



5 Ashley Road, Reading, RG1 6HT

BAT SURVEY REPORT (Rev. C)

January 2023



COMMISSIONED BY

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**5 Ashley Road, Reading, RG1 6HT:
Bat Survey Report Rev. C**

January 2023

Bioscan Report No.
E2151-R1

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APPENDICES

Appendix 1. Consultation advice from RBC Ecology Consultations (02 August 2022 by RBC Ecology)

Appendix 2. Information obtained via MAGIC (nature conservation designations & granted EPS licenses)

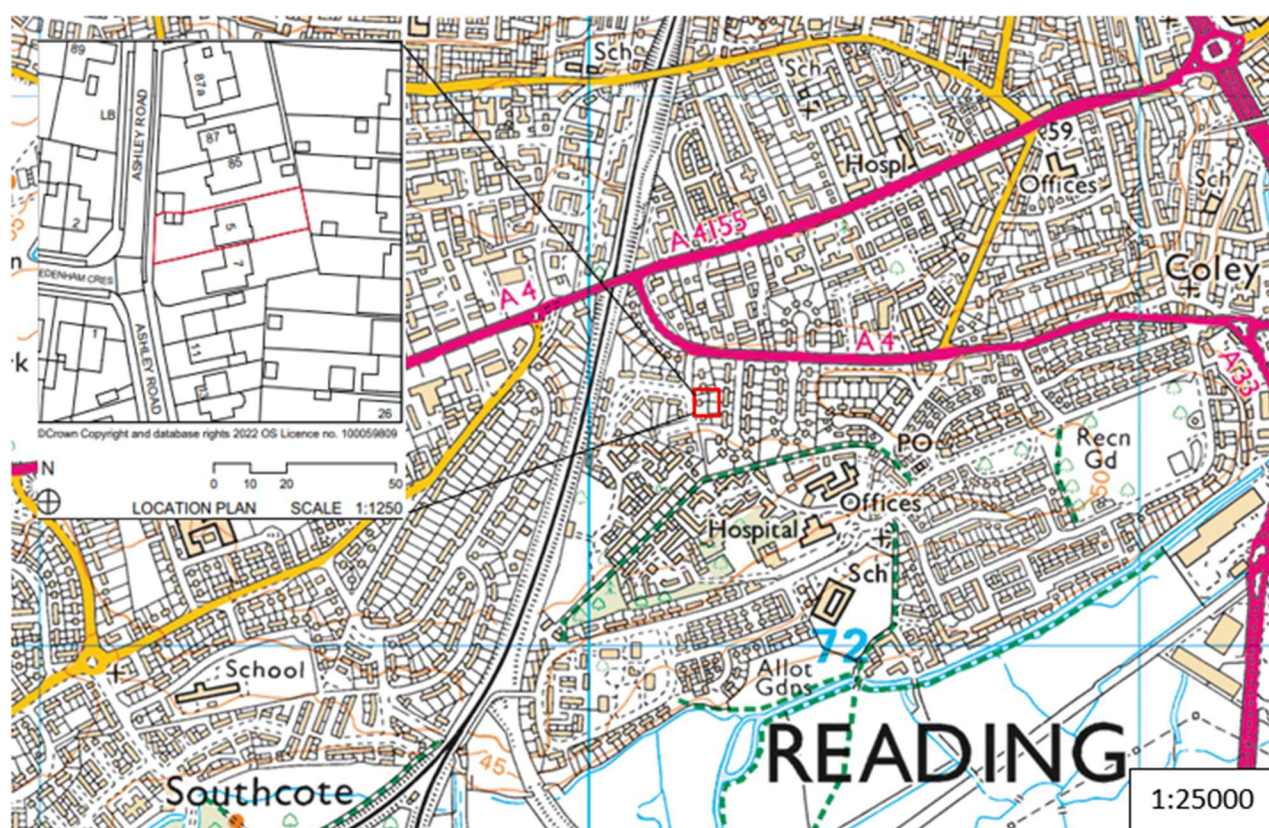
Appendix 3. Proposed elevations plans showing locations for proposed bat mitigation

1 INTRODUCTION

1.1 Background

- 1.1.1 Bioscan (UK) Ltd was appointed in August 2022 by Hives Architects LLP, acting on behalf of Mr P. Grabinar, to carry out bat survey and assessment work in respect of the residential property at 5 Ashley Road, Reading, RG1 6HT (grid reference SU 70205 72476), as shown in **Figure 1** below.

Figure 1. Site location



1.2 Site context

- 1.2.1 The site is located within the Coley Park residential area of Reading. The context is suburban, and the immediate environs of the site comprise established residential development on all sides. Beyond this there are areas of parkland within Reading, as well as other semi-natural habitat primarily associated with the Holy Brook, River Kennet, and the Kennet & Avon Canal to the south of the town.

1.3 Local planning policy

- 1.3.1 Local planning policy relevant to ecology is set out within the Reading Borough Local Plan (adopted November 2019) at **Policy EN12** ('Biodiversity and The Green Network'). This policy (a) requires that development must not negatively affect the Green Network (comprising Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority habitats, the River Thames and all its tributaries, designated Local Green Space and Green Links); and (b) requires development to protect and enhance features of biodiversity interest.

1.4 Planning context and purpose of this report

- 1.4.1 A planning application was submitted to Reading Borough Council (planning reference 220988) in July 2022. The proposals are for:

“2 storey front extension. Increase in roof ridge height. Rear single storey extension. Demolition of front entrance, store and existing garage. Construction of new garage, new windows and doors. Construction of new store. New external wall insulation. Change of facade materials.”

- 1.4.2 Consultation advice on the current planning application was provided to the RBC Planning Case Officer on 2nd August 2022 by RBC Ecology Consultations. This advice note is reproduced at **Appendix 1**, but in summary it recommended that *“The application should not be determined until a bat survey report from an appropriately qualified ecologist has been provided”*.
- 1.4.3 Accordingly, the purpose of this report is to document the findings of bat surveys and assessment work carried out pursuant to the recommendation by RBC Ecology Consultations, and to present proposals for ecological mitigation and enhancement to satisfy the requirements of local and national planning policy, and relevant wildlife legislation.
- 1.4.4 In September 2022, the original version of this report was submitted to Reading Borough Council, following which, advice was received from RBC Ecology Consultations about the additional mitigation measures they considered would be appropriate, subject to additional information being provided to satisfy Natural England’s licensing policy 4.¹ Accordingly, a revised version of the report (Rev. A) was submitted in November 2022 to address those comments, alongside revised design drawings.
- 1.4.5 Further comments were then received from RBC Ecology Consultations on 06 December 2022, requesting that further modifications be made to the design, including *“revised plans showing hanging tiles, [timber] cladding (with gaps behind for bats) or bat boxes above the ground floor on all elevations.”* The design was therefore amended to include provision of extensive timber cladding² and additional integrated bat boxes, pursuant to the request made by RBC Ecology Consultations; and a revised report (Rev. B) was submitted in December 2022 to document those changes.
- 1.4.6 However, on 04 January 2023, further comments were received from RBC Ecology Consultations, stating *“my advice is ... that unless hanging tiles are provided then the proposals are quite likely to result in the permanent loss of the bat roosts.”* In order to satisfy this most recent request, the design was further modified to include extensive areas of hanging tiles. These most recent changes are documented in the current report, with the revised design drawings provided at **Appendix 3**.

¹ Natural England (14 January 2022). *Guidance: European protected species policies for mitigation licences*. Via: <https://www.gov.uk/guidance/european-protected-species-policies-for-mitigation-licences>

² Offering approximately 40% more wall coverage than the existing hanging tiles.

2 SURVEY METHODOLOGY, SURVEY FINDINGS & EVALUATION

2.1 Desk study

- 2.1.1 As part of the assessment process, a desk study was carried out involving a search of relevant internet sources. The Government's online MAGIC³ database was searched for details of statutory nature conservation designations, and for information regarding granted European Protected Species applications, and the results of these searches are presented at **Appendix 1**. A brief review of species records available via the NBN atlas⁴ was also undertaken; and a search of Ordnance Survey 1:25,000 mapping was completed to confirm the absence of mapped ponds within 500m of the site.
- 2.1.2 A single statutory nature conservation designation is present within a 2km radius of the site. This is the Lousehill Copse Local Nature Reserve (LNR), which is located approximately 1.7km to the west of Ashley Road, at which distance no credible impact pathways have been identified.
- 2.1.3 Granted European Protected Species (EPS) licence information made available by Natural England (via MAGIC) includes the following:
- EPSM2010-2590: loss of a breeding soprano pipistrelle *Pipistrellus pygmaeus* bat roost, in a location approximately 0.5km west of the site (2010-2014);
 - 2017-32379-EPS-MIT: loss of a non-breeding common pipistrelle *Pipistrellus pipistrellus* roost, approximately 0.7km east (2017-2022);
 - 2015-14868-EPS-MIT & EPSM2013-6388: loss of a non-breeding common pipistrelle and brown long-eared bat roost, approximately 1.5km south (2013-2018)
 - 2016-22301-EPS-MIT: loss of a non-breeding common pipistrelle roost, approximately 1.9km east (2016-2021).

2.2 Habitat survey

- 2.2.1 Due to the size of the site and limited interest of the garden habitats present, a formal habitat survey was not considered necessary. However, the habitats present were nonetheless assessed in the context of their suitability for bats, including as bat foraging habitat.
- 2.2.2 **Image 1** below shows the landscaped gardens at the front of the property, which is dominated by a gravel-surfaced driveway, with small ornamental flowerbeds and shrubs. **Image 2** shows the rear garden, which comprises a lawn of short-mown amenity grassland, with small ornamental shrubs and a vegetable plot at the boundaries. Mature trees are present off-site within adjacent gardens, albeit these are typically ornamental species such as *Eucalytus* sp. and *Cupressus*-type conifers.
- 2.2.3 The site itself is assessed to offer habitat of low suitability for foraging/commuting bats, although some foraging opportunities are presented by the mature trees within neighbouring gardens. The semi-natural habitat associated with the Holy Brook, River Kennet, and the Kennet & Avon Canal to the south of the town is likely to offer superior opportunities for foraging/commuting bats, in the context of Reading town and its surrounds.

³ Multi-Agency Geographic Information for the Countryside. MAGIC database. Available from: <http://magic.defra.gov.uk/home.htm>

⁴ NBN Atlas. Available from: <https://records.nbnatlas.org/>

Image 1 (left). Front garden



Image 2 (right). Rear garden



2.3 Protected species: Bats

- 2.3.1 The building was subject to detailed internal and external inspections, undertaken by a licensed surveyor⁵ and an assistant on 1st September 2022, in accordance with best practice guidance^{6,7}, in order to search for evidence of and potential for the presence of roosting bats. The surveyors used ladders and high powered Clulite torches to access and inspect the internal enclosed loft void and external features, with binoculars also used to assist with the latter. Each part of the building is described in turn within **Table 2** below, and the findings are mapped at **Figure 2**.
- 2.3.2 Where droppings were found, samples were collected into clean eppendorfs and sent for laboratory DNA analysis⁸.
- 2.3.3 Following the inspection surveys, a dusk emergence survey was undertaken by the two surveyors (positions as shown on **Figure 3**), to ascertain whether any bats emerged from roosts within the building. The surveys were undertaken during calm, clear and warm (21-18°C) weather, as summarised at **Table 1** below, and although there was very light rainfall between 20:57 and 21:17, bats remained active during this time. Whilst the 1st September date falls just outside of the optimal survey window recommended by best practice guidance⁹, conditions were considered suitable for survey and indeed were very similar to the preceding night (i.e. 31st August 2022) which would be classified as within optimal survey season.
- 2.3.4 Both surveyors were equipped with Pettersson D-240X and Anabat Express bat detectors, as well as a tripod-mounted FLIR E95 or E96 thermal imaging camera. Analysis of Anabat recordings was later undertaken using Analook v4.4a software, and thermal imagery footage was reviewed via playback.

⁵ Natural England bat class licence reference 2015-15454-CLS-CLS

⁶ Collins, J. (ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). Bat Conservation Trust, London.

⁷ Natural England (14 January 2022). *Bats: advice for making planning decisions*. Via: <https://www.gov.uk/guidance/bats-advice-for-making-planning-decisions>

⁸ Swift Ecology (2022). *DNA Service Guidance*. <https://www.swiftecology.co.uk/dnaguide2022.pdf>

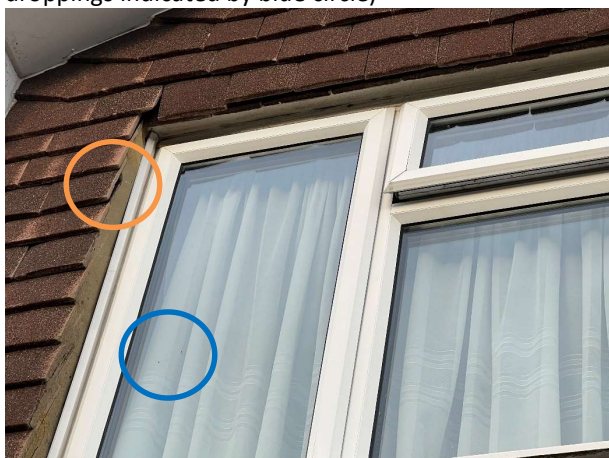
⁹ Collins, J. (ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). Bat Conservation Trust, London.

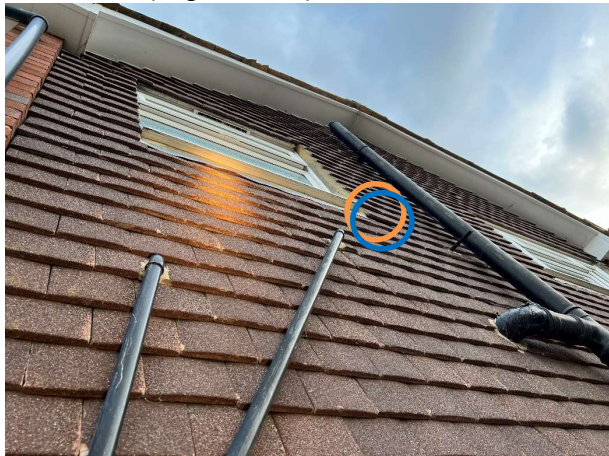
Table 1. Dusk survey dates & conditions

Survey date	Survey timings	Survey conditions
01 September 2022	Start: 19:30 Sunset: 19:50 Finish: 21:40	Clear with 15% cloud cover, light breeze, 21-18°C. Very light rain for 20 mins (20:57 and 21:17) during which time, bats remained active.

Table 2. Results of building inspection for bats

Building Photographs	Building Reference & Description
House	
Image 3. Western elevation  Image 4. Timber roof construction  Image 5. Chimney within enclosed loft void 	The building is a two-storey residential dwelling, of 1960's date and construction style. The main building is constructed over two-storeys, with an attached single-storey flat-roofed porch and garage (see Image 3). <i>Internal inspection</i> The main building supports a single-pitched gable-roof. It is of simple fink truss timber frame construction and includes a ridge-beam (see Image 4 and 5). The timbers are overlain with bitumen felt and concrete roof tiles, and there is insulation to the floor of the void. The enclosed void comprises a single undivided space, although there is a single chimney which extends through the loft (see Image 5). Here the bitumen felt has come loose, creating a potential access feature for any bats able to find a way beneath the roof tiles in this location, although no evidence for the presence of bats was found in this location. The internal floor dimensions of the loft void are approximately 5 x 8m, and the eastern end in particular is used for storage, reflective of current residential occupation (see Image 6). As a result, the space is relatively cluttered, which in combination with the shallow roof pitch and low apex height, reduces any potential suitability for void-dwelling bats. No droppings or other evidence of bats were seen within the loft void, despite searching of features such as the ridge beam and around the chimney.

Building Photographs	Building Reference & Description
Image 6. Storage within enclosed loft void  Image 7. Western elevation  Image 8. Western elevation, with gaps under concrete hanging tiles (access indicated by amber circle, droppings indicated by blue circle) 	<i>External inspection</i> For the northern and southern elevations of the house, and also the garage, brick is used in the construction of the walls; and it appears that here the brick forms a single skin (see Image 1 and 7). To the gable end walls of the western and eastern elevations, breezeblock construction has been used (as shown at Image 4), and apparently faced with brick at ground level. The upper storey of the gable end walls has a cover of concrete hanging tiles (see Image 7). Some of these tiles have slipped slightly, and as a result a small number of gaps have appeared which are suitable to permit access by bats to crevices behind the tiles, particularly in locations adjacent to the windows (e.g. as indicated by amber circle at Image 8). Closer inspection also revealed a couple of bat droppings stuck to the window adjacent to this gap (indicated by blue circle at Image 8), with up to 5 droppings caught in cobwebs below it, and a further scatter of approximately 10 droppings collected on the paving tiles below (see Figure 2 for further detail). In summary, on the western elevation of the house, a total of approximately 20 pipistrelle bat droppings were recorded in association with or below the hanging tiles - as shown at Figure 2.

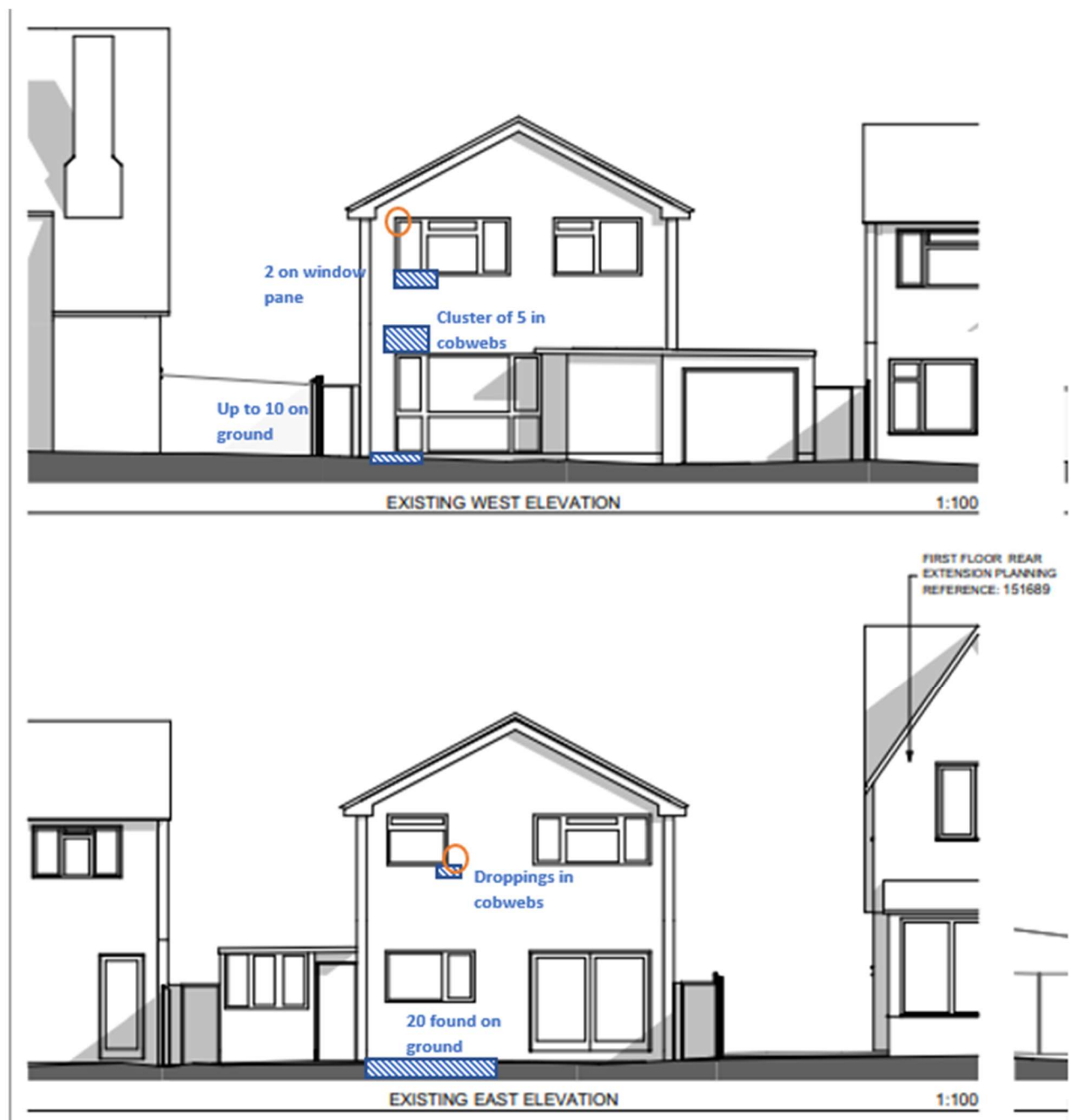
Building Photographs	Building Reference & Description
Image 9. Eastern elevation, showing hanging tiles to upper floor and general night-time illumination levels  Image 10. Eastern elevation, showing gaps under concrete hanging tiles (example ringed in amber) and lead flashing (illuminated by torchlight), and dropping stuck to tiles (ringed in blue)  Image 11. Eastern elevation, showing scatters of bat droppings (ringed in blue) accumulated below hanging tiles 	Whilst it was difficult to fully inspect the roof tiles from the ground, no loose tiles were observed by the surveyors; nor were any gaps seen at the end of the tiled ridge, at either the western or eastern gable end. Where the roof meets the walls at the eaves and gable ends, there are uPVC soffit boxes, which were seen to be in relatively good condition and no gaps were identified that might offer particular opportunities for bats (see Image 9 and 10). The windows themselves do not otherwise present opportunities for bats, being of modern uPVC construction and without lintels, although below the windows there is lead flashing with occasional gaps beneath (see Image 10) that could potentially be used by roosting bats; albeit no evidence was seen here to suggest that is the case. However, gaps were again identified in association with the hanging tiles (example shown circled in amber at Image 10), and a small number of bat droppings were seen to have stuck to the tiles and cobwebs beneath (as ringed in blue at Image 10). Beneath this were further scatterings of bat droppings, and in total, at least 20 pipistrelle bat droppings were seen to have accumulated on the brickwork and the garden furniture and paving below (as ringed in blue at Image 11). In summary, on the eastern elevation of the house, a total of at least 20 pipistrelle bat droppings were recorded in association with or below the hanging tiles - as shown at Figure 2.

Building Photographs	Building Reference & Description
Image 12. Western elevation, showing single-storey garage and porch  Image 13. Western elevation, internal view of garage  Image 14. Eastern elevation, with single-storey store 	The single-storey element of the house incorporates a porch and garage to the front (western) elevation, and a storage building to the rear (eastern) elevation. The roof is flat, with no enclosed void over the garage where it opens to the car store beneath. The roof itself appears to be in good condition, with well-fitting uPVC soffits (around the porch and store) and fascia (on the southern elevation of the garage). No droppings or other evidence of bats was seen within the garage, including on stored materials. The store on the eastern elevation contains a large window and glazed door, with the effect that it is very well-illuminated and does not appear to be suitable for roosting bats internally. Whilst the window and door frame are of timber construction, no particular crevice features were in evidence. In summary, no droppings or other evidence of bats was seen in association with any of the external features of the porch, garage and store.
Outbuilding: car port 	A car-port is located within the front garden, level with the garage of the adjacent property. This insubstantial structure is open to the elements and well illuminated internally. As such it appears to have negligible suitability for day-roosting bats. There are no mature trees or other structures within the property with potential suitability for roosting bats.

2.3.5 Given the relatively low number of features with suitability for roosting bats (generally limited to the hanging tiles), and the suburban nature of the site with its relatively high ambient illumination, the house is on balance considered to have 'low' suitability for roosting bats overall; recognising that whilst the features identified in Table 2 above present opportunities for pipistrelle species, they are unlikely to be attractive to more light-sensitive species.

2.3.6 The results from the building inspection surveys are also shown within **Figure 2** below.

Figure 2. Building inspection survey results

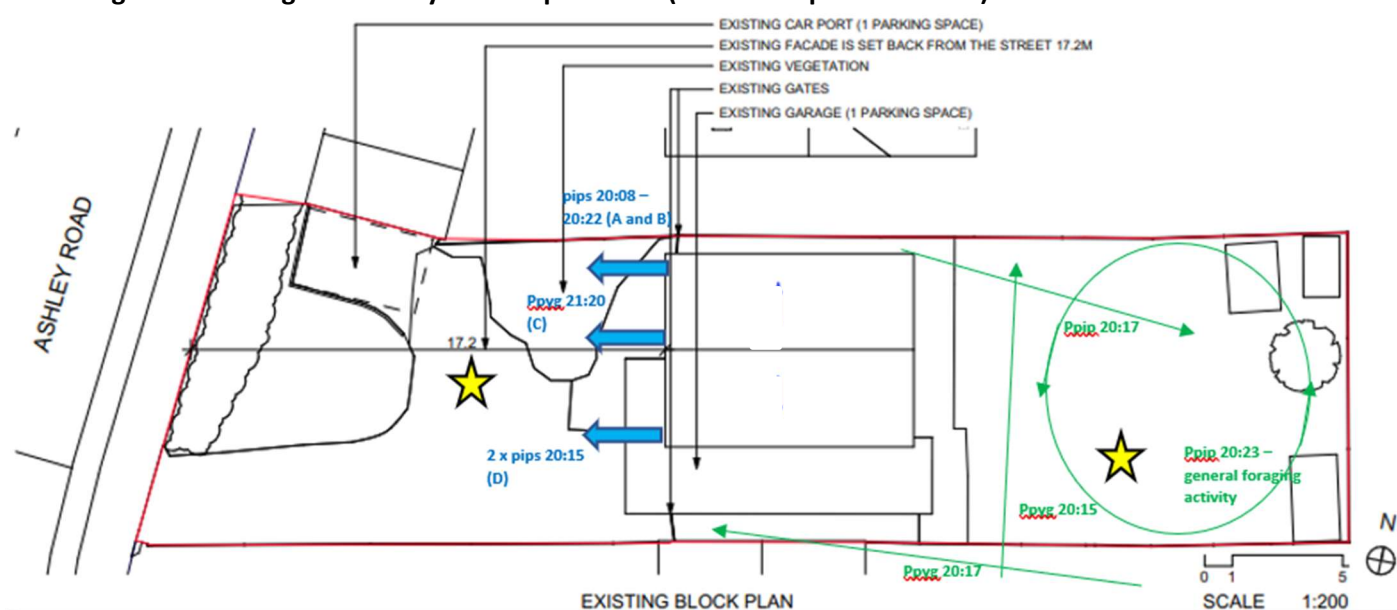


2.3.7 During the dusk emergence survey that followed the building inspection, a total of up to 11 bats (comprising common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*) were seen emerging from crevices behind hanging tiles on the western elevation of the house, as shown within **Figure 3a** and **3b**, and summarised within **Table 3** below.

Figure 3a. Emergence survey results: main house front/western elevation (Dusk 01 September 2022)



Figure 3b. Emergence survey results: plan view (Dusk 01 September 2022)



Yellow stars = surveyor + thermal imaging camera locations; Blue arrows = pipistrelle bat emergence; Green arrows = non-roosting pipistrelle bat activity

Table 3. Dusk emergence survey results

Survey date	Survey timing	Survey results
1st September 2022	Sunset: 19:50. Survey from 20mins before sunset until 1hr 50mins afterward	A total of 11 pipistrelle bats (comprising both common and soprano species) were seen emerging from four hanging tile locations (A-D) on the western elevation of 5 Ashley Road (see Figure 3a and 3b) between 20:08 and 21:20. There was also an incidental observation of a common pipistrelle bat emerging from the south-facing gable-end of 85 Berkeley Avenue (the neighbouring property immediately to the north). Frequent bat 'passes' were detected to the east and west of the house, including common and soprano pipistrelle bats, with a single noctule detected overhead. No other species detected.

- 2.3.8 During the survey, bats were identified to species whenever they emitted echolocation calls that permitted identification in the field and/or post-survey by use of Analook software. However, on a number of occasions, bats emerged from the roost locations shown at **Figure 3a** without echolocating. Whilst it was clear from the size, silhouette, and flight movements that all bats were either common or soprano pipistrelle (and this was corroborated by the absence of recorded sonograms for any other species except a passing noctule), it was not always possible to determine which of these two pipistrelle species had emerged at each time-point.
- 2.3.9 Nonetheless, by reference to **Figure 3a**, at least four of the pipistrelle bats were confirmed as soprano pipistrelle, one was confirmed as common pipistrelle, and the remaining six were either common or soprano pipistrelle, i.e. 11 pipistrelle bats in total.
- 2.3.10 The results of the bat dropping DNA analysis were consistent with these emergence survey findings; no additional (i.e. non-pipistrelle) species were detected by this method.
- 2.3.11 The bats occupy small crevice features behind the hanging tiles on the western elevation of the property, confirmed in four locations (labelled A-D at **Figure 3a**). Additional unconfirmed roosts are present in equivalent locations under hanging tiles on the eastern elevation of the property, where similar accumulations of droppings (c.20) were recorded. Given the extreme heatwave conditions experienced during the summer of 2022, it is considered that bats are likely to exhibit roost switching behaviour at this property, occupying whichever elevation has the most appropriate thermal regime on any particular day. The western elevation is expected to be the warmer of the two elevations, and it is not therefore surprising that bats were found to be occupying the western side (rather than the cooler eastern elevation) towards the end of the summer.
- 2.3.12 Given that both species were found to be roosting in relatively low numbers, and apparently in mixed-species arrangements, the roosts identified are considered consistent with day roosts for both common and soprano pipistrelle bats. Furthermore, given the prolonged drought weather conditions in the weeks leading up to the survey, it is anticipated that *had* large accumulations of droppings been present these would have persisted (rather than being washed away by rain); and on that basis there is no field sign evidence to suggest that the site supports a maternity roost. By reference to Figure 4

of the bat mitigation guidance endorsed by Natural England¹⁰, roosts used by “small numbers of a common species” are considered to be low-conservation status roosts.

2.4 Other protected or notable species

- 2.4.1 During the survey, the site was assessed for its potential to support protected and ‘priority’¹¹ species, including bats (as described above).
- 2.4.2 Most of the habitats within the garden will be retained and therefore potential impacts on protected or priority species will be limited to the footprint of the house, the adjacent hardstanding area, and the immediately adjacent portion of the garden. Accordingly, should priority species such as hedgehog *Erinaceus europaeus* be present locally, access to garden habitats would continue to be available for these species.
- 2.4.3 No signs of any other protected species (such as badger *Meles meles*) were noted during the site visits; and given that the nearest mapped pond is more than 500m distant (see paragraph 2.1.1 above) the presence of species such as great crested newt *Triturus cristatus* can also be reasonably discounted.
- 2.4.4 No evidence of nesting birds was noted during the inspection of the house, although the various garden trees and shrubs have the potential to support common species of nesting birds, in season.

¹⁰ English Nature (January 2004). *Bat Mitigation Guidelines*.

¹¹ ‘Species of Principal Importance in England’ under the Section 41 list of the Natural Environment and Rural Communities (NERC) Act 2006. S41 list accessed from:

<http://webarchive.nationalarchives.gov.uk/20140711133551/http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>

3 PROPOSED MITIGATION STRATEGY

3.1 Proposed ecological mitigation measures: bats

- 3.1.1 It is anticipated that a derogation licence will need to be sought from the Statutory Nature Conservation Organisation (SNCO, i.e. Natural England) in order to permit works to proceed without causing an offence under The Conservation of Habitats and Species Regulations 2017 (as amended). Demolition (and in particular the removal of the hanging tiles) would therefore need to take place under the direct supervision of a licenced bat ecologist, in line with the terms of the licence.
- 3.1.2 The survey work to date been limited to the end of the summer period; and whilst the surveys undertaken are considered sufficient to identify the presence of any roosts, in order to satisfy Natural England's minimum survey requirements for a bat licence application, further bat survey work would need to be undertaken during the May-August period to inform that application, and such surveys would be expected to follow any grant of planning consent. The findings of that survey work would inform any further refinement of the mitigation strategy, as deemed necessary for the licence, but for determination purposes it is considered that the survey results provide sufficient certainty that licensable mitigation can be secured such that the relevant tests of the 2017 Regulations are demonstrably capable of being met.
- 3.1.3 The proposed specifications for mitigation are presented below at **Figure 4** (and in full at **Appendix 3**) and will include:
- **Hanging tiles (re-used or new to match existing)** to be affixed to the western, southern elevation and eastern elevations of the extended dwelling;
 - **2no integrated bat boxes¹²** to be installed to the fabric of the walls on the northern elevation;
 - **3no integrated bat boxes** to be installed to the fabric of the walls on the eastern elevation; and
 - **3no integrated bat boxes** to be installed to the fabric of the walls on the southern elevation.
- 3.1.4 Hanging tile provision will be made to the western, southern and eastern elevations, adjacent to the window frames (as per the existing situation) and extending over a larger area to provide a 'net gain' in coverage.
- 3.1.5 Access gaps will be created to permit access by bats to the spaces behind (including the integrated boxes). This will be achieved by cutting the corner/edge off the hanging tiles sited adjacent to the windows, creating gaps large enough to permit access by pipistrelle bats. Integrated bat boxes will be installed to three elevations, with their accesses aligned with the gaps in the hanging tiles.
- 3.1.6 This arrangement will ensure that a range of thermal regimes are available to bats, including on the warmer southern elevation, and the cooler northern and eastern elevations. By installing the boxes side-by-side in groups of three, the extended cavity spaces will offer opportunities for individual bats as well as larger groups that will fully replicate or potentially even improve upon the existing situation.

¹² e.g. Vivara Pro Build-in Woodstone Bat Tube. Available via: <https://www.nhbs.com/ib-vl-05-vivara-pro-build-in-woodstone-batbox>

Figure 4. Proposed bat roost mitigation & enhancement



3.2 Proposed ecological mitigation & enhancement measures: habitats & other species

- 3.2.1 Most of the habitats within the garden will be retained, and construction impacts will be focussed on the existing building. Recommendations are proposed as follows:
- 3.2.2 **Trees & shrubs.** As far as possible, the existing shrub planting will be retained. However, where new tree and shrub planting is proposed, consideration will be given to use of native species in the first instance. Where more formalised planting is to be created, consideration should be given to use of spring-flowering bulbs, flower-rich summer herbs such as oregano, marjoram and lavender, and late-season species such as asters and autumn stonecrop *Hylotelephium spectabile*, so as to provide opportunities for pollinating insects throughout the year.
- 3.2.3 **Nesting birds.** Wild birds, their eggs, and active nests, are afforded legislative protection under the Wildlife and Countryside Act 1981 (as amended). Any clearance should therefore be programmed to be undertaken outside of these months, or otherwise the building and vegetation will be first checked to ensure that no actively-used nests are present before removal, so to avoid any harm to nesting birds.
- 3.2.4 Bird boxes should be installed within the garden trees and affixed to the building elevations, so as to provide new roosting opportunities for bat and enhanced nesting opportunities for birds. Schwegler 1B nest boxes provide opportunities for bats and a range of bird species (e.g. great tit, blue tit and house sparrow) and would be suitable for tree-mounting; or alternatively, lightweight wooden boxes could be affixed to the fence in locations safe from cats.

3.3 Summary & conclusion

- 3.3.1 It is considered that there are no over-riding ecological constraints to development, and the required ecological mitigation is deliverable. Further detail of how Natural England's EPS licensing policy 4 is met is provided at Chapter 4 of this report.
- 3.3.2 With the implementation of the ecological mitigation and enhancement measures as described at 3.1 and 3.2 above, the proposals will be consistent with the provisions of local and national planning policy, and with Natural England's EPS licensing policy 4.

4 NATURAL ENGLAND LICENSING POLICY #4

4.1 Natural England European Protected Species (EPS) licensing policies

4.1.1 During 2016, Natural England published a series of four draft licensing policies, which were adopted later that year, following a public consultation. The four policies are as follows¹³:

- **Policy 1.** Reduce mitigation measures for impacts on EPS
- **Policy 2.** Location of compensation habitats
- **Policy 3.** Let EPS use temporary habitats
- **Policy 4.** Alternative sources of evidence to reduce standard survey requirements.

4.1.2 Whilst the presence (or otherwise) of protected species must be established before planning permission is granted, where there is a reasonable likelihood of such species being present,¹⁴ Natural England recognises that there are situations where it may be appropriate to proceed on the basis of a 'lower than standard survey effort', including where the cost or delay of standard survey is disproportionate to the benefit or certainty it would provide.

4.1.3 Licensing policy 4 was developed by Natural England to offer a means to address such situations, and its wording is as follows:

"Policy 4 - Appropriate and relevant surveys where the impacts of development can be confidently predicted. Natural England will be expected to ensure that licensing decisions are properly supported by survey information, taking into account industry standards and guidelines. It may, however, accept a lower than standard survey effort where:

- *the costs or delays associated with carrying out standard survey requirements would be disproportionate to the additional certainty that it would bring;*
- *the ecological impacts of development can be predicted with sufficient certainty; and*
- *mitigation or compensation will ensure that the licensed activity does not detrimentally affect the conservation status of the local population of any EPS."*

4.1.4 Further detail is provided below to demonstrate how licensing policy 4 would apply to 5 Ashley Road, Reading.

4.2 Cost or delay of standard survey is disproportionate to the benefit or certainty it would provide

4.2.1 A single dusk emergence survey and building inspection was undertaken on 1st September 2022, and this was sufficient to determine that roosting common and soprano pipistrelle bats are present.

4.2.2 Industry best-practice guidance is that a single night-time survey is appropriate for buildings with 'low suitability' for roosting bats.¹⁵ Arguably, however, the building could be described as of 'moderate suitability', as the hanging tiles have scope to support larger numbers of bats, and a second 'in season' survey would be needed in order to meet standard survey effort requirements.

¹³ Natural England (14 January 2022). *Guidance: European protected species policies for mitigation licences*. Via: <https://www.gov.uk/guidance/european-protected-species-policies-for-mitigation-licences>

¹⁴ ODPM, (16 August 2005). *Government Circular: Biodiversity & Geological Conservation – Statutory obligations and their impact within the planning system*. Paragraph 99. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf

¹⁵ Collins, J. (ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). Bat Conservation Trust, London.

- 4.2.3 As set out at paragraph 3.1.2 above, additional bat survey work would need to be undertaken during the May-August period in order to inform the application for a licence to Natural England, (whether via a conventional bat licence application, or via the Bat Low Impact Class Licence route¹⁶).
- 4.2.4 Such a survey could not therefore be undertaken until May 2023 at the earliest, however; and deferring until June 2023 would be more desirable in allowing data to be captured from closer to the peak of the season.
- 4.2.5 However, if the planning application were not determined until further survey information is provided, then this would give rise to significant consequences for the applicant in terms of cost and delay implications. A dichotomy of scenarios is presented in **Table 4** below, setting out the delay and cost implications in a scenario where a planning decision is not made until after receipt of further survey information (SCENARIO B), as compared with a situation where a planning decision is made this year (SCENARIO A).

Table 4. Delay & cost implications for waiting for further survey information re licensing policy 4

SCENARIO A: Planning application determined January 2023	SCENARIO B: Planning application not determined until July 2023
1. Planning decision received during winter 2022/23. Provided consent is granted, the applicant can proceed having certainty as to planning status and timelines, and can immediately seek detailed quotations from contractors to undertake the work, enabling their time to be contractually secured for autumn 2023. Loan/mortgage agreements can also be finalised with the applicant's provider on the basis of those detailed quotations.	1. Further bat survey undertaken in June 2023 before the application is determined, at the request of Reading Borough Council.
2. Applicant to address any planning conditions relating to wildlife during spring 2023, enabling those conditions to be discharged in advance of making a bat licence application to Natural England. Eight weeks to be allowed for Reading Borough Council to process and formally discharge the relevant conditions.	2. Planning decision received during July 2023. Applicant can only then begin to formalise detailed quotations from contractors to undertake the work. Following that lapse of time, the previous agreements with loan/mortgage providers would need to be renegotiated to fund the work. There is a significant likelihood that forced renegotiation of funding would render the project financially unviable.
3. Further bat survey undertaken in June 2023 to inform bat licence application to Natural England. Details of the survey work could be presented to Reading Borough Council, along with the details of the bat licence granted by Natural England, subject to a suitably worded planning condition.	3. The applicant could address any planning conditions relating to wildlife at this stage, enabling those conditions to be discharged in advance of making a bat licence application to Natural England. Eight weeks to be allowed for Reading Borough Council to process and formally discharge the relevant conditions.
4. Application for a bat mitigation licence to be made to Natural England in July 2023, allowing 6 weeks for the bat licence application to be processed.	4. Following the discharge of any relevant planning conditions, an application could be made in September 2023 to Natural England for a bat

¹⁶ Natural England (2019). *Bats: mitigation class licence to allow low impact work on bat roosts (CL21)*. Via: <https://www.gov.uk/government/publications/bats-licence-to-interfere-with-bat-roosts-cl21>. The Bat Low Impact Class Licence can be used only in situations affecting day roosts, night roosts, transitional roosts or feeding perches for common/widespread species of bats (such as common and soprano pipistrelle). The Low Impact Class Licence cannot be used where works affect a breeding or hibernation roost, or rarer species of bat. Survey requirements are the same as for a conventional licence application.

SCENARIO A: Planning application determined January 2023	SCENARIO B: Planning application not determined until July 2023
	mitigation licence. Six weeks should be allowed for Natural England to process the bat licence application.
5. Building contractor programmed to commence work in September 2023.	5. Bat licence received November 2023 at the earliest. However, as the applicant could not begin to formally secure contractors until July 2023, the earliest realistic start date would be Q1 2024. Given current inflation rates of >10% per annum, this delay is likely to further increase the cost of materials, to the extent that the project risks becoming financially unviable for the applicant, even if loan/mortgage funding can be achieved (see #2 above).
6. Permanent replacement bat roost features installed before May 2024, ensuring that replacement roost features are available for bats prior to the start of the 2024 active season.	6. If works go ahead, it is unlikely that the permanent roost replacement features could be installed before May 2024, and alternative roost provision would therefore take the form of temporary bat boxes as an interim measure.
7. Works completed during early-2024, giving the applicant's family the space they need at the earliest opportunity, and enabling them to stay resident in their existing community.	7. In combination with the pressures of other personal commitments the applicant is faced with during late-2024, delays to the project risk the extension works becoming completely untenable. The applicant's only options would then be: to remain in a dwelling which is of insufficient size to comfortably support a family; or to move further away from the family's existing community and school.

4.3 Predicting the impact

- 4.3.1 As set out at Chapter 2 above, during the dusk survey a total of 11 pipistrelle bats (comprising both common and soprano species) were seen emerging from four hanging tile locations on the western elevation of 5 Ashley Road. Similar numbers of pipistrelle droppings were visible on both the western and eastern elevations, and it was concluded that bats are likely to roost under hanging tiles on both elevations, occupying whichever elevation has the most appropriate thermal regime on any particular day.
- 4.3.2 Given that both species were found to be roosting in relatively low numbers, and apparently in mixed-species arrangements, the roosts identified are considered to be consistent with day roosts for both common and soprano pipistrelle bats. Furthermore, given the prolonged drought weather conditions in the weeks leading up to the survey, it is anticipated that *had* large accumulations of droppings been present these would have persisted (rather than being washed away by rain); and on that basis, there is no field sign evidence to suggest that the site supports a maternity roost.
- 4.3.3 However, in view of the uncertainty that is introduced by not having access to mid-season survey data, a precautionary assessment is made below for a 'reasonable worst case scenario' whereby larger numbers of pipistrelle bats could be present during the peak of the summer season, despite there being no evidence to date for any such activity.

- 4.3.4 Common and soprano pipistrelle bats can form very large breeding colonies, with maternity roost counts sometimes exceeding 1,000 bats,¹⁷ and clearly there is insufficient capacity behind the hanging tiles to support bats in those numbers. However, fifty pipistrelle bats would also be readily recognisable as a maternity roost, and a count of as few as 20 bats of a single pipistrelle species might be deemed to represent a maternity roost in a highly precautionary assessment.
- 4.3.5 Based on the view that more than 20 bats could conceivably occupy the space behind the hanging tiles, an assessment is therefore presented below on the basis that the house could theoretically support a maternity roost for either common or soprano pipistrelle bat species (although as described at paragraph 2.3.12 above, evidence was not found to confirm this during the surveys undertaken to date).
- 4.3.6 Accordingly, whilst current evidence is for roosts used by small numbers of two common species, an assessment is made here also for the presence of a (small) pipistrelle maternity roost, on a precautionary basis.

4.4 Design mitigation and compensation measures

- 4.4.1 Licensing policy 4 requires that mitigation and compensation should be provided to cover the maximum impact of the activity, based on an assessment of plausible scenarios. The scenarios being assessed here therefore include (i) mitigation and compensation for day roosts for common and soprano pipistrelle (for which the evidence is section 2.3 above); as well as (ii) mitigation and compensation for the maximum plausible impact scenario involving a common or soprano pipistrelle maternity roost (as described at paragraphs 4.3.3 – 4.3.6 above).
- 4.4.2 Common pipistrelle and soprano pipistrelle are the two most common species nationally, regionally, and locally. These species are typically crevice-roosting and tend to occupy features such as gaps beneath tiles, and within soffit boxes and cavity walls. Properties constructed during the post-war period, and particularly during the 1960s, tend to offer suitable features for these species, and as such it is anticipated that many other properties locally will support these species¹⁸.
- 4.4.3 Figure 4 of the bat mitigation guidelines endorsed by Natural England¹⁹ provide guidance on the conservation status of each roost type, and related mitigation requirements, as follows:
- (i) Day roosts for common and soprano pipistrelle are considered to be low-conservation status roosts, and mitigation requirements are as follows: *“Flexibility over provision of batboxes, access to new buildings etc. No conditions about timing or monitoring.”*
- (ii) Maternity roosts for common and soprano pipistrelle are considered to be of medium-conservation status, and mitigation requirements are as follows: *“Timing constraints. More or less like-for-like replacement. Bats not to be left without a roost and must be given time to find the replacement. Monitoring for 2 years preferred.”*
- 4.4.4 In view of this assessment, and the desire to demonstrate that mitigation suitable for a maternity roost can be provided, the mitigation detailed at section 3.1 is designed to be suitable for either scenario. The timetable provided at **Table 4** above also shows how timing constraints (i.e. avoidance of works

¹⁷ John Altringham (2003). *New Naturalist: British Bats*. Harper Collins Publishers.

¹⁸ Indeed, a common pipistrelle bat was seen to emerge from the property immediately to the north of 5 Reading Road (85 Berkeley Avenue) during the emergence survey work undertaken.

¹⁹ English Nature (January 2004). *Bat Mitigation Guidelines*.

during the breeding season) are a *de facto* part of the proposed works programme. Furthermore, by reference to point (6) within that table, if works can commence early, there is scope for the permanent mitigation and compensation works to be installed before the start of the 2024 breeding season, avoiding any need to rely on temporary mitigation in the form of bat boxes.

4.5 Summary

4.5.1 Turning to Reading Borough Council's duty to consider the provisions of The Conservation of Habitats and Species Regulations 2017 (as amended), in the process of determining a planning application, and the potential for the 'three tests' to be met by the proposals, it is considered that there is sufficient information to determine that these would be met, subject to the adoption of the mitigation strategy above, for the reasons that follow:

1. The development is for an imperative reason of overriding public interest of an economic nature as the development will contribute to a social and economic need of the local community for improved housing (this is assuming that it is in compliance with other planning policy) – therefore Regulation 55(2)(e) can be met;
2. There is no satisfactory alternative to the development as without carrying out the works the aforementioned need would not be fully met - therefore Regulation 55(9)(a) can be met; and
3. Appropriate mitigation can be provided which will ensure that there will not be a detrimental impact to the favourable conservation status of the bat species concerned - therefore Regulation 55(9)(b) can be met."

4.5.2 Further bat survey work and the preparation of a detailed bat mitigation strategy will be a requirement of the bat licence which the applicant must seek from Natural England prior to commencement of works. In addition, should Reading Borough Council be minded to grant consent, then final agreement of the details of the mitigation scheme with RBC can also be legitimately secured by means of a planning condition, without offending planning practice guidance.

APPENDIX 1. Consultation advice from RBC Ecology Consultations (20 June 2020 by RBC Ecology)

Memo

To: David Brett

From: Cathy Holwill (RBC Ecology Consultations)

CC:

Date: 2 August 2022

Re: Application ref: 220988

Address: 5 Ashley Road Reading, RG1 6HT

Description: 2 storey front extension. Increase in roof ridge height. Rear single storey extension. Demolition of front entrance, store and existing garage. Construction of new garage, new windows and doors. Construction of new store. New external wall insulation. Change of facade materials

This application site is a detached house and garage where the proposals include modifications to the roof including a loft conversion, demolition of the garage, a single storey rear extension and a two-storey front extension. The site is surrounded by habitat of moderate suitability for use by commuting and foraging bats – and there are records of bats roosting nearby.

It is proposed to significantly extend the building. The applicant has submitted a document by Hives Architects that reads:

“The house is detached and built in the 1960’s. There are no visible holes in the roof nor any missing roof tiles; the house has been well maintained and is in a good state of repair.

The house is currently inhabited by the applicant. The applicant has never seen or had any experience of bats visiting or living in residence. There is no evidence of any bat droppings within the vicinity of the property, or within the loft itself.”

This is not sufficient to assess if the building hosts a bat roost. The application should not be determined until a bat survey report from an appropriately qualified ecologist has been provided

Further details are given below.

Legislation

All species of bats receive protection under UK law and it is a criminal offence under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010 (The Habitat Regulations), deliberately or recklessly to destroy or damage their roosts, or to disturb, kill or injure them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).

Planning policy

Paragraph 99 of the government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System (this document was not revoked by the National Planning Policy Framework) states that:

“It is essential that the presence or otherwise of protected species, and the extent that they

may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted."

In this case because neither the presence or otherwise of protected species, nor the extent to which they may be affected has been established, the application would not be in accordance with the above planning policy, or other planning policy in relation to biodiversity.

Survey requirements

A presence / absence bat survey is normally undertaken in two stages, firstly a preliminary roost assessment, whereby the inside and outside of the building/s and/or trees to be removed is surveyed for bats and signs of bats. This survey can be undertaken at any time of year.

If bats are found or features within the building/s or trees have the potential to support roosting bats and these will be affected by the proposals, further dusk emergence and or pre-dawn re-entry surveys during the bat active season (i.e. between May and the end of August/ sub optimally until mid-October) would need to be carried out. The applicant would then need to submit the results of the survey(s) along with any associated mitigation strategy prior to determination of the application.

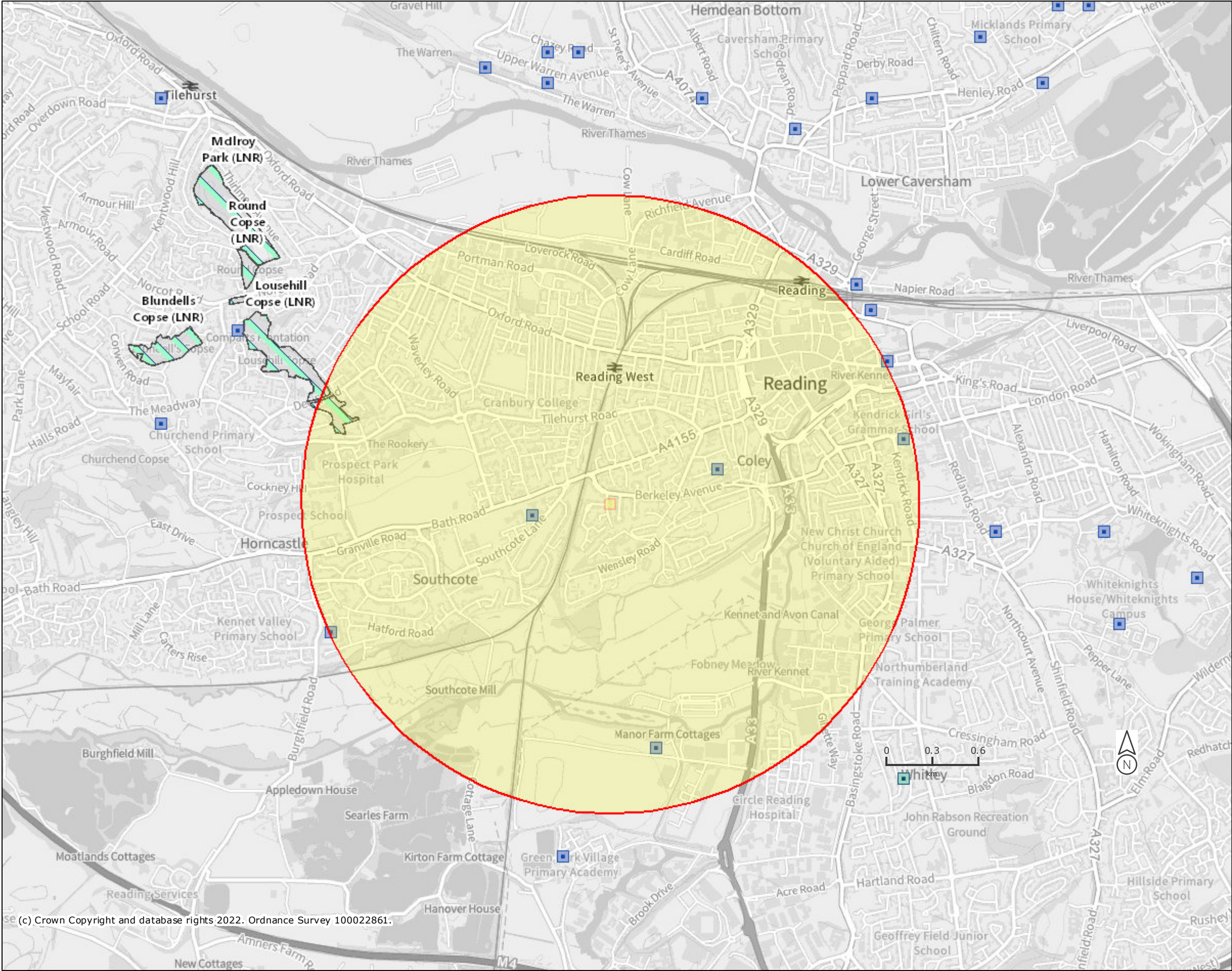
Surveys should be carried out by suitably experienced ecologists who are a member of a professional organisation such as the Chartered Institute of Ecology and Environmental Management and / or are licensed or accredited by Natural England to survey bats.

Summary

The house and the garage may host roosting bats and to confirm whether this is the case, and if so how bats will be affected by the proposals, a bat survey will need to be carried out. The survey will need to be carried out prior to determination of the application or the application would need to be refused on the grounds that insufficient evidence had been provided to determine the likely impacts of the proposals on bats (which are a protected species and a material consideration in the planning process).

The applicant should be aware that bat activity surveys are seasonal, and factor this into the timeframe for their project.

APPENDIX 2. Information obtained via MAGIC (nature conservation designations & granted EPS licenses)



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Legend

- Local Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

Granted European Protected Species Applications (England)

- Amphibian
- Bat
- Cetacean
- Invertebrate
- Other Mammal
- Plant
- Reptile

Projection = OSGB36
xmin = 461800
ymin = 168200
xmax = 478700
ymax = 176900

Map produced by MAGIC on 20 September, 2022.
Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

Site Check Report Report generated on Tue Sep 20 2022
You selected the location: Centroid Grid Ref: SU70207247
The following features have been found in your search area:
Granted European Protected Species Applications (England)
Case reference of granted application
EPSM2010-2590
Species group to which licence relates
Bat
Species on the licence
S-PIP
Site county of licence
Berkshire
Licence Start Date
28/10/2011
Licence End Date
31/08/2014
Does licence impact on a breeding site
Y
Does licence allow damage of breeding site
Does licence allow damage of a resting place
Does licence allow destruction of breeding site
Y
Does licence allow destruction of a resting place
Y
Does licence impact on a hibernation site
Unknown
NERC agreement reference
Unknown
Case reference of granted application
2015-14868-EPS-MIT
Species group to which licence relates
Bat
Species on the licence
BLE,C-PIP
Site county of licence
Berkshire
Licence Start Date
10/12/2015
Licence End Date
30/11/2018
Does licence impact on a breeding site
N
Does licence allow damage of breeding site
N
Does licence allow damage of a resting place
N
Does licence allow destruction of breeding site
N
Does licence allow destruction of a resting place
Y
Does licence impact on a hibernation site
Unknown
NERC agreement reference
Unknown

Case reference of granted application

EPSM2013-6388

Species group to which licence relates

Bat

Species on the licence

C-PIP;BLE

Site county of licence

Berkshire

Licence Start Date

07/10/2013

Licence End Date

30/11/2018

Does licence impact on a breeding site

N

Does licence allow damage of breeding site

Does licence allow damage of a resting place

Does licence allow destruction of breeding site

N

Does licence allow destruction of a resting place

Y

Does licence impact on a hibernation site

Unknown

NERC agreement reference

Unknown

Case reference of granted application

2016-22301-EPS-MIT

Species group to which licence relates

Bat

Species on the licence

C-PIP

Site county of licence

Berkshire

Licence Start Date

21/04/2016

Licence End Date

20/04/2021

Does licence impact on a breeding site

N

Does licence allow damage of breeding site

N

Does licence allow damage of a resting place

Y

Does licence allow destruction of breeding site

N

Does licence allow destruction of a resting place

Y

Does licence impact on a hibernation site

Unknown

NERC agreement reference

Unknown

Case reference of granted application

2020-49490-EPS-MIT

Species group to which licence relates

Bat

Species on the licence

S-PIP

Site county of licence

Berkshire

Licence Start Date

01/11/2020

Licence End Date

30/11/2025

Does licence impact on a breeding site

N

Does licence allow damage of breeding site

N

Does licence allow damage of a resting place

N

Does licence allow destruction of breeding site

N

Does licence allow destruction of a resting place

Y

Does licence impact on a hibernation site

Unknown

NERC agreement reference

Unknown

Case reference of granted application

2017-32379-EPS-MIT

Species group to which licence relates

Bat

Species on the licence

C-PIP

Site county of licence

Berkshire

Licence Start Date

04/12/2017

Licence End Date

29/11/2022

Does licence impact on a breeding site

N

Does licence allow damage of breeding site

N

Does licence allow damage of a resting place

Y

Does licence allow destruction of breeding site

N

Does licence allow destruction of a resting place

Y

Does licence impact on a hibernation site

Unknown

NERC agreement reference

Unknown

Local Nature Reserves (England)

Reference

1009372

Name

LOUSEHILL COPSE

Hectares

13.03

Hyperlink

<https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009372>

Ramsar Sites (England)

No Features found

Sites of Special Scientific Interest (England)

No Features found

Special Areas of Conservation (England)

No Features found

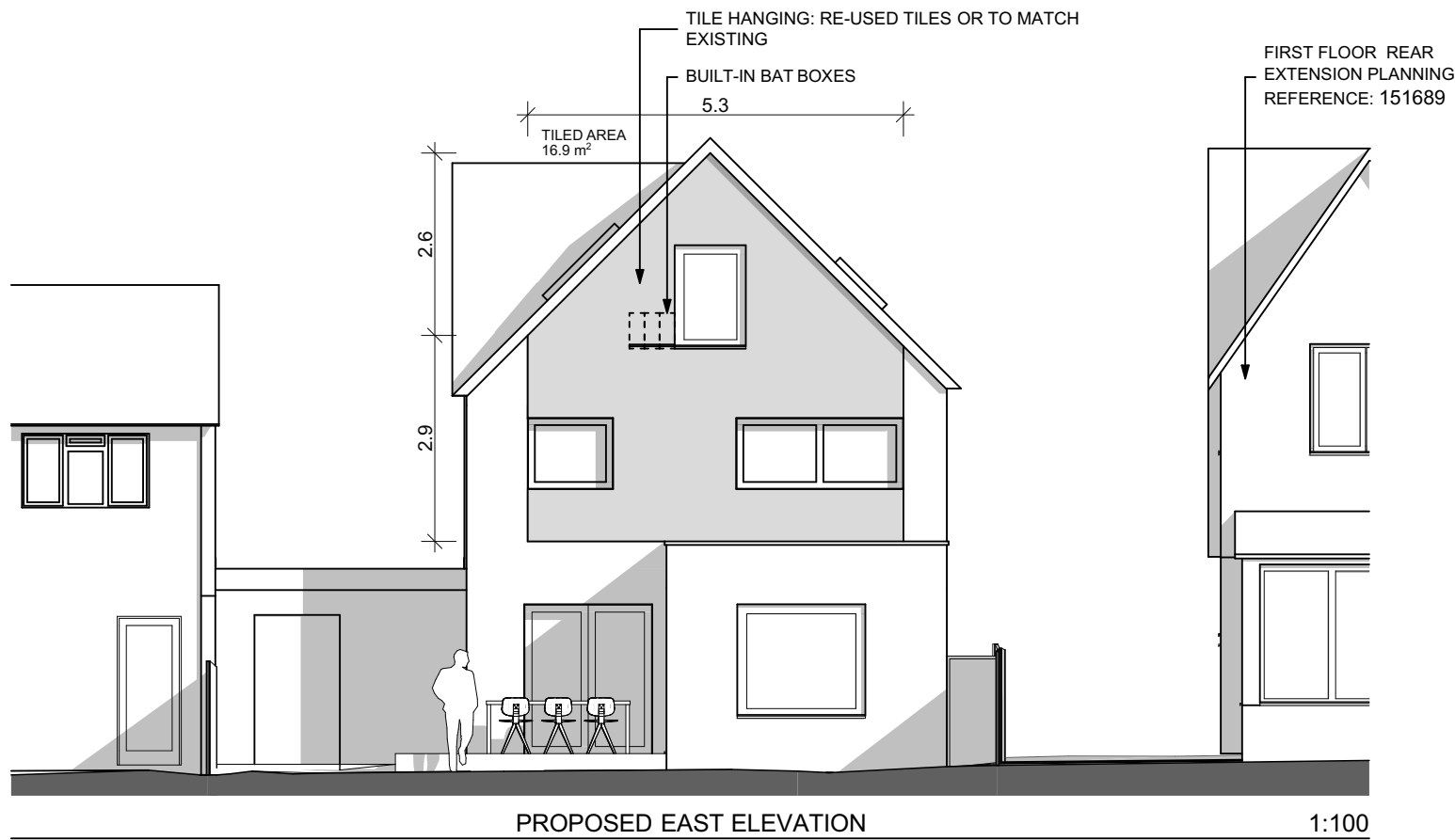
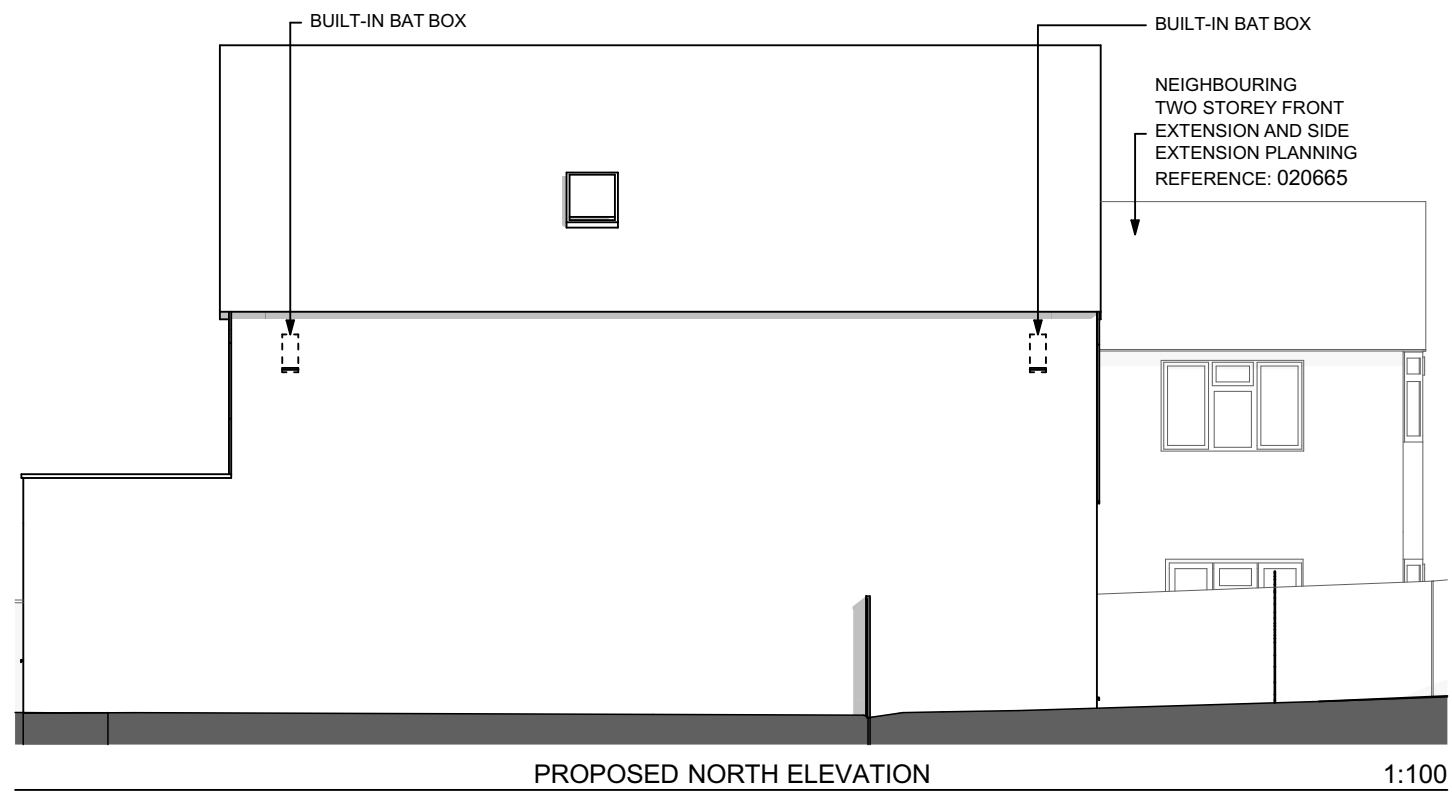
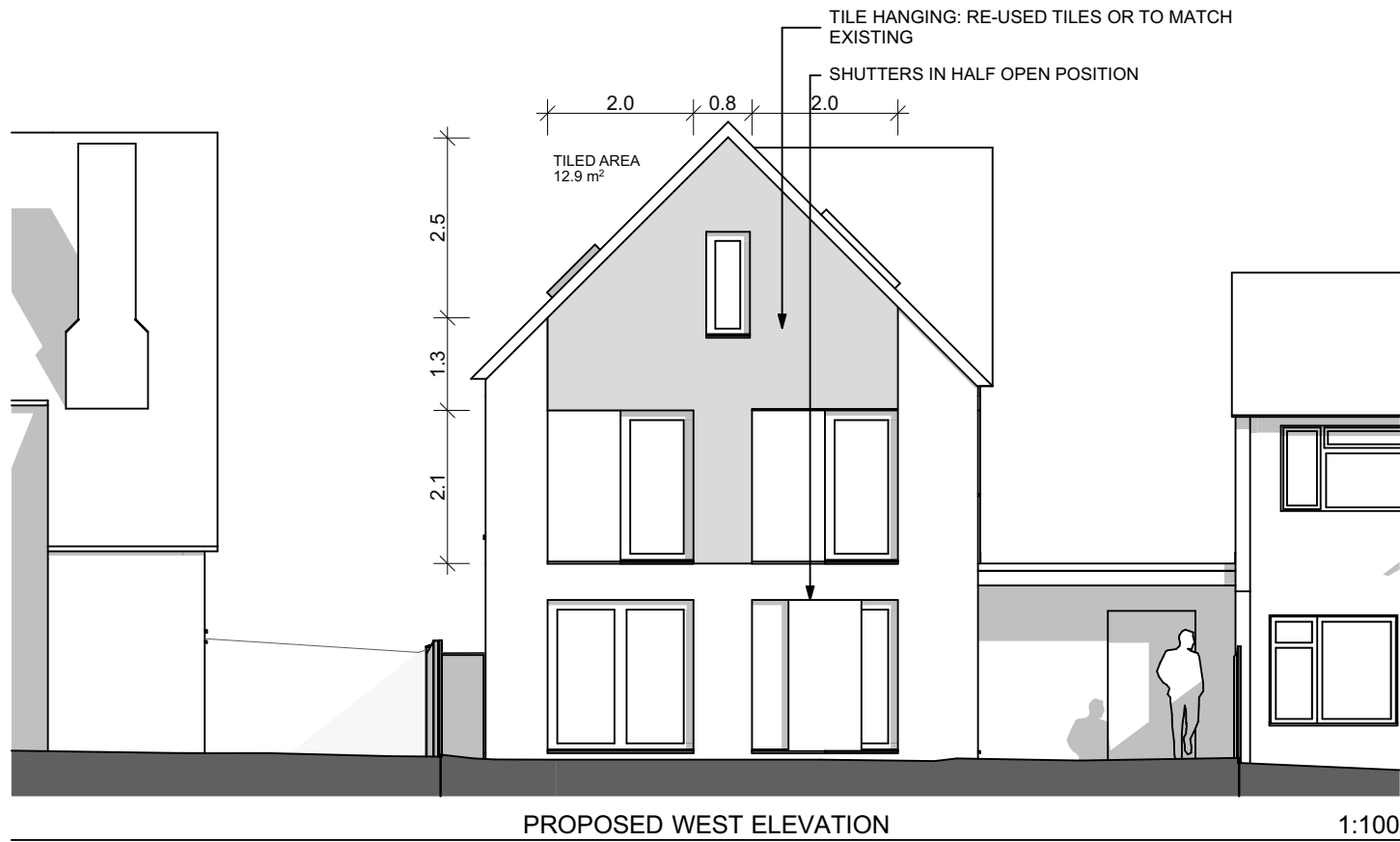
Special Protection Areas (England)

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APPENDIX 3. Proposed elevations plans showing locations for proposed bat mitigation

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TOTAL PROPOSED TILED AREA: 57.4

0 1 2 5
SCALE 1:100

Rev P14 19/01/22 CLADDING REPLACED TO HANGING TILES

Client
MR P GRABINAR

Site
5 ASHLEY ROAD
READING
RG1 6HT

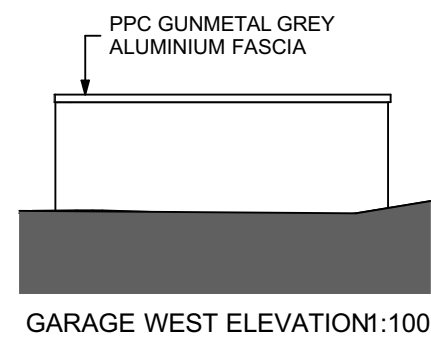
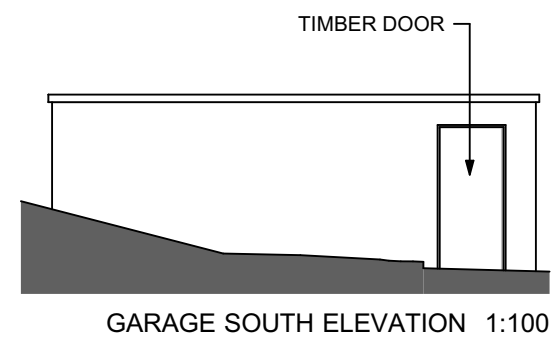
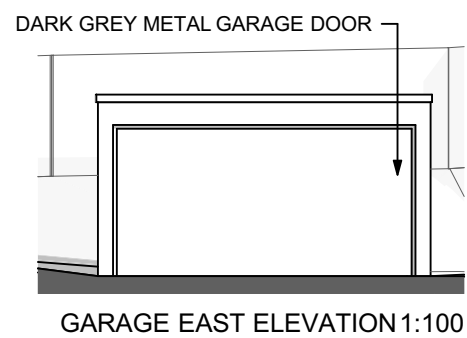
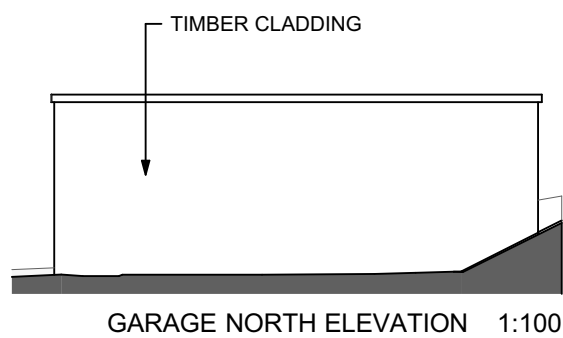
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Project Status
PLANNING

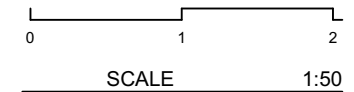
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SINCE 1934
Hives Architects LLP
29 Castle Street, Reading, RG1 7SB
0118 958 7331, admin@hivesarchitects.co.uk

Project Drawing Revision
2835 005P14



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Revisions

P4 20/01'22 TILE CLADDING ADDED

Drawing Title

PROPOSED MATERIALS

Job title

**5 ASHLEY ROAD
READING
RG1 6HT**

Client

MR P GRABINAR

Project Status

PLANNING

Scale

1:50@ A4

Drawn

GP

Check

HW

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SINCE 1934

Hives Architects LLP

0118 958 7331

29 Castle Street Reading RG1 7SB

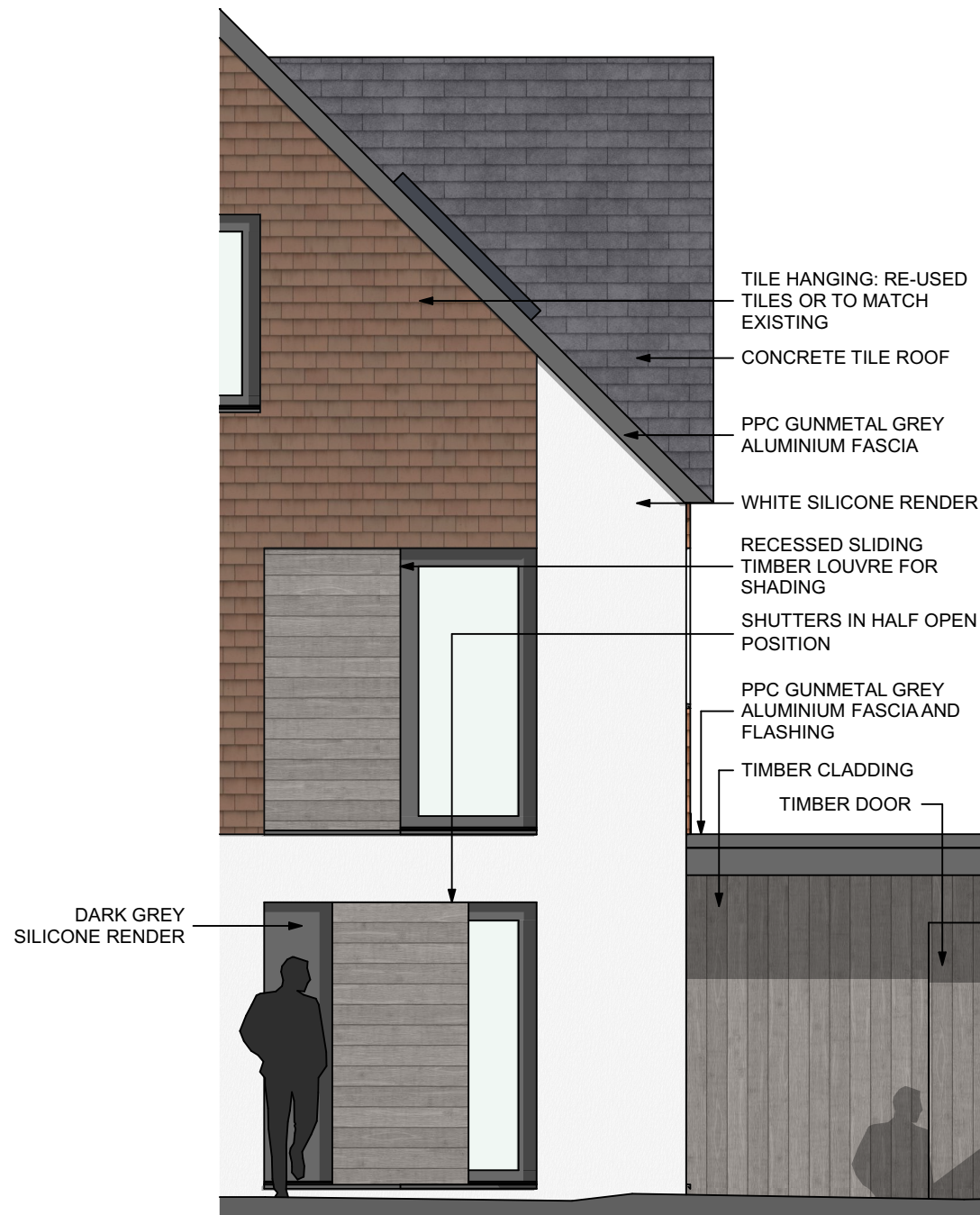
hivesarchitects.co.uk

Project

Drawing

Revision

2835 008P4



PROPOSED MATERIALS

1:50



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