## BAT ROOST ASSESSMENT SURVEY & MITIGATION REPORT

# Site name: Romsley Hill Grange, Farley Lane, Romsley, Halesowen B62 0LN

Commissioned by: Nick Parkes, Coda Developments Ltd

Date: Ver. 4.0, 07-08-23



europaeus land management services (ecology)

Director : Stephen P.B. West MSc MCIEEM PrCMA

01568 611736 Sub offices: Herefordshire; Cheshire; Oxfordshire

Office email: ecology.susan@hotmail.co.uk

### CONTENTS

1. Introduction	6
2. Survey methodology	11
3. Survey results	14
4. Appraisal and recommendations	22

Appendix 1: Survey photographs

Appendix 2: Aggregate bat data

Appendix 3: Implications of Survey Findings & Considerations for Proposals, Precautionary Working Precautionary Method Statement and Summary Recommendations, Mitigation Strategy & Biodiversity Enhancements - Updated August 2023

Author: S.P.B.W.

Checked: S.D. Date: Ver. 4.0, 07-08-23

NB. Information on legally protected, rare or vulnerable species may appear in this report. It is recommended that appropriate caution be used when circulating copies. Whilst all due diligence and reasonable care is taken in the preparation of reports, Europaeus Land Management Services accept no responsibility whatsoever for any consequences of the release of this report to third parties. It should be noted that we are an ecological practice and matters concerning the interpretation of legal matters should be considered appropriately and further advice sought if necessary. It should also be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

### **Executive Summary**

- 1. A scoping / stage one (bat roost) daytime assessment for protected species and primarily bats in buildings was undertaken at parts of the property (buildings at Romsley Hill Grange, Farley Lane, Romsley, Halesowen), in a suburban / rural location, during the early spring of 2020. A full preliminary survey, primarily for bat issues in this area and immediate vicinity as an ecological appraisal, was carried out to best practice guidelines drawing evidence from aerial photographs, desk-based tools and typical associations from the habitats present on the site and surrounding land. These surveys were fully updated with a hibernation check and suite of summer activity and assessment surveys in 2023. New or revised information is provided in red font.
- 2. In passing, and in the immediate vicinity of the site, evidence for the presence of protected species was sought searching for signs of nesting birds etc, while primarily, as a Provisional Roost Assessment survey (PRA), the specific parts of the relevant structures were examined for the potential to support roosting bats. An assessment was made of any potential for the proposed work at the site to harm or disturbed protected species or their habitats.
- 3. Of three blocks of structures surveyed recent signs of a bat use including within the interior of the buildings were observed in two of the three. No other protected species groups were identified other than the potential for bird breeding activity, although this was only a one-off scoping survey and not a concerted species survey.
- 4. Signs of a long-eared bat use of the site for roosting at least at a prolonged feeding, nighttime level, by a smaller species such as a pipistrelle type and direct observation of two lesser horseshoe bats (in torpor) were identified.
- 5. Obvious opportunities existed for the access of bats into the roofs and voids, including the cellar and service passageway and possibly other structural features such as external walls, some of which are affected by the proposals and we consider that a presence of bats using those features would not necessarily have left signs evident even to an experienced surveyor.
- 6. It was a conclusion of the preliminary report that a continuing presence of bats using the two blocks of structures was likely with obvious potential for the use as indicated to be at a greater and more significant level. Thus, a contemporary use of the site was evident and which use could be disturbed by the development proposals. The survey methods employed had, as

usual, left a residual potential for missed evidence of solitary or temporary bat visitation elsewhere.

- 7. Neither the precise use of the site, nor definite access point(s) for bats had been identified, (although a hibernation use of the cellars is of a highly significant nature given the location). Therefore, a bat disturbance mitigation licence would need to be applied and, in the meantime, a precautionary approach to the planning of the proposed works was recommended, along with a suite of summer season activity surveys for bats, fully updated in 2023.
- 8. The suite of surveys has now been completed and this updated report summarises the findings and conclusions of that work, namely that the workshop building (C) has a low level day roost of (brown) long-eared bats (using a gap in the rear (western) gable end to enter, and a use of two internal spaces for night feeding perches); that there is a site wide foraging use by pipistrelle bats but no definite current roosting use; and that the service tunnels and office cellar have a roosting use by numbers of lesser horseshoe bats including hibernation and summer use. This use has been confirmed in 2023.
- 9. No other protected species or likely habitat issues were identified associated with the site, although please do note the limited extent of this bats in structures appraisal.
- 10. Based on the nature of the site, its location and the observable evidence, the conclusion made, within the extent of knowledge of the planned work (structural disturbance with potential for impediment to bat access or use of roosting locations), is that the work presents some potential for disturbance to use by roosting bats or to other protected species, and that a precautionary approach to structural disturbance is recommended at the appropriate time following appropriate licensing.
- 11. The property structure at the site with current proposals for change left some potential for oversight of the possibly variable use by the bat use. With this in mind, and an evolution of site plans as now fully consented by Bromsgrove Council, new surveys had to be carried out to assess any changes and to reconcile those consented plans with the appropriate mitigation which work is now completed.

- 12. Either a site registration under the bat class mitigation licence, or a full European Protected Species Mitigation Licence of derogation from the relevant (bat) protected species legislation is deemed necessary to enable the conversion works otherwise prohibited by the law. Specific recommendations are made in Appendix 3 and we recommend these be conditioned within planning consent. Regardless of any consent situation the legal situation remains the same for repair works. Given that the current assessment is that the workshops are the only building which represents a bat roost, therefore work to convert the old garages and to convert the old office building could take place in advance of any form of legal consent for protected species. A modified range of mitigation, compensation and enhancement measures are presented here. All site work should be under full ECoW supervision to ensure no inadvertent harm is done to protected species, their resting places or specific site use. Work to demolish the workshops and to replace with two new, semi-detached dwellings, providing that work to achieve replacement bat roosting features can be done within six months from commencement, can be eligible for a site registration within the Bat Mitigation Class (Low Impact) Licence system.
- 13. Our overall recommendation, therefore, is to follow careful proposals for the site development scheme, and to pursue a precautionary approach to those works once all necessary consents are obtained.

### 1. Introduction

- 1.1 Europaeus Land Management Services was commissioned by PBC Architecture on behalf of Samuel Parkes Estates Ltd, to carry out a bat roost preliminary daytime assessment survey of parts of the identified property (Romsley Hill Grange, Romsley, Halesowen), prior to proposed works there. We understood that the site is proposed for works to convert some of the structures and remove others; and which work therefore has potential to disturb parts of the property within which components potentially suitable for bat roosting could be partially disturbed. This report sets out the findings of that preliminary survey and an analysis of the findings from a suite of summer bat activity surveys, and provides recommendations in the light of those findings. Update assessment work has been commissioned by Coda Developments Ltd in 2023 which work has involved a full winter assessment and full updated suite of summer surveys.
- 1.2 Thus, work to modify the structures and particularly roofing and structural components will create the possibility of direct or indirect disturbance to some parts of the buildings and site which may have potential for use by bats and other protected species were they to be there or users of such features rendering the need for a bat survey.

### The need for a bat survey

1.3 Some bat species in Britain are reported to be declining in numbers and distribution. There are 17 resident species in the country constituting over a third of all mammal species present. With habitat loss, fragmentation and degradation, building conversion, misuse of timber-treatment chemicals, increase in predators and direct persecution, the situation in some areas is serious. Several of the commoner bat species are reported to have significantly declined in the second half of the twentieth century. Bats are therefore protected under national and international wildlife law, and owners, developers and planners have to take due notice of their protection within activities. There is no defence under law for a plea of ignorance even when carrying out otherwise lawful activities.

#### Limitations

1.4 The optimal survey period for the characterisation, mapping and assessment of the presence and nature of protected species (bats) present on a site in this geographical region, to the level required for a comprehensive ecological assessment, is May - August inclusive. The May / August period is the optimal survey period for bats within buildings on a site in this geographical region, to the level required for a comprehensive assessment. Bats are active at this season and their droppings and other field signs, whilst typically cryptic and requiring detailed search, will nonetheless be apparent to the experienced surveyor. However, with recent changeable weather trends, bats are known to have, in some circumstances, altered their movement and occupation patterns. This full structural and scoping survey was deemed to have taken place adequately with the aid of ladders, a flexible endoscope, binoculars, thermal imaging and ultraviolet light transmission equipment available. Apart from the details provided here, no other parts of any structures or other building components adjacent to the site were entered or surveyed nor were other protected species groups addressed except in passing (as no significant impact will result from the plans on any semi-natural habitats or surrounding land for instance). It should be noted that investigation of the site represented a bat species appraisal and, although we feel it is highly unlikely that significant matters have been overlooked, visits may miss species not apparent at the times of survey by reason of seasonality, mobility, habits or chance. Particular seasonal limitations are indicated in the text. Weather conditions were acceptable at the time of the surveys for this approach.

#### Legislation

1.5 Within England all species of bat and their breeding sites or resting places (roosts) are protected under Regulation 39 of the Conservation (Natural Habitats) Regulations 1994 and Section 9 of the Wildlife and Countryside Act 1981. Further enforcement has been provided by The Countryside and Rights of Way Act 2000 which confers a responsibility to the government. The Conservation of Habitats and Species Regulations 2010 updated the legislation. In exercising their decisions within the planning framework, local authorities are duty bound to take full account of the impact on biodiversity, including the wider biodiversity within network and 'notable' species listed Red Data Books, taxa-specific conservation lists and Schedule 41 of the Natural Environment and Rural Communities Act 2006. Furthermore Planning Policy is relevant to preserve and enhance biodiversity and conserve native wildlife and habitats. The national government is committed, under the

UKBAP, to the promotion of the pertinent habitats and species action plans which includes all of its bat species.

- 1.6 It is illegal to:
  - deliberately disturb bats (whether in a roost or not) in a way as to be likely to significantly affect

(a) the ability of any significant groups of animals of that species to survive, breed, or rear or nurture their young, or (b) the local distribution of abundance of that species

- damage, destroy or obstruct access to bat roosts
- possess or transport a bat or any part of a bat, unless acquired legally and in possession of a licence to do so
- sell, barter or exchange bats, or parts of bats unless in possession of a licence to do so.
- 1.7 Within the Conservation of Habitats and Species Regulations the law has been made quite clear. Many formerly used defences can now no longer be used in disturbance situations. These include the commonly relied upon 'incidental result defence', which previously covered acts that were the incidental result of an otherwise lawful activity and which could not reasonably have been avoided.
- 1.8 There is, therefore, an obligation on those who seek to effect changes to buildings, structures, caves or trees, or carry out activities which might constitute a disturbance, where bats are present, thought to be present, or have the reasoned possibility of presence to seek specialist advice, and to ensure that appropriate systems are in place to avoid damage to bat roosts or their habitat.
- 1.9 As bats are protected by European legislation, works under a planning permission that will cause disturbance to a bat or bat roost shall require a specific licence from the Wildlife Licensing Unit (W.L.U.) of Natural England (DEFRA), and in Wales of N.R.W., (only after planning permission has been granted where this is required). Conditions may be added to a licence or the granting of a licence may be refused. Under the Conservation of Habitats and Species Regulations the W.L.U. can issue licences for:

- preserving public health and safety or other imperative reasons of over-riding public interest including those of a social and economic nature and beneficial consequences of primary importance for the environment;
- preventing the spread of disease; preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other form of property or to fisheries
- 1.10 The W.L.U. can only issue a licence if it is satisfied that the activity meets one of the above purposes and is also satisfied that there is no satisfactory alternative, and that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a <u>favourable conservation status</u> in their natural range.
- 1.11 Applications to apply for European Protected Species licence for bats consist of the following:-
  - Application form this provides detail on the applicant, project, the purpose of the work and consideration of alternatives.
  - Method Statement this provides detail on the methods to be used to carry out the work with regard to bats and will include a survey undertaken to determine the number of bats present.
  - Detailed timetable of works, mitigation measures and all monitoring and possible modification works.
  - Reasoned Statement of Application (for larger scale projects) this provides the reasons for the disturbance and gives evidence of the justification.
  - Within English jurisdiction (though not Wales), for projects involving small numbers of the most commonly encountered bat species, in licence situations and in roosting behaviour other than important maternity, mating or hibernation sites (amongst others), an approach of a **Registered Consultant** being employed to instruct works under the **Bat Low Impact / Mitigation Class Licence** (B.L.I.C.L./B.M.C.L.) system may be appropriate with a lower burden of paperwork, compensation and monitoring.

#### **Breeding Birds**

### The need for a breeding bird survey

- 1.12 The Wildlife and Countryside Act 1981 (WCA 1981) provides that all wild birds are protected and cannot be killed or taken except under licence. The Act also prohibits or controls certain methods of killing or taking except under licence. Certain exceptions to this general rule apply. However, with the exception of a certain few derogated pest or very common species, the legislation gives protection to all wild birds in Britain.
- 1.13 The May June period is the optimal season for the identification of breeding bird assemblages where song birds identify and defend nesting territories and sites, where vegetation is less dense than later and first broods might be expected to be observable.

#### Limitations

1.14 A search for any disused nests or those occupied was possible. Weather conditions were acceptable at the time of the surveys.

### 2. Survey methodology

- 2.1 Bats: The detailed methodologies for the survey followed a considered and proportionate approach to best practice recommendations in *Bat Surveys: Good Practice Guidelines* (BCT 2007, revised 2016), and *Bat Mitigation Guidelines* (English Nature 2004), the Bat Workers' Manual (JNCC 2004), and Guidelines for Baseline Ecological Assessment (Institute of Environmental Assessment 1995), Institute of Ecology and Environmental Management Professional Issue Series (IEEM 2006).
- 2.2 **Survey objectives:** The first objective of the survey was to categorise the survey site as identified and highlight any potential issues pertaining to protected species and habitats. The objectives of the survey methodology were to identify bat and other similarly protected species at the survey site, and assess their uses of the location with a view to potential impacts of proposed works to the identified site and vicinity; similarly to make an assessment of the presence or possibility of any bat or other protected species, to locate bats in occupation or signs of bat use of the identified building components and immediate vicinity, and to assess the possibility of the site being occupied by bats or other protected species.
- 2.3 A full structural survey and walkover "scoping" or "stage one" daytime assessment of the survey site was undertaken examining features for the presence of protected species and assessing the likelihood of their occupation or use.
- 2.4 The habitat assessment was undertaken in the early spring of 2020 (2-3-20) with dedicated search made by exploring the named and identified parts of the survey buildings and immediately surrounding land at the site. A full update structural survey and winter hibernation check was carried out on 20-2-23. Additional structural checks were made throughout 2023.
- 2.5 This full survey, including a thorough and systematic internal and external visual examination for signs or presence of bats using the identified buildings was undertaken, concentrating on the roofs and walls of the relevant buildings and elsewhere by a highly experienced and suitably qualified ecologist. High powered and small beam torches were utilised with the structures viewed in detail from all aspects. Binoculars, ultraviolet light and thermal imaging devices and a flexible video endoscope were available to be employed. Comprehensive and systematic search was made of the structures including all aspects and levels, and in detail to

the wall tops, soffits etc. Attention was given to crevices etc for bats, their droppings, food remains or characteristic grease marks at potential exit and entrance points. The exteriors of the buildings were thoroughly searched, paying particular attention to external crevices, ledges or pipes where droppings could gather undisturbed, and under potential access points such as any loose roofing material, flashing or broken ventilation bricks etc.

- 2.6 Signs of bat activity searched for included:
  - Droppings these can contain fragments of insect exoskeleton and will crumble to dust (unlike those of small rodents, which typically become hard). Bat droppings will stick to surfaces including walls, windows and window ledges and may also become caught in spider webs near a roost site or feeding perch.
  - Feeding remains these include the discarded wings of flying invertebrates, which may accumulate under a well-used feeding perch. Some species, such as the brown long-eared bat, have seasonal preference for moths of the *noctuid* family the accumulated wings of which identify this bat as being present.
  - Oil staining the fur of bats may leave an oily residue on surfaces close to occupied roost sites and access/egress points.
  - Smell most bat species have an identifiable aroma while certain species, such as the noctule (*Nyctalus noctula*), are noted for their "smelly roosts" due to urine scent marking activity.
  - Daytime vocalisations these are most pronounced at larger roost sites during periods of hot weather.
  - Absence of cobwebs a well used bat roost and its access points are typically clear of cobwebs.
  - Scratching scratch marks produced by the claws of many bats may be apparent close to the access point for a well-used roost.
  - Dead bats, either older or especially babies within maternity roosts.
  - Pupae of the bat fly.
  - Tracks in dust.

- 2.7 A follow-on bat activity survey series was first commenced for a period over and prior to dusk on the night of 15-6-20 by a highly experienced ecological team of four, employing handheld and static time expansion, heterodyne and frequency division bat detectors. The "emergence survey" was undertaken for more than a minimum recommended period. Binoculars and night vision equipment were employed to visually monitor possible access points to the structure under survey. Observation of emergence or entrance, or returns to roosting locations was sought including an assessment of the area immediately associated with the survey structures. Seven recording units were set to record all bat activity for the duration of the survey including within all structures at the location as well as passing or nearby bats. Particular attention was paid to the survey buildings' structural components and roofs where disturbance is proposed to identify any emergence or returns of bats. A further activity survey was carried out on the pre-dawn and dawn of the 7-7-20, and a third on the dusk of 13-8-20. This work was updated with surveys on 3-5-23, 1-6-23 and (dawn) 20-7-23. Including some long-term deployment of remote detectors in the garages.
- 2.8 **Equipment and technology** employed included four Pettersson D240x® time expansion ultrasonic detectors, an Anabat SD1®, Anabat Walkabout®, Anabat Scout® and Anabat Express®, a Bat Box Duet® frequency division and heterodyne ultrasonic detector all with MP3 recording devices, and EM3® and SM2® time expansion, frequency division, and heterodyne combined recording detector technology. In addition two Echometer Touch® devices recorded via an iPad 4® and an android device, all calls for live and subsequent analysis. A night vision scope, headtorches, red-filter torches and high powered torches were all employed. The data acquired from all of the units was further analysed later on a mainframe computer running analysis software to confirm and extrapolate "in the field" identification.
- 2.9 For *breeding birds* an assessment of nesting sites was taken during the survey visits and the site searched paying particular attention to the possible presence of all nesting and dependent species.

### 3. Survey results

#### Location & description

- 3.1 The survey location is at national grid reference SO 95583 78275 and is a smaller set of structures associated with a large residential complex. Those surveyed, all being currently non-residential and with only the office having heating, are termed structures A, B and C and range in style from traditional brick built buildings with pitched and tiled roofs, and including a notable cellar, and larger workshop buildings, (see Table 1). The whole property is situated out of the main part of Romsley in a generally quiet and rural location. Some of the workshop space, and the office rooms are well used buildings though the design of the workshops are not optimal for instance, for maternity use or hibernation use by large numbers of bats due to the disturbance factors, lack of suitable enclosed voids and probable environmental variability and exposure. There is much evident opportunity for the ingress of bats along the roofs at ridgelines, other gaps, gaps in brickwork, through the ends of the workshops etc.
- 3.2 During the preliminary survey there was a discernible contemporary use of the buildings A and C by bats of at least three species and the presence of structural components known to be favoured by bats (tiled roofs, roof spaces, hipped roofs, large internal and accessible flying spaces, a range of aspects and gables, timber soffits), potentially affected by the proposals as explained to us. Additionally, aspects of the structures potentially affected by the current proposals had residual obvious opportunities for a roosting use by bats capable of being missed by the experienced surveyor and a further activity assessment approach was recommended and duly followed. The bat access to structure A was likely the result of doors being left open and appeared to be very recent and at a low level of use, thus purely opportunistic.
- 3.3 The location is immediately adjacent to a densely wooded area of semi-natural and native species and within an area of identifiable good quality habitat for bat commuting or foraging by a range of bat species.

europaeus land management services (ecology) August 2023





16

### Table 1: Survey structures, descriptions and signs

Survey building	Description	Signs or potential for bat use	Findings of activity surveys
A	"Garages", old mortuary: single storey, part pitched roof, part flat roof, part hipped roof to the north; rendered brick walls, unheated, tiled roof, some "torching"; single loft space of ≥1m height; timber soffits in part	Long-eared bat feeding perch in main flat- roofed garage; pipistrelle type faecal droppings in northern section; potential access and roosts, especially central ridge and northern hipped roof High potential and some recent evidence of use	No definite current season roosting use, but concerted foraging around the structures. Feeding perch used in the current year with doors left open. No subsequent access or evidence of use and none whatsoever identified in 2023. Conclusion: This is not currently or viably a bat roost.
В	Small outbuilding	Some evidence of internal bat exploration Low / moderate potential	No use identified. Conclusion: This is not currently or viably a bat roost.

#### Species evidence

- 3.4 **Bats**. All relevant areas of the accessible structures were viewed in detail on the surveys. All surfaces were scrutinised for evidence of bats. Where applicable any cracks in the structures were examined in detail including endoscopic analysis. Any cracks, holes etc were all examined with the use of the endoscope where applicable and accessible, including the interior and exterior of the buildings' components.
- 3.5 By these means evidence of a historic, recent and contemporaneous bat usage of structures A (opportunistic and recent, not continuing), and C, by at least three different bat species was discerned on the preliminary survey. There was a residual opportunity for missed evidence. The cellar of the offices is evidently a bat roost for lesser horseshoe bats, certainly for winter hibernation and potentially for other use possibly including use of the long service tunnel. The workshops are used by long-eared bats for feeding, night perches and possibly for day roosts while the garages had an opportunistic access and brief use in 2020. Other exploratory access to those structures by bats of a smaller species has also been identified. There was some opportunity for missed evidence thus an activity survey suite was commissioned.
- 3.6 The activity (visual and detector) surveys covered periods of good weather to identify bat use of a site in the geographical location. The survey work did identify the site as the roosting location (through day-roosting) by two species of bats, namely (brown) long-eared bats, and lesser horseshoe bats, and with foraging around the site in general by the same species along with common pipistelle and Noctule bats. Roosting use by likely non-maternity and noncolonial bats of the long-eared species described was identified associated with the western gable of the central workshop where access beneath soffits was observed. Further, and more significantly, the service tunnels have been confirmed as summer roosting sites for numbers of lesser horseshoe bats (though for the most part not associated with the survey location under examination). The trees and shrubs to the immediate west were particularly identified as important foraging and flight areas for the long-eared bats and considerable foraging by common pipistrelle. As described, other species of bat were identified on the activity surveys but no behaviour was observed directly associated with the structures themselves though the generally unlit nature of the location contributes to this value as foraging and safe flight zones particularly for the long-eared and lesser horseshoe species.



Figure 4: Surveyors (white) and static

equipment deployment, & important

foraging & flightlines (yellow),

service tunnel (red)

### Other species

3.7 No evidence of any other protected species group was identified directly associated with the survey structures other than the use of the garages by nesting blackbirds and potentially others in due season for instance, and there is very little realistic potential to encounter such species. Although the general area will no doubt have some habitats of (commensal) wildlife value, the proposed works, as we understand them, would appear to have no perceivable impact upon these. Birds' nests were identified.

### 4. Appraisal and recommendations

- 4.1 These recommendations are made in order to facilitate proposed works at the site location, and to ensure compliance with local and national statutory planning policies, species protection and best practice. In addition to species specific and habitat protection legislation local planning authorities have an obligation to conserve and enhance biodiversity.
- 4.2 The survey site is within a relatively biodiverse region of the country. Consequently, protected wildlife which is supported there should figure highly in management and development proposals at the locality. For the named survey structures we consider that a proportionate survey approach to scope and identify relevant property matters has been undertaken at this time of year with the parts of the surveyed buildings proposed for remodelling disturbance as described having an overall demonstrably high potential to currently support roosting by bats as evidenced by this survey approach. This potential for multi-species bat use is created by the nature and condition of the construction type, the range of environmental conditions available, the proximity to optimal protected foraging habitat and by the presence of suitable access opportunities. The summer activity survey work was therefore required to confirm the species, nature and type of use, flightpaths and any other roosting activity on the buildings and which work has indicated the current season use by low numbers of long-eared bats at a day roost on the workshop, and night perch roosts in the garages and workshops. The service tunnels were further explored to determine the level of use and potential for connectivity to other part of the wider site particularly for lesser horseshoe bats. The findings of this survey indicated that the tunnels are a horseshoe bat roost though, other than the late winter use within the sub-office cellar and western end of the tunnels by hibernating bats, the summer use is some fifty metres at least underground to the east. This summer use appears to have increased during 2023 surveys with several piles of droppings indicating prolonged and multiple bat use of the tunnels. As described, the more general survey location and local habitat quality and connectivity are used by a range of the more commonly encountered bat species for commuting and foraging. The survey site evidently contains habitat suitable for nationally valued or recognised species. A search of records held primarily by the county biological recording centre has also been recommended. Any protected wildlife which is supported there or utilises the site in some fashion will need to figure highly in routine management and any development proposals at the locality.

4.3 **Appraisal.** The identified parts of the property at the location targeted for possible disturbance by the proposed building works showed signs of a bat visitation and prolonged, summer and winter bat use. Works to the structures identified (workshops, garages and office cellar) are deemed to have a potential to disturb bats, their roosts or their access points to roosts. There is a residual potential for missed seasonal evidence following our survey. The identified bat use must also be assumed to be variable and subject to patterns of alteration

#### Summary

- 4.4 While the identified structures have a recent or current bat use or occupation identified (which means no disturbance is permitted), and the further survey effort has confirmed the species and access points to roosts, and served to locate evidence of bat species' use in terms of foraging and commuting, the main conclusion of this survey is that the structure complexes A and C ("Garages" and "Office/Workshops") have been found to be functioning as active bat roosts while other structural components possess potential. The use of the garages has been reassessed in various site visits and checks from 2020 to 2023, a long-term deployment of a remote detector within the garages and concerted attempts to observe any contemporaneous use. None such has been identified and our conclusion therefore is that the evidence of a use in 2020 survey reflected an opportunistic entrance to the interior of the building, due to doors being left open, and which use has not been repeated since then. This calls into question the status as a bat roost at all and we are of the belief that this structure's status should now be downgraded to not a bat roost or resting place while all doors are kept shut. Given the proposals as we understand them, we consider that it will be entirely possible to pursue these, within a licensed scheme of considered and proportionate mitigation and compensation, and which works will have the potential to enhance the biodiversity use of the surveyed site.
- 4.5 **Recommendations in general.** In addition to the legal protection afforded bats and their roosts, in line with recognised good practice and government policy on biodiversity and sustainability, all practical opportunities should be taken to harmonise the built environment with the needs of wildlife. As much connectivity and habitat diversity should be retained within development schemes as is reasonably practicable. It is, therefore, good practice to attempt to maintain the biodiversity potential at such sites and with specific regard to protected species groups. However we consider that a well-configured development proposal,

taking consideration for maintenance and enhancement and especially the maintenance of bat use, will allow for the site to continue to support locally valued species and habitats and our advice would always be to incorporate such ecological input when drawing up such schemes.

### Precautions

- 4.6 It could not be entirely ruled out that protected bat species are not using any other parts of the site at this location, (indeed we consider it to be highly likely and the full extent of the service tunnel complex has not yet been fully investigated nor indeed any of the other above ground structures at the location), or that they would not be present should work take place, therefore a precautionary approach should generally be followed to any and all building disturbance including general maintenance (such as roof repairs), which should be by careful means. It is important to note that any work, maintenance or remodelling of any of the other structures or gardens / trees etc present at the location could well require a qualified survey approach and potentially including a "bat mitigation or disturbance licence" prior to legal permission to proceed should bats be found to be present. We recommend, via our precautionary method statement in Appendix 3, that any works to the structures, were they to be required, proceed within an informed precautionary approach, and that a qualified, supervisory element is involved.
- 4.7 (Most) birds are protected during the breeding season (which nest dependency can be year-round for wrens for instance). They are fully and legally protected when nesting and their nests may not be disturbed or their access to them impeded (unless under special permission or of the very few derogated species). If nests are found to be present at the time of works commencement of those works should be delayed and further advice sought from the ecologist. Suitable mitigation for the protection of small mammals etc will need to be devised for the building scheme.

### **Report Author & Personnel**

The surveys were carried out by Stephen West MSc MCIEEM PrCMA an experienced ecological surveyor, assisted by Susan Davies BA (Hons), Paul Wilkinson BSc (Hons) MCIEEM, and Dr Jane Sedgeley-Strachan PhD MCIEEM in 2021, and Elaine Farrant and Paul Wilkinson in 2023.

The survey was carried out by Stephen West MSc MCIEEM MACMA, who is an ecologist with more than thirty years' experience of environmental consultancy, and forty years' of project management work and habitat management experience. He studied Ecology at bachelors level at U.E.A. and possesses a Master of Sciences degree (with distinction) in Habitat Creation and Management and another similar relevant qualification from Oxford University. Stephen is a highly experienced ecological surveyor and consultant and represented Southern England on the early National Council of the Bat Conservation Trust in the 1990's. He has worked with all types of wildlife, and with bats since the 1970's in the UK and abroad, and held English Nature / Natural England / Welsh licences to disturb bats for the purposes of science and education or conservation since 1991 (Survey licence no's (All England) NE: CLS001710 - Bat survey level 4, & CL20 Level 4 2015-15782-CLS-CLS, (All Wales) NRW: 76333:OTH:CSAB:2017 to survey bats of all species for scientific (including research) and/or educational purposes). He is a Registered Consultant under the Bat Low Impact Class Licence System (Bat Mitigation Class Licence both Annexes B & D) with Natural England enabling us to provide speedier and less bureaucratic licensing for work on sites of low impact on the commoner bat species. We also offer this quick, cost effective service for great crested newts via one of the team. Stephen is the founding chairman of the current Worcestershire Bat Group, and a foundation and currently serving committee member of the West Midlands branch of the Chartered Institute of Ecology and Environmental Management. He holds a number of Natural England and NRW / CCW protected species conservation licences including badger, great crested newt, barn owl and hazel dormouse.

Our work has involved extensive development of mitigation plans and DEFRA / Natural England and W.A.G. / Natural Resources Wales licence applications, ecological impact assessments, ecological management plans and appearing as expert witness at public inquiry. Europaeus Land Management Services was established in 1993 and has held management and consultancy contracts with a great many organisations and private individuals.



### Appendix 1: Survey photographs (2-3-20)



Plate 1: View of "Garages" A: with location of opportunistic feeding perch roost identified in 2020 as a result of doors left open, though not used since



Plate 2:A: View of the underside of the northern roof



Plate 3:A: View of the interior of the central pitched roof section



Plate 4:A: View of the northern roof intersection with potential bat access points Identified. Not confirmed through summer surveys

europaeus land management services (ecology) August 2023



Plate 5:A: View of the rear (western) elevation of the structure, backing on to the seminatural woodland



Plate 6:C: View of the southern elevation of the "Offices" with bat suitable roof shown. No use identified through summer activity surveys



Plate 7:C: Interior view of the small loft space of the "Offices"



Plate 8:C: View of the interior of the vaulted cellars beneath the "Offices"



Plate 9: C View of hibernating lesser horseshoe bat in the cellars 2020



Plate 10:C: View of the service tunnel potentially suitable for a range of bat roosting use. Distant from the western (office cellar) end a confirmed summer use of these by lesser horseshoe bats has been observed in the summer of 2020 and again in 2023



Plate 11: C: View of the rear of the offices and attached workshops. Long-eared bat roost access point indicated in 2020 and in use 2023



Plate 12:C: View of the front (eastern) elevation of the workshops with interior bat roost identified in 2020 and 2023



Plate 13: C: View of sheeted stores to west of main offices/ workshops deemed unused by bats



Plate 14:C: View of the interior of the largest of the workshops



Plate 15:C: View of identified long-eared bat feeding perch in the central (most northerly) of the workshops – at ground floor level in rear storeroom



Plate 16:C: Close-up view of scattered yellow underwing moth wings identified as longeared bat feeding perch

### Appendix 2: Aggregate bat data

### Table 1 : Bat species mentioned in text

Noctule bat	Nyctalus noctula
Common pipistrelle bat (45kHz)	Pipipstrellus pipistrellus
Brown long-eared bat	Plecotus auritus
Lesser horseshoe bat	Rhinolophus hipposideros

### Table 2 : The bat activity data (not exhaustive of all recorded bat contacts)

15-6-20	Activity Survey 1
	Windspeed still, Cloud cover 7/8, Relative humidity 55 - 76%,
Sunset	Temperature range 21 – 18.2°C
21.32	
19.50	Onsite, position detectors, re-check exterior, survey service tunnel complex, and perform
	emergence activity survey
21.53	45 kHz Pipistrelle bat identified to SW of C, again @ 21.54, 22.19, 22.21, 22.30, 22.48
21.53	45 kHz Pipistrelle bat identified to W of A, again @ 22.06, 22.14, 22.16, 22.18, 22.21, 22.37
	(feeding), 22.40, 22.43, 22.45, 22.46, 22.48, 22.55, 22.56, 22.59
22.21	45 kHz Pipistrelle bat identified to E of C, again @ 22.27, 22.30, 22.43, 22.48
22.54	Noctule bat identified overhead by all surveyors
21.49	(Brown) long-eared bat observed as probable emergent from central western gable of C,
	identified again @ 22.24, 22.46
21.53	45 kHz Pipistrelle bat identified to W of C, again @ 22.19, 22.27, 22.40, 22.42
23.10	Terminate activity survey 1 direct observation and depart site

7-7-20	Activity Survey 2
	Windspeed still, Relative humidity 63 - 75%,
Sunrise	Temperature range 14.8 – 13.5°C
04.56	
03.10	Onsite, position detectors, re-check exterior and perform emergence / return roost activity
	survey
From arrival	45 kHz Pipistrelle and Noctule bats identified around/over site
03.30	45 kHz Pipistrelle bat identified to W of A, again @ 03.37, 03.39, 03.40, 03.41, 03.54, 04.01,
	04.08, 04.09, 04.20, 04.30 (2 together)
03.39	45 kHz Pipistrelle bat identified to S of C, again @ 03.54
03.42	45 kHz Pipistrelle bat identified at W of C, again @ 03.47, 04.02
03.48	(Brown) long-eared bat identified at E of C
03.54	(Brown) long-eared bat identified at S of C
03.54	45 kHz Pipistrelle bat identified to E of C
04.30 -	Two (brown) long-eared bats observed at W of C, observed entering the western central
04.33	gable of that building via a loose soffit board
04.05	Lesser horseshoe bat identified to E of C possibly using brick pillar inspection "turret" to
	service tunnel to re-enter the tunnels
04.32	(Brown) long-eared bat identified to E of C
05.20	Terminate activity survey 2 direct observation and depart site

13-8-20	Activity Survey 3
	Windspeed still, Cloud cover 8/8, Relative humidity 73 - 84%,
Sunset	Temperature range 22.4 – 20.2°C
20.36	
20.05	Onsite, position detectors, re-check exterior and perform emergence / return roost activity
	survey
20.53 –	45 kHz Pipistrelle bat identified to W of C, again @ 20.58, 21,27 (2 together)
20.55	
21.16	45 kHz Pipistrelle bat identified to E of C, again @ 21.20, 21.28
21.20	(Brown) long-eared bat observed emerging from the western gable of the central roof of C,
	followed by second @ 21.21, further pass @ 21.29;
	Following emergence the bats flew north then west into the woodland
	-
21.30	(Brown) long-eared bat identified to E of C
Throughout	45 kHz Pipistrelle bat foraging around the site before departing the area around 22.20
rest of survey	
21.29	Lesser horseshoe bat identified to W of C flying into woodland from the east
22.30	Terminate activity survey 3 direct observation and depart site

3-5-23	Activity Survey 4	
	Windspeed breeze, Cloud cover 1/8, Relative humidity 50 - 66%,	
Sunset	Temperature range 13.5 – 9.7°C	
20.37		
20.10	Onsite, position detectors, re-check exterior, survey service tunnel complex, and perform	
	emergence activity survey	
_	Lesser horseshoe observed perching in the "undercroft" below the garages off site to the N	
	– flew by 21.39 to the W	
20.35	45 kHz Pipistrelle bat identified to S of buildings – possible emergence from structures in	
	that direction	
20.48	45 kHz Pipistrelle bat identified to NW of buildings	
21.19	45 kHz Pipistrelle bat identified to W of garages within woodland; again @ 21.37, 22.00	
21.25	45 kHz Pipistrelle bat identified to S of survey location;	
	Also, Noctule above site recorded by all	
22.40	Terminate activity survey 4 direct observation and depart site	

1-6-23	Activity Survey 5	
	Windspeed breezy, Cloud cover 8/8, Relative humidity 61 - 74%,	
Sunset	Temperature range 14.4 – 12.1°C	
21.20		
20.25	Onsite, position detectors, re-check exterior and perform emergence / return roost activity	
	survey	
21.29	Lesser horseshoe bat identified to E of workshops, HNS	
21.31	45 kHz Pipistrelle bat identified to W of office; again @ 21.39 foraging, 21.41, 21.43	
21.59	45 kHz Pipistrelle bat observed foraging around trees in woods to the W; again @ 22.29	
22.11	Lesser horseshoe bat observed flying through "undercroft" off site	
22.19 - 22.20	(Brown) long-eared bat foraging around to the E of the workshops	
22.28	55 kHz Pipistrelle bat identified to W of office	
22.49	(Brown) long-eared bat identified perching within eastern end of "undercroft" off site	
23.20	Terminate activity survey 5 direct observation and depart site	

20-7-23	Activity Survey 6
	Windspeed still, Relative humidity 51 - ≥90%,
Sunrise	Temperature range 19.4 – 11.1°C
05.10	
03.30	Onsite, position detectors, re-check exterior and perform emergence / return roost activity
	survey
03.36	45 kHz Pipistrelle bat identified to E of workshops beyond conifers; again @ 04.16
02.42	45 kHz Divistralla bat identified to W woodland: again @ 02.54
03.43	45 KHZ Fipistrelle bat identified to W woodland, again @ 03.54
03.58	Lesser horseshoe bat foraging around conifers to E of workshops
04.07 - 04.10	(Brown) long-eared bat observed flying to E of workshops then between steel outbuilding
	and to the N of the garages
04.09	Lesser horseshoe bat observed flying in and out of "undercroft" off-site to N of workshops
04.17	(Brown) long-eared bat observed flying within the "undercroft" off site
04.20	(Brown) long-eared bat observed flying over roof of workshops E to W; again @ 04.23,
	04.28
04.28	Brief swarming to W side of northernmost gable of workshops by two long-eared bats before
	definite roost return; a third observed two minutes later making a possible roost of three bats
05.30	Terminate activity survey 6 direct observation and depart site

T

Conclusions in 2020	<ol> <li>Roost by day, in the current year, of at least two (possibly three) (brown) long- eared bats accessing the roof of the central workshop at the western soffit, gable verge</li> </ol>
	2. Night perching roosts in that workshop and in the garages (recent, opportunistic)
In 2023	3. Summer use of the eastern service tunnels by numbers of lesser horseshoe bats and winter use (only) of the office cellar and western end of the service tunnel for hibernation roosting
	4. The opportunistic night perching use of the garages (old mortuary) has not been repeated since 2020 – confirmed by extensive observation in 2023

### Appendix 3: Updated Precautionary Working Method Statement and Summary Recommendations for Mitigation and Enhancement

- 1. An evolution of plans, processes, site status with respect to bats and to timing of works, based on the most recent site surveys and assessments, has enabled an updated advisory and recommendation package. This also reflects modified and now planning-consented plans for the site. Updated advice is identified by red font for ease of comprehension. Two species of bats are using the surveyed structures at Romsley Hill Grange. There is a low to medium priority summer feeding use and day roosting use by no less than two long-eared bats using the western gable end of the central section of building C to access a soffit area day roost. There are feeding perches within structure C and structure A. In 2023 the feeding perch within structure A has been shown to have been merely a temporary, opportunistic use when doors were left open on one occasion and which use has not continued. Therefore, it is appropriate to assess this structure as not currently a bat roost. There is a winter and summer use by numbers of lesser horseshoe bats of the service tunnels, using the office cellar (C) and western end of the service tunnel complex for winter hibernation resting and the more easterly parts of the tunnels during the summer. There is also a foraging use of the whole surveyed area by small numbers of common pipistrelle bats. In 2023 there is no continuing opportunistic use of building A by any bat species. The long-eared bat use of building C is continuing, at the same level and using the same access routes.
- 2. The long-eared bats enter the gable end of the workshop via a gap in a soffit panel, but importantly need to fly up from beneath and thence into this location. Therefore, any obstruction to this mode of use must be considered as a significant disturbance.
- 3. The horseshoe bats' use of the location is currently restricted to the subterranean tunnels and unlit areas of the whole site (which is generally and significantly floodlit) and which use is a high priority for this rare and vulnerable species. Given the nature of that use of the structure identified and particularly the evidence obtained of bats using the tunnels and cellar of C we consider the likelihood of encountering and disturbing bats during any work to those structure as highly likely and which must therefore be avoided. However, the plans as agreed and consented, if pursued according to our precautionary approach, will present no risk of disturbance to this use of these structures by this species.

- 4. The proposed conversion works to buildings C and A, if any disturbance to the subterranean features and connectivity of C as described can be avoided, would otherwise appear only to potentially affect a small day roost and two feeding, nighttime perches for long-eared bats and which use can easily be accommodated within an appropriate scheme of mitigation and compensation. Further consideration will therefore need to be given to altering the current proposals, and perhaps to including the converted structures' roofs into those bats use of the buildings by creating and providing them with similar access opportunities at gable ends and roof ridges as appropriate for the species. The provision of suitable night perching opportunities poses a different challenge but we consider that a modification to the structure to the west of the current identified roosting points can be achieved to good effect. In 2023, consented plans have taken account of these earlier findings and which plans will present no risk to the identified use.
- 5. Note that no trees can be removed or significantly affected by any proposals at the location without the risk of seriously compromising the efficacy of the location as a roost location for both the named species. Similarly, the extending of the current exterior floodlighting regime must be avoided to prevent an effective exclusion from the site by these two notable light-averse and sensitive species.
- 6. In 2020 it seemed that, given there are several different uses of the surveyed structures A and C as identified bat roosts, and used by the bats for different purposes at different times of the year, a modest and out-of-season, NE-licensed scheme of works to convert those buildings, to include or retain existing roosting location (specifically the western gable of C and cellar/service tunnel use), a regime of creating accessible niches by the long-eared bats, a lack of disturbance to the subterranean features as described, and using the approved bituminous roofing felt throughout, would be granted consent to proceed by the planning authority and licensing body. Further design details and leading to a comprehensive method statement for that licensed work will need to be devised collaboratively by the owners, ecologists and architect. In 2023, designs have duly been altered and have evolved to represent a minimized risk of disturbance of bat roosts, flight routes or foraging areas, beyond the demolition of the workshops (C) and construction of two semi-detached residences.

- 7. **Conclusion Bats:** We consider that it is highly possible to improve the potential and site natural capital for the named bat species to utilize this semi-rural location within an informed scheme of lighting modification and remediation under our specialist advice, a further enhancement to and management scheme for the subterranean features for the horseshoe bats, a creation of suitable night perch provision, and an inclusion of additional roosting features on the buildings and accessible mature trees. In 2023, the evolution of site plans and consented plans have incorporated much of our earlier advice. It is our current conclusion that a disturbance licence will be required for impacts on the workshops solely, but not to the garages or office, or indeed any of the other outbuildings. Thus, work to office building and old garage building could therefore precede the work to the workshops and in advance of the need to hold a mitigation licence. The precautionary approach recommended is to continue with the oversight of an Ecological Clerk of Works as structures are impacted, structurally stripped, exposed and converted or removed. Works then to the workshops, providing the demolition and build up to the accommodation of facilities for bats can take place within a six month period, can be eligible for a site registration within the Bat Mitigation (Low Impact) Class Licence.
- 8. The critical factor in making these conclusions is that no disturbance to the service tunnels or cellar and to flight routes for the lesser horseshoe bats' use will take place. Identified off-site use by the species (in land not held by the developers) has also been fully considered and with appropriate ECoW supervision none such will ensue. Any future changes will however need to be very carefully assessed in the light of an evolving use of the site by the lesser horseshoe species, this being a highly important consideration.
- 9. Consequently, with regard to the often transitory and quickly changing nature of bats' use of buildings and due to the extent of any possible work at the location, we feel it appropriate and proportional to proceed in the way set out here; that is, with caution and awareness. No work should proceed without the full licensed permission for that work from the appropriate licensing body. Once obtained, and working with an appointed Ecological Clerk of Works and a consented Method Statement (MS), this appendix and the MS should be made available to all workers onsite and constitute a "tool box" briefing at the start of their involvement with the project and following a further update search by the ecologist with the awareness of the everpresent possibility of the presence of bats (or birds) in occupation. The named foreman or project manager will then be responsible going forward for adherence to all relevant protected species legislation. The best time of year for this work would be post summer breeding use

aiming to complete before the spring of the following year (provided no subterranean disturbance results).

- 10. Additionally, bats and some **other protected species**, (for example hedgehogs), can be cryptic and mobile species. Thus, any associated groundworks must also be considered with due care. However, we feel it entirely possible to not only retain but to enhance the ecological functionality of this site within a detailed and carefully compiled methodology of work and informed management regime.
- 11. Generally, and as stated in the main body of the survey report:- A strong precautionary approach should generally be followed to any appropriately licensed building maintenance or repairs, and any stripping operations or demolition especially. At that time should any bats be discovered during works (or suspicion arise about the possible presence of bats, for instance in a crevice, behind a cavity or timber boarding, beneath roof slope or hanging tiles, or within stonework etc), that work must cease immediately, and the licensed consultant employed to establish bat presence or otherwise. The situation would then be assessed in the light of that evidence. It should be noted that any work schedule may well be affected should bats be discovered but to continue would constitute a breach of the legislation and a possible prosecutable offence. It is important to note that certain bat species do not occupy the internal volume of roofs and can often be supported between, for example, lining and the roof covering of buildings or, for example, beneath roof components including felt, flashing and fascia panels, in walls and soffits, even close to the ground etc or along wall tops.
- 12. Bats in the UK, when encountered in structures, are not huge things like fruit bats hanging from beams, rather they are very small (generally smaller by far than a man's thumb), somewhat brownish in colour and often tucked away in tiny niches and crevices. You must look very carefully when lifting tiles, slates, flashing, exposing roof components etc. They are very fragile creatures and also known to potentially carry a range of diseases and should therefore not be handled with bare hands by anyone other than authorised and suitably prepared personnel. This must be pointed out at the start of the project.

### Summary for any structural works to anywhere at the property

- 13. Continue to engage the services of an ecological consultant to develop the methodology of specific works proposed, and to the point of gaining licensed permission, as that is deemed necessary. In 2023, at the time of report completion, full planning consent has been gained, though based on site plans which differ from those considered in 2020.
- 14. Thence make this appendix and the developed Method Statement for works available to all site workers and this to be the responsibility of the appointed Ecological Clerk of Works, the foreman or project / site manager.
- 15. Subsequently, and at any time during the disturbance, if any bats (or breeding birds) are encountered or a suspicion about their presence or a roost being discovered then:-

### 16. Work must stop immediately.

- 17. Carefully replace the component which removal led to the discovery, and gently cover the bat unless it has already flown (a soft cloth can be used).
- 18. **Do not handle any bat unless absolutely necessary** to avoid it being harmed. In that event handle only with gloves and place somewhere safe, in the dark and where undisturbed.
- 19. Call Stephen immediately, if not present onsite, in any case on 07767 853495, or Natural England. Similarly, call should any other species be observed (reptile, amphibian, nesting bird etc).
- 20. Do not continue until full consultation has taken place. It could be a prosecutable offence to continue without the further consultation.
- 21. The ECoW must be present on site as any part of the roof or gable ends are impacted / exposed by the proposed works, or any works at all with the service tunnel and cellar complex, there to search for the presence of bats. If any are discovered then works must cease in the first instance to enable the ECoW to provide a resolution in accord with the relevant legislation and consents.

22. <u>Important note</u>: If there is an owners' desire to carry out any repair or modification work likely to cause disturbance to bats, their identified roosts or their access to them, then full legal consent must be obtained prior to that work. This involves any disturbance, whatsoever to any part of the service tunnel network across the whole of the Romsley Hill Grange site, also to the cellars beneath the old office building, as well as to the ground floor component ("undercroft") of the garages off-site to the immediate north of the workshops (C). Any such disturbance is likely to present a breach of protected species legislation. All site owners, occupants, service and maintenance personnel, facilities management staff etc need to be fully aware of this to avoid prosecution.

### Mitigation and biodiversity enhancement strategy Updated July 2023

In the light of altered site proposals and consented plans (22/00237/FUL), please refer to Drawing no's:-

- 22\_00237\_FUL-1296\_16\_B\_LOCATION\_PLAN\_AND\_BLOCK\_PLAN-1005634,
- 22\_00237\_FUL-1296\_30\_PROPOSED\_PLOT\_3\_AND\_4-1005635,
- 22\_00237\_FUL-1296\_31\_PROPOSED\_SITE\_PLAN\_\_WOOD\_STORE\_AND\_GARAGES-1005636
- 22\_00237\_FUL-1296\_32\_PROPOSED\_PLOT\_1-1005637
- 22\_00237\_FUL-1296\_33\_PROPOSED\_PLOT\_2-1005638.
- 23. The collaboratively agreed approach is to recreate the long-eared bat roost location, aspect, height and general conditions but on the new dwellings consented to be built to replace the workshops. Other than niche features created for bat use on the roofs of the garages / former mortuary no additional bat roosting provision is required. Importantly, to leave all use of the subterranean aspects of the survey site unaffected, and to create a further stand-alone roosting void feature (see 25 below) as compensation for the feeding perches which will be lost and a more general and extensive enhancement scheme.
- 24. Furthermore, a range of additional opportunities to roost will be provided by the range of new roof aspect access at gable bat tubes along with extensive soffit and ridge channel niche roosts on the two new semi-detached dwellings. Critically, no loss of roost availability, access, aspect, height, shelter or environmental conditions will result from the current plans.
- 25. A repaired outbuilding will be modified to serve as logstore and cycle store. This will have a floor area of 5m<sup>2</sup> footprint and have a bat loft above the utilised area of 9m<sup>3</sup>. Access for bats will be via an open doorway and 25 x 50cm open hatch cut into the ceiling specifically to encourage lesser horseshoe bats to use, and to be useful for long eared bats' feeding perches. The underside of the tiled roof will be counter-battened.
- 26. In addition to this void, a total of four Vivara Pro woodstone bat tubes, (or Green and Blue bat tubes or Schwegler 2FR bat tubes), should be incorporated into the two new buildings' one each on each rear and side aspect; fourteen soffit access points of c 100 x 25mm will be introduced as roofs are repaired on the office and garages; and at least twenty ridge channel access niches will be created (one every two linear meters), again of 100 x 25mm gaps. All roofs, where lined and bats are to have access, should be underlined in 1F bitumnised felt.

- 27. Other than a modest change of fine details, it is understood that there will be no significant additions to the footprint of the existing building structures, but for required excavations hedgehog protection will need to be put in place.
- 28. The timing of these works is critical to avoid disturbing the existing summer use of the workshop structure by bats. Thus, work to the workshops must be carried out before or after the summer occupational period (May-July/August), to be determined by the ecologist, or the scheme devised to phase such works in stages. Full demolition (primarily by hand-stripping means and under ECoW supervision) should continue thereafter provided no additional disturbance results from those works. The program would require full ECoW supervision to ensure this.
- 29. Similarly, no site work lighting over the hours of darkness should be permitted.
- 30. Lighting will consist of a large, minimised zone of "dark skies" primarily to the north and west of the buildings, where semi-natural woodland habitat prevails. Domestic lighting will be restricted to entrances only, with no floodlighting or high level installations. LEDs will be utilised on minimised time duration, PIR, cowled and down-pointing units.

### **Biodiversity compensation and improvement recommendations**

- 31. For the new status of the converted buildings a considerable advance in effective potential roost opportunity is to be provided as detailed in the foregoing section. Roost opportunities have been devised so as to be attractive to both void and niche-utilising species and particularly all the species identified as currently present at the location. The design is aimed to enhance opportunities particularly for the long-eared and lesser horseshoe bats identified. Night and day roosting features are to be retained suitable for the other species present.
- 32. Owl roosting use can be encouraged at the location by the erection of suitable owl boxes in the mature trees and particularly those for barn owls where suitable foraging habitat has been identified west and south of the site.
- 33. We further recommend sparrow terrace boxes and house martin nest forms (as supplied by, for instance, NHBS, with "Schwegler" designs or "woodcrete" material preferred), be erected in suitable positions on the gables and beneath verges on the three buildings and around the whole site in general.
- 34. New native tree planting and/or hedging is to be introduced as shown on the plans. This will serve to improve the connectivity of habitats to the west. This planting should be of native species such as fruiting hazel, hawthorn, wych elm, alder buckthorn and field maple; permitted to grow to at least 1.5m in height.
- 35. We recommend that parking and vehicular transit surfaces are made to be porous and SUDS compliant, ideally with aspects of vegetated growth within "honeycomb" matrices. If a sustainable drainage scheme is planned a wetland feature such as pond or bog garden associated with that would serve to significantly enhance the location for a broad range of species.





coliste

Landing



**Romsley Hill Grange** Details of Plot 2 to be Implemented as approved under Application 21/00068FUL

Drg. No. 1296/33 Scale 1:100

europaeus land management August 2023

services (ecology)















SCALE 1:100 Om 1m SCALE 1:1







#### Bat mitigation measures:

The repaired / replaced outbuilding to serve as logstore and cycle store. To have a floor area of 5m<sup>2</sup> footprint and have a bat loft above the utilised area of 9m<sup>3</sup>.

Access for bats to be via an open doorway and 25 x 50cm open hatch cut into the ceiling specifically to encourage lesser horseshoe bats to use, and to be useful for long eared bats' feeding perches.

The underside of the tiled roof to be counterbattened.

No lighting



Do Not Scale.





europaeus land management services (ecology) August 2023



### europaeus land management services (ecology)

Director: Stephen P.B. West MSc MCIEEM PrCMA

01568 611736 Sub offices: Herefordshire; Cheshire; Oxfordshire

> Office email: ecology.susan@hotmail.co.uk 51