Bat Survey

Hexham Shambles

September 2023

Final Report

Report Prepared For:

Northumberland County Council
County Hall
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NE61 2EF

Project Ref: ECN23 027

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Document Control

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V1	Draft	18/07/23	Draft to client	Not confidential	CS	NH	CS
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Field Investigations and Data

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by EcoNorth Ltd for inaccuracies in the data supplied by any other party.

Declaration of Compliance

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

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Contents

1. Summary

EcoNorth Ltd was commissioned by Northumberland County Council to undertake a bat survey of the Shambles Market in Hexham, Northumberland. The surveys comprised a preliminary bat roost assessment of the structure followed by one activity survey in July 2023. It is proposed to undertake a series of repair works on the Grade II listed structure; this assessment is designed to inform the proposals and assesses the potential impacts upon bats.

A desk study completed prior to the field visit highlighted 345 records of bats species within 2km of the site within the last 10 years, including brown long-eared, common, soprano and Nathusius' pipistrelle, noctule, Leisler's, Natterer's and whiskered / Brandt's bats, as well as *Pipistrellus, Nyctalus* and *Myotis* sp., and records which could not be identified to genera level. A number of records were provided from the centre of Hexham, although none related directly to the Market Place. No statutory sites designated due to the presence of bats are known to be present within 2km of the development area.

The following table highlights the key findings of the surveys, including a year-round assessment based on a reasonable worst-case scenario, based on the information available to date. Requirements for further surveys are highlighted, if necessary, with mitigation measures provided in Section 7.

The client is happy to commit to the implementation of the mitigation measures detailed within this report and is aware that these are likely to be made a condition of any planning consent and/or Natural England license which may be granted.

Feature	Site Conditions	Key Survey Results	Value to Bats	Further Surveys RequiredPre-planning?	License/ Mitigation Required?
Habitats	The site lies within the south of Hexham Market Place, towards the centre of the town in an area dominated by commercial development, immediately to the east of the Abbey. The site is surrounded by hard standing and built development of limited value to bats, but with areas of green space west of the Abbey and less than 1km from the site in all directions	Habitats within the site are considered to be of limited value to foraging or commuting bats due to the dominance of hard standing and built development, and the high light levels associated with the town centre location. Habitats of similar or higher quality are present throughout the surrounding area	Low	No	N/A
Buildings	The structure to be affected is a single-storey covered market building, comprising a hipped slate roof supported on stone columns, with timber fascias, a lead ridge, and metal gutters. The roof is lined with timbers, with gaps apparent above the timber ridge beam. Regular gaps/vents are present externally along the ridge, with a series of slipped/missing slates across the roof	No evidence of roosting activity was recorded during the July dawn survey, with only a single common pipistrelle pass recorded	Low - local	No	No - works to proceed to a precautionary method statement. Potential bat roosting opportunities to be retained within the structure through the works, primarily along the ridge. No lighting to be installed which would illuminate potential new / retained roost features.
Other Features / Species	Evidence of roosting by Feral Pigeons was noted within the structure	N/A	N/A	No	Pre-start nesting bird checks if works will be undertaken during the breeding season (March – September inclusive)

2. Introduction

2.1 Background

EcoNorth Ltd was commissioned by Northumberland County Council (henceforth referred to as the client) to undertake a bat survey of the Shambles Market in Hexham, Northumberland (central grid reference NY 93609 64110). The client proposes to undertake repair works on the structure, which is Grade II listed. The survey was designed to assess the potential use of the site by bats year-round, to inform the proposals and assesses the potential impacts upon bats.

This report:

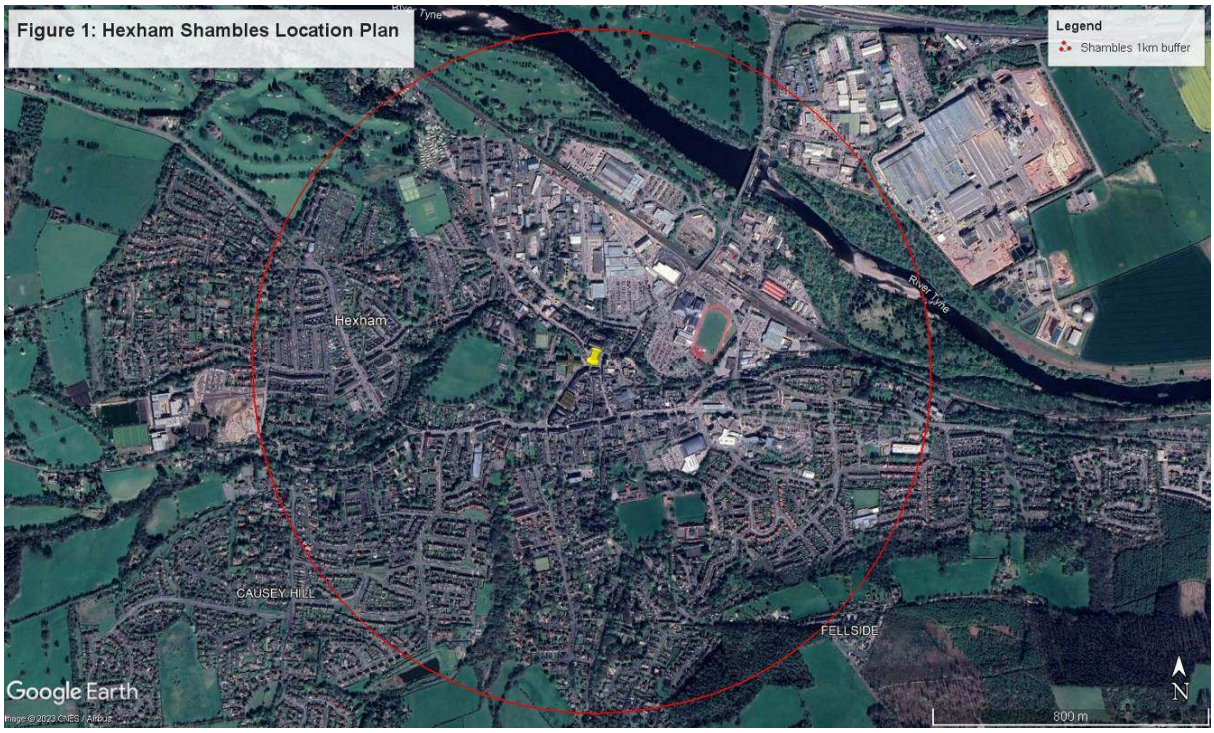
- Sets out the results of the survey.
- Analyses the site's value for bats.
- Identifies additional survey requirements in order to fully determine the baseline ecological conditions on the site, if necessary.
- Identifies key avoidance, mitigation and/or compensation measures required to help ensure the proposals do not have an adverse impact upon biodiversity.

2.2 Site Context

The site lies to the south of the Market Place, towards the centre of Hexham, immediately east of Hexham Abbey. The surrounding area is dominated by urban commercial development with areas of amenity green space scattered through the town, including immediately to the west of the Abbey. Tree cover is primarily associated with the River Tyne (0.66km to the north east) and its tributaries (Cockshaw Burn, 0.28km to the north west) with more extensive areas of woodland beyond the edges of the town c.0.8km to the south east. The area surrounding the town is largely under agricultural management, primarily pasture.

Figure 1 identifies the location and extent of the development site.

Figure 1: Indicative Site Boundary (location demoted by yellow pin)



2.3 Nature of the Proposals

It is proposed to undertake a series of repair works to the Grade II listed structure.

3. Planning Policy and Legislation

3.1 Planning Policy and Guidance

A series of national and local planning policies are in place which are designed to ensure that development works do not have an adverse impact upon biodiversity, at a site or wider level. Such policies ensure that both developers and public bodies must give due consideration to the potential effects of development works upon both ecological receptors (in line with existing wildlife legislation) and biodiversity.

3.1.1 National Planning Policy Framework (NPPF) (2021)

The NPPF outlines the Government's policies through the planning process, acting as guidance for local planning authorities and decision-makers. The document places a duty on local authorities to consider the principles included when assessing planning applications and preparing Local Plans and Regional Spatial Strategies. Chapter 15 relates to the conservation and enhancement of the natural environment, in line with existing wildlife legislation. Further details are provided on the gov.uk website.

3.1.2 Habitats and Species of Principal Importance / Biodiversity Action Plans (BAPs)

The UK BAP was published in 1994 to guide national strategies for the conservation of biodiversity. BAPs were designed to ensure the conservation and re-establishment of natural habitats, and that measures were implemented to aid the conservation and enhancement of habitats and species of local importance, the latter through the development of Local BAPs. The UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in 2012, however, the lists of species and habitats of conservation importance are still considered a valuable tool for identifying features of local and national conservation concern. As such, the potential presence of both Local and UK BAP habitats and species were considered throughout the surveys and assessment.

Species and habitats formerly identified and included within UK BAPs are typically also those which are considered to be "of principal importance for the purpose of conserving biodiversity" and listed under section 41 (England) of the NERC Act (2006) in accordance with the requirements of the NERC Act. Such species and habitats need to be taken into consideration by a public body when performing any of its functions.

3.2 Legislation

All European bat species are protected in Britain under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (the Habitat Regulations 2019). All British bat species are included on Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended) and the whole of Section 9 applies to European bat species. The above collectively prohibits the following:

- Deliberately or recklessly capturing, injuring, taking or killing of a bat.
- Deliberately or recklessly harassing a bat.
- Intentionally or recklessly disturbing of a bat in its place of rest (roost), or which is used for protection or rearing young.
- Deliberately or recklessly damaging, destroying or obstructing access to any resting place or breeding area used by bats.
- Deliberately or recklessly disturbing a bat in any way which is likely to significantly affect the local populations of the species, either through affecting their distribution or abundance, or affect any individual's ability to survive, reproduce or rear young.
- Possession or advertisement/sale/exchange of a bat (dead or alive) or any part of a bat.

Bats are also protected by the Wild Mammals (Protection) Act 1996. Licenses are issued by Natural England for any works which may compromise the protection of European protected species, including bats. This license is required irrespective of whether the works require planning permission. Selected species are also listed in the UK BAP.

An overview of the above legislation is provided in Appendix A.

4. Methodology

4.1 Desk Study

Contextual information was gathered as part of a desk study undertaken prior to the start of field surveys. Such information can identify protected or notable species which may occur on the proposed development site or in the local area, as well as identifying statutory and non-statutory ecological sites which may have the potential to be affected by the proposals. The location of statutory and non-statutory nature conservation sites designed due to the presence of bats which lie within 2km of the survey site were obtained from the Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk), while bat records from within 2km were obtained from the Environmental Records Information Centre North East (ERIC NE).

It should be noted that an absence of records is likely to reflect an absence of survey data and cannot be taken as confirmation that a particular species is not present in the site or surrounding area.

4.2 Field Survey

4.2.1 Habitat Assessment

An assessment of the potential suitability of the habitats within the site and surrounding area for bats was undertaken on 5th July 2023, as part of the initial site survey. This included an assessment using the criteria set out in the Bat Conservation Trust Survey Guidelines, as shown in Table 1, below.

These criteria were used to provide a guide as to the potential suitability of the site for bats. It is important to note that an absence of potential commuting routes or 'good quality' foraging areas around a site can not be used to confirm the absence of bats from a site. Bats are highly mobile animals which will use different habitats at different times of the year, therefore an appropriate level of additional survey work must be carried out in order to determine if and how bats utilise a particular site.

Table 1: BCT Guidelines for Assessing the Value of Habitats for Bats.

Feature	Value
Evidence indicating that a structure/feature is used by bats, such as: • Bats seen roosting or emerging/entering a structure/ feature; • Field signs such as droppings, feeding remains or carcasses found; and/or • Bats heard calling or 'chattering' within a roost. Bats recorded/observed using an area for foraging or commuting	Confirmed Roost
• Site is close to known roosts • Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river/stream valleys or hedgerows • Habitat of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses, parkland • Buildings, trees or other structures e.g. mines, caves, tunnels, ice houses and cellars, with features of particular significance for roosting bats	High Value Habitat
• Site is connected with the wider landscape by linear features that could be used by commuting bats e.g. lines of trees and scrub or linked back gardens • Habitat could be used by foraging bats e.g. trees, scrub, grassland or water • Several potential roosts in the buildings, trees or other structures	
• Isolated site not connected by prominent linear features (but if suitable foraging habitat is adjacent it may be valuable if it is all that is available • Isolated habitat that could be used by foraging bats e.g. a lone tree or patch of scrub, but not parkland • Small number of potential roosts generally of lower conservation importance e.g. probably not maternity roosts or hibernacula	
• No features that could be used by roosting bats for foraging, roosting or commuting.	Low Value Habitat

4.2.2 Building Surveys

Preliminary Bat Roost Assessment /Field Sign Survey

An initial inspection of the buildings within the site was completed on 5th July 2023. The internal and external areas of the building were inspected and notes made regarding both the nature of the structure (materials, roof structure, age etc.) and condition of the building, to help identify any areas or features which may allow bats access or have the potential to provide roosting opportunities. Where potential access or roosting opportunities were noted, these were inspected for signs of bats, including droppings, feeding remains, staining or bats themselves.

The survey included an assessment of the likely potential use of the building at times throughout the year to take into account the fact that bats will utilise different roost sites at different times and for different purposes, sometimes including multiple roost types within a single structure.

The layout of the buildings within the site is shown in Appendix B; site photographs are provided in Appendix C.

Activity Surveys

One dawn activity survey was completed at the site, which commenced 1.5 hours before sunrise and finished 15 minutes after sunrise, in line with current best-practice guidelines.

Surveyors were positioned around the exterior of the building to watch for bats emerging/entering the structure, with all elevations viewed at one time and the line-of-sight not exceeding 50m. Surveyor locations are shown in Appendix D.

Each surveyor used an EchoMeter Touch Pro 2 detector linked to an Amazon Fire tablet to identify bats and allow subsequent analysis of calls where necessary, with visibility aided by GuideTrack thermal cameras. Bat activity during the surveys was recorded on field sheets detailing the time, roost emergence/entrance points, the number of bats, species (where possible), key flight-lines and foraging areas. A note was also made of any other activity recorded, such as foraging or social calling. An overview of the activity survey is provided in Appendix E.

Details of the surveys are provided in Table 2.

Table 2: Survey Times and Weather Conditions

Date	Sunset/rise (BST)	Start Time (BST)	End Time (BST)	Precipitation	Temperature (°C)	Cloud Cover (Oktas)	Wind (Beaufort Scale)
05/07/23	-	-	-	Nil	17	6	2
07/07/23	04:40	03:10	04:55	Nil	16	6	2

4.2.3 Analysis of Results

Echometer Touch Detectors

Recordings made using the EchoMeter Touch 2 Pro detectors were analysed using Kaleidoscope Pro. The program can help to confirm the identification of the different calls recorded to species level using sonograms and power spectra, along with the measurements of a range of variables such as inter-pulse interval, minimum and maximum frequencies and pulse length. Foraging activity or social calling can also be identified in this way.

It should be noted that it is not always possible to confirm calls to species level. *Pipistrellus* sp. and *Myotis* sp. can usually be separated with a high degree of confidence and it is normally possible to identify pipistrelle bats to species level however, many of the *Myotis* sp. have similar calls and it is not always possible to confirm identification to species level. This is also the case with *Nyctalus/Eptesicus* sp., which can again have very similar calls, or for species which echolocate very quietly, such as brown long-eared bats, as it may not be possible to record a strong enough call to confirm the assessment. Any uncertainties in identification are noted in this report.

4.2.4 Personnel

Surveys were completed as shown in Table 3.

Table 3: Survey Personnel

Survey	Date	Survey Leader	Assistant Surveyors
Building Preliminary Bat Roost Assessment	05/07/23	**Claire Snowball**	-
Building Dawn	07/07/23	**Claire Snowball**	Ellesse Janda
N.B. Where names are in **bold**, this indicates that the individual was licensed to work with bats by Natural England at the time of works			

Any constraints or limitations to the survey are discussed in Section 6.1.

4.3 Assessment

The value of the site for bats was assessed against the broad UK status of the species recorded, as shown in Appendix F, and the criteria published by the Chartered the Institute of Ecology and Environmental Management (CIEEM) in 2018 (http://www.cieem.net/ecia-guidelines-terrestrial-). Each feature was classified as being as one of the following levels of value:

- International
- National
- Regional/County

- City/District/Borough
- Local
- Low

Examples of different ecological features meeting each of these criteria are outlined in Appendix G.

5. Baseline Conditions

5.1 Desk Study

No statutory or non-statutory sites designated due to the presence of bats were identified within 2km of the survey site. ERIC NE provided 345 records of bats within 2km of the site, including records of including brown long-eared, common, soprano and Nathusius' pipistrelle, noctule, Leisler's, Natterer's and whiskered / Brandt's bats, as well as *Pipistrellus, Nyctalus* and *Myotis* sp., and records which could not be identified to genera level. A number of records were provided from the centre of Hexham, although none related directly to the Market Place. Further details are provided in Appendix H.

5.2 Field Survey

5.2.1 Habitat Assessment

Habitats within the site were found to be dominated by hard standing and built development, which also dominate the surrounding area, with only very low levels of urban tree covered within the Market Place. Such habitats are considered to provide low quality habitat for bats, being open and exposed and lacking good quality commuting routes or sheltered foraging areas.

5.2.2 Building Surveys

Preliminary Bat Roost Assessment / Field Sign Survey

A single structure is present within the site. The covered Shambles Market building is one-storey in height and comprises a hipped slate roof supported on stone columns; a number of slates have lifted or slipped, creating small gaps beneath. The building has timber fascias with no gaps behind. The external ridge is formed of shaped lead flashing, with regular gaps / vents present along its length, with the roof supported on cut timbers in a queen post design, and lined with timber sarking; no enclosed loft space is present.

No field signs indicating the presence of bats were recorded during the survey.

Activity Surveys

A single common pipistrelle was recorded flying north west past the site during the dawn survey, over one hour before sunrise. No further activity was recorded, and artificial light levels surrounding the building were considered to be sufficiently high as to have a negative impact upon the potential use of the area by foraging roosting or commuting bats.

Based on the results of the surveys, the potential presence of maternity roosts can be ruled out with some certainty, although the potential use of the structure on an intermittent basis by individual non-breeding

pipistrelle bats at times throughout the active season cannot be completely discounted; precautionary working methods will address the low residual risk associated with such potential use.

The nature of the structure and location of the small number of potential roosting opportunities (along the ridge) makes it unlikely that the building would be utilised by hibernating bats, due to the relatively exposed conditions and resultant variable environmental conditions in such areas throughout the winter period.

5.2.3 Other Species

Evidence of roosting Feral Pigeon activity was noted within the roof of the Shambles at the time of survey. Although no evidence of nesting was recorded, the structure is considered to be suitable for use for such purposes by a range of locally common bird species, potentially including some of conservation concern.

The risk of other protected or notable species being present on site or affected by the proposals is considered to be minimal, given the nature of the existing habitats within the survey area.

6. Interpretation and Discussion

6.1 Survey Constraints

Full access was available to the structure and surveys were completed under suitable weather conditions at the appropriate time of year, in line with current best practice guidelines. As such, there were not considered to be any constraints to the survey or assessment.

6.2 Further Survey Requirements

Based on the data gathered, no further surveys are considered to be necessary to inform the current proposed works. Update surveys will be required to determine whether the situation on site remains the same in the event that no works are undertaken within 12 months of the date of the most recent survey.

6.3 Assessment of Value

Based on the results of the desk study and field work completed to date, the site is valued as shown in Table 4, below, using the criteria outlined in Section 4.3.

Table 4: Value of Ecological Features Recorded on Site

Feature	Value for Bats	Justification
Habitats	Low	Open and exposed conditions which provide poor quality foraging habitat and lack strong commuting routes
Buildings	Low – local	Site retains the potential to be used by individual non-breeding bats (most likely pipistrelles) on an intermittent basis at times during the active season

6.4 Impact Assessment

Based on the proposal to undertake repair works on the structure, the works will have the following impacts if an appropriate mitigation strategy is not implemented:

- The temporary disturbance of habitats of low value to foraging and commuting bats during the works period.
- The low residual risk of the harm or disturbance of individual non-breeding bats which may roost within the structure on an intermittent basis during the works period.
- The loss of a small number of potential roost sites within the structure which may be used by individual non-breeding bats on an intermittent basis at times during the active season.
- The harm of locally common nesting birds / active nests in the event the works are undertaken during the breeding season (March – September inclusive).

7. Mitigation and Compensation Strategy

The following measures will be implemented in order to minimise the ecological impacts of the proposals, including the risk of bats being adversely affected:

- Works will proceed in accordance with a precautionary method statement produced by a suitably qualified ecologist, to minimise the low residual risk of bats being adversely affected by the proposals.
- In the event any bats are recorded during the works, operations will cease immediately and a suitably qualified ecologist and/or Natural England will be contacted for advice on how to proceed.
- Potential roost features along the ridge of the building will be retained and/or created through the works, in order to ensure the structure retains the potential to be used by such species following the completion of works.
- No new lighting will be installed through the works which would illuminate any of the retained or created bat roost features within the structure.
- No timber treatments which are harmful to bats will be utilised through the works; details of insecticides and timber treatment which are suitable for use in or near bat roosts are available on the Natural England / gov.uk website.
- Based on the results of the surveys, no timings constraints to the works are proposed in relation to bats.
- In the event works will be undertaken during the nesting bird period (March – September inclusive) works will not commence unless a checking survey by a suitably qualified ecologist has confirmed that no active nests are present within the 3 days prior to the start of works. In the event any active nests are identified at this time, the ecologist will implement an appropriate buffer zone around the feature

into which works will not progress until subsequent checks by the ecologist confirm that the nest is no longer active.

8. References

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Appendix A – Key Legislation

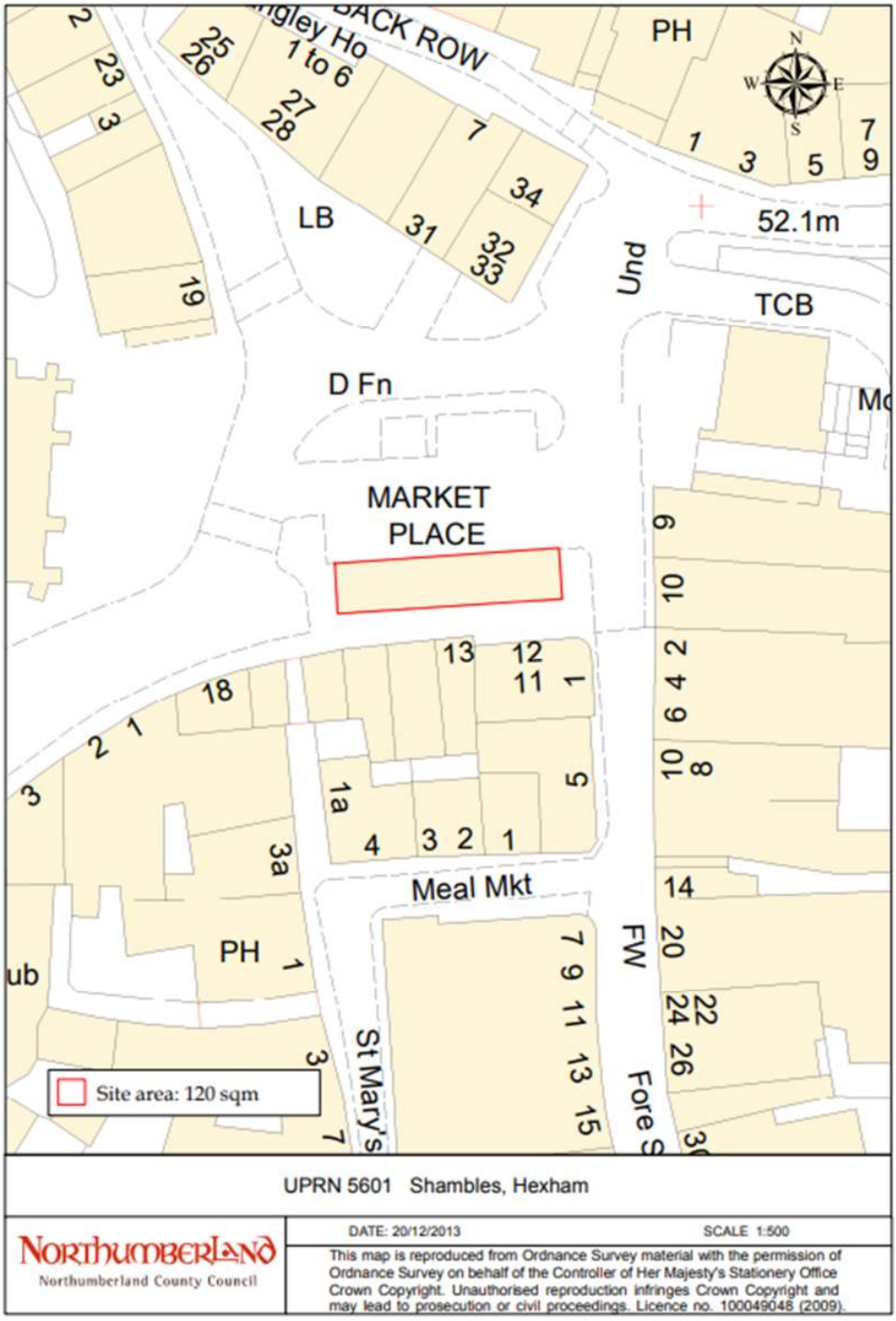
Table A1: Overview of Key Legislation

Legislation	Key Features
The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019	These Regulations consolidate and update the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations 2010"). The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 ("the Habitats Regulations 2019") transpose Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive) and elements of Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive") in England, Wales and, to a limited extent, Scotland and Northern Ireland. The objective of the Habitats Directive is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Directive lays down rules for the protection, management and exploitation of such habitats and species. The Habitat Regulations make it an offence (with certain exceptions) to deliberately capture, disturb, kill or trade in those animal species listed in Schedule 2, or to pick, cut, uproot, collect, destroy or trade in those plant species listed in Schedule 4. The EC Birds Directive requires member states to establish and monitor Special Protection Areas (SPAs) for all rare or vulnerable species included in Annex I, as well as for all regularly occurring migratory species, with key focus on wetlands of international importance. Annex I and II of the Habitats Directive respectively list those habitats and species for which a similar network of sites – Special Areas of Conservation (SACs) – must be established and monitored. Collectively, SPAs and SACs form a network of pan-European protected areas which are referred to as 'Natura 2000' sites.
The Convention on the Conservation of European Wildlife and Natural Habitats 1979 (Bern Convention)	The Bern Convention was adopted in 1979 and ratified by the UK Government in 1982. The principal aims of the Convention are to ensure the conservation and protection of all wild plant and animal species and their natural habitats (listed in Appendices I and II), to increase cooperation between contracting parties, and to afford special protection to the most vulnerable or threatened species (including migratory species). Members of the European Community meet their obligations via the Birds Directive and the Habitats Directive. These are transposed into UK law by the Wildlife and Countryside Act 1981 (as amended), Nature Conservation (Scotland) Act 2004 (as amended), Wildlife (Northern Ireland) Order 1985, and the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985.
The Wildlife and Countryside Act 1981 (as amended)	The Wildlife and Countryside Act consolidates and amends existing national legislation to implement the requirements of the Bern Convention and the Birds Directive throughout Great Britain. The Act is the primary UK mechanism for the designation of statutory ecological sites - Sites of Special Scientific Interest (SSSIs) - and the protection of individual species listed under Schedules 1, 2, 5, 6 and 8 of the Act, each of which is subject to varying levels of protection. Schedule 9 of the Act also lists those plant species which it is an offence to plant or otherwise cause to grow in the wild, while Schedule 14 prevents the release into the wild

Legislation	Key Features
	or sale of certain plant and animal species which may cause ecological, environmental or socio-economic harm.
Natural Environment and Rural Communities Act 2006	The NERC Act places a duty on public bodies to consider and conserve biodiversity through the exercise of their functions and includes a range of measures to strengthen the protection of both habitats and wildlife. The Act makes provision in respect of biodiversity, pesticides harmful to wildlife, protection of birds and invasive non-native species.
The Countryside and Rights of Way (CRoW) Act 2000	The CRoW Act, which applies to England and Wales only, strengthens the provisions of the Wildlife and Countryside Act 1981 (as amended), both in respect of protected species and statutory ecological sites, the latter primarily relating to the management and protection of SSSIs. It also provides for better management of Areas of Outstanding Natural Beauty (AONBs). The Act places a statutory obligation on public bodies to further the conservation of biodiversity through the exercise of their functions, thereby providing a statutory basis to the Biodiversity Action Plan (BAP) process. Section 74 of the Act lists those habitats and species of principal importance in England.
The Wild Mammals (Protection) Act 1996	This Act provides protection for wild mammals from acts of cruelty. An offence is committed if any person mutilates, kicks, beats, nails, or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

Appendix B – Site Plan

Figure B1: Site Boundary (provided by the client)



Appendix C – Site Photographs

Photo 1: South western corner	**Photo 2:** South eastern corner
	
Photo 3: North eastern side	**Photo 4:** Internal roof structure
	

Photo 5: Timber sarking and gaps along ridge	**Photo 6:** Gaps and ridge and lifted / missing slates
	
Photo 7: Lack of gaps along fascia	**Photo 8:** High light levels during dawn survey
	

Appendix D – Surveyor Locations

Figure D1 – Surveyor Locations

Appendix E – Overview of Activity Survey Results

Figure E1 – Dawn 07.07.23 Bat Activity Survey Results

Appendix F – Status of UK Bat Species

Table F1: Status of UK Bat Species

Bat Species	Distribution	Status
Greater horseshoe*	Confined to south west England and south and west Wales	Very rare and threatened
Lesser horseshoe*	Wales, south west England and western Ireland	Rare (but currently increasing in no.); threatened
Bechstein's*	Confined to central to southern England and Wales	Very rare; threatened
Natterer's	Widespread throughout much of the UK, except the far north of Scotland	Common; not threatened
Daubenton's	Widespread throughout the majority of the UK	Common; not threatened
Whiskered/Brandt's	Common in north and west England, rare elsewhere	Locally common; not threatened
Alcathoe's	First recorded in caves in Yorkshire & Sussex in 2010 – distribution currently unknown, but likely to be under-recorded due to similarities with whiskered/Brandt's	Status currently unknown
Greater mouse-eared	Small number of individuals currently known from southern England (non-breeding population)	Status currently unknown; at one time considered extinct in Britain
Serotine	Restricted to southern England and Wales	Uncommon
Noctule*	Found as far north as Central Scotland, but absent from northern Scotland and Ireland	Uncommon; threatened
Leisler's	Scattered throughout England and into south west Scotland.	Scarce in Great Britain; Common in Ireland.
Common pipistrelle	Widespread throughout the UK	Common; not threatened
Soprano pipistrelle*	Widespread throughout the UK	Common; threatened
Nathusius' pipistrelle	Found throughout Britain and Ireland, but not common	Rare
Brown long-eared*	Widespread throughout the UK	Common; threatened
Grey long-eared	Restricted to south Devon and coastal areas of Dorset and west Sussex. More	Very rare

Bat Species	Distribution	Status
	common on the Isle of Wight and Channel Islands	
Barbastelle*	Restricted to southern England and Wales	Rare; threatened
* UK BAP Species		

Appendix G – Value of Ecological Receptors

Table G1: Examples of Ecological Receptors of Differing Value

Value	Examples
International	• An internationally designated site or candidate site (SPA, pSPA, SAC, cSAC, pSAC, Ramsar site) or an area which meets the designation criteria for such sites. • Internationally significant and viable areas of a habitat type listed in Annexe 1 of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • Any regularly occurring, globally threatened species. • A regularly occurring population of an internationally important species, which is threatened or rare in the UK, of uncertain conservation status • A regularly occurring, nationally significant population/number of any internationally important species.
National	• A nationally designated site (e.g. SSSI, NNR) or a discrete area which meets the published selection criteria for national designation (e.g. SSSI selection guidelines) irrespective of whether or not it has yet been notified. • A viable area of a UK BAP priority habitat, or smaller areas of such habitat which are essential to maintain the viability of a larger whole. • A regularly occurring significant number/population of a nationally important species e.g. listed on the Wildlife and Countryside Act 1981 (as amended). • A regularly occurring population of a nationally important species that is threatened or rare in the county or region. • A feature identified as being of critical importance in the UK BAP.
Regional/County	• Viable areas of key habitat identified in the Regional or County BAP or smaller areas of such a habitat, which are essential to maintain the viability of the larger whole. • Regional/county significant and viable areas of key habitat identified as being of regional value in the appropriate English Nature (now Natural England) Natural Area. • A regularly occurring significant population/number of any important species important at a regional/county level. • Any regularly occurring, locally significant population of a species which is listed in a Regional/County Red Data Book or BAP on account of its regional rarity or localisation. • Sites of conservation importance that exceed the district selection criteria but that fall short of SSSI selection guidelines.
City/District/Borough	• Areas of habitat identified in a District/City/Borough BAP or in the relevant Natural Area profile. • Sites that the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves selected on District/City/Borough ecological criteria. • Sites/features that are scarce within the District/City/Borough or which appreciably enrich the District/City/Borough habitat resource. • A diverse and/or ecologically valuable hedgerow network.

Value	Examples
	• A population of a species that is listed in a District/City/Borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation. • A regularly occurring, locally significant number of a District/City/Borough important species during key phases of its life cycle.
Local	• Areas identified in a Local BAP or the relevant natural area profile. • Sites/features which area scarce in the locality or which are considered to appreciably enrich the habitat resource within the local context, e.g. species-rich hedgerows. • Local Nature Reserves selected on Parish/Local ecological criteria. • Significant numbers/population of a locally important species e.g. one which is listed on the Local BAP. • Any species, populations or habitats of local importance.
Low	• Habitats of moderate to low diversity which support a range of locally and nationally common species, the loss of which can be easily mitigated.

Appendix H – Bat Records Identified by the Desk Study

Table H1: Bat Records within 2km within the last 10 years

Species	Number of Records	Most Recent Record	On Site?	Level of Protection		
				HR 2019	WCA 1981	NERC /UK BAP
Common pipistrelle	173	2022		☒	☒	☐
Soprano pipistrelle	90	2022		☒	☒	☒
Nathusius' pipistrelle	1	2016		☒	☒	☐
Brown long-eared	6	2022		☒	☒	☒
Noctule	43	2017		☒	☒	☒
Leisler's	1	2016		☒	☒	☐
Daubenton's	1	2022		☒	☒	☐
Natterer's	1	2013		☒	☒	☐
Whiskered / Brandt's	4	2022		☒	☒	☐
Pipistrellus sp.	6	2020		☒	☒	☐
Nyctalus sp.	5	2022		☒	☒	☐
Myotis sp.	7	2022		☒	☒	☐
Bat – unidentified species	7	2022		☒	☒	☐

Key:
HR 2019 – The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019
WCA 1981 – The Wildlife and Countryside Act 1981 (as amended)
NERC – The Natural Environment and Rural Communities Act 2006
UK BAP – UK Biodiversity Action Plan