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[redacted]

BAT PRESENCE / ABSENCE SURVEY

At

Black Moss Farm
Elmridge Lane
Chipping
Preston
Lancashire
PR3 2NY

NGR: SD 60110 40448

Prepared for:	Richard Keeling, FI Construction Ltd
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[redacted]

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EXECUTIVE SUMMARY

Internal and external building inspections were undertaken of four buildings at Blackmoss Farm, Chipping, by United Environmental Services (UES) on the 7th August 2024. The object of these inspections was to establish the suitability of the buildings to support roosting bats, based on a site-specific survey and habitat assessment. The buildings were searched externally for bat presence and features associated with bat activity, as detailed in Bat Conservation Trust (BCT) guidance (2023). The development proposals involve the demolition of Building 4 and modifications to Buildings 1, 2 and 3.

The internal and external building inspections found that Buildings 1, 2 and 3 had numerous PRFs (potential roosting features), as such these buildings were assessed as being of moderate suitability to support roosting bats. Bat droppings were observed during the inspections of Buildings 1, 2 and 3 and a single brown long-eared bat *Plecotus auritus* was observed roosting within Building 3 during the internal inspection of the loft void. Building 4 contains no PRFs and was assessed as having negligible potential to support roosting bats.

Bat presence / absence surveys were conducted by UES of Buildings 1, 2 and 3 on the 19th June and 7th August 2024. The objective of the presence / absence surveys was to establish whether or not bats are using the building on site to roost, and if so to assess the type and importance of roosts in order to inform the planning process. The surveys were carried out to recognised guidelines, timings and weather conditions, with particular reference to Natural England and BCT publications.

Blackmoss Farm is situated in an area that has moderate-high potential to support bats. The farm itself has 142-hectare curtilage and supports a wide range of habitats such as improved grasslands, woodlands and waterbodies that will support an array of invertebrates and as such offer an abundance of foraging opportunities for bats. Further afield, the habitats are similar in composition and the local area contains numerous commuting routes due the numerous tree lines, hedgerows and unlit country roads.

Moderate levels of bat activity were recorded on site during the bat presence / absence surveys, predominantly from common pipistrelles *Pipistrellus pipistrellus*, with soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula,* brown long-eared and *Myotis* bats recorded to a lesser extent.

Severn roosts were identified within Buildings 1, 2 and 3 during the building inspections and presence / absence surveys. Due to specific works due to be undertaken to each building, the licencing, mitigation and compensation requirements for each roost vary and are detailed fully below.

Roosts 3 & 4 – No mitigation measures needed

Roosts 3 and 4 are located within loft spaces of Buildings 2 and 3, which are not due to be impacted by the development proposals. As such, mitigation measures and a licence are not required as there are no potential impacts.

Roost 1 – Non-licenced method statement

Roost 1 is not due to be impacted by the proposed development and will be retained. Due to the presence of a bat roost within the building, the non-licensed method statement detailed in section 4.3.1 of this report should be implemented to protect bats in the unlikely event that they are present within the working area at the time of the works.

Roosts 2, 5, 6 & 7 – Mitigation licence

Roosts 2, 5, 6 and 7 are due to be removed to facilitate the development proposals. As such, the works to Buildings 2 and 3 that will impact these roosting areas will need to be registered under Natural England's Earned Recognition Licence or under a European Protected Species (EPS) Licence granted by Natural England.

An application to register the site under an EPS or Earned Recognition licence submitted after planning permission has been secured, but must be in place prior to any works that could impact the known roosts. The works to Buildings 2 and 3 must comply with the method statement included in section 4.3.1 of this report.

Birds

Due to the known and further potential presence of breeding birds within the buildings, it is recommended that the works take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible, a breeding bird nest check should be undertaken prior to the commencement of works by a suitably experienced ecologist and an ecological clerk of works appointed if considered necessary.

This report should be read in conjunction with appendices 1 to 8, which provide visual representations of the survey results and statutory and planning context.

1 INTRODUCTION

1.1 Author, surveyors and qualifications

This report is compiled and written by Toby Leverett BSc MSc, UES Trainee Ecologist. Other surveyors include:

- Mark Halliwell MBiol, UES Senior Ecologist. Mark is licensed by Natural England to disturb, take and handle all species of bats under licence number 2023-11661-CL18-BAT (level 2).
- Heather Tewnion BSc, UES Field Ecologist
- Ysobella Cox BSc MBiol, UES Ecologist
- Ben Cowell MEng, UES Trainee Ecologist

This report has been reviewed and approved by Tom Kenwright BSc MSc ACIEEM, UES Senior Ecologist. Tom is licensed by Natural England to disturb, take and handle all species of bats under licence number 2023-11076-CL18-BAT (level 2).

All surveyors have the knowledge, skills and experience identified within CIEEM's "Competencies for Species Survey: Bats" (2013), or were under the supervision of a surveyor with the required competencies.

1.2 Survey objectives

UES was commissioned in June 2024 to conduct site surveys which include the following activities:

- Conduct internal and external building inspections to look for field signs of bats
- Confirm bat presence or likely absence by conducting emergence surveys of Buildings 1, 2 and 3
- Assess the type and importance of the roost(s), if present
- Recommend appropriate mitigation and compensation, if applicable

1.3 Proposed development

The development proposals involve the demolition of Building 4 and modifications to Buildings 1, 2 and 3:

- A single storey extension will be added to the eastern aspect of Building 1.
- The pig stye section of Building 2 is to be converted into a residential space.
- The barn section of Building 3 is to be converted into residential space.

1.4 Structure of the report

This report sets out the methodology, results, and recommendations in relation to a specific bat survey. Recommendations are in line with statutory legislation and planning policy objectives.

The report should be read in conjunction with appendices 1 to 8, which give visual representations of the survey results.

2 METHODOLOGY

2.1 General

All surveys were carried out to recognised guidelines, timings and weather conditions, with particular reference to Natural England and BCT publications (see references for further information).

The habitats on site and in the surrounding area were assessed during a walkover survey and through studying aerial photographs, in order to gauge their suitability to support roosting, foraging and commuting bats.

2.2 Building inspection

The buildings on site was searched both externally and internally for bat presence and features associated with bat activity, as detailed in BCT guidance (Collins, 2023). This was conducted on 7th August 2024 by Mark Halliwell and Ysobella Cox.

2.2.1 External inspection

The external inspection of the buildings was carried out from ground level using binoculars, and also using ladders and an endoscope to investigate suitable gaps. The objective of the survey was to find and record any signs of bat use, for example:

- Bat droppings
- Feeding remains
- Grease staining / urine marks
- Corpses or skeletons

The bat signs listed above are visible from the outside of a building. The following areas were searched, where present:

- Roof and ridge tiles
- Lead flashing
- Eaves
- Boxed soffits
- Fascia and barge boards
- Window sills and panes
- Walls
- Gaps under felt
- Cracks / holes in woodwork or behind cladding
- Gaps in brickwork and mortar
- Air bricks
- Grills
- Vents

2.2.2 Internal inspection

The internal inspections covered all of the accessible rooms and roof spaces within the buildings.

Bats regularly utilise specific areas within roof spaces, which were searched for any field signs of bats using high-powered torches and an endoscope, where considered necessary by the licenced ecologist. The following features were searched, where present:

- Roof beams and junctions

- Gaps under felt
- Dividing walls
- Chimney breasts
- Gaps in brickwork and mortar
- Cracks / holes in woodwork
- Floor or other surfaces on which droppings could accumulate

2.3 Emergence survey

All aspects of the buildings were covered by surveyors and / or infrared cameras during the dusk emergence surveys on the 19th June and 7th August 2024.

Bat echolocation, flight and habitat characteristics were recorded where possible, in order to determine the species. The level and type of bat activity was also recorded to establish how bats are using the site.

2.3.1 Equipment

BATLOGGER M bat detectors and recorders were used during the surveys. This device records bat echolocation calls across the full spectrum, with a sensitivity range of 10 – 150 kHz. The integrated heterodyne live monitoring also allows the observer to hear the echolocation calls in real time, with automatic tuning. The recordings are individually time/date, GPS and temperature stamped, and are of high enough quality to produce time expansion quality sonograms.

Nightfox Whisker Night Vision Binoculars were used in conjunction with Nightfox XB5 940nm Low Glow Infrared LED Flashlights to monitor part of the building during the surveys. The Binoculars were positioned alongside surveyors to cover potential roost access points and recorded video footage to be reviewed post-survey. Surveyors can also use the binoculars during the survey as a night-vision aid

Canon XA11 Professional Video Camera was used in conjunction with an infra-red LED illuminator to monitor part of the building during the surveys. The camera was positioned to cover potential roost access points. Footage of the survey was recorded and reviewed post-survey.

ANABAT SCOUT full spectrum bat detectors were used during the survey. This device records bat echolocation calls across the full spectrum, with a sensitivity range of 10 – 160 kHz. The integrated heterodyne live monitoring also allows the observer to hear the echolocation calls in real time, with automatic tuning. The recordings are individually time/date, GPS and temperature stamped, and are of high enough quality to produce time expansion quality sonograms.

2.3.2 Weather conditions

Table 1 - Weather conditions and survey timings

DATE	SURVEY TYPE	TIMINGS	SUNSET / SUNRISE	TEMP.	WIND	RAIN	CLOUD COVER
19/06/24	Emergence	21:30 – 23:15	21:45	13°C	Calm	Dry	0%
07/08/24	Emergence	20:40 – 22:25	20:55	16°C	Light Breeze	Dry	80%

2.4 Survey limitations

During the first presence / absence survey one of the detectors associated with a camera position had a fault and didn't recorded data. The camera remained functional so no bat roosts were missed as a result and there was overlap between the ranges of detector in use during the survey, so all bats were still recorded. As such, there are considered to be no significant limitations to the surveys.

3 RESULTS

3.1 Habitat assessment

Blackmoss farm is located 15km north-east of Preston near the village of Chipping. The farm itself has 142-hectare curtilage and supports a wide range of habitats such as improved grasslands, woodlands and waterbodies that will support an array of invertebrates and as such offer an abundance of foraging opportunities for bats.

The wider surrounding area is comprised of similar habitats to those found on the farm and predominantly comprises agricultural fields with hedgerow and tree lines. In addition, habitats of higher quality are present, including numerous blocks of woodland, watercourses and waterbodies. The surrounding landscape contains numerous commuting routes due the numerous tree lines, hedgerows and unlit country roads. Alternative roosting opportunities within the wider landscape are numerous within mature trees, agricultural buildings and scattered residential buildings.

3.2 Building inspections

3.2.1 External inspection

The buildings surveyed have been numbered 1 to 4 for this report (see Appendix 1 – Site Plan).

Building 1 is a residential cottage constructed from breezeblocks and with a pitched roof and a single rendered chimney (see Appendix 3 – Photograph 1). The roof is constructed from concrete tiles which are in good condition (Photograph 2). The eaves of the building contain wooden fascia boards which provide several PRFs for bats (Photograph 3). The PRFs include gaps underneath the fascia boards on most aspects of the building, gaps over the top of the barge boards which lead underneath the tiles on the eastern and western aspects (Photographs 4 and 5), and a section of the fascia board which is missing on the western aspect of the building that has resulted in a gap leading directly over the top of the wall plate (Photograph 6).

Attached to Building 1 is a breezeblock garage with a lean-to roof (Photograph 7). The garage is constructed from corrugated asbestos with slate barge boards along the eaves. Gaps were identified underneath the fascia boards which may provide a PRF for bats (Photograph 8). Where the lean-to roof connects to Building 1 there is lead flashing which is in good condition (Photograph 9). Nesting swallows *Hirundo rustica* were recorded entering and exiting the garage during the internal building inspection.

Building 2 is a stone residential farmhouse with an attached breezeblock pigsty. The farmhouse has a pitched roof constructed from slate tiles which are raised in places providing PRFs for bats. There is a single stone chimney on the roof of the building which is surrounded by lead flashing as well as a skylight. Fascia boards are present along the eaves on the northern and southern aspect. Cavities in the stonework walls provide PRFs for bats.

The eastern section of the building is a pigsty (Photograph 10). It has a pitched roof constructed from slate tiles which are raised and missing in places (Photograph 11). Sections of the ridgeline are also missing forming PRFs (Photograph 12). Access points were identified due to the presence of gaps within the mortar along the edges of the roof (Photograph 13).

The eaves of the pigsty are comprised of wood and metal joists (Photograph 14). Numerous cavities and access points were found to be associated with the breezeblock walls (Photographs 15 and 16), and the stone-line along the southern eaves of the building (Photograph 17). While some of the windows have been boarded over (Photograph 18), others have been left open and provide free access into the building (Photograph 19). Nesting swallows were recorded entering and exiting the pigsty during the internal building inspection.

Building 3 is a combined stone residential farmhouse and barn with a pitched roof constructed from slate tiles (Photograph 20). Some of the tiles are raised and provide PRFs for bats (Photograph 21). There are two stone chimneys which are surrounded by lead flashing where they connect to the roof, and skylights have also been incorporated (Photograph 22).

Wooden fascia boards are present along the eaves of the building and the external walls are constructed from stone. Potential access points were identified along the eaves of the building due to the presence of several gaps between the top of the wall plate and fascia boards (Photographs 23, 24 and 25). Four bat droppings were identified on the southern wall, directly below a gap underneath the wooden fascia board which leads into the stonework and onto the top of the wall plate (Photograph 26). The droppings were sent for eDNA analysis and were found to be common pipistrelle (see Appendix 6). The external walls contain several cracks and cavities between the stonework as well as missing mortar (Photograph 27). In addition, there are ventilation holes in the eastern gable end wall (Photographs 28 and 29). All of these features provide numerous PRFs.

There are single-storey porches located on the northern and southern aspects of the building. The northern porch has a pitched roof constructed from slate tiles, with plastic fascia boards at the eaves and stone walls (Photograph 30). Whereas the southern porch has a pitched roof constructed from slate tiles with plastic cladding with glass windows making up the top two thirds of the wall and stone the lower portion (Photograph 31).

Building 4 is an agricultural barn with a corrugated asbestos pitched roof (Photograph 32). Several skylights have been incorporated into the roof structure. The upper half of the external walls are constructed from a combination of timber and corrugated metal, whilst the lower half is a combination of breezeblock and concrete. As the building is an agricultural barn, there are large open areas within the external walls which provide direct internal access (Photograph 33). No potential roosting features found during the external inspection of Building 4.

Bat droppings were found on the southern exterior wall of Building 3. No bat droppings or other field signs of bats were found during the external inspections of Buildings 1, 2 and 4.

3.2.2 Internal inspection

Building 1 has a single loft space which is approximately 1.25m in height and 4m wide. It has timber rafters and purlins (Photograph 34). Cavities were identified above the western gable end wall which provide a PRF for bats (Photograph 35) and three droppings were identified on the wall during the internal building inspection. Both the roof and floor within the loft space are insulated with mineral wool, and numerous mouse droppings were identified on the floor insulation. The mineral wool also has a large hole in it allowing access to the underside of the roof (Photograph 36).

The garage does not have a loft space and is open floor-to-ceiling. It is currently utilised as a storage area. Swallows were recorded nesting within the garage space.

Building 2 contains a single loft void which is located within the farmhouse and measures approximately 2m in height. The roof is lined with three layers of material: chipboard, insulation and a breathable membrane adjacent to the tiles (Photograph 37). The floor of the loft space has been lined with a chipboard sheeting. Approximately 20 scattered bat droppings and a small number of underwing moth wings were found on the floor and walls at the gable ends (Photographs 38). The bat droppings were sent for eDNA analysis and were found to be common pipistrelle.

The pigsty does not contain any loft spaces and is open floor-to-ceiling. The pigsty is separated internally into three sections, two of which are similar in structure. The western room within the pigsty has a pitched roof supported by a combination timber and steel rafters and purlins, with a breathable membrane lining (Photograph 39). The internal walls are rendered and contain several PRFs including where the end timber connects to the gable end wall (Photograph 40. Gaps are also present above the wall plate (Photograph 41).

The central and eastern rooms are similar in structure with a pitched roof lined with bitumen (Photographs 42 and 43). Gaps were identified between the tiles and lining which may provide PRFs (Photograph 44). However, considerably more damage to the bitumen was identified in the eastern room (Photograph 45). The internal walls are constructed from a combination of rendered stone and bare breezeblock, with cavities and gaps above the wall plate forming PRFs (Photographs 46, 47 and 48). Access points were also identified with gaps in the breezeblock walls and through the open windows (Photograph 49). The interior of the building is light and exposed, and it is currently utilised as a storage area.

Swallows were recorded nesting within all three rooms of the pigsty (Photograph 50). No bat droppings were identified within the pigsty however, it was difficult to determine due to the many hundreds of swallow droppings and clutter associated with the open working barn.

Building 3 contains a single loft space which is located within the farmhouse and measures approximately 3m in height. The internal loft structure is timber rafters and purlins and is lined with a modern breathable membrane (Photograph 51). A brown-long eared bat *Plecotus auritus* was observed within the loft void during the internal building inspection, roosting on the membrane within the centre of the loft, upon closer inspection the bat was found to be a first-year non-breeding female (Photographs 52 and 53).

The internal walls are constructed from stone and contain numerous cavities and associated PRFs (Photograph 54). Approximately 100 fresh bat droppings which were observed on the floor during the internal building inspection (Photograph 55).

The barn attached to the eastern aspect of the farmhouse does not contain a loft void and both the tiles and roof structure are visible from the first floor, which measures approximately 6m in height (Photograph 56). The roof is unlined and numerous gaps are present within the tiles which results in cold and drafty internal conditions (Photograph 57). The roof is supported by timber rafters and purlins, and several PRFs were found to be associated with the woodwork including crevices in the old wooden beams, horizontal splits and gaps at the mortice joints (Photographs 58, 59 and 60).

Stone walls are present along the lower half of the northern and southern aspects of the building, with gable end walls on the eastern and western aspects. Numerous cavities were identified within the walls and gaps are present above the top of the wall plates (Photographs 61 and 62). Approximately 6 fresh, scattered bat droppings were observed near the western gable end wall with approximately another 30 bat droppings scattered throughout the

remainder of the first floor (Photographs 63 and 64). Around 10 scattered bat droppings were also observed within the ground floor (Photograph 65).

Several swallows were recorded nesting within the ground floor of the barn during the survey, and both house sparrow *Passer domesticus* and wren *Troglodytes troglodytes* nests were also identified (Photographs 66).

Building 4 does not contain a loft space and is open floor-to-ceiling. The roof is unlined and supported by a steel frame. Concrete walls extend from north to south along the centre of the building to form separate cattle stalls (Photograph 67). No potential roosting features or evidence of roosting bats was identified during the internal inspection.

Bat droppings were found in Buildings 1, 2 and 3 during the internal building inspections. A single brown long-eared bat was observed within the loft void of Building 3. No bat droppings or other field signs of bats were found during the internal inspection of Building 4.

3.3 Emergence surveys

Table 2 – Bat activity summary

DATE	SURVEY TYPE	SPECIES	NO. OF BATS	ROOST LOCATION	ACCESS POINT	TIMINGS
19/06/24	Emergence	Soprano Pipistrelle	1	Roost 3 - Roof of western section of Building 2.	Access is via lifted tile.	22:04
		Common Pipistrelle	3	Roost 1 - Southern aspect of Building 1.	Gap under the facia board on the western end of the southern aspect.	22:23
07/08/24	Emergence	Common Pipistrelle	1	Roost 7 - Eastern aspect of Building 3.	Holes in the eastern gable end wall.	21:32
		Common Pipistrelle	2	Roost 1 - Southern aspect of Building 1.	Gap under the facia board on the western end of the southern aspect.	21:12 and 21:15

3.4 Activity summary

Table 3 – Bat activity summary

DATE	SURVEY TYPE	SPECIES	NOTES
19/06/24	Emergence	Common pipistrelle	Common pipistrelles were recorded commuting and foraging between the buildings.
		Soprano pipistrelles	Soprano pipistrelles were recorded following similar commuting and foraging paths as the common pipistrelles however they were also seen emerging from the buildings.
		Noctule	Noctules were recorded commuting over the site.
		Myotis sp.	Myotis bats were recorded on two occasions, flying between the buildings.
07/08/24	Emergence	Common pipistrelle	Common pipistrelles foraging made up the majority of the activity during the survey.
		Soprano pipistrelles	Soprano pipistrelles were recoded briefly and it is likely to be a single individual commuting.
		Noctule	Noctule activity made up the second largest portion of the activity during this survey. This activity was mainly foraging around Buildings 2 and 3
		Myotis sp.	Myotis bats were recorded foraging just to the north of Building 1 over the track.

		Brown long-eared	Low numbers of brown long-eared bats were recorded over the track to the north of Building 1.

4 EVALUATION AND RECOMMENDATIONS

4.1 Evaluation of results

Blackmoss Farm is situated in an area that has moderate-high potential to support bats. The farm itself has 142-hectare curtilage and supports a wide range of habitats such as improved grasslands, woodlands and waterbodies that will support an array of invertebrates and as such offer an abundance of foraging opportunities for bats. Further afield, the habitats are similar in composition and the local area contains numerous commuting routes due the numerous tree lines, hedgerows and unlit country roads.

Moderate levels of bat activity were recorded on site during the bat presence / absence surveys, predominantly from common pipistrelles, with soprano pipistrelle, noctule, brown long-eared and *Myotis* bats recorded to a lesser extent.

Three roosts were observed during the bat presence / absence surveys and a further four roosts were observed during the building inspections. These roosts are classified and detailed further in section 4.2 below.

4.2 Roost assessment

Roost 1 – Three common pipistrelles were recorded emerging from underneath the facia boards on the southern aspect of Building 1 during the first survey and two were observed using the same roost during the second survey. This is considered to be a day roost used by a low number of bats.

Roost 2 – Bat droppings were observed within the loft void of Building 2 and were later confirmed to be from common pipistrelles though DNA analysis. Bats were not observed to be using the roost during the presence / absence surveys and so the access points could not be identified. However, due to the location of the droppings within the loft space and the presence of a cavity at the eaves on the southern aspect, this is considered to likely be the access point. Due to the low number of droppings, this is considered to be a day roost used on an occasional basis by a low number of bats.

Roost 3 – A soprano pipistrelle roost located underneath the western end roof tiles of Building 2, observed to be in use by a single bat during the presence / absence surveys. This is considered to be a day roost used by a single bat on an occasional basis.

Roost 4 – A brown long-eared bat roost located in the loft space of Building 3. This roost was identified during the internal building inspection when a bat was observed within the loft space. The access point of this roost could not be determined since no bats were recorded emerging from this location during the surveys. This is considered to be a day roost used on an occasional basis by a single bat.

Roost 5 – Roost five is a common pipistrelle roost in the farmhouse section of Building 3. The roost was identified through DNA analysis of droppings. The droppings were located on the southern wall directly below a gap underneath the wooden fascia board. The gap leads into the stonework and onto the top of the wall plate. No bats recorded emerging during the presence / absence surveys. Due to the low number of droppings and lack of bats using the roost during the surveys, this is considered to be a day roost used on an occasional basis by a single or low number of bats.

Roost 6 – A BLE feeding perch located within the first floor of the barn section of Building 3. This roost has been categorised due to the presence of classic brown long-eared feeding remains and scattered droppings. No bats recorded emerging from this location during the presence / absence surveys, and it is considered to be in use by a single or low number of bats on an occasional basis.

Roost 7 - A common pipistrelle roost located in the wall cavity on the eastern gable end of Building 3. A single bat was observed emerging from the roost on a single occasion. This roost is considered to be a day roost used on an occasional basis by a single bat. The exact location of the roost within the wall could not be determined due to the extent of the wall cavities.

4.3 Mitigation and compensation measures

4.3.1 Bats

Building 4 has been assessed as having negligible potential to support roosting bats due to a lack of PRFs. As such no further surveys, mitigation or compensation measures are required with regards to bats and this building.

None of the buildings on site contain PRFs with significant hibernation potential. However, the cavities within the brickwork of Buildings 2 and 3 have some, albeit limited non-classic hibernation potential and could be suitable for use by individual hibernating bats. These features cannot be fully surveyed as they are located within a cavity wall, but they may be used during the hibernation period. As such the building is considered to support 'non-classic' hibernation features that are unlikely to be used by bats, but do retain hibernation potential. As such, the mitigation measures detailed below include timing restrictions to ensure that any works that may impact crevices and wall cavities (the only potentially suitable hibernation features) will occur between March and October inclusive, outside of the hibernation period.

Severn roosts were identified across Buildings 1, 2 and 3. Due to specific works due to be undertaken to each building, the licencing, mitigation and compensation requirements for each roost vary and are detailed fully below.

Roosts 3 & 4 – No mitigation needed

Roosts 3 and 4 are located within loft spaces of Buildings 2 and 3, which are not due to be impacted by the development proposals. As such, mitigation measures and a licence are not required as there are no potential impacts.

If the development plans change and incorporate works to these loft voids or their associated roofs, the requirement for a licence and mitigation measures will need to be reassessed.

Roost 1 – Non-licenced method statement

Roost 1 is not due to be impacted by the proposed development and will be retained. Due to the presence of a bat roost within the building, a non-licensed method statement should be implemented to protect bats in the unlikely event that they are present within the working area at the time of the works. As part of the non-licenced method statement, the following mitigation measures will be implemented:

- Prior to commencement of works to Building 1, the project ecologist will deliver a toolbox talk to the contractors. The talk will cover bat ecology, bats and the law, and what to do if bats or field signs of bats are found during the works.

- Prior to the start of works, the known roosting area will be inspected by a licensed ecologist. The ecologist will use an endoscope where necessary to examine inside any potential roosting features, in order to further confirm the presence or absence of bats and direct works accordingly.

- If any sensitive areas of the building are to be removed, such as raised ridge tiles, they are to be removed by hand, under the direct supervision of a licensed bat ecologist.

- In the event that a bat is discovered during the works, works on that locality will cease immediately UES will be contacted for advice on how to proceed. UES can be contacted directly on [redacted]. It's likely that a mitigation licence will then need to be secured for the works to continue.

If the development plans change and incorporate works that will impact the roost, the requirement for a licence and mitigation measures will need to be reassessed.

Roosts 2, 5, 6 & 7 – Mitigation licence

Roosts 2, 5, 6 and 7 are due to be removed to facilitate the development proposals. As such, the works to Buildings 2 and 3 that will impact these roosting areas will need to be registered under Natural England's Earned Recognition Licence or under an EPS Licence granted by Natural England.

An application to register the site under an EPS or Earned Recognition licence submitted after planning permission has been secured, but must be in place prior to any works that could impact the known roosts.

It is a requirement of the licence application that a walkover survey / check must have been undertaken within the three months prior to submission of the licence application form, to ensure conditions on the site have not changed. Natural England aim to process Earned Recognition licence applications within 15 working days and EPS licence applications within 30 working days.

The measures detailed below outline the mitigation and compensation measures required in order to safeguard protected species throughout the duration of development. They form a method statement that will inform the licence application and which the contractors undertaking works on site must adhere to:

- The low numbers and common species of bats likely to be affected, as well as the proposed soft demolition techniques, negate the need for timing restrictions in relation to this development. However, works involving the brickwork of Buildings 2 and 3 will need to be conducted outside of the peak hibernation season and avoided during November to February inclusive.

- When planning external lighting, consideration is to be given to the commuting and dispersal routes used by bats. External lighting is to be directed away from any tree lines and proposed bat box locations. See Appendix 7 – External lighting guidance for further information.

- The project ecologist will deliver a toolbox talk to the contractors responsible for the destructive works, prior to commencement. The talk will cover bat ecology, bats and the law, and what to do if bats or field signs of bats are found during the works.

- Prior to the destructive works, two Schwegler 2F (general purpose) bat box (or similar as agreed by the licenced ecologist if the specified model isn't available) will be fitted to a mature tree within the immediate vicinity of the site and within the developers ownership boundary, as specified by the onsite ecologist, and will be left *in situ* after the works have been completed on site. If no suitable mature trees are present then the boxes may be mounted on a pole or affixed to nearby buildings at the discretion of the project ecologist. The bat boxes should be located on a southerly aspect, where they will receive the maximum amount of sunlight. They should be sited at a height of between three and six metres and away from any potential disturbance (including external lighting). Once bats have inhabited a bat box it may only be disturbed by a licensed bat ecologist

- If the site has not been registered within three months of the most recent survey visit, a walkover survey / check is required prior to the submission of the site registration form to ensure that the conditions of the site have not changed since the most recent survey.

- Prior to the start of works, the known roosting areas will be inspected by the registered consultant / ecologist. The ecologist will use an endoscope where necessary to examine inside the roost access point, in order to further confirm the presence or absence of bats and direct works accordingly.

- The known roost and other sensitive areas of the building, such as raised ridge tiles, are to be removed by hand, under the direct supervision of a licensed bat ecologist. In the event that a bat is discovered during the works, the bat will be captured by hand by the onsite ecologist and transported to the aforementioned pre-installed bat box. If the bat is harmed or emaciated, it will be taken to the nearest animal hospital or bat carer if deemed necessary by the onsite ecologist.

- UES will remain on call throughout the development in case any further advice is needed or bats are encountered. **UES can be contacted directly on [redacted].**

4.3.2 Birds

Due to the known and further potential presence of breeding birds within the buildings, it is recommended that the works take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible, a breeding bird nest check should be undertaken prior to the commencement of works by a suitably experienced ecologist and an ecological clerk of works appointed if considered necessary..

5 CONCLUSION

Blackmoss Farm is situated in an area that has moderate-high potential to support bats. The farm itself has 142-hectare curtilage and supports a wide range of habitats such as improved grasslands, woodlands and waterbodies that will support an array of invertebrates and as such offer an abundance of foraging opportunities for bats. Further afield, the habitats are similar in composition and the local area contains numerous commuting routes due the numerous tree lines, hedgerows and unlit country roads.

During the building inspections, Buildings 1, 2 and 3 were assessed as having moderate suitability to support roosting bats and Building 4 was assessed as having negligible potential to support bats.

Due to the moderate assessment of Buildings 1, 2 and 3 and the observation of bat droppings and / or a bat using the building during the internal inspections, two bat presence / absence surveys were conducted of each building.

Moderate levels of bat activity were recorded on site during the bat presence / absence surveys, predominantly from common pipistrelles, with soprano pipistrelle, noctule, brown long-eared and *Myotis* bats recorded to a lesser extent.

Severn roosts were identified across Buildings 1, 2 and 3 during the building inspections and presence / absence surveys. Due to specific works due to be undertaken to each building, the licencing, mitigation and compensation requirements for each roost vary and are detailed fully in section 4.3.1.

If any changes are made to the development plans, then the license requirements and mitigation measures will need to be reassessed.

Due to the known and further potential presence of breeding birds within the buildings, it is recommended that the works take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible, a breeding bird nest check should be undertaken prior to the commencement of works by a suitably experienced ecologist and an ecological clerk of works appointed if considered necessary.

6 REFERENCES

Chartered Institute of Ecology and Environmental Management (2013). *Competencies for Species Survey: Bats*.

Ministry of Housing Communities and Local Government (2023). *National Planning Policy Framework*.

Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines.* (4th ed.) The Bat Conservation Trust, London.

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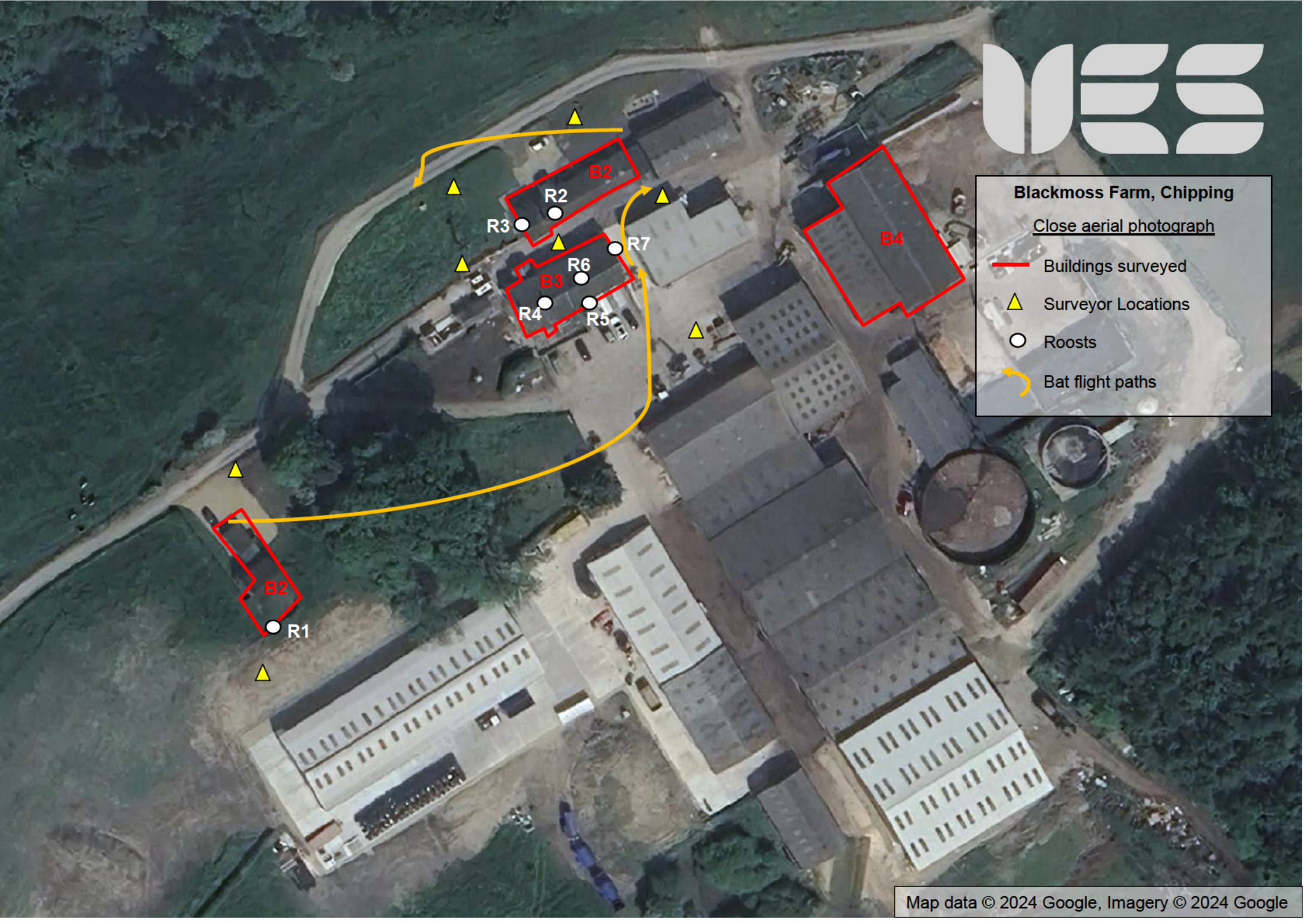
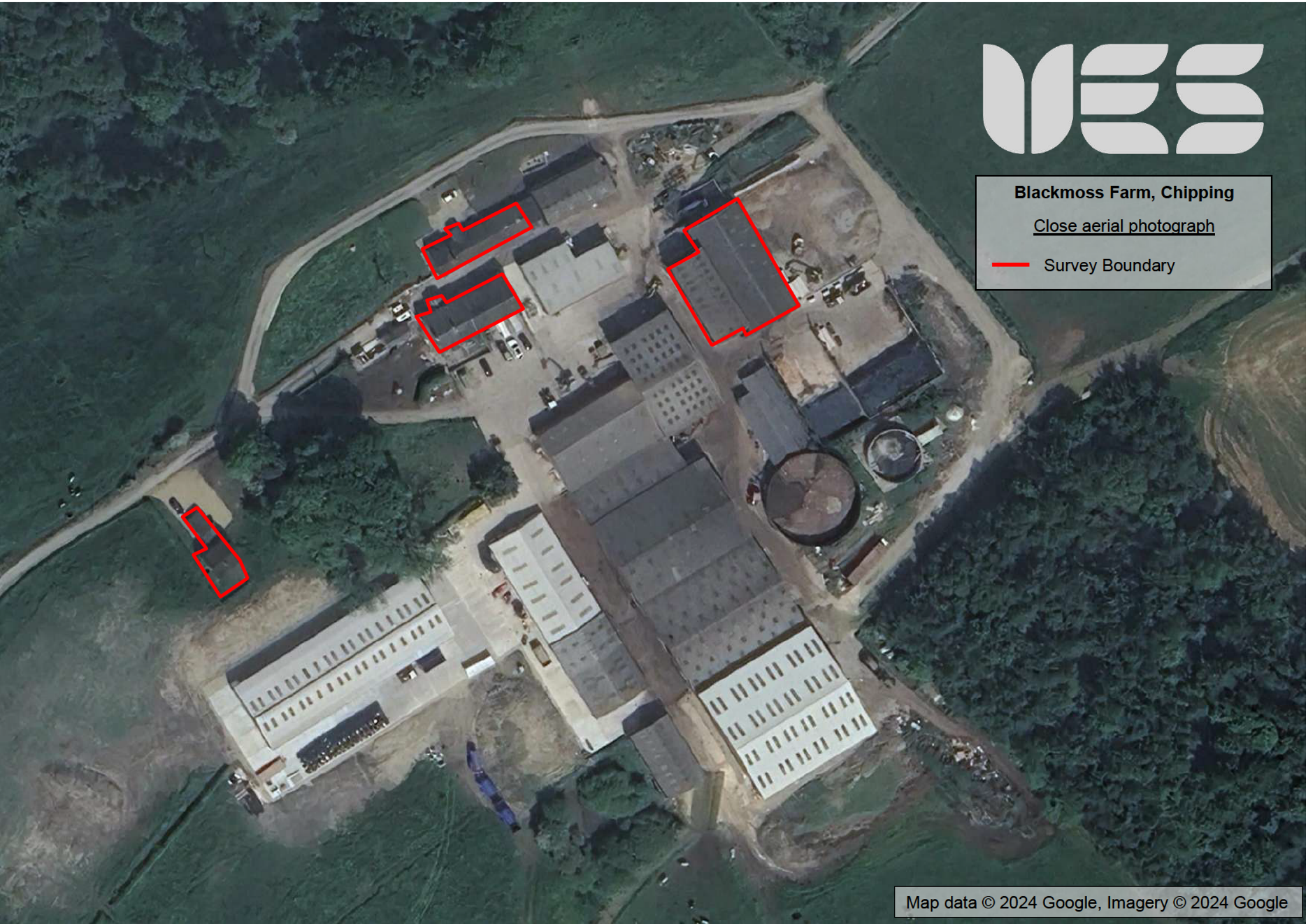
APPENDICES

Appendix 1 – Site plan


B2
R2
R3
R7
B3
R6
R4
R5
B4
B2
R1
Blackmoss Farm, Chipping
Close aerial photograph
Buildings surveyed
Surveyor Locations
Roosts
Bat flight paths
Map data © 2024 Google, Imagery © 2024 Google

Appendix 2 – Aerial photographs


Blackmoss Farm, Chipping
Close aerial photograph
Survey Boundary
Map data © 2024 Google, Imagery © 2024 Google


Blackmoss Farm, Chipping
Wide aerial photograph
Site Location
Map data © 2024 Google, Imagery © 2024 Google

Appendix 3 – Photographs

Photograph 1 – View of the southern aspect of Building 1.

Photograph 2 – View of the pitched roof and western gable end of Building 1.

Photograph 3 – View of the PRFs formed from damaged fascia boards on the southern aspect of Building 1.

Photograph 4 – View of the gaps under the bargeboards on the eastern aspect of Building 1.

Photograph 5 – View of a damaged section of bargeboard on the western aspect of Building 1.

Photograph 6 - View of a missing section of bargeboard on the western aspect of Building 1.

Photograph 7 – View of the northern aspect of Building 1 including the garage.

Photograph 8 – Internal view of the gaps behind the fascia boards in the garage attached to Building 1.

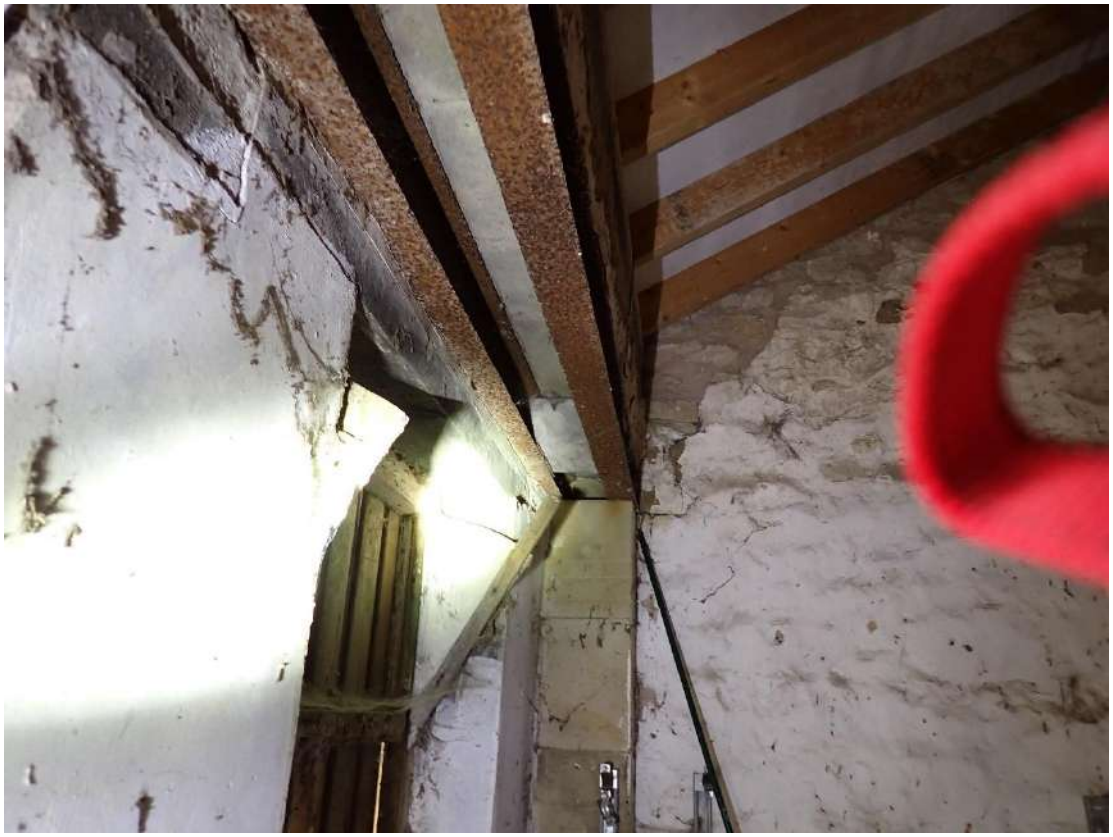
Building 9 – View of the lead flashing where the garage attaches to Building 1.

Photograph 10 – View of the pig stye forming the eastern section of Building 2.

Photograph 11 – View of PRFs formed from raised roof tiles on the eastern section of Building 2.

Photograph 12 - View of patches of raised roof tiles and missing ridge tiles on the roof of the eastern section of Building 2.

Photograph 13 – View of access points into Building 2 formed from missing mortar behind the fascia boards.



Photograph 14 - View of the wood and metal joists which comprise the eaves of the eastern section of Building 2.

Photograph 15 – View of access points into the wall cavities of Building 2 via areas of damaged brickwork at the eastern gable end.

Photograph 16 – View of an access point into the wall cavity in the eastern section of Building 2. located on the eastern gable end.

Photograph 17 – View of gaps in the brickwork on the southern aspect of Building 2.

Photograph 18 - View of boarded over windows in on the southern aspect of the eastern section of Building 2.

Photograph 19 - View of the open windows allowing access to the interior of the eastern section of Building 2.

Photograph 20 – View of the northern aspect of Building 3.

Photograph 21 - View of the raised tiles on the southern aspect of Building 3, forming PRFs.

Photograph 22 – View of the southern aspect of Building 3 and the flashing around the chimneys and the skylights which is in good condition.

Photograph 23 – View of the gaps behind the fascia board on the southern aspect of Building 3.

Photograph 24 – Close in view of the gaps between the fascia boards on the southern aspect of Building 3.

Photograph 25 – View of the cavity extending up to the wall plate, located behind the fascia board on the southern aspect of Building 3.

Photograph 26 – View of the location where droppings were observed on the southern aspect of Building 3.

Photograph 27 – View of the PRF formed by cracks in the brickwork on the northern aspect of Building 3, where the newer extension meets the older barn.

Photograph 28 – View of the PRFs formed from ventilation gaps on the eastern gable end of Building 3.

Photograph 29 – Close view of the PRF formed by the ventilation hole near the apex of the eastern gable end of Building 3.

Photograph 30 – View of the porch on the northern aspect of Building 3.

Photograph 31 - View of the porch on the southern aspect of Building 3.

Photograph 32 - View of the gable end of Building 4.

Photograph 33 – View of the side wall of Building 4 showing the large entrance points allowing access into the interior of the building.

Photograph 34 - View of the single loft space located in Building 1.

Photograph 35 - View of the gaps in the interior walls which allow access to the wall cavities.

Photograph 36 - View of a hole in the mineral wool roof insulation leading to the underside of the tiles.

Photograph 37 – View of the interior loft insulation in the loft of Building 2.

Photograph 38 - View of bat droppings located on the walls at the gable ends of loft void of Building 2.

Photograph 39 – View of the underside of the roof in the western room of the pig styes in Building 2, showing the steel rafters and the breathable membrane lining.

Photograph 40 – View of the PRFs in the gable ends where the timber of the roof ends.

Photograph 41 - View of the gaps above the wall plate in the western room of the pig styes of Building 2.

Photograph 42 – View of the bitumen lining the central room of the pig styes of Building 2.

Photograph 43 - View of the damaged section of the bitumen lining of the middle room of the pig styes in Building 2.

Photograph 44 – View of the gaps between the tiles and the bitumen lining forming PRFs in the middle room of the pig stye section of Building 2.

Photograph 45 – View of the damaged bitumen lining in the eastern room of the pig stye section of Building 2.

Photograph 46 - View of the damaged sections of the brickwork in the internal walls of the pig stye section of Building 2 leading to the wall cavity.

Photograph 47 – View of the gap in the wall above the final brick and the beam allowing access into the wall cavity of the eastern room of the pig stye section of Building 2.

Photograph 48 – View of a hole in the breezeblocks at the gable end leading to the wall cavity in the eastern room of the pig stye section of Building 2.

Photograph 49 – View of the open doorway in the northern aspect of the building allowing access to the interior of the building.

Photograph 50 – View of the swallow nest located in the pig stye section of Building 2.

Photograph 51 - View of the internal loft space located within the farmhouse section of Building 3.

Photograph 52 – View of the brown long-eared bat on the breathable membrane lining the loft in the farmhouse section of Building 3.

Photograph 53 – Close view of the brown long-eared bat located in the loft of the farmhouse section of Building 3.

Photograph 54 – View of the numerous cracks and gaps in the internal walls allowing access to the wall cavity.

Photograph 55 – View of the numerous fresh bat droppings scattered over the chipboard lining the floor of the loft in the farmhouse of Building 3.

Photograph 56 – Internal view of the first floor in the barn section of Building 3.

Photograph 57 – View of the underside of the roof of the barn section of Building 3, showing gaps in the tiles and an absence of lining.

Photograph 58 – View of a PRF in the form of a gap around mortice joints in the wooden beams in the barn section of Building 3.

Photograph 59 – View of a PRF formed by ill-fitting joints in the timber structure of the barn section of Building 3.

Photograph 60 – View of a PRF formed from cracks in the timber beams in the barn section of Building 3.

Photograph 61 - View of the cracks in the gable end and missing mortar at the wall plates in the barn section of Building 3.

Photograph 62 – View of additional cracks and cavities of the gable end of the barn section of Building 3.

Photograph 63 – View of the bat droppings scattered throughout the first floor of the barn section of Building 3.

Photograph 64 – View of the fresh droppings located in the barn section of Building 3.

Photograph 65 - View of a bat dropping located in the ground floor of the barn section of Building 3.


Photograph 66 - View of the swallow nest located in the Barn section of Building 3.

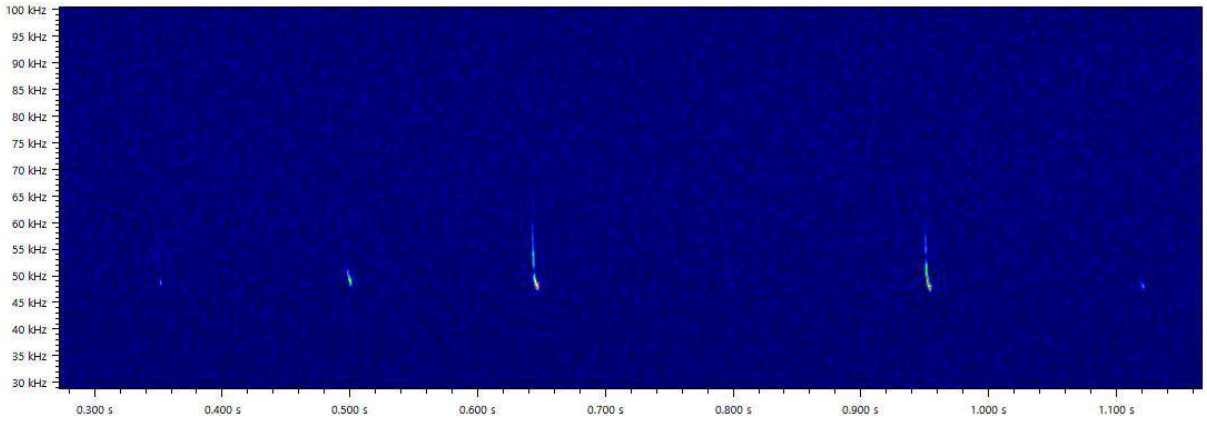
Photograph 67 – View of the interior of Building 4 showing the well lit and exposed conditions inside the building.

Photograph 68 – View of the southern aspect of Building 1 with Roost 1 circled in red.

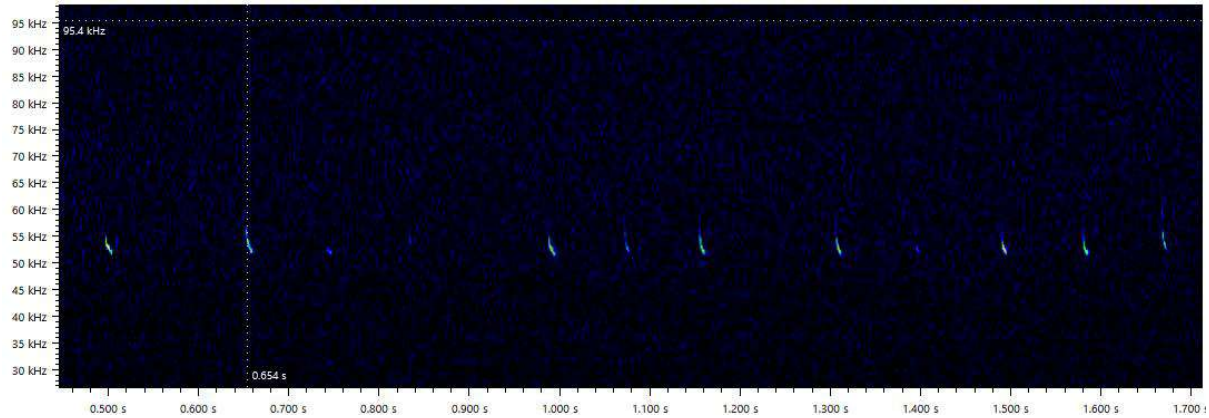
Photograph 69 – View of the entrance to Roost 3 circled in red, located on the western aspect of Building 2.

Photograph 70 – View of the eastern gable end of Building 2 with the entrance to Roost 7 circled in red.

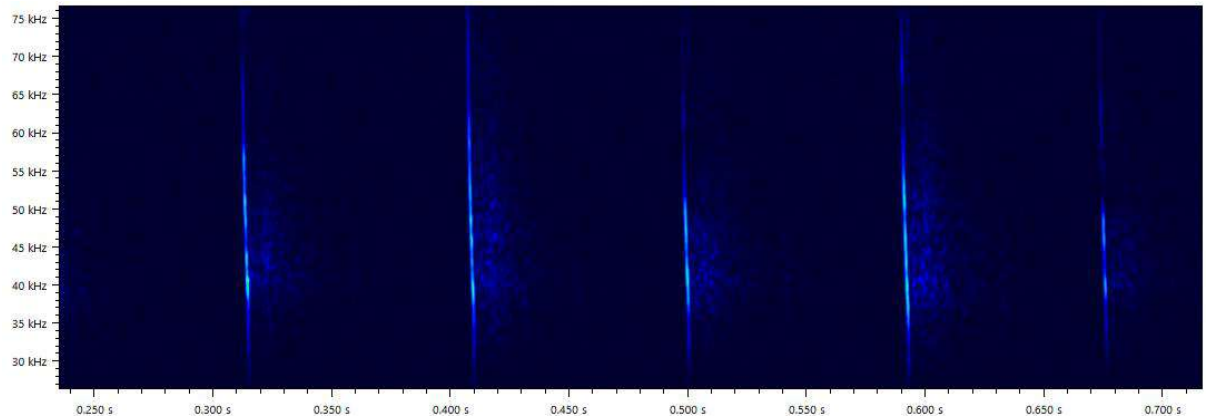
Appendix 4 – Results



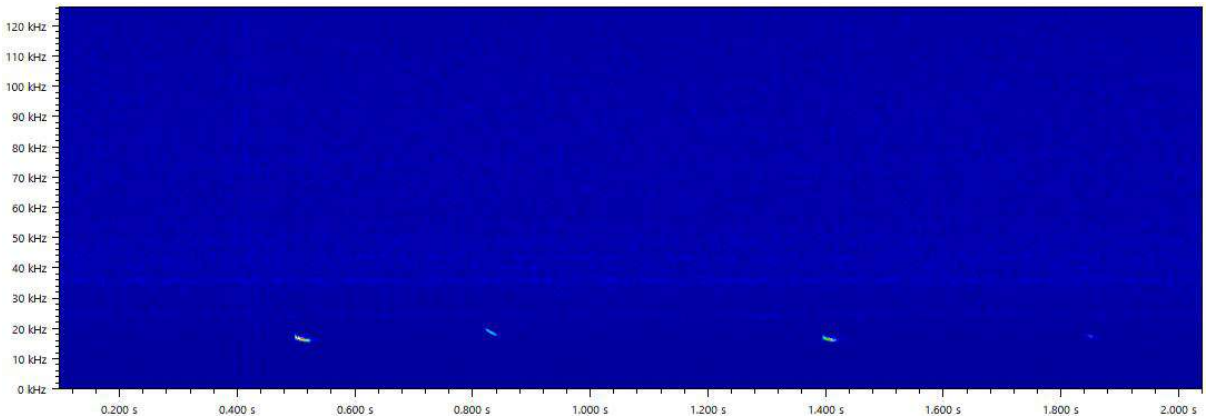
Sonogram 1 – Common pipistrelle recorded to the south of Building 3 at 22:16, on 19.06.2024.



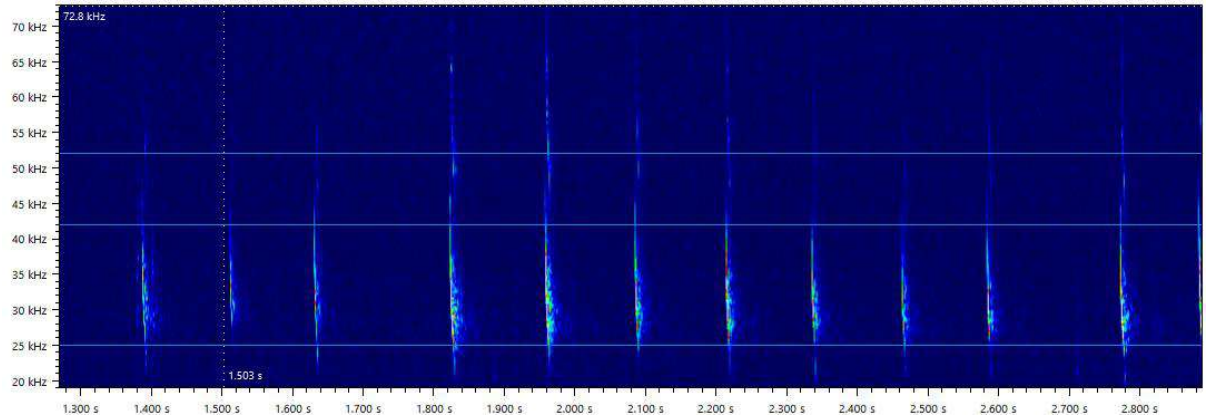
Sonogram 2 – Soprano pipistrelle recorded to the south of Building 3 at 22:39, on 19.06.2024.



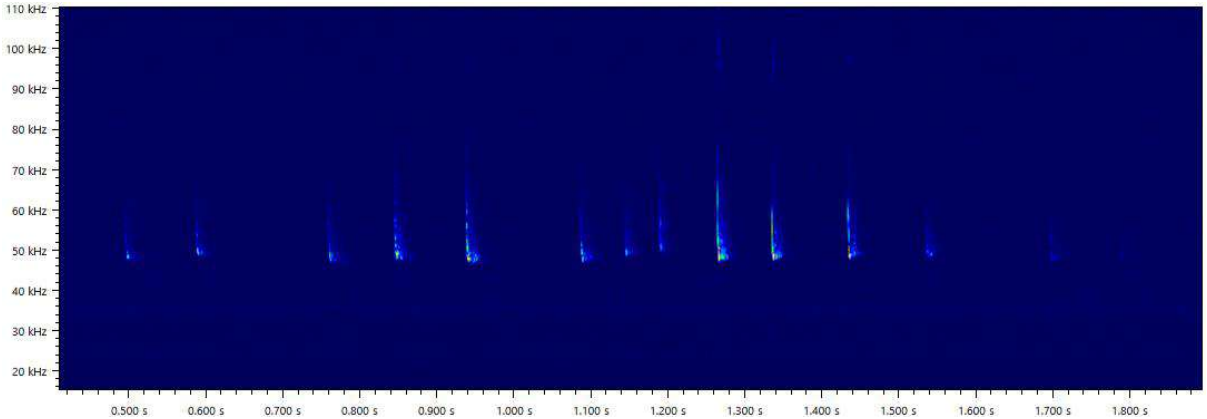
Sonogram 3 – Myotis bat recorded to the north of Building 3 at 22:39, on 19.06.2024.



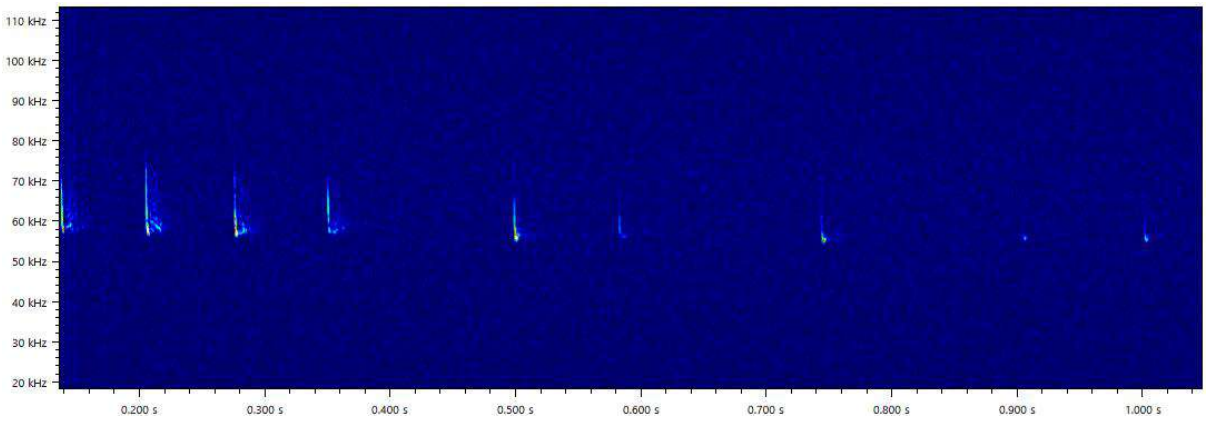
Sonogram 4 – Noctule recorded to the south of Building 1 at 22:32, on 19.06.2024.



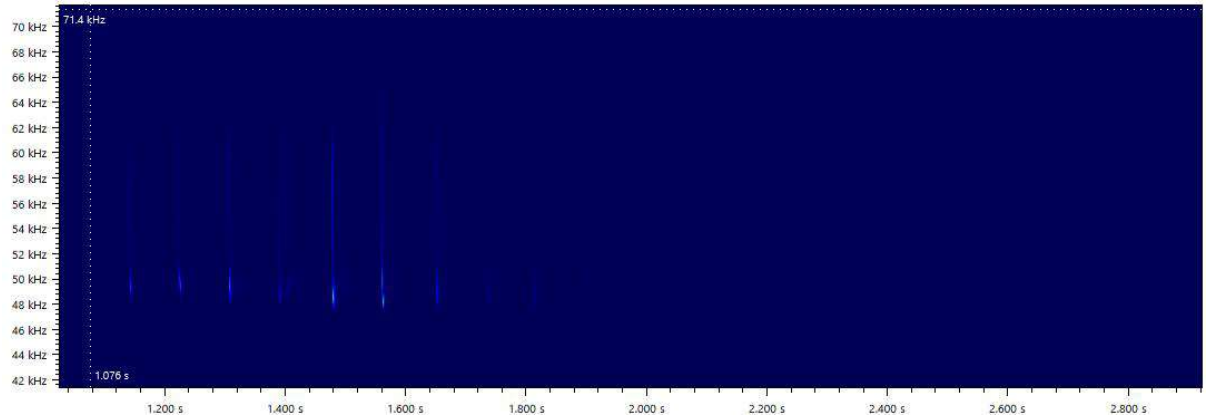
Sonogram 5 – Brown long-eared bat recorded to the north of Building 2 at 22:17, on 07.08.2024.



Sonogram 6 – Common pipistrelle recorded shortly after emerging from Roost 1 at 22:23, on 19.06.2024.



Sonogram 7 – Soprano pipistrelle recorded emerging from Roost 7 at 22:04, on 19.06.2024.



Sonogram 8 – Common pipistrelle recorded emerging from Roost 7 at 21:32, on 07.08.2024.

Appendix 5 – Infrared Images

Photograph 1 – Infrared image of the northern aspect of Building 1 at the darkest point in the survey on the 19th June 2024.

Photograph 2 – Infrared image of the southern aspect of Building 1 at the darkest point during the survey on the 19th June 2024.

Photograph 3 – Infrared image of the western end of the southern aspect of Building 2 at the darkest point during the survey on the 19th June 2024.

Photograph 4 – Infrared image of the eastern end of the southern aspect of Building 2 at the darkest point of the survey on the 19th June 2024.

Photograph 5 – Infrared image of the southern aspect of Building 3 at the darkest point of the survey on the 19th June 2024.

Photograph 6 – Infrared image of the north-western aspect of Building 1 at the darkest point of the survey on the 7th August 2024.

Photograph 7 – Infrared image of the southern aspect of Building 1 at the darkest point during the survey on the 7th August 2024.

Photograph 8 – Infrared image of the eastern end of the northern aspect of Building 2 at the darkest point of the survey on the 7th August 2024.

Photograph 9 – Infrared image of the eastern end of the southern aspect of Building 2 at the darkest point during the survey on the 7th August 2024.

Photograph 10 – Infrared image of the western end of the northern aspect of Building 3 at the darkest point of the survey on the 7th August 2024.

Photograph 11 – Infrared image of the eastern end of the southern aspect of Building 3 at the darkest point during the survey on the 7th August 2024.

Appendix 6 – DNA Results

Folio No: 3293-2024
Purchase Order: UES03941
Contact: United Environmental Services Ltd (UES)
Issue Date: 19.08.2024
Received Date: 09.08.2024

Biological Report

Technical Report

SureScreen Scientifics

Folio No: 3293-2024
Purchase Order: UES03941
Contact: United Environmental Services Ltd (UES)
ssue Date: 19.08.2024
Received Date: 09.08.2024

SureScreen Scientifics

Biological Sample Analysis

Summary

Most biological materials (tissue, feces, hair, blood, etc.) contain small amounts of DNA from the organism of which it originated. Using molecular methods such as PCR (polymerase chain reaction) and DNA sequencing, SureScreen Scientifics are able to analyze an unknown sample to determine which species the sample originates from our methods are optimized for the detection of species including bats (over 92% of bat species worldwide can be identified including all 18 UK bat species), mammals; bees, wasps & hornets; birds; fish; plants (from roots, leaves, stem and even dried wood) and many more species.

Results

Lab ID	Site Name	OS Reference	Sample Type	Species Name	Match(%)
B3661	Blackmoss Farm B2 Floor		Bat Dropping	Common pipistrelle (Pipistrellus pipistrellus)	99.47
	Genetic Sequence TGGAGGATTTGGAACTGACTAGTTCCACTAATAATTGGAGCCCCTGACATGGCATTTCCTCGTATAAATAATATAAGTTTCTGACTCCTACCTCCTTCTTTTCTACTACTACTAGCCTCGTCTATAGTAGAAGCGGGAGCGGGTACAGGCTGAACAGTCTACCCCCCTCTAGCAGGAAACCTAGCTCATGCTGGAGAG				
B3660	Blackmoss Farm B3 Southern Wall		Bat Dropping	Common pipistrelle (Pipistrellus pipistrellus)	99.44
	Genetic Sequence TTGGAACTGACTAGTTCCACTAATAATTGGAGCCCCTGACATGGCATTTCCTCGTATAAATAATATAAGTTTCTGACTCCTACCTCCTTCTTTTCTACTACTACTAGCCTCGTCTATAGTAGAAGCGGGAGCGGGTACAGGCTGAACAGTCTACCCCCCTCTAGCAGGAAATCTTGCATCATGCAGGAG				

Matters affecting result: none
Reported by: Chelsea Warner

Approved by: Vanessa Hind

Folio No:	3293-2024
Purchase Order:	UES03941
Contact:	United Environmental Services Ltd (UES)
ssue Date:	19.08.2024
Received Date:	09.08.2024

SureScreen Scientifics

Methodology

Once samples have arrived in the laboratory, the DNA is isolated using a commercial DNA extraction kit. Using PCR, DNA (if present within the sample) is amplified using universal molecular markers designed to amplify a short fragment of the DNA of the target species group (i.e. mammal, fish, arthropod, reptile, plant etc.). If amplification is successful, the resulting DNA sequence is revealed using a process known as Sanger Sequencing in order to obtain the genetic sequence of the mitochondrial gene within the sample. The sequence results are aligned against a library of known reference sequences using bioinformatics software, which enables us to determine which species the DNA sequence from the sample matches with, informing the species identity and sequence similarity (match %).

If the initial analysis is unsuccessful, the entire process is repeated up to two additional times with a fresh reserve sample (if available) in order to obtain a species identification. If no DNA is detected after three attempts, then we can be confident that any further analysis of the sample will likely also fail to result in species identification.

Interpretation of Results

Sample Type:

The sample you send to us can come from a variety of sources. Fecal, dropping, urine, hair, blood, carcass (skin, flesh, bone), gamete, plant matter or unknown biological material all contain DNA that we can test for in order to identify the species of origin.

Genetic Sequence:

The unique DNA sequence obtained from the sample.

Match (%):

How closely matched the DNA sequence from your sample is to the sequences within our reference database. This can be interpreted as a score of result accuracy, with the maximum score of 100% indicating an exact match of the sample to the indicated species' reference sequence. Lower scores (80-99%) indicate some variation between the sample and reference sequence, likely due to natural variation between individual genetic sequences and/or systematic variations generated through the sequencing process. Scores below 80% similarity should be interpreted with care and can indicate part degraded or part contaminated samples.

Inconclusive Result:

Degraded sample:

DNA is degraded and we are unable to determine species identification due to degradation of sample DNA. This can happen either before sample collection (old samples, exposure to UV etc.) or after sample collection if stored for long periods before analysis or not handled correctly.

Inhibited/contaminated sample:

We are unable to determine species identity due to contamination or the suspected presence of large quantities of PCR inhibitors. Contamination sources can originate from other species which could have come into contact with the samples, or human contamination during sample collection.

Alternative Result:

Sometimes, for targets such as bat dropping analysis, other mammalian species such as rodents are detected. We find this to be a common occurrence as some bat droppings can be similar in appearance to rodent droppings. Although sometimes unexpected, repeat analyses in these cases would likely return the same results.

Appendix 7 – External Lighting Guidance

Lighting scheme in relation to bats

The two most important features of street and security lighting with respect to bats are:

1. The UV component. Low or zero UV installations are preferred to reduce attraction of insects to lighting and therefore to reduce the attraction of foraging bats to these areas.

2. Restriction of the area illuminated. Lighting must be shielded to maintain dark areas, particularly above lighting installations, and in many cases, land adjacent to the areas illuminated. The aim is to maintain dark commuting corridors for foraging and commuting bats. Bats avoid well lit areas, and these create barriers for flying bats between roosting and feeding areas.

UV characteristics:

Low

- Low pressure Sodium Lamps (SOX) emit a minimal UV component.
- High pressure Sodium Lamps (SON) emit a small UV component.
- White SON, though low in UV, emit more than regular SON.

High

- Metal Halide lamps emit more UV than SON lamps, but less than Mercury lamps
- Mercury lamps (MBF) emit a high UV component.
- Tungsten Halogen, if unfiltered, emit a high UV component
- Compact Fluorescent (CFL), if unfiltered, emit a high UV component.
- Variable
- Light Emitting Diodes (LEDs) have a range of UV outputs. Variants are available with low or minimal UV output.
- Glass glazing and UV filtering lenses are recommended to reduce UV output.

Street lighting

- Low-pressure sodium or high-pressure sodium must be used instead of mercury or metal halide lamps. LEDs must be specified as low UV. Tungsten halogen and CFL sources must have appropriate UV filtering to reduce UV to low levels.
- Lighting must be directed to where it is needed and light spillage avoided. Hoods must be used on each lamp to direct light and contain spillage. Light leakage into hedgerows and trees must be avoided.
- If possible, the times during which the lighting is on overnight must be limited to provide some dark periods. If the light is fitted with a timer this must be adjusted to reduce the amount of 'lit time' and provide dark periods.

Security and domestic external lighting

The above recommendations concerning UV output and direction apply. In addition:

- Lighting should illuminate only ground floor areas. Light should not leak upwards to illuminate first floor and higher levels.
- Lamps of greater than 2000 lumens (150 W) must not be used.
- Movement or similar sensors must be used. They must be carefully installed and aimed, to reduce the amount of time a light is on each night.
- Light must illuminate only the immediate area required, by using as sharp a downward angle as possible. Light must not be directed at or close to bat roost access points or flight paths from the roost. A shield or hood can be used to control or restrict the area to be lit.
- Wide angle illumination must be avoided as this will be more disturbing to foraging and commuting bats as well as people and other wildlife.
- Lighting must not illuminate any bat bricks and boxes placed on buildings, trees or other nearby locations.

Taken from the Bat Conservation Trust

Appendix 8 – Statutory and planning context

Ecological assessments
Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Bats
In the United Kingdom, all species of bat and their roosts are afforded full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Amendment (EU exit) Regulations 2019 (known as the "Habitats Regulations"). The Wildlife and Countryside Act is the domestic implementation of the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) and was amended by the Countryside and Rights of Way Act 2000. This makes it an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture a bat
- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (even if the bat is not present at the time)
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead bat, any part of a bat or anything derived from a bat

Under UK law, a bat roost is *any structure or place which any wild [bat] … uses for shelter or protection*. As bats often reuse the same roosts, legal opinion is that a roost is protected whether or not the bats are present at the time of the activity taking place.

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

If an activity is likely to result in any of the above offences, a licence can be applied for to derogate from the protection afforded. These licences must provide appropriate mitigation and are issued by Natural England.

A Natural England mitigation licence application requires a Mitigation Method Statement and, in many cases, a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

The National Planning Policy Framework 2021 (NPPF) provides guidance on the interpretation of the law in relation to the natural environment and development.

The Natural Environment and Rural Communities (NERC) Act 2006 lists the following bat species as species of principle importance under Section 41:

- Barbastelle *Barbastella barbastellus*
- Bechstein's bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared bat *Plecotus auritus*
- Greater horseshoe *Rhinolophus ferrumequinum*
- Lesser horseshoe *Rhinolophus hipposideros*

Section 40 requires every public body in the exercising of its functions 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity' (all biodiversity and not just section 41 species and habitats); therefore making these bats a material consideration in the planning process and requiring a detailed ecological bat survey before planning permission can be granted.

Birds
All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird, or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare.

In addition to the protection afforded to all wild birds, more vulnerable species listed on Schedule 1 of the Act receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

The NERC Act offers further protection to the nests of some species that regularly re-use their nests, even when the nests are not in use.

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status' of 244 UK bird species. "Birds of Conservation Concern 4: the Red List for Birds" is the most recent publication summarising their findings. Three lists, Red, Amber and Green, have been produced based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. These lists are a valuable resource when considering conservation priorities.

Planning policy

National Planning Guidance is issued in the form of the National Planning Policy Framework 2021 (NPPF). The most relevant section is 15: Conserving and enhancing the natural environment.

Key relevant principles stated in 15: Conserving and enhancing the natural environment are;

174. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

179. To protect and enhance biodiversity and geodiversity, plans should:
- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity[61]; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation[62]; and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity

180. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons63 and a suitable compensation strategy exists; and
d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.