertaken on 9th May 2017 commencing at 10:30. The weather conditions during the time of the survey were recorded and are presented in Table 1 below.

Parameter	Value
Temperature (°C)	10.0
Cloud cover (%)	100
Precipitation	None
Wind speed (Beaufort scale)	0

Table 1 Weather conditions during the diurnal survey

The decorative ridge of the pitched roof was fully intact and sealed with no gaps or crevices the ridge tiles observed. All the roof slate tiles were tightly overlapping with none broken, dislodged or missing (Figs. 6- 9).



Figs. 6 & 7 Ridge and roof tiles to the south



Figs. 8 & 9 Ridge and roof tiles to the north

The flat roof was finished with tarred felt in good condition with no holes or tears (Fig. 10).



Fig. 10 Sealed flat roof

The chimney was finished with tightly moulded lead flashing all round (Figs. 11 and 12).



Figs. 11 & 12 Tightly moulded lead flashing

The gable to the front was finished with the roof ends cement sealed to the wooden barge board, the roof was tightly fitting against the gable wall plate; the gable to the rear was finished with the roof ends cement sealed to the wooden fascia boards (Figs. 13 and 14).



Figs. 13 & 14 Sealed gables

The eaves of the pitched roof were finished with the roof verge tightly fitting against the wall plates all round (Figs. 15 and 16).



Figs. 15 & 16 Sealed pitched roofed eaves

The eaves of the flat roof were finished with the tarred felt folded over the roof edge and sealed to the wooden fascia boards (Figs. 17 and 18).



Figs. 17 & 18 Sealed eaves of the flat roof

The brick walls were sound throughout; whilst all the window casements and doorframes were tightly fitting.

No signs of bat activity or occupation were found around the outside of the Riverside Dental Practice.

Internally the roof void of the pitched roof was unlined and heavily cobwebbed, vertical cobwebs were observed (Figs. 19 – 22).



Figs. 19 & 20 Heavily cobwebbed ridge



Figs. 21 & 22 Cobwebbed gable ends

Light penetrated the roof void through the round window in the front gable wall (Ref. Fig. 21).

The upper rooms of the flat roof extension were open to the dry board lined underside of the roof.

No evidence of bat activity or occupation were found inside the Riverside Dental Practice.

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There were no signs of nesting birds in or on the building.

4. CONCLUSIONS AND RECOMMENDATIONS

Bats tend to be seasonal visitors to properties, and are not usually in occupation all year round. The females normally form maternity colonies during May or June and then leave for adjacent trees and/or woodland during July or August once the young bats are able to fly and become independent. Here they will spend the winter months in hibernation before returning to the house or barn the following spring.

Male bats generally live alone and have a number of favoured roosts. During the summer they visit each of these for a few days at a time, before moving to their chosen hibernation site in mid-late October. Different species have different habits, but this seasonal movement is common to all.

Bats choose their roosts carefully. During the summer they look for sites which are warmed by the sun, and as a result are most often found on the south and western side of buildings.

Pipistrelles, our smallest and commonest bats, prefer to roost in very confined spaces around the outside of buildings, typical places being behind hanging tiles, weather boarding, soffit, barge and eave boarding, between roof felt and roof tiles or in cavity walls.

As such they can be difficult to find, so the suitability for roosting was also assessed.

This was considered negligible.

No signs of Brown Long-eared Bat activity were found, nor indeed signs of other species which are commonly found in roof spaces.

A desk study revealed a number of bat species records within 1.0km of the site, including Common Pipistrelle and Daubenton's Bat, within 5.0 km of the site Brown Long-eared Bat, Noctule and Soprano Pipistrelle records were noted. .

At the time of the survey, Riverside Dental Practice at 20 Bridge Street was not considered a bat roost and as such no further surveys or mitigation measures are required.

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There were no signs of nesting birds in or on the building.

5. REFERENCES

Bat Conservation Trust, 2016. *Bat Surveys – Good Practice Guidelines.* 3rd edition. Bat Conservation Trust, London.

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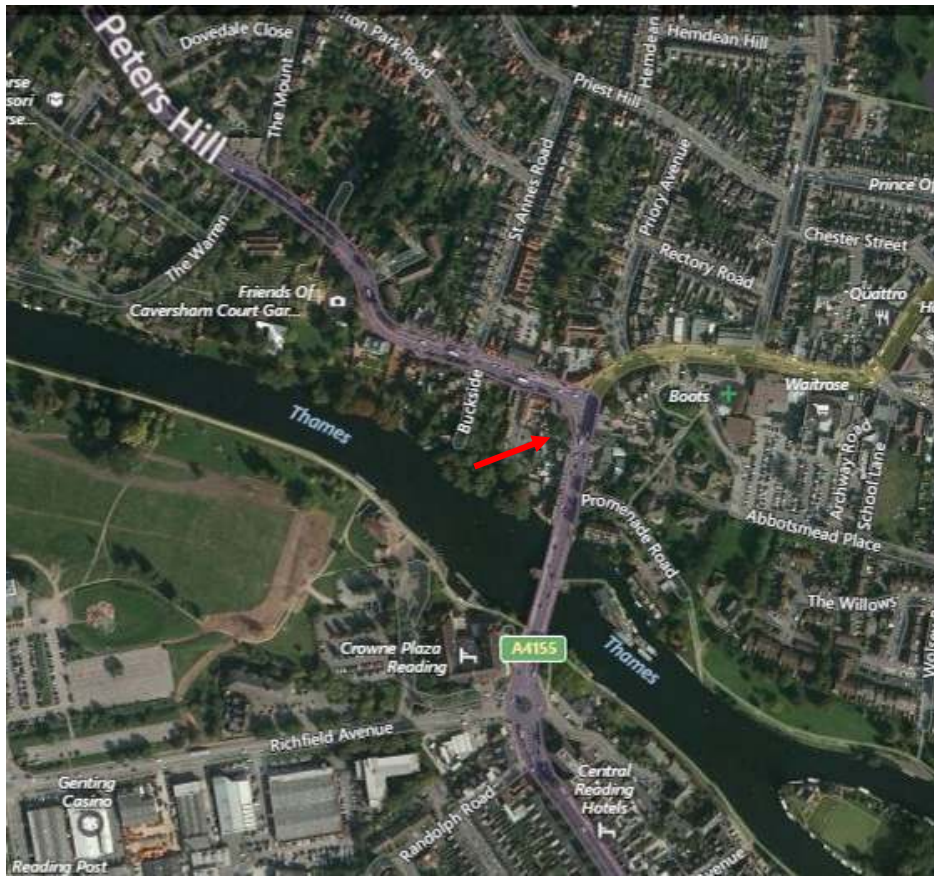
The Vincent Wildlife Trust, 2003. *The Bats of Britain and Ireland.* The Vincent Wildlife Trust, Ledbury.

APPENDICES

Appendix 1: Location plan

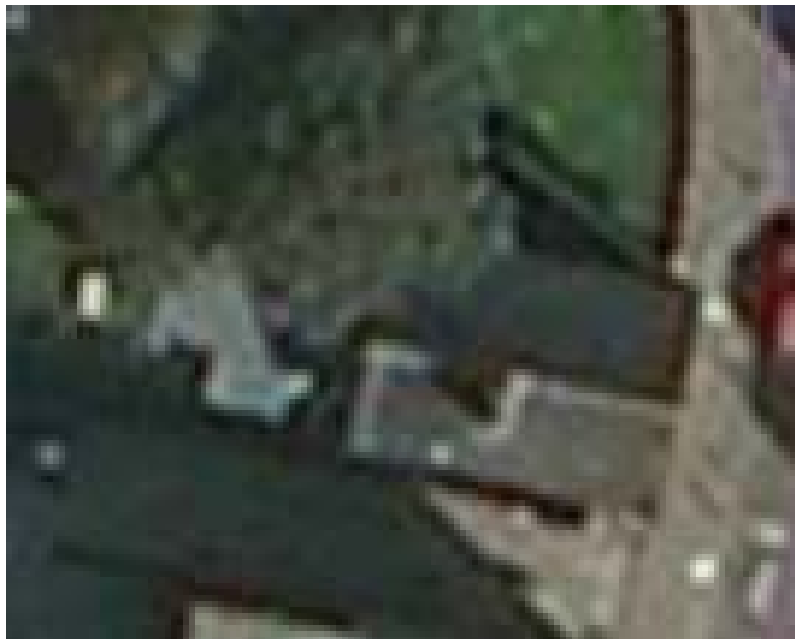
Appendix 2: Site layout

Appendix 1: Location plan



Riverside Dental Practice, 20 Bridge Street, Caversham, Reading

Appendix 2: Site layout



Riverside Dental Practice

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