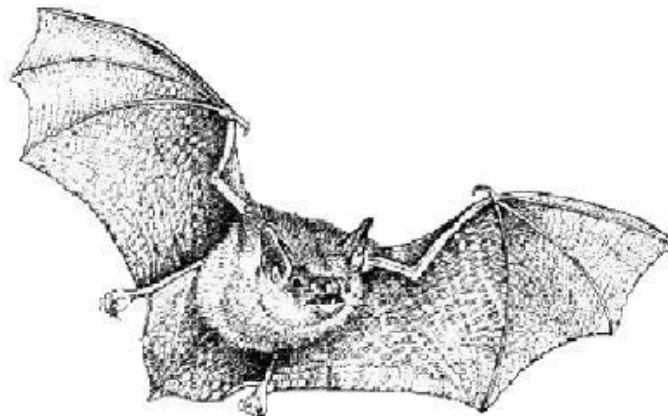


**New Moston Primary School,
Moston Lane East,
New Moston,
Manchester.
M40 3QJ**

**Preliminary Survey & Assessment
in Respect of
Bat Species and Nesting Birds.**

**Surveyor- Mike Fisher
(Bat Survey Licence Level 2 Class Survey Licence WML CL18)
(Bat Roost Visitor Level 1 Class Survey Licence WML CL15)**



Echo Calls Bat Surveys

5th April 2022

1. Introduction.

1.1 Reason for Survey.

As part of the process to obtain planning permission to develop the site, by the construction of a new kitchen extension to an existing primary school building, a preliminary daytime evidence and opportunity bat survey, and a pre-season bird nesting survey, were requested, on the parts of the school that would be affected by the new building work, and any trees, shrubs, and hedgerows both within and around the site boundaries. The purpose of these surveys was to provide evidence on habitats and protected species within the site boundaries, as part of the Local Development Framework (UDP Policy EN9).

1.2 Aims

The aims of this ecological assessment were to:

- To provide clear advice to the client and the Local Planning Authority on the nature conservation value of the site and surrounding area.
- To assess the site for the presence or potential of protected species, within the proposed development site.
- To enable the client to comply with legislation afforded to protected sites and species.
- To highlight the presence of any habitats or species of ecological importance, including Habitats and Species of Principal Importance (NERC Act, 2006).
- To identify any ecological constraints on future development.
- To establish the need for any further surveys and assessments.
- To make nature conservation recommendations.

1.2 The Site.

The site was a large plot of land positioned along the western edge of Moston Lane East, in the New Moston area of Manchester, and consisted of a large complex of connected buildings, belonging to New Moston Primary School, and its surrounding land. The targeted part of the complex of buildings from now on, are referred to as the “site”, at OS grid reference SD 89176 02535, (refer to **Fig 1 - The Site Location**).

1.3 The Buildings.

New Moston Primary School was a multi-limbed building complex, with all parts connected both externally and internally, and this was positioned centrally within the overall area. However, as most of the school buildings will not be affected by the proposed extension, they were not part of the planning application, and therefore they were not surveyed at this time.

1.4 Surrounding Land.

The overall school complex consisted of a number of interconnected buildings surrounded by large areas of concrete hardstanding, and also containing a few garden areas, whilst the targeted school building and its adjacent gazebo, were positioned at the south-eastern corner of the complex, with areas of car parking, football pitches, playing fields and Nuthurst park, all stretching away to the south and south-east. Beyond these further south, were numerous dwellings with their own gardens containing some trees and shrubs.

Positioned to the north, east and west of the school, were numerous similar dwelling, and interspaced in a few areas between these, were some small retail units, and a leisure centre.

The nearby Moston Brook ran from the west, before flowing away in a north-easterly direction lying approximately 0.56 km away from the site, at its nearest point, whilst the Rochdale Canal ran in a north to south orientation, approximately 0.68 km away from the site at its nearest point, and both had lines of mature trees along their banks. But other than the above mentioned features, there were no large areas of open water, or areas of woodland in the surrounding area, (refer to **Fig 1 - The Site Location**, **Fig 2 – Google Map of Area**, **Fig 3 – Main Plan of Area**, **Fig 4 - Plan of Photographs**, and **Fig 5 - Plan of Evidence and Opportunity Bat Survey Results**).

2. Methods.

2.1 Risk Assessment, Possible Hazards.

The required access to the site was relatively easy, and most of the perimeter of the targeted building could be searched with ease. All parts of the school were in excellent condition, and there were no more hazards, other than those normally associated with surveying both the inside and outside, of this type of buildings.

2.2 Methodology of Bat Surveys

A number of factors are used for the survey methodology, which include:

- Knowledge of bat species relevant to the site location, and geographical range.
- Nature of the immediate, and surrounding habitat, in relation to foraging opportunity.
- Condition of trees, shrubs, and any water bodies.
- Presence/absence of roost potential.
- Value of roost potential – if present.

2.3 Daylight Evidence and Opportunity Survey.

The current daylight evidence and opportunity bat survey took place on 23rd March 2022, and was carried out in order to assess the site, and search for evidence of bat occupation, (including recent and historic use). Also, to determine how bats use the site, in what numbers, and if possible, what species of bat are present.

The current survey was undertaken in accordance with the standard methods described in the 'Bat Worker's Manual' (JNCC 2004) and 'Bat Surveys – Good Practice Guidelines' (BCT 2016). It comprised a search for bats, bat droppings, remains of invertebrate prey, grease marks or fur staining, from repeated contact, or passage through narrow roost accesses, or against surfaces, and any other signs of bat occupation, and at the same time looking for evidence of recent nesting birds, any active nests, splash and feathers.

Areas within the targeted buildings searched were:

- Outside the buildings, the eaves, soffits, and walls, were surveyed for signs of potential bat access holes, the ground, windowsills, doorways, and any other surfaces, such as boarding or furniture, which may occur underneath the eaves, and around the perimeter of the building, were searched for bat droppings.
- Inside the school building and adjacent gazebo, on floors, door lintels, window ledges, or on pieces of furniture and equipment, also in spider's webs and other places where droppings, or invertebrate prey remains may collect. Also, noting any noises such as scratching and squeaking which may indicate the presence of roosting bats.

The optimum time to investigate buildings for evidence of a bat roost, is between May and September, but this can sometimes be earlier or later in the year, and is weather and temperature dependant. However, preliminary evidence and opportunity inspections and assessments, may be conducted outside of this time, and can often provide conclusive results, which can save expense and time for Planning Applicants.

All possible roosting areas within the trees, shrubs and hedgerow, both around the site perimeter, or within the site itself, were searched for bats, bat droppings, urine staining, any remains of invertebrate prey, grease marks from repeated contact, or passage through, narrow roost accesses, or against surfaces, and any other signs of bat occupation.

The habitats around the site and surrounding any trees, shrubs and hedges within it, were assessed for their suitability for use by foraging and commuting bats.

All evidence of bird species that were nesting within the site were recorded, and all habitats were assessed for their value for use by nesting birds.

2.4 Equipment.

Equipment used consisted of close-focus binoculars, camera, endoscope, ladders, and a powerful hand-held torch.

3. Results.

3.1 Daylight Survey.

3.1.1 Weather.

The weather conditions at the start of the survey on the 23rd March 2022 were good. It was sunny with a little cloud cover, and a gentle breeze, (Beaufort Scale 2/3), and with a temperature at the start of the survey of 17°C, and such conditions were optimal for a survey of this type.

3.2 Possible Roost Sites.

3.2.1 New Moston Primary School.

New Moston Primary School was a collection of similarly constructed buildings, mostly interconnected, and positioned at locations around the school grounds on large areas of concrete hardstanding, together with some areas of garden. However, the current planning application only applies to a single classroom building and an adjacent gazebo positioned at the south-eastern corner of the complex, and therefore the remaining parts of the school were not surveyed at this time.

The Classroom Building.

The targeted classroom building was a single storied, rectangular building, constructed from brick, with a pitched roof covered in concrete tiles, and underlined with timber panels mounted on timber beams and purlins, and with a well-insulated roof void. The building was regularly used, and was fully insulated and heated, well-maintained, and in an excellent condition, with a well-sealed roof, soffits and gable ends, and as such it was deemed to offer low bat roost suitability, (refer to **figs 3, 4 and 5**, and **photos 1 to 10**).

There were potential bat access points however, and these were:

- There was hole between the building wall and the rear of the guttering at the south-eastern corner of the eastern elevation, but an inspection of this using an endoscope, and a physical inspection of the wall and floor beneath, found the gap to be heavily cobwebbed, and therefore offered low roost suitability, (refer to **figs 3, 4 and 5**, and **photo 4 and 5**).
- At the corner of the south-eastern gable there was a gap behind the soffit boarding, and also another gap between the soffit boarding and the wall in the south-eastern elevation, and both of these, and the walls and floor beneath them, were carefully examined, but neither bat droppings, urine staining, invertebrate prey remains, nor fur staining from the repeated passage of bats through these gaps, and it was concluded that neither of these gaps had been used by bats, (refer to **figs 3, 4 and 5**, and **photos 7 and 8**).
- Located at the south-western corner of the eastern elevation, an open pipe emerged from a hole within the brickwork. However, an internal search of this using an endoscope found the pipe to be internally mashed, and therefore was deemed to have low roost suitability, (refer to **figs 3, 4 and 5**, and **photo 9**).

The Gazebo.

Positioned a short distance to the north of the targeted classroom building, was a gazebo. This was hexagonal in shape, and constructed from open latticed timber planking, mounted on a timber frame, and with a completely open interior, and neither doors, nor the upper half of the sides. The gazebo had a roof of timber planking mounted on a timber frame, with neither roof void nor insulation.

it was both unheated and insulated, and as it had mainly open sides, the gazebo was cold, draughty, and damp, and as such, was deemed unsuitable for breeding bats. Also, as frost and bad weather were likely to penetrate the interior of the gazebo in the colder months, it did not offer the optimum humidity, and constant low temperatures, that hibernating bats require. The resulting conclusion was that the gazebo was deemed to offer low potential bat roosting suitability. It was also felt that the copious amount of light, that would enter the interior of the gazebo through the open sides, which would further restrict the number of dark corners that bats require for roosting purposes, (refer to **figs 3, 4, and 5**, and **photos 1 to 4**).

Close inspection of both the classroom building and the gazebo during the survey, found neither any current nor historic evidence of bats, either internally or externally, nor around any other part of the site.

It was thought possible that some of the site could be used by nesting birds, but at the time of the current survey, although there was some bird activity around the site, neither historical or active nests were found, but it was also surmised that due to the time of year, most birds will have begun to set up territories, and some may have started to breed, (Refer to **Appendix 1**).

3.2.4 Trees and Shrubs.

There were a few immature trees and shrubs, along the north-eastern site border, and a few others along the western site boundary, however, it was understood at the time of the survey, that very little of this overall vegetation would be affected by the planned work. All of the nearby ones were inspected for potential bat roosting opportunities, however, none were found, and therefore all were judged to be Category 3 (negligible value) in accordance with **Appendix 2**.

It was thought likely that these trees and shrubs could be used by nesting birds, but at the time of the survey, although there was some bird activity in and around the site, no active or historic nests were found.

3.2.5 Foraging Potential and Alternative Roost Potential.

The site itself lay within a suburban area, and contained all of the interlocked buildings of the primary school immediately surrounded by large areas of hardstanding and car parks. and the nearby habitats beyond the site boundaries, consisted mainly of dwellings of various sizes and configurations, together with their drives and gardens, containing a few immature trees and shrubs, and bordered by either low walls, fencing, or hedgerow, and all of these together, offered linear features suitable for foraging bats, such as common pipistrelle (*Pipistrellus pipistrellus*), and possibly other bat species, to hunt along for their insect prey.

But other than the above-mentioned features, and Moston Brook and Rochdale Canal some distance away, there were no areas of woodlands, nor any other watercourses, or large reservoirs in the nearby vicinity, and thus the area overall, was assessed to offer only low to moderate suitability value for foraging bats, primarily pipistrelle species, but it was thought that small numbers of other species could be present.

It was considered that other buildings, especially dwellings, in the surrounding area, could offer greater potential as bat roosts, as bats favour heated building whilst breeding.

The search also found no evidence to suggest that any aspect of the targeted part of the school, or anywhere else within the nearby site, had been used historically by nesting or roosting birds.

During the survey, although a few birds were observed around the site, none were seen showing any roosting or nesting behaviour, and therefore it was concluded that the none of the targeted complex within the site were currently being used by nesting birds.

4. Conclusions

4.1 In summary, during the surveys undertaken on 23rd March 2022, neither current, or historic evidence of roosting bats was found anywhere in the targeted part of the primary school, nor anywhere else within the nearby site.

4.2 The targeted school building was in regular use, and was heated, fully insulated, well-maintained, and in an excellent condition, with well-sealed roof, soffits and gable ends, and as such it was deemed to offer low bat roost suitability, (refer to **Appendix 2**).

4.3 The gazebo had open sides and was draughty, unheated, uninsulated, and damp, and as the interior had very little bat roosting opportunity It was deemed unsuitable for breeding bats. Also, as frost and bad weather was likely to penetrate the buildings interior in the colder months, it was felt that no part of the gazebo offered the optimum humidity, and stable low temperatures that are required by hibernating bats, and therefore the resulting conclusion was that all parts of the wooden gazebo were deemed to offer low bat roosting suitability, (refer to **Appendix 2**).

4.4 Since bats, particularly Pipistrelles are opportunistic, an absence of roost evidence at present, does not preclude the low possibility of small numbers of bats, using the site occasionally in the future and/or at other times of year. It is considered that the likelihood of a significant roost (such as a maternity roost) being established as very unlikely, with lone and/or transient roosting likelihood being negligible.

4.5 None of the nearby trees, shrubs, and hedgerows around the site perimeters, offered any suitable roosting opportunities for bats of any species, and therefore, they were all concluded to offer negligible potential as possible bat roosts, (refer to **Appendix 2** and **3**).

4.6 The adjacent habitats had the potential to support low to moderate numbers of foraging common pipistrelles, but large numbers of other species of bats was unlikely. It was concluded that since there was currently no evidence of the presence of bat roosts within any part of the complex,

that the proposed modification to the classroom building and the addition of a new kitchen building, will not have significant implications on the population status of local bat species. There will not be requirement for an EPS mitigation licence (as issued by Natural England) but as a measure of best-practice, precautionary measures should be applied as described in section 5 below.

4.7 It was also concluded that since no evidence of roosting bats, or evidence of either recent or historic bat occupation had been found during the surveys carried out on 23rd March 2022, then a single visit to the site to carry out a daylight evidence and opportunity bat survey, was considered sufficient to assess the site, (refer to the 'Bat Worker's Manual' (JNCC 2004) and 'Bat Surveys – Good Practice Guidelines' (BCT 2016), paragraph 8.3.4).

4.7 It was understood that there may be some site clearance work carried out during the planned development, but that this will be kept to a minimum, and that the site boundaries would be mainly unaffected by the work, and, as bats use linear features such as lines of trees or walls, as foraging, navigating, and commuting routes, it was concluded that any small loss of the habitats, and any future development works on the site, would not affect the overall foraging or commuting potential for bats in the area.

4.10 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) while they are breeding. There was potential for the shrubbery both within, and around the sites' perimeter, to be used by birds for both roosting and nesting purposes, but neither active nor historic nests were found during the surveys, but it was also surmised that due to the time of year, most birds will they have started setting up territories for the 2022 breeding season, and some species may have already started to nest, (Refer to **Appendix 1**).

5. Recommendations.

5.1 The proposed changes to the site as laid out in the planning application, can commence if the following mitigation measures are adhered to.

5.2 The aim of any mitigation is to ensure that any work is carried out in a manner, that avoids either harm or significant disturbance, to bats and birds, also, to create new enhanced roosting opportunities for bats, and nesting opportunities for birds, both during and after the development.

5.3 Ideally, all parts of the classroom building, and the wooden gazebo, (not considered suitable for hibernation), especially the various roofs, should be worked on in winter to avoid the possibility of bats moving in, and using the buildings as spring, summer and/or autumn roosts after the survey. The safest period will be from the first hard frosts, normally mid-December, until mid-March, although this could be earlier in a really warm spring, or later in a cold spring.

5.4 However, as it is likely that the building may be worked on at other times, it will be very unlikely that roosting bats will be disturbed, but it is recommended that work starts as soon as possible after this survey, and that any roof sheeting, wooden soffit boarding, or sheeting over walls, are carefully removed by hand under the supervision of a licenced bat worker. Once a roof has been removed, that part of the building should be left for two nights, before renovation continues. This will permit any bats present in cracks in the top of a wall, time to move off.

5.5 If more than 12 months elapses between this survey, and the commencement of any modification work, any new building work, or roofing material removal is intended, then the surveys of the site must be repeated. The evidence and opportunity survey needs to be carried out under weather conditions suitable for normal bat activity, or when bats are fully active, (May to September but is weather dependent), and this will also be accompanied by a suitable number of evening bat emergence surveys.

5.6 As a measure of best practice and in accord with a key principle of National Planning Policy Framework (2012), it is recommended that the re-development scheme for this site, incorporates biodiversity enhancement measures, and an appropriate measure will be the installation of bat boxes attached to the outside of the new building, and bat bricks can be incorporated within building walls at the gable ends. It is recommended that these measures are implemented at the new-build stage, to maximise the opportunities for wildlife at the site, (refer to **Appendix 6** for details).

5.7 There was potential for both roosting and nesting birds at numerous locations within the site, and although there was some bird activity noticed, there were no current signs of nesting behaviour observed during the surveys. It is therefore recommended that where possible, the perimeter hedgerows, and shrubs be left untouched to encourage future nesting.

5.8 It must be remembered that it is an offence to disturb active birds' nests, and it is recommended therefore, that before any commencement of building or demolition work, that a careful survey looking for any evidence of nesting birds, is carried out. If evidence of an active bird's nest is detected, then the nest must be left undisturbed, until it is appropriately confirmed that the young birds have fledged. It is recommended therefore, to reduce any nest disturbance, that no activity involving people or their equipment, it is to be carried out within a 3m radius of active nests. If there is any doubt, please refer to the consultant.

5.9 This guidance is applicable during the bird breeding season which typically extends from March to August inclusive, and it is recommended therefore that some wooden nest boxes are erected around the site to complement the existing box attached to the building. These will be a mixture of open fronted and hole fronted boxes, and are to be erected to mitigate for any potential loss of nesting opportunities, both during and after the development, to encourage and enhance future colonisation and nesting by these species. These wooden nesting boxes can be easily constructed, and should be erected as soon as possible both within the overall the site, and attached to both the walls of the buildings or to trees located within the site boundaries, (refer to **Appendix 7** for details).

5.10 It is also recommended that before any excess building materials are disturbed, or removed, during building works, then this should be undertaken outside the hedgehog hibernating months, November to mid-March. If this is not possible, then a suitably experienced ecologist must be present to oversee the removal, to ensure that no hedgehogs (*Erinaceus europaeus*) are disturbed whilst hibernating (Hedgehogs are a UK BAP Priority species).

5.11 No hole or pit should be left uncovered over-night, to ensure that wildlife such as amphibians or hedgehogs are not trapped, and unable to escape. Alternatively, a broad wooden plank or similar can be placed in the excavation to allow animals to escape. A scaffolding board pitched at a maximum 45° angle would be ideal. Additionally, any pipework left on site that is greater than 150mm in diameter should to be temporarily capped off.

5.12 During the development, all excavations, and piles of smaller pipework and similar, should be checked first thing each morning, prior to the start of works that day. Any animals found during these inspections, should be allowed to escape, and move off, or be carefully removed, and placed within suitable habitat cover before site works commence for the day.

5.13 Close boarded fences with concrete bases, or brick walls, are barriers to animal movement, and It is recommended, that any new perimeter fences installed along the boundaries are not to be sealed at their bases. Where possible, hedgerows are to be used instead, with timber post and wire fencing also serving to enforce boundary lines, without prohibiting wildlife movements. If any boarded fences are required, it is recommended that there is a 3 – 5cm gap between the wood and the ground (greater in some locations and less in others is not a problem) so that wildlife such as hedgehog and amphibians can pass into and out of the school grounds.

5.14 Outdoor lighting is typically a deterrent to wildlife, especially bats and nesting birds, it is therefore recommended that any future outdoor lighting, installed during the proposed development, be screened, hooded, or positioned low at bollard level, so that it does not illuminate the roof or eaves, or nearby trees and shrubs.

5.15 It should be remembered that bats are occasionally found in the most unexpected places. If any bats are found during unsupervised work, work must be stopped immediately, and either the consultant (07745 268815), or the Bat Conservation Trust (0345 1300 228), or Natural England (01270 754 00, should be notified, (refer to **Appendix 5** for details). **Failure to do so would be a criminal offence.**

6. Survey Constraints.

Surveying for bats at a specific season of the year, does not provide information of use of the site by bats at other times of the year. The current survey was undertaken at the start of spring, and reflects past bat activity, and whilst consideration may be given to roosting at other times, there may be no evidence for activities outside the survey period.

As bats can utilise very small cracks and crevices, it is not possible to completely discount their use of some of the buildings around the site, although the survey did not identify any evidence of use. Assessments can however be made of potential use from the survey findings collected, but it may not provide a full picture of site usage.

Small bat roosts and single roosting bats can easily be overlooked. They can be difficult to detect during inspection, as they leave few field signs which can easily be missed during surveys. External signs e.g., droppings, prey remains etc., are also subject to weather and rain, which can often remove the signs prior to an actual survey. This is particularly valid when inspecting trees and shrubs.

7. References

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Bats of Britain and Europe - Schober and Grimmberger. Hamlyn (1993)

8. Surveyors Qualification.

The surveyor Mike Fisher is a holder of:

- Natural England Class Licence Registration Number: 2015-10595-CLS-CLS, this is the Bat Survey Level 2 Class Survey Licence WML CL18.
- Natural England Class Licence Registration Number: 2015-10592-CLS-CLS which is the Volunteer Bat Roost Visitor Level 1 Class Survey Licence WML CL15.
- The surveyor also has a licence to disturb and take bats for scientific, educational, or conservational purposes by Countryside Council for Wales (Licence Number S085859/1).

9. Plans & Photographs.

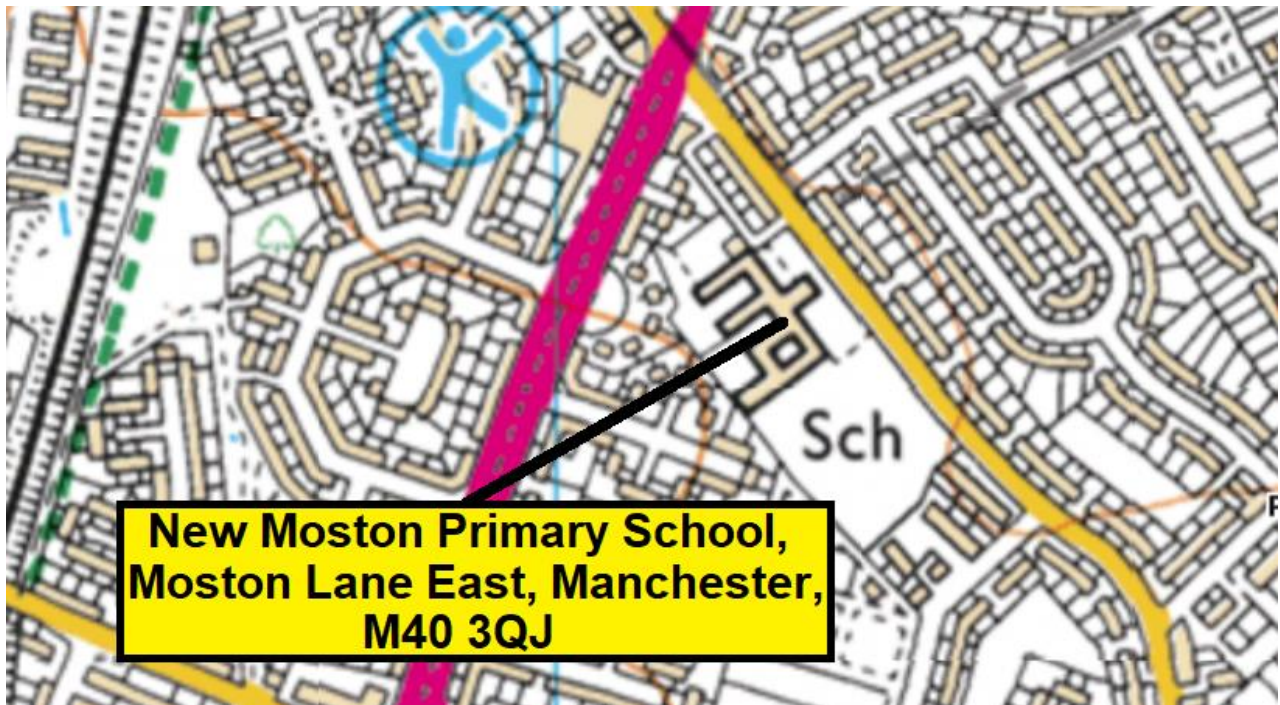


Fig 1 - The Site Location



Fig 2 – Google Map of Area

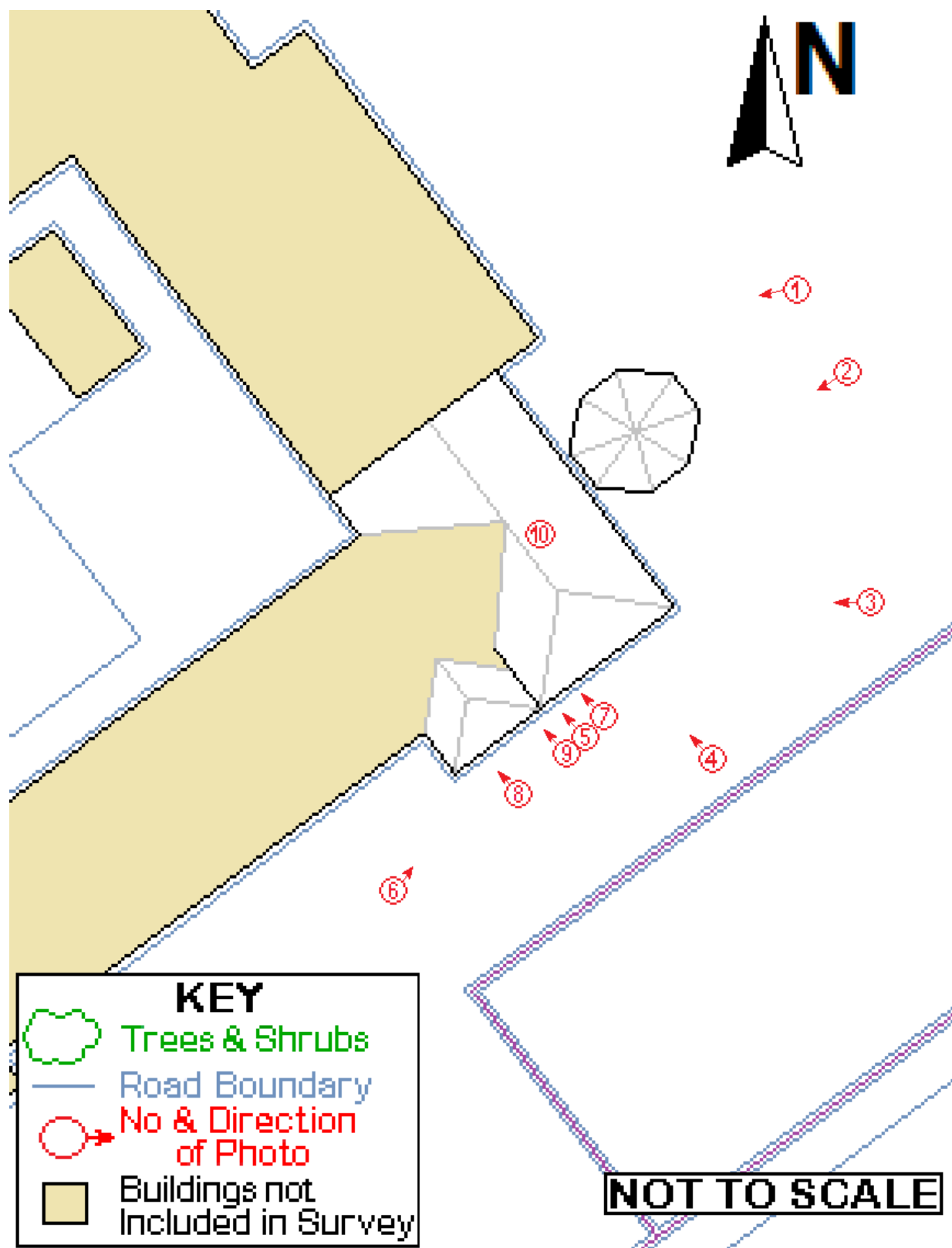


Fig 4 – Plan of Photos

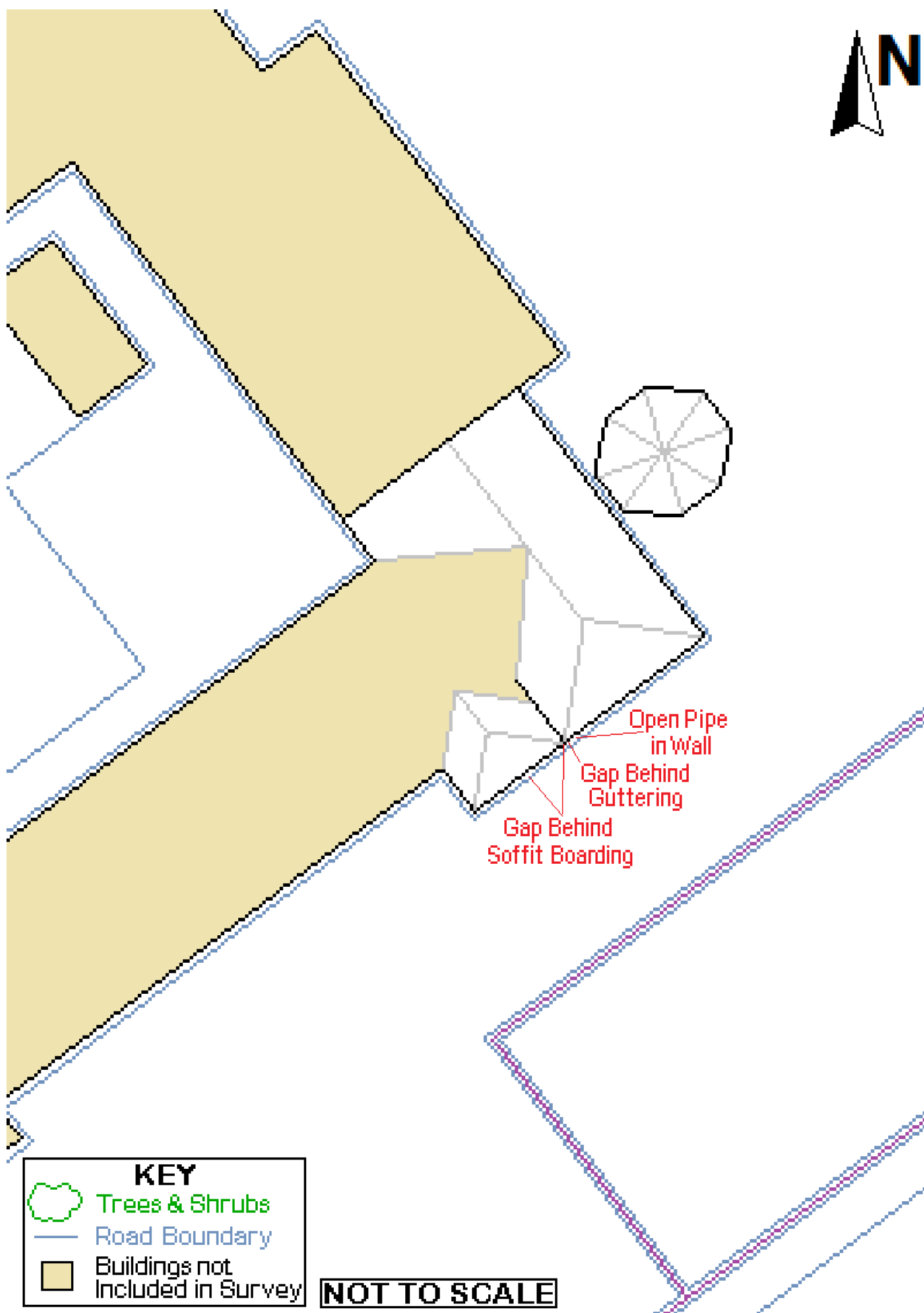


Fig 5 – Plan of Evidence and Opportunity Survey Results



PHOTO 1
North-western Corner of Complex



PHOTO 2
Northern Elevations



PHOTO 3
North-eastern Corner of Complex



PHOTO 4
Eastern Elevation



PHOTO 5
South-eastern Corner of Main Roof



PHOTO 6
South-eastern Corner of Complex

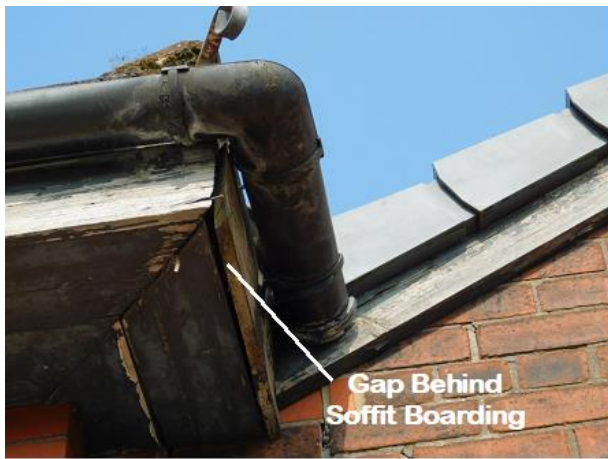


PHOTO 7
North-eastern Corner of Entrance



PHOTO 8
Entrance Soffit



PHOTO 9
Part of Eastern Elevation



PHOTO 10
Underside of Main Roof

5^h April 2022
Mike Fisher, Bat Worker
Holder of Natural England Bat Roost Licence

Disclaimer.

All reasonable effort has been taken to ensure an accurate assessment of the birds and bats at this site. The absence of recorded presence or sign should not be taken as an absolute guarantee that a site is not being used by a particular protected species. There is also no guarantee that any particular protected species will not use the site at any time in the future. Survey results for both bird and bat activity may be weather or seasonally dependent. Any interpretation of legislation is based on our understanding and experience of the law. The relevant statutory authority can provide a more definitive interpretation.

This report has been prepared by Echo Calls Bat Surveys with all reasonable skill, care and diligence, within the terms of the Contract with the Client.

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APPENDIX 1: Synopsis of Relevant Legislation

Bats and the Law

In Britain, all bat species and their roosts are legally protected, by both domestic and international legislation.

- This means you will be committing a criminal offence if you:
- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.

Licensing

Licenses to permit illegal activities relating to bats and their roost sites can be issued for specific purposes and by specific licensing authorities in each country. These are sometimes called 'derogation licenses' or 'European Protected Species' licenses, and are issued under the Habitats Regulations. It is an offence not to comply with the terms and conditions of a derogation Licence. If you carry out work affecting bats or roosts without a Licence, you will be breaking the law.

Who needs to take particular note of the legislation?

- Property owners/householders who have a bat roost in their property.
- Woodland owners, arboriculturalists and foresters.
- Pest controllers.
- Planning officers & building surveyors
- Architects, property developers, demolition companies, builders, and roofers.

Which legislation is relevant for bats and roosts?

In England and Wales, the relevant legislation is the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2010).

In Scotland, the key legislation that applies is the Conservation (Natural Habitats &c.) Regulations 1994 (as amended).

In Northern Ireland bats are listed under Schedule 2 of the Conservation (Natural Habitats etc.) Regulations (Northern Ireland) 1995 and in the Republic of Ireland, under Schedule 5 of the Wildlife Act 1976 and Schedule 1 of the European Communities (Natural Habitats) Regulations 1997.

Defences include:

Tending/caring for a bat solely for the purpose of restoring it to health and subsequent release
Mercy killing where there is no reasonable hope of recovery, (provided that person did not cause the injury in the first place - in which case the illegal act has already taken place).

Penalties on conviction –

People committing bat crimes can face six months' imprisonment and/or unlimited fines. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences such as vehicles, plant or machinery can be forfeited.

Under National Planning Policy Framework (2012), it is recommended that the re-development scheme for any site, protected species, such as bats should be a material consideration in planning applications. This has implications for bat foraging areas as well as their roosts.

The National Planning Policy Framework (NPPF) places a clear responsibility on Local Planning Authorities to conserve and enhance biodiversity and to encourage on the consideration that should be given to Protected Species where development may affect them.

The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation. This is supported by a guide to good practice entitled 'Planning for Biodiversity and Geological Conservation: Building in Biodiversity' in which paragraphs 5.34 and 5.35 identify that species such as bats are highly dependent upon built structures for survival and that roosts can be easily incorporated into existing and new developments/conversions to benefit these species.

Breeding Birds.

All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended), whilst they are actively nesting or roosting. Section 1 of this Act, makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

APPENDIX 2: Bat Roost Potential

Guide to bat roost assessment categories in built structures based on Table 4.2 in the BCT Bat Survey good practice guidelines (Hundt, 2012).

Category Description	Indicators
Confirmed Roost	• Sighting/hearing of bats (including emergence). • Fresh or old droppings.
High potential to support bat roost(s)	• Numerous or high potential roosting features that are not exposed to the elements: crevices deeper than 100mm, width 15-70mm: • Un-obstructed flyways. • Low disturbance levels. • Situated within or near to woodland, parkland or next to water bodies, buildings (i.e. potential foraging and roosting habitat). • Well connected to wider landscape through presence of continuous linear features such as hedgerows, watercourses, farm-tracks etc.
Moderate potential to support bat roost(s)	Some of the above features but considered to be less suitable on account of age, location and disturbance levels.
Low potential to support bat roost(s)	• Limited suitable roosting features. • Exposed roosting features e.g. open to wind/rain. • High levels of regular disturbance e.g. from lighting. • Isolated from suitable foraging habitat & commuting features.
Negligible potential	No features with bat roost potential recorded

APPENDIX 3: Bat Tree Assessment Criteria

Criteria for Assessment of Trees in accordance with Category 1 to 3 as defined in Table 8.4 of *Bat Surveys: Good Practice Guidelines 2nd Edition* (Hundt, L. 2012).

CATEGORY	DESCRIPTION	CRITERIA
Known or Confirmed	Confirmed roost	Confirmed roost Evidence found that indicates tree/tree features are being used by bats. Droppings found at the base of the tree, below a cavity. Bats heard 'chattering' inside a feature on a warm day or at dusk Bat(s) observed flying from or to a feature.
1*	Very high value	Trees with multiple, highly suitable features capable of supporting larger roosts. Features of particular significance, suitable for high priority roosts such as maternity roosts, used by large numbers of bats, offering conditions that are uncommon or rare in the local area. Features such as large cavities, extensive branch or trunk splits, also including multiple features in the same tree that offer a diversity of opportunities. Features may also include dense ivy.
1	High value	Trees with definite bat potential supporting fewer suitable features than category 1* trees or with potential for use by single bats. Features which provide a more secure form of roost for small groups of bats and individuals, but may still be quite common types of feature, such as small cavities, minor splits or sparse ivy cover.
2	Moderate value	Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats. A tree which on close inspection the potential roost positions are in some way not ideal. They could be upward facing or holes very low down or cluttered by adjacent branches.
3	Low/Negligible value	Trees that have no features which could be used by bats for roosting (Usually young trees).

APPENDIX 4: Planning Considerations

When considering each planning application, the presence of protected species, such as those listed above, is a material consideration which must be fully considered by the Local Authority when granting planning permission. If a licence from Natural England is required, then prior to issuing any planning consent, the local planning authority will need to be satisfied that there is no reason why such a licence would not be issued. Therefore, in reaching the planning decision the local planning authority will need to have regard to the requirements of the Conservation of habitats and Species Regulations 2010.

The three licensing tests given in the Regulations must be considered. In summary, these are that:

1. The development is required for the purpose of:
 - preserving public health or public safety,
 - for other imperative reasons of over-riding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.
 - for preventing serious damage to property.
2. There is no satisfactory alternative.
3. The proposal will not be detrimental to the maintenance of the population of the species at a favourable conservation status.

All necessary information would need to be provided to the planning authority as part of the planning application in order to address the above tests.

The Natural Environment and Communities Act (NERC Act) 2006 extended the biodiversity duty set out in the Countryside and Rights of Way (CROW) Act to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. The Duty is set out in Section 40 of the Act, and states that:

"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity"

The Duty applies to all local authorities, community, parish and town councils, police, fire and health authorities and utility companies. Section 41 (S41) of this Act (the 'England Biodiversity List') also requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. This list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40(1) of the Act.

Also, Local Authorities must follow the National Planning Policy Framework (NPPF) which provides guidance on the interpretation of the law in relation to wildlife issues and development. For each development proposal considered by the Local Planning Authority the NPPF states that the authority must aim to conserve and enhance biodiversity. If significant harm 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.

APPENDIX 5: Bats: What to do should bats be found during construction or renovation.

All of the UK's bats and their roosts, are protected by law, (see Appendix 1), so it is important to understand these laws, if you are planning any building or remedial work that may affect or disturb a bat roost. The relevant statutory authority should be initially contacted for advice.

Having bats roosting within a building, does not necessarily mean that work cannot be carried out. What it does mean is that the work will need careful consideration, especially in terms of time and materials, so that the area can continue to be used by both bats and people. Therefore, the earlier in the process the bats are taken into account, the less disruption to building plans there will be.

If at any point during either new building work, renovation work, or demolition, one or more bats are found, then all work being undertaken by contractors should stop immediately. All working machinery and contractors should be removed from the area where the bats have been found, and advice sought immediately from one of the following, on how to proceed while causing minimal disturbance to bats.

Advice can either be provided by a professional licensed ecological consultant - Echo Calls Bat Surveys on 07745 268815, the Bat Conservation Trust on 0345 1300 228, or from your Statutory Nature Conservation Organisation (SNCO), or from Natural England on 01270 754 000.

Depending on the advice given, a licensed bat worker, or suitably qualified Natural England approved representative, will then be sent to site to liaise with the site manager, and Natural England itself. Depending on the advice given, actions will be recommended that may include the safe removal of the bat by the nominated person, only where written or verbal permission has been gained by Natural England.

Works will recommence when Natural England are satisfied that the risk to bats has been removed. If, however, it is determined that the proposed work on site contains more risk to bats than was originally thought, then it is probable that further work will only proceed, under a Natural England Development Licence.

If a bat is found under a tile, slate, flashing or any other covering material, work must stop immediately. If the bat does not fly out immediately, then the area around the roost must be carefully covered over, to protect the bat from the elements and further disturbance, leaving a small gap for bats to escape voluntarily. At this point, advice must be sought as mentioned above. The materials used to cover the occupied bat roost, must be free from liquid, oil, grease and other contaminants.

It is recommended that the handling of bats be avoided wherever possible, but if it absolutely necessary, then to avoid a bat being harmed, gloves must be worn whilst handling the bat. It should be carefully caught, placed in a cardboard box with air holes in the lid, and a small container containing water. The box should then be kept in a very quiet, dark area, away from further disturbance, whilst awaiting the arrival of the licenced bat worker, or Natural England approved representative.

Failure to do any part of this could result in a criminal offence.

APPENDIX 6: Bats: Types of Bat Box.

The aim of any mitigation is to ensure that any work is carried out in a manner that avoids harm or significant disturbance to bats, and also to create new roosting opportunities for bats both during and after the development.

Schwegler 1FD boxes are to be erected to larger trees located along the edges of the site. This type of bat box is a “general all-rounder” and is suitable for all types of bats.

These boxes are to be erected as recommended by the Bat Conservation Trust guidelines which state that

- Ideally, erect the boxes facing so they face in different directions, to provide a range of temperature conditions. For example, boxes facing from south-east to south-west allow the sun to fall on each box for part of the day. During very hot days a south-facing box may overheat, but the other boxes should have some shade during the day.
- Bat boxes should be located close to a linear vegetation feature such as a tree line or hedgerow or to lines of buildings. Some bat species use these features for navigation between their roosting site and feeding ground and to avoid flying in open and exposed areas.
- Ensure that tree branches or other items will not impede the bats’ approach to the box – clear away underneath the box so the bats can land easily before crawling into the box.
- Boxes should be erected at a height of approximately 4m above ground level



Schwegler 1FD Bat Box

This Schwegler 1FD bat box has been developed specifically for smaller bats. The interior and the type and size of the entrance hole match the requirements of smaller species. It features a special layout inside the domed roof, an increased interior height, and two grooved internal wooden front panels with precise spacing between them.

This model has proved highly effective as a nursing area.

Occupants: Small bats such as the Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Daubenton’s Bat (*Myotis daubentonii*) and Common Long-eared bat (*Plecotus auritus*).

Bat Brick

Standard bricks to provide access for bats into roof or wall spaces.

With the increase in development of new building sites and redevelopment of older buildings, especially in rural areas, availability of roost sites for bat species is becoming more limited. However, bats can be encouraged to remain at old sites or colonise new sites by incorporating artificial roost spaces into the building during the build or renovation process.

The bat brick is a standard sized brick, shaped especially to allow bats to access the cavity of a house. They can be incorporated during both new build or renovation projects. (A cavity chamber may need to be constructed to maintain an area free of insulating material where bats can roost).

The bricks are available in three standard colours - Red, Golden and Brown.

Brick dimensions:

- * Height: 60 mm
- * Width: 215 mm
- * Depth: 100 mm
- * Entrance dimensions: approx. 110 x 25 mm

Brick codes:

- * Red - Ibstock A0610A (cheddar red)
- * Golden - Ibstock A0611A (cheddar golden)
- * Brown - Ibstock A0612A (cheddar brown)



APPENDIX 7: Nesting Birds: Mitigation and Compensation Measures.

Birds are declining throughout the country due to loss of roost and nesting places, and as the development may disturb nesting potential on the site, artificial nests are to be erected to compensate for this possible loss. The erection of artificial nests around the complex, will provide alternative sites for all three species of bird, and make a positive contribution to their conservation.

Making a nestbox suitable for robins and other box builders

What you need

Natural nest holes do not come in standard sizes, so use these dimensions only as a guide. Any plank or sheet of about 15 mm thick weatherproof timber is suitable. However, do not use CCA pressure-treated timber, since the leachates may harm birds. Cut each section as per our plan, which you can download by clicking on the link to the right.

Dimensions

The plan gives measurements for a small and a large box. Use only the first or the second figure throughout. For starlings and great spotted woodpeckers, use the dimensions for the large box; all the others need the small one.

The bottom of the entrance hole must be at least 125 mm from the floor of the nestbox. If it's less, young birds might fall out or be scooped out by a cat. The inside wall below the entrance hole should be rough to help the young birds to clamber up when it's time for them to leave.

Putting it together

Drill drainage holes to the base of the box, and use galvanised nails or screws to assemble. It's always best to leave the box untreated. As it weathers, it will blend into its surroundings. Softwood boxes can be treated with selected water-based preservatives, which are known to be safe for animals, such as Sadolin. Apply it only to the outside of the box, and not around the entrance hole. Make sure the box dries and airs thoroughly before you put it up.

A woodpecker box should be filled with a block of balsa wood, rotting log or wood chips – woodpeckers like to excavate their own nesting cavities.

Do not nail down the lid, since you will need to clean out the box in the autumn. Attach the lid with a brass or a plastic hinge that will not rust, or hinge it with a strip of leather or rubber (an old piece of bicycle inner tube will do). Fasten it down with a good catch.

How big does the hole need to be?

The entrance hole size depends on the species you hope to attract:

25 mm for blue, coal and marsh tits

28 mm for great tits, tree sparrows and pied flycatchers

32 mm for house sparrows and nuthatches

45 mm for starlings

The small box with 100 mm high open front may attract robins, or pied wagtails. A wren would need a 140 mm high front panel, while spotted flycatchers and blackbirds prefer a low 60 mm front to the box.

