

8 Burnham Rise
Emmer Green
Reading
RG4 8XJ

Preliminary Bat Roost Assessment

Report prepared by Meghan Porter; reviewed by Conor Watson ACIEEM
Ref: R3464/b

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1 Diesel House, Honey Hill, Wokingham, Berkshire RG40 3BL
Telephone: 0118 3271810 Mobile: 07979 403099 E-mail: info@wenman-ecology.co.uk
www.wenman-ecology.co.uk

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Registered office: 100 New Wokingham Road, Crowthorne, RG45 6JP where you may look at a list of members' names.

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1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was commissioned by Mr and Mrs Addington to undertake a Preliminary Roost Assessment (PRA) for bats at 8 Burnham Rise in Emmer Green, Reading. The PRA was commissioned to accompany a planning application submitted to Reading Borough Council seeking consent for the construction of a first floor rear extension and a single-storey side extension with modifications to the existing roof.
- 1.1.2** 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') (as amended). A survey of the interior and exterior of the property was undertaken on the 13th June 2023 by Conor Watson ACIEEM registered under the Natural England Bat Survey Class Licence CL17 and Meghan Porter registered under the Natural England Bat Survey CL17.
- 1.1.3** The observation of approximately five small bat droppings, resembling those typically deposited by pipistrelle species, along the party wall inside the roof void indicates that the house is likely used as an occasional/transitional and/or day roost for an individual or small numbers of non-breeding pipistrelle bats. The observation of approximately 10-15 medium-sized bat droppings, resembling those typically deposited by long-eared species, scattered on the floor of the roof void indicates that the house is likely used as an occasional/transitional roost for an individual brown long-eared bat.
- 1.1.4** The survey findings demonstrate that the proposals could result in the damage/destruction of bat roosts and in the absence of mitigation, lead to the disturbance and/or harm of bats if present during the works. Further survey is required to confirm the status of the bat roosts in the house and should comprise a minimum of two evening emergence and/or dawn re-entry survey visits in the bat active season (May to September inclusive).
- 1.1.5** Subject to the further survey findings, a European Protected Species (EPS) mitigation licence or if applicable, the registration of the site under the Bat Mitigation Class Licence (BMCL) may be necessary to permit the work to proceed lawfully.

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was commissioned by Mr and Mrs Addington to undertake a Preliminary Roost Assessment (PRA) for bats at 8 Burnham Rise in Emmer Green, Reading.

2.1.2 The PRA was commissioned to accompany a planning application submitted to Reading Borough Council seeking consent for a first floor rear extension and a single-storey side extension with modifications to the existing roof (Planning Application No.: 230563).

2.2 Legislative Background

2.2.1 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') (as amended). 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; and
- Deliberately kill, injure or take any bat.

2.2.2 The government's statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests have been met:

- **Regulation 55(9)(a)** - there is "no satisfactory alternative" to the derogation;
- **Regulation 55(9)(b)** - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a 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.”

- 2.2.3** Local Planning Authorities (LPAs) 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 LPA must therefore consider and determine whether these three tests are likely to be satisfied by applications where survey findings show that an EPS mitigation licence is necessary before granting planning permission.
- 2.2.4** EPS mitigation licence application can be submitted once all the necessary planning consents have been granted. Natural England aims to issue a decision on EPS mitigation licence applications within 30 working days of submission.
- 2.2.5** Licensable projects affecting small numbers of seven commonly occurring species occupying roosts of low conservation importance may fall under the remit of the low impact Bat Mitigation Class Licence WML-CL21 (BMCL). The BMCL permits ‘Registered Consultants’ or accredited agents appointed by them to carry licensable operations on site on behalf of clients following registration of sites with Natural England at least 15 working days before the work days before the work is due to start.
- 2.2.6** Survey data supporting EPS mitigation licence applications or the registration of the site under the BMCL 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.

2.3 Site Location and Context

- 2.3.1** The property is a semi-detached house situated on the eastern side of Burnham Rise in Emmer Green, Reading (OS grid reference: SU 72094 76980).
- 2.3.2** The property is set in a suburban area surrounded by similar residential properties. Clayfield Copse Local Nature Reserve (LNR) is approximately 220m east of the property and consists of ancient semi-natural woodland and an area of recreational

grassland. Reading Golf Club is approximately 295 metres west of the property and comprises open grassland, woodland and several waterbodies; ancient semi-natural woodland bordered the golf club. These nearby habitats offer high suitability commuting and foraging opportunities to bats roosting locally.

3 SURVEY METHODOLOGY

3.1 Building Inspection

3.1.1 A survey of the interior and exterior of the property was undertaken on the 13th June 2023 by Conor Watson ACIEEM registered under the Natural England Bat Survey Class Licence CL17 (Registration Number: 2020-44817-CLS-CLS) and Meghan Porter registered under the Natural England Bat Survey CL17 (Registration Number: 2023-11300-CL17-BAT).

3.1.2 The survey was undertaken with the aid of binoculars and a high power (1 million candle power) torch looking for signs of occupation by bats and features that could offer potential roosting sites following standard survey guidelines (Collins 2016; Mitchell-Jones 2004; Mitchell-Jones & McLeish 2004).

3.1.3 The following may indicate the presence of a bat roost within a building:

- Bat droppings (these can be found externally, especially 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).

3.1.4 Residential buildings may offer potential roosting sites in a number of locations, favoured locations include:

- Under roof, ridge and hip tiles, especially when loose or lifted tiles are present, or sections of mortar are missing;
- Under sections of raised lead flashing;
- At the gable ends – access is typically gained at the roof apex via gaps in the soffits or under roof tiles;
- At the eaves – gaining access via gaps between the soffits and wall;
- Within an enclosed roof space – long-eared bats (*Plecotus* spp.) for example, will often cluster at the ridge beam.

3.2 Survey Constraints

- 3.2.1** There were no significant constraints because full external and internal access was available throughout the survey and the weather conditions were clear skies with an air temperature of 20°C.
- 3.2.2** It should be noted that it is not always possible to inspect all potential roosting locations during a survey and therefore an absence of bat evidence does not necessarily equate to evidence of bat absence.

4 SURVEY FINDINGS

4.1 Introduction

- 4.1.1** Photographs of the property are presented in **Appendix 1** and a plan of the external and internal survey findings with associated target notes is illustrated in **Appendix 2**. The survey findings from the exterior and interior of the property are described as follows:

4.2 External Survey

- 4.2.1** The semi-detached property had a hipped roof with a pitched roof over the bay window on the front elevation and a single-storey flat roof extension on the rear elevation (**Photographs 1 & 2**).
- 4.2.2** The hipped roof was covered in overlapping clay roof tiles that were occasionally lifted, with a damaged tile on the southern elevation (**Photograph 3; Target notes 1 & 2**). The ridge tiles and mortar were intact across the roof but there were gaps below the hipped tiles on the rear elevation (**Photograph 4; Target notes 3 & 4**). There was a slight gap between the timber soffit and brickwork on the side elevation (**Photograph 5; Target note 5**). There were lifted and uneven hanging tiles above the bay window and on the pitched gable on the front elevation, and gaps over hanging tiles beneath the soffits (**Photographs 6 & 7; Target notes 6 & 7**). A small gable at the top of the roof was shared with the neighbouring semi-detached house and clad in hanging tiles (**Photograph 8; Target note 8**).
- 4.2.3** There were multiple points of potential ingress/egress for roosting bats found during the external survey of the property.

4.3 Internal Survey

- 4.3.1** The roof void was accessible via a first floor loft hatch and had an estimated height of 2.5 metres along the party wall. The void was of 'cut and pitch' hipped construction and the roof was lined with hessian-reinforced bitumen felt, which had occasional tears (**Photographs 9 & 10; Target note 9**). The floor was boarded around the loft hatch, with layers of fibreglass insulation present elsewhere filling the eaves (**Photograph 11; Target note 10**). The front gable was lined with bituminous

felt; daylight was visible through a gap at its apex and a tear in the felt revealed hanging tiles behind (**Photographs 12 & 13; Target notes 11 & 12**).

- 4.3.2** The party wall was of brick construction with a band of hollow bricks connecting to the neighbouring roof void (**Photograph 14; Target note 13**). Two small bat droppings, resembling those typically deposited by pipistrelle species (*Pipistrellus* spp.), were present on the brickwork and floor below the small shared gable; at least three more droppings were found along the party wall (**Photographs 15 & 16**). Approximately 10-15 medium-sized bat droppings were scattered on the floor throughout void with a higher density at the eastern end (**Photographs 17 & 18**).

5 DISCUSSION AND RECOMMENDATIONS

5.1 Assessment of Bat Roost Status

- 5.1.1** The observation of approximately five small bat droppings, resembling those typically deposited by pipistrelle species (*Pipistrellus* spp.), along the party wall inside the roof void indicates that the house is likely used as an occasional/transitional and/or day roost for an individual or small numbers of non-breeding pipistrelle bats (*Pipistrellus* sp.).
- 5.1.2** The common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) are the most abundant and widespread bats in Great Britain. Both species occur in almost any habitat type and are well adapted to the built environments; they are the species most regularly reported roosting in houses and churches (Mathews *et al.* 2018). Roosts supporting these species are of low to moderate conservation significance subject to the status 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).
- 5.1.3** The observation of approximately 10-15 medium-sized bat droppings, resembling those typically deposited by long-eared species (*Plecotus* spp.), scattered on the floor of the roof void indicates that the house is likely used as an occasional/transitional roost for an individual brown long-eared bat (*Plecotus auritus*). The location of the property is outside of the current range of the grey long-eared bat (*Plecotus austriacus*) and therefore it is considered highly unlikely that this species is present (Mathews *et al.* 2018).
- 5.1.4** The brown long-eared bat (*P. auritus*) is a widespread species in Great Britain commonly associated with broadleaved and mixed woodland habitats. This species will roost in trees, bat boxes and buildings but maternity roosts are predominantly located in barns, churches and houses with large internal flight spaces (Mathews *et al.* 2018). Roosts supporting this species are of low to moderate conservation significance subject to the status 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). The grey long-eared bat (*P. austriacus*) is very similar in morphology and flight pattern to the brown long-eared bat (*P. auritus*) but very few colonies are known in Great Britain; this species is found almost exclusively in lowland regions of southern England, near to the coast.

- 5.1.5** The external features identified for potential bat ingress/egress opportunities included gaps under occasionally lifted and broken roof tiles; gaps beneath hip tiles on the rear elevation; a slight gap between soffit and brickwork on the side elevation; gaps associated with hanging tiles on the bay window and small shared gable on the front elevation.

5.2 Impact of Proposals and Recommendations

- 5.2.1** The planning proposals involve the construction of a first floor rear extension and a single-storey side extension with modifications to the existing roof (refer to existing and proposed elevations in **Appendix 3**). The survey findings demonstrate that the proposals could result in the damage/destruction of bat roosts and in the absence of mitigation, lead to the disturbance and/or harm of bats if present during the works. Further survey is required to confirm the status of the bat roosts in the house.
- 5.2.2** Further survey of the house should comprise a minimum of two evening emergence and/or dawn re-entry survey visits, each separated by at least two weeks. The surveys should be conducted in the bat active season between May and September inclusive, with at least one or the majority of the survey visits undertaken in the optimal period for recording maternity roosts, i.e. May to August (Collins 2016).
- 5.2.3** Subject to the further survey findings, a European Protected Species (EPS) mitigation licence or if applicable, the registration of the site under the Bat Mitigation Class Licence (BMCL) may be necessary to permit the work to proceed lawfully. A licence can be issued by Natural England if the three licensing tests (detailed in **Paragraph 2.2.2**) have been met by the proposals.
- 5.2.4** To meet one of the licensing tests, it would be necessary to demonstrate that the 'favourable conservation status' of bats using the house is maintained throughout and after the completion of the work by employing mitigation measures during the work; by providing compensatory roosts in the short-term and ensuring that roosting sites are retained on site in the long-term. Indicative and provisional mitigation proposals are summarised in **Section 5.3** below. **N.B. the preparation of a detailed mitigation strategy necessary for the submission of an EPS mitigation licence should be based on the findings of the further survey.**

5.3 Indicative and Provisional Mitigation Proposals

- 5.3.1** If further survey demonstrates that an EPS mitigation licence is required, under the terms of the licence or BMCL (if applicable), the commencement of work affecting bat roosts will be timed to avoid the periods when bats are most susceptible to disturbance, i.e. winter hibernation season for all roosts (mid-November to February) to avoid disturbing torpid bats, and outside of the peak summer breeding season (May to mid-September) where evidence of a maternity roost is recorded. **N.B. current survey information does not indicate that a maternity roost is present.**
- 5.3.2** Replacement roosting opportunities would be provided so that they are available to bats in the short-term, i.e. prior to and during the work by erecting woodcrete bat boxes suitable for the species/roosts present on a mature tree or purpose-built pole before the work starts.
- 5.3.3** Before the licensable work commences, a licensed ecologist or Registered Consultant under the BMCL would provide a toolbox talk to contactors on site detailing that bats are present, the legislation protecting bats, the location of the roosting site, good working practices, the measures that are required to protect bats during the work and what to do if bats are found.
- 5.3.4** A 'soft strip' approach to the work affecting identified roosts would be adopted, i.e. the careful removal of roof tiles associated with the roosts by gloved hands and with hand-held tools, under the supervision of a licensed ecologist or the Registered Consultant under the BMCL. In the event that bats are discovered during the course of the work, the licensed ecologist or Registered Consultant would capture the bat(/s) and transfer it(/them) directly to a bat box erected in advance of the works.
- 5.3.5** In the long-term, replacement access and/or roosting opportunities may need to be created and/or reinstated in the house as part of an EPS mitigation licence or BMCL (if applicable). Access and roosting opportunities should be created corresponding to the positioning of access points/roosting sites identified during the further survey.

6 REFERENCES

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

Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough. ISBN 978-1-78354-494-3.

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.

APPENDIX 1 - SITE PHOTOGRAPHS



1. Front of property viewed from west.



2. Rear of property viewed from east.



3. Occasionally lifted overlapping roof tiles (front elevation).



4. Missing mortar below hip tiles (rear elevation).



5. Slight gap between soffit and brickwork (side elevation).



6. Lifted hanging tiles above bay window (front elevation).



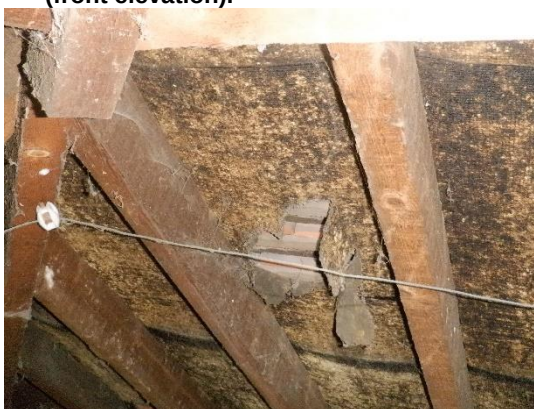
7. Gaps over hanging tiles beneath gable soffit (front elevation).



8. Small shared gable clad in hanging tiles (front elevation).



9. Hessian-reinforced bitumen roofing felt (roof void).



10. Tear in bitumen roofing felt (roof void).



11. Fibreglass insulation filling eaves (roof void).



12. Daylight visible through gap at apex of front gable (roof void).



13. Tear in bitumen felt on front (roof void).



14. Party wall (roof void).



15. Hollow bricks in party wall (roof void).



16. Small bat dropping on party wall brickwork (roof void).

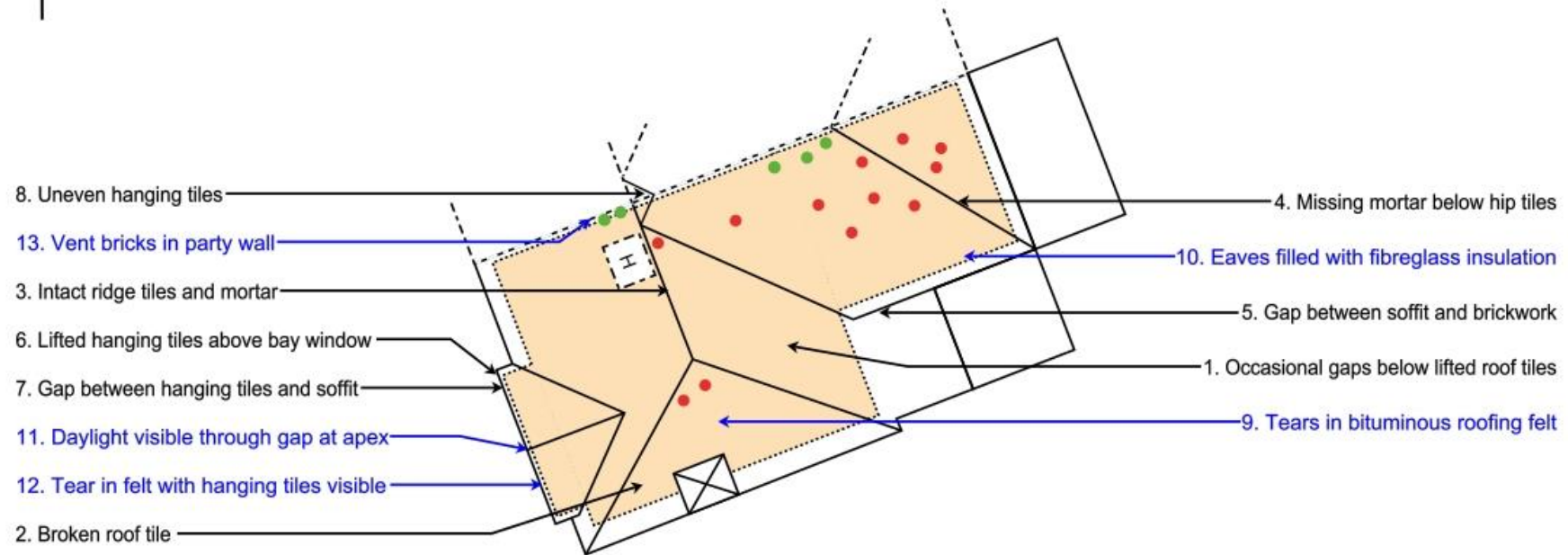


17. Medium-sized bat dropping on floor (roof void).



18. Medium-sized dropping on fibreglass insulation (roof void).

APPENDIX 2 – PRELIMINARY BAT ROOST ASSESSMENT PLAN



n. External target note

n. Internal target note

● Small-sized bat dropping

● Medium-sized bat dropping

□ Roof void

⊠ Chimney

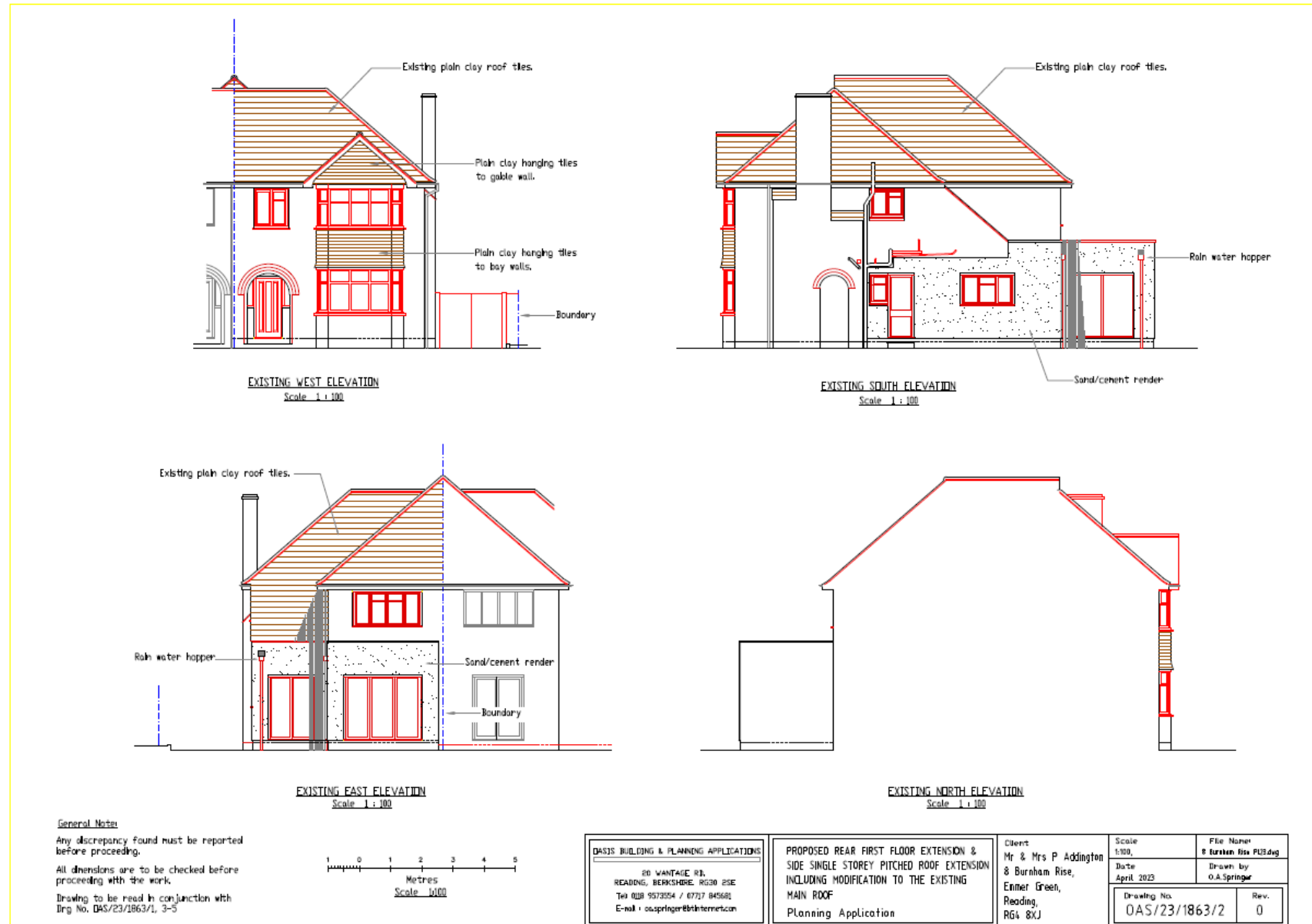
WT Water tank

H Loft hatch

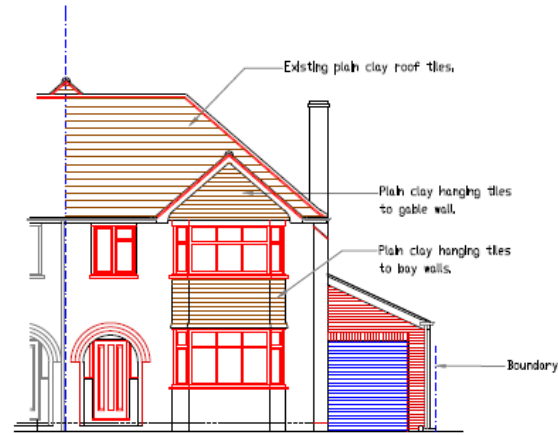
Drawn by:	Date	Scale:	8, Burnham Rise, Emmer Green RG4 8XJ	
MP	July 2023	Not to scale	Preliminary Bat Roost Assessment Findings	

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13/07/2023

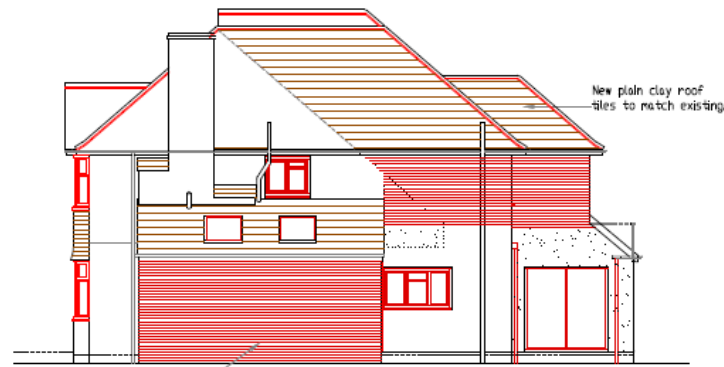
APPENDIX 3 – EXISTING AND PROPOSED ELEVATIONS



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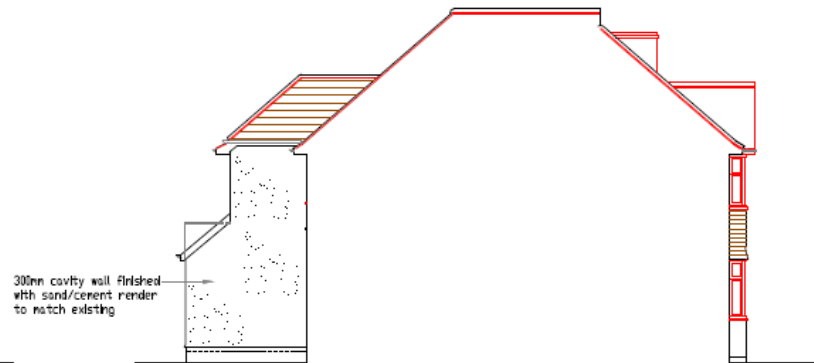
PROPOSED WEST ELEVATION
Scale 1:100



PROPOSED SOUTH ELEVATION
Scale 1:100



PROPOSED EAST ELEVATION
Scale 1:100



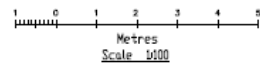
PROPOSED NORTH ELEVATION
Scale 1:100

General Notes

Any discrepancy found must be reported before proceeding.

All dimensions are to be checked before proceeding with the work.

Drawing to be read in conjunction with Ling No. DAS/23/1863/1-3, 5



DASIS BUILDING & PLANNING APPLICATIONS 20 VANTAGE RD, READING, BERKSHIRE, RG30 2SE Tel: 018 9573554 / 07737 84568 Email: dasis@readingplanning.co.uk	PROPOSED REAR FIRST FLOOR EXTENSION & SIDE SINGLE STOREY PITCHED ROOF EXTENSION INCLUDING MODIFICATION TO THE EXISTING MAIN ROOF Planning Application	Clients Mr & Mrs P Addington 8 Burnham Rise, Emmer Green, Reading, RG4 8XJ	Scale 1:100 Date April 2023 Drawing No. DAS/23/1863/4	File Name 8 Burnham Rise R23.dwg Drawn by G.A. Springer Rev. 0
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