Tudor Lodge Burchett's Green Lane Burchett's Green Maidenhead Berkshire SL6 3QP

Preliminary Bat Roost Assessment Ref: R2692/a

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1 INTRODUCTION

1.1 Background

- 1.1.1 John Wenman Ecological Consultancy LLP was commissioned by Mr and Mrs Spread to undertake a survey for the presence of bats within the detached house and garage at Tudor Lodge, Burchett's Green in Maidenhead, Berkshire.
- 1.1.2 The survey was commissioned in connection with a planning application to be lodged with Windsor and Maidenhead Borough Council seeking consent for a first storey extension above the garage (refer to plans and elevations in Appendix 3).

1.2 Legislative Background

- 1.2.1 All British bat species are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 ('Habitat Regulations'). In summary, the legislation combined makes it an offence to:
 - Damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a bat;
 - Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair the ability of bats to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating bats, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species;
 - Deliberately kill, injure or take any bat.
- **1.2.2** The government's statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. A licence can be issued if the following three tests have been met:
 - **Regulation 55(9)(a)** there is "no satisfactory alternative" to the derogation, and;
 - Regulation 55(9)(b) the derogation "will not be detrimental to the maintenance of the population of the species concerned at a John Wenman Ecological Consultancy

favourable conservation status in their natural range" and;

- **Regulation 55(2)(e)** the derogation is 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".
- **1.2.3** Local authorities have a statutory duty under Regulation 7(3e) of the Habitat Regulations to have regard to requirements of the Habitats Directive in the exercise of their functions. The Council must therefore consider and determine whether these three tests are likely to be satisfied by applications where survey findings show that European Protected Species licensing is necessary before granting planning permission.
- 1.2.4 European Protected Species mitigation licence applications can be submitted once all necessary planning consents have been granted and Natural England aim to issue a licence decision within 30 working days of a full mitigation licence application.
- 1.2.5 Licensable projects affecting small numbers of seven commonly occurring bat species may fall under the remit of the Bat Mitigation Class Licence (WML-CL21). The Class Licence permits 'Registered Consultants' to carry out licensable operations on site on behalf of clients following the registration of sites with Natural England at least 15 working days before the work is due to start.
- **1.2.6** Survey data supporting EPS licence applications or the registration of the site under the Bat Mitigation Class Licence (WML-CL21) must be up to date i.e. have been conducted within the current or most recent optimal survey season i.e. May to August. Therefore, if surveys show bats are present and licensable work is delayed until during or after the next survey season, updated surveys will be required to support an application or site registration.

1.3 Site Location and Context

- **1.3.1** The house is situated on the western side of Burchett's Green Lane in Burchett's Green, Maidenhead (OS grid reference: SU 83983 81278).
- **1.3.2** The property is set in a semi-rural location, with a large hedge-lined garden to the rear of the property. There are neighbouring houses to the south of

the site and to the east side of Burchett's Green Lane, with open fields and farmland in the wider area to the east, south and west of the site. Approximately 50 metres to the south of the site is an area of deciduous woodland, which extends to include Pinnocks Wood, an area of ancient and semi-natural woodland, starting approximately 175 metres south-west of the site. Approximately 160 metres to the north-west of the site there were areas of broadleaved and deciduous woodland, next to an area of traditional orchard – a priority habitat. There was an extensive area of wood-pasture and parkland beyond these areas of woodland, approximately 345 metres north-east of the site. 300 metres to the south of the site there was a pond in the garden of a neighbouring house.

1.3.3 The proximity of woodland habitats, ponds and open grassland surrounding the property provides high quality commuting and foraging opportunities for bats.

2 SURVEY METHOD

2.1 Bat Survey

- 2.1.1 A survey of the interior and exterior of the house was undertaken on the 24th November 2020 by an ecologist registered under the Natural England Bat Survey Class Licence CL17 and an assistant ecologist. A close endoscopic inspection of the exterior of the garage was completed by an ecologist registered under Natural England Class Licence CL18 and an assistant ecologist on November 27th 2020.
- 2.1.2 The survey was undertaken with the aid of binoculars, a ladder, a high power (1 million candle power) torch and Ridgid SeeSnake CA100 video endoscope and looked for any signs of occupation by bats, and for features that could offer potential roosting sites following standard survey guidelines (Collins 2016; Mitchell-Jones 2004; Mitchell-Jones & McLeish 2004).
- **2.1.3** The following may indicate the presence of a bat roost within a building:
 - Droppings (these can be found externally, in sheltered areas such as window sills, underneath roost entrances or internally within a roof space);
 - Piles of insect remains e.g., moth wings (these may be indicative of regular feeding sites used by species such as brown long-eared bat);
 - Staining at roost entrances or within the roost (urine and oil from fur can leave stains on timbers when bats are gathered for long periods);
 - Bats (live or dead).
- **2.1.4** Residential properties may offer potential roosting sites in a number of locations, favoured locations include:
 - Under roof and ridge tiles, especially when loose or missing tiles are present or sections of mortar are missing;
 - At the eaves gaining access via gaps between the soffits and wall;
 - At the gable ends access is typically gained at the roof apex via gaps in the soffits or under roof tiles;
 - Within an enclosed roof space long-eared bats (*Plecotus* sp.) for example, will often cluster at the ridge beam.

2.2 Survey Constraints

2.2.1 Full access was available to the interior and exterior of the property, thus

there were no significant constraints to the survey.

3 SURVEY FINDINGS

3.1 Building Inspection

3.1.1 Photographs of the property are presented in Appendix 1 and a plan of the external and internal survey findings with associated target notes is shown in Appendix 2. The survey findings from the exterior and interior of the house and garage are described as follows:

3.2 External Survey

- 3.2.1 The detached house was of brick cavity wall construction, with a complex roof including a hipped roof running the length of the house, with pitched roof gables to the front and the rear, and multiple pitched roofed dormer windows on both the front and rear elevations (Photographs 1 & 2). There was a double garage attached to the house on the north-eastern corner of the property (**Photograph 3**). The house had multiple lifted roof tiles on the front elevation (Photograph 4: Target note 1). The dormer windows on the front elevation featured hanging tiles on the sides of them, which were mostly tight and lifted in places (Photograph 5 & 6: Target note 2). There was a wooden soffit flush to the wall along the front elevation (**Photograph** 7: Target note 3). There was a lifted roof tile on the northern side of the pitched roof, and lifted tiles on the southern side where the roof join the hipped roof (Photograph 8: Target note 4 & 5). On the rear elevation, there were some gaps between the hipped tiles near the ridge of the roof (Photograph 9: Target note 6), a lifted tile below the chimney and lifted lead flashing to the side of the chimney (Photograph 10: Target note 7). There was a dormer window on the cat slide section of the hipped roof, that had lifted roof tiles below it, with waney-edged board cladding above the window and hanging tiles on both sides of the dormer, which was all tight and no visible gaps (Photograph 11, 12 & 13: Target note 8 & 9). There was a tight wooden soffit along the rear elevation, including the gable of the pitched roof (Photograph 14: Target note 10). The southern side of the pitched roof featured multiple gaps below the ridge tiles and some gaps between the verge tiles where they had moved apart (Photograph 15: Target note 11 & 12).
- 3.2.2 The garage was attached to the wall on the north-eastern corner of the house, with an undercover area to the side of the garage (Photograph 16). The garage roof was flat centrally with tile margins and a wooden soffit flush

to the wall around the garage (**Photograph 17: Target note 13**). There were slightly lifted roof tiles on the eastern and southern side of the roof (**Photograph 18 & 19: Target note 14, 15 & 16**), which when inspected closely with the use of an endoscope showed no evidence of use by bats.

3.2.3 There was no bat evidence found during the external survey of the property.

3.3 Internal Survey

3.3.1 The roof void was accessed through a loft hatch on the first floor and extended the length of the house. The roof was of 'cut and pitch' construction and had beams crossing halfway done the slope of the roof, with a floor to ridge height of approximately 2.5 metres (**Photograph 20**). The floor had fibre-glass insulation present throughout the void (installed in 2009), and it was boarded around the loft hatch and water tanks towards the northern end of the void, with a boarded pathway along the western side of the void (Photograph 21: Target note 17 & 18). The roof was lined with foil covered bitumen felt, which was mostly tight but with some occasional tears in places (Photograph 22). The ridge was heavily cobwebbed in places but clear of cobwebs towards the central part of the void (Photograph 23: **Target note 19**). There were scattered medium sized bat droppings throughout the void, with approximately 1000 droppings present. There were areas where the droppings were more concentrated; adjacent to the loft hatch, below the ridge between the two pitched gables and at the base of the gable wall on the western side of the void (Photograph 24, 25 & 26). There were urine spots and scattered medium sized droppings on the covers of the raised water tanks, with some scuffed marks on the bitumen felt next to the ridge, indicating a potential roosting site (Photograph 27 & 28: Target note 20 & 21). Next to this were two uncovered metal water tanks, with a dead mouse present in the smaller of the two (Photograph 29: Target note 22). On the western gable wall, there were some gaps above the blockwork with medium sized droppings on the wall (Photograph 30: Target note 24 & 25). There was a gap in the wall across the void at the southern end of the roof, with the side of the chimney visible, through the cavity wall (Photograph 31: Target note 26). The ridge was free of cobwebs and there were scattered droppings throughout the southern hipped section of the void (Photograph 32 & 33: Target note 27). There was a destroyed wasp nest on the hipped beam and an intact wasp nest in the void above the dormer window to the front elevation (Photograph 34 & John Wenman Ecological Consultancy

35: Target note 28 & 29).

3.3.2 The garage was open to the roof and constructed of pre-formed trussed rafters, with a couple of rooms to the west of the garage and an open void above the rooms (Photograph 36 & 37). The roof was lined with bitumen felt material around the sides of the roof, that was tight and intact and had wooden boarding on the flat section of the mansard roof (Photograph 38). There were three drainpipes coming off the flat roof across the centre of the garage, with some water damage around the western drain and a gap in the floor of the void, opening to the room below (Photograph 39: Target note 30). There was an old bird nest to the east of the garage door, on top of the wall plate in the south-eastern corner (Photograph 40: Target note 31). No evidence of bats was found during the internal survey of the garage.

4 DISCUSSION AND RECOMMENDATIONS

4.1 Assessment of Bat Roost Status/Potential

- **4.1.1** The finding of approximately 1000 medium-sized bat droppings scattered through-out the void below the central ridges, at the western gable wall and below the northern and southern hipped roof, indicates that the house is being used by void-dwelling bat species, considered likely to be a long-eared bat species (*Plecotus* sp.), as a day roost used regularly by small numbers of non-breeding adult bats. The number of droppings is unlikely to be consistent with the roof supporting a maternity colony.
- 4.1.2 Two long-eared bat species are found within the UK: brown long-eared bat (*Plecotus auritus*) and grey long-eared bat (*Plecotus austriacus*). Brown long-eared bats are a widespread species found throughout the UK. Day and transitional/occasional roosts occupied by small numbers of non-breeding brown long-eared bats are considered to be of low conservation importance; however, brown long-eared bats are a species of principal importance for conservation (as defined within Section 41 of the NERC Act 2006) and any loss of roosts may have an adverse impact on the status of local populations (Mitchell-Jones 2004). The grey long-eared bat has a restricted distribution and is confined to the south of England (Richardson 2000), therefore it is unlikely that this rarer species is present.
- **4.1.3** The gaps between and underneath roof tiles on the house provide opportunities for crevice-dwelling species, such as the pipistrelles (*Pipistrellus* spp.) and/or small *Myotis* species. There are two species of pipistrelle bat: common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) that are widespread and abundant throughout the UK (Richardson 2000). Whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*) are widespread and common but less abundant than the pipistrelle species. Roosts supporting pipistrelle and/or small *Myotis* bat species are considered to be of low to moderate conservation importance (subject to the type of roost present i.e. non-breeding roosts supporting individual or small numbers of bats through to maternity roosts supporting large numbers of female bats) (Mitchell-Jones 2004).
- **4.1.4** Overall, taking into account the evidence of bats, the location and number of roosting features, the house is a confirmed roost and of high bat roost

potential. The garage featured occasional lifted tiles of low bat roost potential that were able to be inspected with an endoscope and showed no evidence of use by bats showing the garage is unlikely to support roosting bats.

4.2 Impact of Proposals and Recommendations

- 4.2.1 The survey findings show that the proposed building work to extend above the garage will not have an impact on the confirmed roost present in the roof void of the house and is unlikely to affect bat roosting sites, therefore it is considered unlikely that the works will lead to the loss of a bat roost or to the disturbance of bats occupying a roost and therefore a European Protected Species licence would not be required to allow the works to go ahead lawfully.
- 4.2.2 The house supports a bat roost for a species likely to be brown long eared bat and may support crevice dwelling species. Care must therefore be taken to ensure that the building work does not block access to the house roof e.g., by scaffolding.
- 4.2.3 Bats are highly mobile and roosting within the house, therefore it is possible that bats could eb found within the garage in the future. Care must therefore be taken during the work to remove the small number of tiles by gloved hand and if bats are discovered, work must stop immediately, and a licensed ecologist called to site to attend to the bat(s) and provide further advice. Work must only recommence once further written advice has been received; a mitigation licence or confirmation of the site's registration under the Bat Mitigation Class Licence (if applicable) may be required for the work to go ahead lawfully.

5 **REFERENCES**

Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition. Bat Conservation Trust, London.

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

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd Edition)*. JNCC, Peterborough.

Richardson, P. (2000). *Distribution Atlas of Bats in Britain and Ireland 1980*– 1999. Bat Conservation Trust, London.

APPENDIX 1 - SITE PHOTOGRAPHS



1. Front elevation of the detached house.



2. Rear elevation of the detached house.



3. Garage to the north of the site.



Eastern end of the property.



5. Hanging tiles on northern dormer window .



6. Slightly lifted hanging tiles on southern dormer window.



7. Wooden soffit flush to the wall along the front elevation.



8. Lifted roof tile below ridge tiles of pitched roof.



 Gaps between roof tiles near corner of ridge and hipped tiles.



10. Lifted roof tiles and lifted lead flashing around the base of the chimney.



11. Lifted roof tiles below rear dormer window.



12. Tight waney-edged boards above dormer window.



13. Occasional lifted hanging tiles around dormer window on rear elevation.



14. Tight wooden soffit flush to the wall.



15. Lifted roof tiles below ridge tiles; gaps where verge tiles have moved apart.



16. Eastern elevation of garage, with overhanging mansard roof.



17. Tight wooden soffit around the entire garage.



18. Lifted roof tile on western elevation of the hipped edge of the garage roof.



19. Occasional lifted roof tiles on southern elevation of the garage roof.



20. Cut and pitch roof construction along roof void.



 Fibreglass insulation on the floor of the void with occasional boarding along western side of the void.



22. Tear in foil covered bitumen felt roof lining.



23. Occasionally cobwebbed ridge.



24. High concentration of bat droppings adjacent to the loft hatch at the northern end of the void.





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25. High concentration of bat droppings below ridge in the central part of the roof void.



27. Bat droppings and urine spots on raised, covered water tanks under the central ridge.

26. High concentration of bat droppings below the western gable blockwork wall.



 Bat droppings and urine spots on top of the raised, covered water tanks under the central ridge.



29. Metal uncovered water tanks, with a dead mouse inside the smaller tank.



30. Gaps around blockwork on western gable; scattered bat droppings on gable wall.



31. Inside cavity wall and side of chimney visible through gap in wall across the void.



32. Ridge mostly clear of cobwebs in the hipped southern section of the void.



33. Scattered bat droppings on fibreglass across the southern section of the void.



34. Destroyed wasp nest on the hipped ridge on the southern side of the void.



35. Large wasp nest above the front pitched dormer window.



36. Trussed rafter roof construction, open to the roof.



37. Open void section above rooms to the western side of the garage.



 Roof tiles lined with tight bitumen felt and wooden boarding lining the flat section of the mansard roof.



39. The westernmost drainage pipe on the flat roof, with water damage on the boarding around the top.



40. Old birds' nest on top of the wall plate in the south-eastern corner.

APPENDIX 2 – PRELIMINARY BAT ROOST ASSESSMENT FINDINGS



