

**MERCEDES BENZ, RICHFIELD
AVENUE, READING**

**PRELIMINARY BAT ROOST & NESTING
BIRD ASSESSMENT**

A Report to: Vertu Motors PLC

Report No: RT-MME-127294-02

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of practice for planning and development”.

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	01/03/2018	Henry Rees BSc (Ecological Project Officer)	Paul Roebuck MSc MCIEEM (Principal Ecological Consultant)	Dr Philip Fermor CEnv MCIEEM (Managing Director)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should 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.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 12 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

Middlemarch Environmental Ltd was commissioned by Vertu Motors PLC to undertake a Preliminary Bat Roost and Nesting Bird Assessment at Mercedes Benz, Richfield Avenue, Reading. This assessment is required to inform a planning application associated with the demolition of the workshop building and the extension of the Mercedes-Benz showroom with associated landscaping.

To fulfil the above brief to assess the potential for the existing buildings on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 13th February 2018.

During the assessment of Buildings 1 and 2 a number of features were recorded around the buildings which could be utilised by bats to gain entry into the building and potential roost locations. These features include:

- Gaps under metal cladding;
- Open windows;
- Missing canopy panels;
- Damaged metal fascia board;
- Gaps around piping in metal soffit box; and,
- Weep and pipe holes in brickwork.

A detailed external review was undertaken on site, including the features described above, and no evidence of bats was recorded. However, it was not possible to fully inspect features located at height and those which extended beyond the reach of an endoscope and into the cavity wall. Following an internal inspection, it was determined that the buildings were internally subject to high levels of disturbance and the roof structures were generally unfavourable for supporting roosting bats. There was no evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, recorded in areas that could be inspected. However, a full inspection of all areas could not be conducted, including the area between the roof and the suspended ceiling.

Taking into account the structural characteristics, and the immediate surrounding habitat and the constraints encountered during the survey, it is deemed that Buildings 1 and 2 have moderate potential for roosting bats. At this time, there is not sufficient evidence to conclude whether buildings are utilised by roosting bats. The Preliminary Roost Assessment cannot rule out the reasonable likelihood of a bat roost being present and further survey work is required.

The site was deemed to offer low value nesting bird habitat. If the proposed works are undertaken in the bird nesting season then there is potential for impact upon nesting birds. No evidence of historic nesting bird activity was recorded during the assessment.

Following the results of the Preliminary Bat Roost and Nesting Bird Assessment, the following recommendations have been made:

R1 Buildings 1 and 2

To determine the presence / absence of roosting bats within the buildings, further survey work is required. There are two possible survey options available to the client: the buildings can be subject to nocturnal emergence and dawn re-entry surveys or the buildings can be subject to an Endoscope Survey using Mobile Elevated Work Platform (MEWP) to access features that were inaccessible during this survey. If a roost is discovered during these surveys, a Natural England licence application may be required.

R2 Nesting Birds

Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation/buildings to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.

Full recommendation text is provided in Chapter 6.

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

Middlemarch Environmental Ltd was commissioned by Vertu Motors PLC to undertake a Preliminary Bat Roost and Nesting Bird Assessment at Mercedes Benz, Richfield Avenue, Reading. This assessment is required to inform a planning application associated with the demolition of the workshop building and the extension of the Mercedes-Benz showroom with associated landscaping.

In addition, Middlemarch Environmental Ltd has been commissioned to undertake a Preliminary Ecological Appraisal, the findings of which are detailed in Report RT-MME-127294-01.

To fulfil the above brief to assess the potential for the existing buildings on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 13th February 2018.

All UK bat species are European protected species and they are capable of being material considerations in the planning process. A summary of the legislation protecting bats is included within Appendix 1. This section also provides some brief information on the ecology of British bat species.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended). Some species (listed in Schedule 1 of the WCA) are protected by special penalties. Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

'Reckless' offences with regard to the disturbance of nesting wild birds included in Schedule 1 of the Wildlife and Countryside Act were added by the Countryside and Rights of Way Act 2000. The Natural Environment and Rural Communities (NERC) Act 2006 maintains lists of species and habitats which are of principal importance for the purposes of conserving biodiversity in England. These lists include a number of bird species.

1.2 SITE DESCRIPTION AND CONTEXT

The site under consideration is a commercial and industrial complex containing a Mercedes-Benz showroom and a storage and workshop building. The site is an irregular shaped land parcel approximately 1.2 hectares in size, located in Reading at Ordnance Survey Grid Reference SU 70613 74344. The topography of the site is generally flat.

The site is dominated by the existing buildings and surrounding hardstanding used for parking and access. Strips of amenity grassland and scattered trees are present along the site boundaries. Richfield Avenue lies to the north of the study area, with further commercial and industrial buildings surrounding the remainder of the site. The site is located within a pocket of land dominated by commercial use and light industry. The river Thames lies 100 m to the north of the site, beyond a pocket of amenity greenspace. The wider landscape is predominantly urban, with pockets of greenspace and pastoral farmland.

1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
Proposed demolition plan / MER01-MCB-XX-SI-DR-AR-00082	McBains Ltd

Table 1.1: Documentation Provided by Client

2. METHODOLOGY

2.1 DESK STUDY

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species in proximity to the site. This involved contacting appropriate statutory and non-statutory organizations which hold ecological data relating to the survey area. Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organizations.

The consultees for the desk study were:

- Natural England – *MAGIC* website for statutory conservation sites; and,
- Thames Valley Environmental Records Centre.

The desk study included a search for European statutory nature conservation sites within a 5 km radius of the site (extended to 10 km for any statutory site designated for bats), UK statutory sites within a 2 km radius and non-statutory sites and protected/notable species records within a 1 km radius.

The data collected from the consultees is discussed in Chapter 4. Selected raw data are provided in Appendix 1. In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

The desk study also included a review local planning policy with regard to biodiversity and nature conservation (see Chapter 3).

2.2 FIELD SURVEY

In line with the specifications detailed in Bat Mitigation Guidelines (English Nature, 2004) and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), a Preliminary Bat Roost Assessment of the buildings was conducted during daylight hours. A visual assessment was undertaken to determine the presence of any Potential Roost Features (PRFs), together with a general appraisal of the suitability of the site for foraging and commuting. Table 2.1 provides examples of PRFs. Any accessible PRFs were inspected using binoculars, a torch and endoscope for evidence of possible bat presence. Buildings were surveyed externally and internally.

Based on the PRF's present, the survey area was assessed using the suitability classes detailed within Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), as detailed in Table 2.2.

Example of Potential Roost Features	
<u>Externally</u>	
• Access through window panes, doors and walls; • behind peeling paintwork or lifted rendering; • behind hanging tiles; • weatherboarding; • eaves; • soffit boxes; • fascias; • lead flashing; • gaps under felt (even including those of flat roofs); • under tiles/slates; • existing bat and bird boxes; and • any gaps in brickwork or stonework permitting access into access to cavity- or rubble-filled walls.	
<u>Internally</u>	
• behind wooden panelling; • in lintels above doors and windows; • behind window shutters and curtains; • behind pictures, posters, furniture, peeling paintwork; • peeling wallpaper, lifted plaster and boarded-up windows; • inside cupboards and in chimneys accessible from fireplaces. • within attic voids: • the top of gable end or dividing walls; • the top of chimney breasts; • ridge and hip beams and other roof beams; • mortise and tenon joints; • all beams (free-hanging bats); • the junction of roof timbers, especially where ridge and hip beams meet; • behind purlins; • between tiles and the roof lining; and • under flat felt roofs.	

Table 2.1: Potential Roost Features (Adapted from Collins, 2016)

Suitability	Description
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Negligible	Negligible habitat features on site likely to be used by roosting bats.

Table 2.2: Classification of Structures with Bat Potential (Adapted from Collins, 2016)

In respect to an assessment of the value of the site for nesting birds, passive observation involved the careful and methodical scanning of the vegetation and buildings using binoculars. Observations were undertaken from a variety of vantage points scattered at strategic locations within, and adjacent to, the vegetation or buildings. Any evidence indicative of the historic presence of nesting birds and evidence of bird activity around potential roosting features was noted, e.g. visible nests, faecal staining around potential nesting locations, etc. Due to the timing of the survey, in early February, it was not possible to survey for active nesting activity.

3. DESK STUDY

3.1 STATUTORY NATURE CONSERVATION SITES

The site is not located within 10 km of a statutory site designated for bats.

3.2 SPECIES RECORDS

The data search was carried out in February 2018 by Thames Valley Environmental Records Centre. Records of bat species within a 1 km radius of the survey area provided by the consultee are summarised in Table 3.1. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals - bats					
Noctule <i>Nyctalus noctula</i>	7	2015	330 m east	✓	ECH 4, WCA 5, WCA 6
Unidentified bat <i>Vespertilionidae</i> sp.	1	1991	620 m north-west	#	#
Brown long-eared bat <i>Plecotus auritus</i>	5	2015	650 m north-east	✓	ECH 4, WCA 5, WCA 6
Common pipistrelle <i>Pipistrellus pipistrellus</i>	7	2015	700 m north-east	-	ECH 4, WCA 5, WCA 6
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	8	2015	830 m north	✓	ECH 4, WCA 5, WCA 6
Pipistrelle <i>Pipistrellus</i> sp.	4	1994	880 m north	#	ECH 4, WCA 5, WCA 6
Daubenton's bat <i>Myotis daubentonii</i>	17	2005	Potentially within a 1 km radius*	-	ECH 4, WCA 5, WCA 6
Key: # : Dependent on species. † : Records are confidential and therefore proximity is not provided within the report. ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection. WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods. Species of Principal Importance: Species of Principal Importance for Nature Conservation in England. Local: London Biodiversity Action Plan Priority Species Note. This table does not include reference to the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats), the Bonn Convention on the Conservation of Migratory Species of Wild Animals or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).					

Table 4.2: Summary of Bat Species Records Within 1 km of Survey Area

4. SURVEY RESULTS

4.1 INTRODUCTION

The Preliminary Bat Roost Assessment was conducted on 13th February 2018 by Will Rees (Ecological Project Officer) and Henry Rees (Assistant Ecologist).

Weather conditions were recorded and are presented in Table 4.1.

Parameter	Conditions
Temperature (°C)	7
Cloud Cover (%)	100
Precipitation	Light
Wind Speed (Beaufort)	F2

Table 4.1: Weather Conditions During the Preliminary Bat Roost Assessment

4.2 CONSTRAINTS

There was no access on to the roofs of Buildings 1 and 2; surveys of the roofs were completed from ground level. Due to the timing of the survey, it was not possible to survey for active signs of nest building.

4.3 SURVEY RESULTS

4.3.1 Building 1 (Mercedes Benz Showroom)

External Assessment

The Mercedes-Benz showroom and MOT garage occupied the majority of the western portion of the study area. A rectangular shaped, two-storey structure consists of the façade, a full height glazed showroom and a grey brick workshop in the rear. The structure has a pitched trapezoidal composite panelled metal roof. Internally, the building comprised a large modern double height showroom, large modern double height workshop and two storeys of office space. Plates 4.1 and 4.2 depict the exterior of the building.



Plate 4.1: Building 1 – Eastern Aspect



Plate 4.2: Building 1 – Western Aspect

There was no access onto the roof of the building and therefore a survey of the roof was undertaken from ground level. There were no observed gaps, cracks or crevices around the exterior of the composite panelled roof. The metal fascia board was largely intact, however damage was noted on the western aspect providing a suitable access point a potential roosting location within the roof structure (Plate 4.3). Narrow gaps were recorded around piping on the eastern aspect, providing suitable access points for bats to roost features within the metal soffit and area above the dropped ceiling. (Plate 4.4). It was not possible to fully inspect these features due to the height at which they were located and as such it was not possible to establish if bats had used these features to enter a roost location at the time of surveying.



Plate 4.3: Building 1 – Damaged Metal Fascia



Plate 4.4: Building 1 – Gaps Around Piping

A broken air vent was located on the western aspect of the warehouse (Plate 4.5). This air vent was considered to be generally unfavourable for bats to roost within as it led into a well-lit and heavily used building interior. The vent was fully inspected and no evidence of bats was noted within or around the feature. The brickwork was generally in good condition, however further features were recorded in the form of exposed external pipe holes providing possible access points to the interior of the building and small weep holes in the external walls providing access points to the internal cavity wall (Plate 4.6). The features within the brickwork were fully inspected and found to be largely free from debris and old cobwebs, indicating they may have been used by fauna to access the internal wall structure. No evidence of bats was recorded within the accessible areas of the features. However, it was not possible to examine the cavity wall itself.



Plate 4.5: Building 1 – Broken Air Vent



Plate 4.6: Building 1 – Weep Holes

A number of features were recorded around the building which could be used by bats to gain entry into the structure and potential opportunistic roosting locations. These features include:

- Damaged metal fascia board;
- Gaps around piping in metal soffit box; and,
- Weep and pipe holes in the brickwork.

Internal Assessment

Building 1 was in use at the time of the survey as a showroom and workshop with high levels of noise and disturbance. The internal areas of the building consisted of a bright, open double-height showroom, in addition to a two-storey office space and double height MOT centre with suspended ceilings. The internal areas had intact floors, walls and ceilings. The showroom and MOT area had an open construction, with an exposed roof structure. Due to the presence of multiple skylights, in addition to the high levels of disturbance, the internal roof structure within these areas was deemed unsuitable to support roosting bats.

The office spaces were similarly unfavourable for bats, with high levels of disturbance and no internal features recorded. The office space had a suspended ceiling concealing the roof structure. It was not possible to inspect the entirety of the void behind the ceiling due to access constraints. However, in areas where the void could be inspected, it was found to be well lit by skylights, with an unlined metal roof structure providing largely unfavourable conditions for roosting bats.

There was no evidence of bat activity (e.g. droppings, scratch marks, urine staining, feeding remains or bats) identified during the internal inspection of the building.

4.3.2 Building 2 (Workshop)

External Assessment

The workshop was a large square warehouse structure located to the east of the Mercedes Showroom. The structure was two-storey, with a mixture of brick and corrugated metal walls, with a flat corrugated metal roof. A uPVC canopy extended from the northern aspect of the building. Internally the building was segmented into an actively used double-height warehouse and two floors of disused office space with suspended ceilings. Plate 4.7 and Plate 4.8 show the exterior of the building.



Plate 4.7: Building 2 – Western Aspect



Plate 4.8: Building 2 – Eastern Aspect

There was no access onto the roof of the building and therefore a survey of the roof was undertaken from ground level. There were no observed gaps, cracks or crevices around the exterior of the corrugated metal roof. The metal fascia board was undamaged and the metal soffit box was generally in a good state of repair. Missing panels in the canopy provided access to the internals of the structure interior (Plate 4.9). The canopy was examined from the damaged panels and in areas which could be inspected it was found to be uninsulated with a thin uPVC shell and smooth wooden supports, reducing its value for roosting bats. There was no evidence of bat activity around the access points leading into the canopy.



Plate 4.9: Building 2 – Missing Canopy Panel

Air vents were present on all aspects of the building (Plate 4.10). These air vents were considered to be generally unfavourable for bats to roost within as they were too narrow for entry. The brickwork was generally in good condition, however further features were recorded in the form of cracks, exposed external pipe holes and large numbers of weep holes, providing possible access points into the internal cavity wall (Plate 4.11). Where the features were accessible they were found to be largely free from cobwebs and debris. No evidence of bats was recorded within the accessible areas of the features. However, it was not possible to examine the cavity wall itself and the weep holes located at height.

The brickwork was generally in good condition but weep holes were present which led to an internal cavity (Plate 4.11). Where weep holes could be inspected they were found to be blocked and cobwebbed, however not all holes could be inspected.



Plate 4.10: Building 2 – Air Vent



Plate 4.11: Building 2 – Weep Holes

A further crevice was recorded leading under the corrugated metal cladding on the walls providing low value roosting location for bats (Plate 4.12). uPVC and wood framed windows and doors were largely intact and well-sealed, however an open window was also recorded leading into an internal bathroom and gaps were recorded around doors leading into the actively used workshop (Plate 4.13). No evidence of bats using these features for entry into the building was observed during the survey.



Plate 4.10: Building 2 – Gaps Under Metal Cladding



Plate 4.11: Building 2 – Open Window

A number of features were recorded around the building which could be used by bats to gain entry into the structure and potential opportunistic roosting locations. These features include:

- Gaps under metal cladding;
- Open windows;
- Missing canopy panels; and,
- Weep and pipe holes in the brickwork.

Internal Assessment

Building 2 was partially in use at the time of the survey with high levels of noise and disturbance within the workshop area. The office space was disused. The internal areas of the building consisted of bright, open double-height modern workshops with direct access to roofing, in addition to a two-storey disused office space with suspended ceilings. The internal areas had intact floors, walls and ceilings. The workshop area was subject to high levels of disturbance, had an open construction, with exposed corrugated roofing and metal beams. Due to the presence of multiple skylights, in addition to the high levels of disturbance, the internal roof structure was deemed unsuitable to support roosting bats. The disused office space was similarly unsuitable, with no internal features suitable for roosting bats. It was not possible to inspect the entirety of the void behind the ceiling due to access constraints. However, in areas where the void could be inspected, it was found to be well lit by skylights, with an unlined metal roof structure providing largely unfavourable conditions for roosting bats.



Plate 4.112: Building 2 – Workshop Interior



Plate 4.113: Building 2 – Void Above Dropped Ceiling

There was no evidence of bat activity (e.g. droppings, scratch marks, urine staining, feeding remains or bats) identified during the internal inspection of the building.

4.4 SITE AND SURROUNDING HABITATS

Hardstanding dominated the site, with small patches of amenity grassland, scattered trees and scrub offering isolated and limited foraging opportunities for bats. The habitat directly to the south of the site was predominantly hardstanding and business parks, located at the edge of an area dominated by light industry in Reading. Richfield Avenue, a well-lit, heavily used road abuts the northern site boundary. These habitats are relatively poor for bats with widespread street lighting, although insect prey may be present in low numbers. However, the presence of amenity greenspace to the north of Richfield Avenue, and the River Thames 400 m to the north of the study area provides the site with connectivity to suitable foraging habitat within the river corridor itself and the wider landscape.

Habitats within 1 km of the site suitable for roosting, commuting and foraging include:

- Residential houses and associated gardens;
- Running and standing water bodies;
- Pockets of grassland; and,
- Railway lines with vegetated banks.

Approximately 500 m to the northeast of the study area are Caversham Court Gardens with Christchurch Meadows further to the east. The areas provide suitable foraging and roosting habitat for bats. A railway line lies within 500 m of the site at its closest point, providing a vegetated corridor suitable for commuting bats.

The habitats recorded on site and the urban setting provide sub-optimal foraging habitat in the immediate environment. The site and the immediate surroundings are subject to street lighting and moderate levels of traffic movement which may deter these species. In general, the surrounding environment has low value for bats with the exception of the River Thames to the north, which provides potentially high value wildlife corridor for nocturnal species such as commuting and foraging bats.

4.5 NESTING BIRDS

The following bird species were observed on site during the field survey: feral pigeon *Columba livia* and carrion crow *Corvus corone*.

The scattered trees and hedgerow were of suitable height and offered sufficient cover were identified to provide opportunities for nesting birds within the survey area. No evidence of historic nests was recorded within the vegetation.

The buildings on site were found to offer low value nesting and roosting habitat, notably within the void above the suspended ceiling and within the wall structure itself. Access points into these locations were noted via weep holes, broken vents, damaged fascia boards, gaps in metal soffit boxes and canopy panels. No evidence of historic nesting or roosting was recorded during the survey at these access points, however a thorough examination of the areas above the suspended ceilings and the wall cavity was not possible.

5. DISCUSSION AND CONCLUSIONS

5.1 SUMMARY OF PROPOSALS

It is understood that proposals include the demolition of the workshop building and the extension of the Mercedes-Benz showroom with associated landscaping.

5.2 ASSESSMENT OF BUILDINGS

During the assessment of Buildings 1 and 2 a number of features were recorded around the buildings which could be utilised by bats to gain entry into the building and potential roost locations. These features include:

- Gaps under metal cladding;
- Open windows;
- Missing canopy panels;
- Damaged metal fascia board;
- Gaps around piping in metal soffit box; and,
- Weep holes leading into the cavity wall.

A detailed external review was undertaken on site, including the features described above, and no evidence of bats was recorded. However, it was not possible to fully inspect features located at height and those which extended beyond the reach of an endoscope and into the cavity wall. Following an internal inspection, it was determined that the buildings were internally subject to high levels of disturbance and the roof structures were generally unfavourable for supporting roosting bats. There was no evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, recorded in areas that could be inspected. However, a full inspection of all areas could not be conducted, including the area between the roof and the suspended ceiling.

Taking into account the structural characteristics, and the immediate surrounding habitat and the constraints encountered during the survey, it is deemed that Buildings 1 and 2 have moderate potential for roosting bats. At this time, there is not sufficient evidence to conclude whether buildings are utilised by roosting bats. The Preliminary Roost Assessment cannot rule out the reasonable likelihood of a bat roost being present and further survey work is required.

5.3 NESTING BIRDS

The scattered trees and hedgerow were of suitable height and offered sufficient cover were identified to provide opportunities for nesting birds within the survey area. The buildings on site were found to offer low value nesting and roosting habitat, notably within the void above the suspended ceiling and within the wall structure itself. Access points into these locations were noted via weep holes, broken vents, damaged fascia boards, gaps in metal soffit boxes and canopy panels. No evidence of historic nesting or roosting was recorded during the survey, however a thorough examination of the areas above the suspended ceilings and the wall cavity was not possible.

5.4 POTENTIAL IMPACTS

The habitat within the site is predominantly hardstanding, considered to be relatively poor for foraging and commuting bats. The small areas of amenity grassland, scattered trees and scrub offer extremely limited and isolated foraging and commuting opportunities within the site boundaries. The potential for bats being present foraging and commuting within the site boundary is therefore determined as low. Should bats be found roosting within the buildings, there is potential for direct harm, injury and disturbance.

The site offers low value nesting bird habitat. If the proposed works are undertaken in the bird nesting season then there is potential for impact upon nesting birds and as such, a recommendation has been made.

6. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

R1 Buildings 1 and 2

To determine the presence / absence of roosting bats within the buildings, further survey work is required. There are two possible survey options available to the client: the buildings can be subject to nocturnal emergence and dawn re-entry surveys or the buildings can be subject to an Endoscope Survey using Mobile Elevated Work Platform (MEWP) to access features that were inaccessible during this survey; both options are detailed further below. If a roost is discovered during these surveys, a Natural England licence application may be required.

Option 1: Nocturnal Emergence and Dawn Re-Entry Surveys

Buildings 1 and 2 have been identified as having moderate potential to support roosting bats. Bat Surveys: Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2016) recommends that for structures with moderate bat roosting potential two separate survey visits (consisting of one dusk emergence and a separate dawn re-entry survey) be undertaken during the bat emergence/re-entry survey season to determine the presence/absence of roosting bats within the structures. The bat emergence/re-entry survey season extends from May to September. At least one of the surveys should be undertaken during the peak season for emergence/re-entry surveys between May and August. Should this survey confirm the presence of roosting bats, it will be necessary to undertake additional surveys in order to inform a Natural England licence application. In addition, should the survey identify the presence of significant levels of bat activity at the site, it may be necessary to undertake further survey visits to comprehensively assess the value of the site to bats.

Option 2: Endoscope Survey

Where safe to do so, features identified within this building will be accessed utilising Mobile Elevated Work Platform (MEWP). Any PRF will be internally searched using a torch and endoscope. If the feature on further inspection is found to be unsuitable or less suitable for bats, then the status of the building will be downgraded to low or negligible bat potential and if possible, it will be fully inspected for evidence. If a roost is identified, if PRF extend beyond the reach of an endoscope, or if the PRF shows any signs of use by bats, appropriate additional survey work will be required.

R2 Nesting Birds

Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation/buildings to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

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The Conservation of Habitats and Species Regulations 2017.

APPENDIX 1

LEGISLATION

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CROW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*.

The reader should refer to the original legislation for the definitive interpretation.

ECOLOGY

At present, 18 species of bats are known to live within the United Kingdom, of which 17 species are confirmed as breeding. All UK bat species are classed as insectivorous, feeding on a variety of invertebrates including midges, mosquitoes, lacewings, moths, beetles and small spiders.

Bats will roost within a variety of different roosting locations, included houses, farm buildings, churches, bridges, walls, trees, culverts, caves and tunnels. At different times of the year the bats roosting requirements alter and they can have different roosting locations for maternity roosts, mating roosts and hibernation roosts. Certain bat species will also change roosts throughout the bat activity season with the bat colony using the site to roost for a few days, abandoning the roost and then returning a few days or weeks later. This change can be for a variety of reasons including climatic conditions and prey availability. Bats are known live for several years and if the climatic conditions are unfavourable at a particular roost, they may abandon it for a number of years, before returning when conditions change. Due to the matriarchal nature of bat colonies, the locations of these roosts can be passed down through the generations.

Bats usually start to come out of hibernation in March and early April (weather dependent), when they start to forage and replenish the body weight lost during the hibernation period. The female bats then start to congregate together in maternity roosts prior to giving birth and a single baby is born in June or July. The female then works hard to feed her young so that they can become independent and of a sufficient weight to survive the winter before the weather gets too cold and invertebrate activity reduces. Males generally live solitary lives, or in small groups with other males, although in some species the males can be found living with the females all year. The mating season begins in the autumn. During the winter bats hibernate in safe locations which provide relatively constant conditions, although they may venture outside to forage on warmer winter nights.