



BRAITHWAITE BAT SURVEYS

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PRELIMINARY BAT SURVEY REPORT



Outbuilding Demolition / Plot Development Proposal

3 Cote Close

Shelley

Huddersfield

HD8 8JL

Document Information

Client Name	Mr Michael Delaney
Project Name	Cote Close Outbuilding Demolition / Plot Development Proposal
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The information and advice contained in this report has been issued in accordance with bat survey and mitigation best practice guidelines. I, Thomas Braithwaite, confirm that the statements in this report are legitimate unbiased opinions.

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1 Introduction

1.1 Background

This report has been prepared on behalf of Mr Michael Delaney by Thomas Braithwaite (BSc. Hons) in order to provide the results of Preliminary Bat Survey conducted on the 26th February 2020 associated with the proposed development at 3 Cote Close, Shelley, outlined in section 1.3.

1.2 Objectives

This report is required to:

- Confirm the presence or likely absence of roosting bats. A negative result to be reinforced by what is considered suitable survey effort and in accordance with accepted standards.
- Identify the requirements for any further survey.
- Where required, to present mitigation/compensation recommendations. Including, avoidance measures where possible.
- To inform if it is likely that any licencing will be required for proposed development.
- Identify any opportunities for ecological enhancement to better the habitat for bats in the locality.

This report only takes into account habitat and roosting potential for bats and not any other protected species that may be present or affected.

1.3 Proposals

The proposed development will include:

- Demolition of existing storage sheds, workshops and garages structures.
- Possible demolition of one additional structure – Structure ‘Five’. See Section 1.4 – Site Description for details.
- Construction of two independent plots. Each new plot will include a large two-storey detached dwelling surrounded by their own grounds.

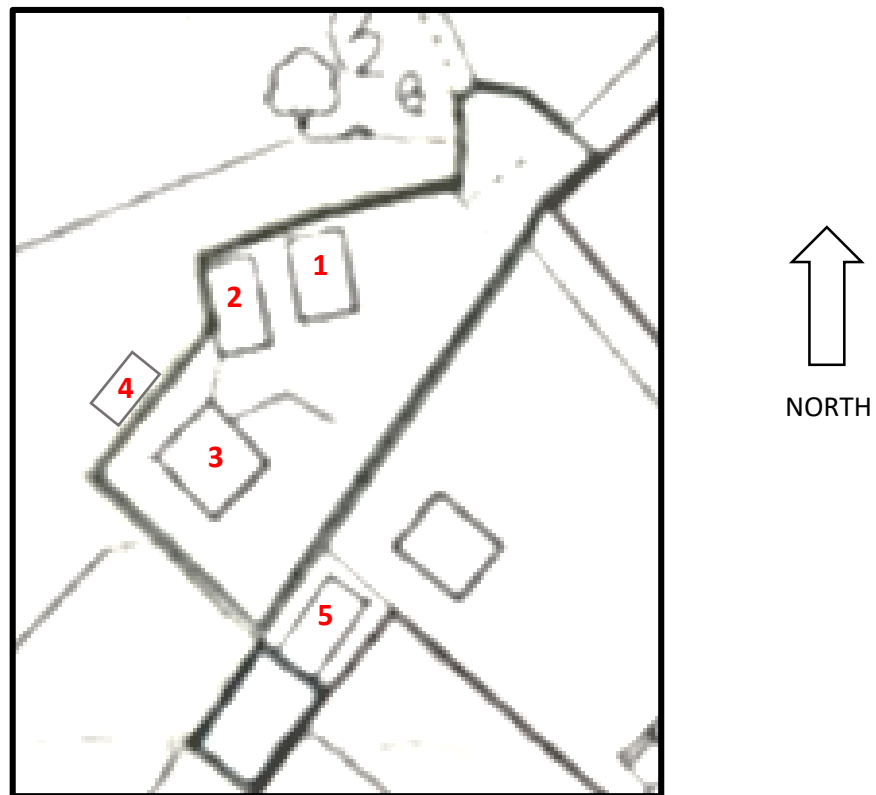
It is understood by the surveyor that the proposals do not affect any trees or other structures not mentioned.

See Section 6.1 & 6.2 for architect’s drawings of proposed site layout and elevation drawings.

Planning application number: 2019/62/93243/E

1.4 Site Description

Figure 1 - Site Layout & Structure Reference Number (Ref. Numbers Applicable to This Report Only)



Structure One:

	• Single storey detached structure. • Currently used as a garage/storage shed. • Constructed with corrugated steel walls. • Roof constructed with structural steel internal framework. • Timber sliding door allows access.
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Structure Two:

	• Single storey detected structure. • Currently used for storage. • Constructed with corrugated steel roof. • Structural timber framework. • Chip-board outer and internal walls. • Access gained by large barn doors to south elevation and single door to east elevation.
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Structure Three:

	• Large single storey structure. • Structure is comprised of various additions; a) Central structure (largest) - timber framed, timber clad and corrugated steel roof. b) Single storey timber lean-to structure adjoining north-west elevation of structure 'a'. c) Timber clad static caravan adjoined to north-east elevation of structure 'a'. d) Open sided lean-to structure adjoining south-east elevation of structure 'a'. e) Timber structure adjoined to north-east elevation of structure 'a', linking with structure 'c'. • Roof areas of items 'b', 'c' and 'e' have insulated corrugated steel roofing panels installed. • Roof area of structure 'd' is a single-ply corrugated steel sloped roof. • Roof area of item 'a' is a corrugated steel sheet roofing panels. • Structures 'c' and 'e' are severely dilapidated.
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Structure Four:

	• Small single storey garage structure. • Constructed with a prefabricated concrete structural framework. • Prefabricated concrete wall panels. • Insulated corrugated steel roofing panels laid over corrugated Asbestos (presumed) panels. • Timber roofing purlins.
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Structure Five (Demolition TBC):

	• Large detached single storey workshop structure. • Constructed with timber clad walls and structural timber framework, including roof framework. • Corrugated steel roofing panels overlaid over original timber cladding and bitumen roofing felt roof.
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Structure 'one' appears to be the only structure that is used regularly and is accessed frequently. All other structures are unoccupied and in varying stages of disrepair. Parts of some structures are visibly unstable.

Some windows have been boarded up for security, however, some openings have also not been fully sealed.

Structures 'one', 'two', 'three' and 'four' are situated surrounding a hardstanding asphalted access track. Structure 'five' is situated in a more elevated position adjacent to a much larger agricultural building to the south-west of the main cluster of structures.

To the west of the site is a large open grassed area. This area is greenbelt land and is to remain unaffected by the development proposal.

The site is surrounded by mid-height to large mature deciduous trees on all sides. Some trees are located within the proposed plot boundaries. The surveyor was not made aware of any trees to be removed as part of the development plans.

The area surrounding the plot is considered to be rural and is comprised of open farmland and areas of moderate sized deciduous woodland.

Shepley Dyke; a small river, passes approximately 75 metres to the north-east and Stone Wood Dyke nearby to the north-west. Both water courses are relatively fast running.

1.5 Site Location

The property sits at the stated address near the hamlet 'Thunder Bridge' in the Shelley area; a suburb within the Metropolitan Borough of Kirklees in West Yorkshire.

Grid Ref.: SE 19013 11043

1.6 Legislation Protecting Bats

All British bat species are protected under The Conservation of Habitats and Species Regulations 2010 (as amended). They are also listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are protected by Parts 4(b), 4(c) and 5 of Section 9 of that Act. In net effect, it is an offence to:

- Deliberately capture, injure or kill bats;
- Intentionally or recklessly disturb bats in a place of shelter (roost);
- Intentionally or recklessly damage, destroy or obscure access to a breeding site or resting place (roost); and/or
- Possess, control, transport, sell or exchange a bat or any part of a bat, unless acquired legally.

Because bats use roosts at different times of year and typically return to the same roosts annually, it is the legal opinion that a roost is protected whether bats are in occupancy at the time or not.

2 Methodology

2.1 Preliminary Assessment for Bats

In order to undertake a preliminary scoping survey at 3 Cote Close, Shelley, a daytime site visit was carried out on the 26th February 2020 at 16:30 and lasted approximately 1.5 hours.

The survey was completed by Natural England Level 2 Bat Survey Licence holder; Thomas Braithwaite (BSc. Hons).

2.2 Site Visit

During stated site visit the building and surrounding area was assessed for;

- Suitability of potential roosting features (PRF's) and characterisation of features.
- Suitability of bat foraging habitats.
- Requirement for further survey (if applicable).
- Visible indication of bat usage and/or presence.

Visual inspection of the structure was made, which included external and internal areas. In order to aid with inspection of individual features of the property equipment such as ladders, step-ups, binoculars, torches and endoscopes were used where required.

Any potential roost features, such as crevices and/or voids that could be used by roosting bats, were recorded and photographed. If possible, these features including the surrounding areas where inspected in more detail to determine evidence of any current or previous usage such as; droppings, feeding remains, urine staining, fur staining, smell and live or dead bats visible.

2.3 Assessment Criteria

Where direct evidence of a bat roost was found the structure would be categorised as a confirmed roost. Otherwise the structures potential for bat usage was based on a number of factors, notably the number, location and type of roost features available throughout. Where no evidence was found directly confirming the structure as a bat roost, the structure could be categorised as having either negligible, low, moderate or high potential. Further survey will be required. if the property falls into one of these categories.

Low Roost Suitability:

One survey visit; Either one dusk emergence survey or one dawn re-entry survey.

Moderate Roost Suitability:

Two separate survey visits; One dusk emergence and one separate dawn re-entry.

High Roost Suitability:

Three separate survey visits. One dusk emergence and a separate dawn re-entry. Followed by a third dawn re-entry or dusk emergence survey.

Surveys to be undertaken within bat activity season (May – September inclusive). Spaced at least 2 weeks apart. A moderate potential site should have at least one survey before the end of August, a high potential site should have at least two surveys before the end of August.

A structure with a high potential categorisation could have only one good roost feature or it could have many. Equally, a structure with low to negligible could have many poor features or just one.

2.4 Data Search

In order to help better understand the requirements of bats previously recorded in the locality, a data search was carried out utilising West Yorkshire Ecology Services (WYES), which included data collected by West Yorkshire Bat Group.

It should be noted that any lack of records does not denote an absence of a species from an area surveyed.

2.5 Survey Method

Preliminary surveys/scoping surveys are only considered a means of identifying if or what further survey may be necessary for the structure in question. It is not always possible for a surveyor to determine whether the presence of bats can be completely ruled out.

Signs of regular bat occupancy within a roost are not always present and can be removed by factors such as weather. Furthermore, a thorough inspection of features that may support a bat roost is often

not possible due to difficulty of access and intricacy of features where bats can roost without being identified.

A surveyor may however, be able to confirm the presence of bats by observing signs of usage. It is however, likely to lead onto further survey; roost characterisation surveys, to better understand the particularities of a site, the species and how they are using it in order to provide adequate recommendations of mitigation during and prior to project progress.

2.6 Data Lifespan

It is considered, under best practice guidelines, that data and recommendations provided within an ecological bat survey report are valid for up to two years from date of survey, depending on local planning authority. If the proposed development has not been undertaken, following that period, the provided survey results and recommendations will/are likely to need re-evaluating prior to progression.

3 Findings

3.1 Data Search

No bat roosts have been previously recorded at the property's address.

Records from West Yorkshire Ecology Services (WYES), predominantly recorded by West Yorkshire Bat Group (WYBG) revealed a moderate level of recorded bat activity and numerous roost sites within the 2km area surrounding the site (See Appendix 6.3).

Records of bat species; Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared, Noctule and multiple records of unspecified Pipistrelle species and Myotis species have previously been recorded in the area. The majority of records within the 2km buffer zone are of unspecified Pipistrelles species.

The nearest bat related activity recorded is of an unspecified Pipistrelle species and is approximately 200m to the east of the site.

Recorded bat activity in the area immediately surrounding the site is limited, however, becomes more densely populated approximately 1km from the site in the village of Shelley and 2km to the north in Kirkburton. However, there are some scattered records in more rural area with the search area also.

The activity recorded suggests the habitat surrounding the site is suitable for foraging, commuting and roosting bats of multiple species and suggests a moderate – high level of activity is likely to be present nearby.

There are 11 known roost sites within a 2 km radius of the site.

The nearest known roost location is approximately 200 metres to east of the site at 'Cornmill Bottom' in Shelley village. This is a "potential" roost site, however, is not confirmed but is in close proximity to a record of bat related activity.

The nearest confirmed roost site is approximately 881 metres to the east within Shelley village and is a large roost of over 180 bats, identified only as a Vesper Bat species.

Roost locations are predominantly within the built environment in the areas surrounding the site. This suggests bats in the area have a strong reliance on man-made structures for roosting. Both roost sites are over 1.5km from the site location and are both within man-made structures.

It is important to note that numerous records of Brown Long-eared bat species have been identified in the area. Considering the suitability of the existing structures on the site and surrounding habitat. Any further survey recommended should be designed to include suitable methods to identify this species and its unique foraging, ecolocating and roosting preferences.

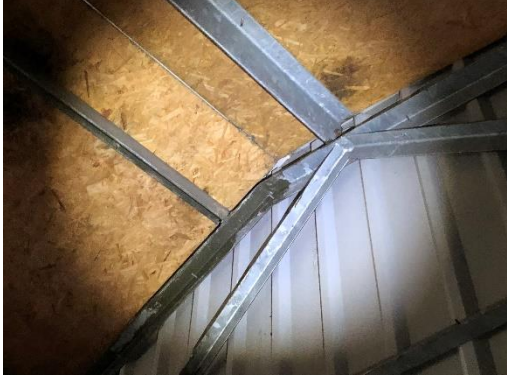
Records of bat activity in the area are of mostly crevice dwelling bats and are likely to be found in features found in roof spaces, wall cavities, tree holes and bat boxes.

3.2 Preliminary Roost Assessment

The following items have been highlighted as notable features in order to support the surveyor's conclusions.

Structure One:

	
3.2.1 Constructed using corrugated steel panels – considered undesirable for roosting bats due to poor thermal retention properties and surface properties for bats to grip onto while at roost.	3.2.2 Underside of roofing clad with timber boards on structural steel framework – negligible roost potential features between external corrugated steel cladding and timber boards.

	
3.2.3 Internal timber boarding very tightly fitted together and with steel purlins, providing limited openings for roosting bats to access.	3.2.4 Heavy build-up of cobwebs around structural steel throughout internal roof space, suggesting bats roosting within the structure is unlikely.

Structure Two:

	
3.2.5 Single ply corrugated steel roof panels installed over timber boards – negligible roost potential for same justifications explained in 3.2.1.	3.2.6 Small opening (potentially too narrow) above door to south elevation into structure – low roost access potential.

	
3.2.7 North elevation roof rake edge – several low-moderate potential roost features between timbers installed under roof cladding edge trim and possible access into the structure / wall cavity.	3.2.8 Extremely heavy build-up of cobwebs around internal structural timber framework suggesting it is unlikely bats are utilising the internal elements of the structure for roosting and/or internal flight.

Structure Three: Element 'a' (Central Large Structure)

	
3.2.9 No evidence of bat activity within internal space of the workshop area was identified. No access point into this structure was found.	3.2.10 Roof area appeared to be clad with a single-ply corrugated steel roofing system. Inspection to the underside of roofing could not be undertaken due to ceiling installed to inside of structure 'a'. See 3.2.9.

	
3.2.11 Opening in timber fascia board on north-east elevation – moderate-high potential roost feature	3.2.12 Displaced/loose timber soffit board – moderate – high potential roost feature

Structure Three: Element 'b' (Timber Clad Lean-to Structure)

	
3.2.12 Access into structure remains closed for security. Small opening above access door – low potential roost access feature.	3.2.13 Several openings between timber soffit boards and rafters of structures access porch – moderate potential roost features.

	
3.2.14 Clad with timber board and exposed timber rafters – considered highly suitable for roosting bats. Particularly suitable of BLE species as structure allows for internal flight. Numerous openings allowing access into wall cavity.	3.2.15 Opening along top edge of north-west elevation external timber boarding considered a suitable access point for roosting bats – moderate potential roost feature.

Structure Three: Element 'c' (Caravan Structure)

	
3.2.14 Inside of caravan structure – negligible roost potential.	3.2.15 Openings between corrugated steel roofing panels – negligible roost potential.

Structure Three: Element 'd' (Corrugated Roof Lean-to Structure)

	
3.2.16 Open-sided lean-to structure offers limited concealment and protection for roosting bats – negligible potential roost structure. Structure is likely to be favourable for internal flight and providing feeding perches for bats such as BLE – no evidence of such usage was identified however.	3.2.17 Heavy build-up of cobwebs along back edge of structure suggests bats are unlikely to have previously used the structure for roosting.

Structure Three: Element 'e'

	
3.2.18 Currently used for storage the structure has several access points, some allowing free flight access and some smaller. There are numerous features suitable for roosting bats throughout the structure with timber ceiling and crevice like features throughout the inside and outside of the structure.	3.2.19 The structures roof is comprised of single-ply corrugated steel panels - considered unfavourable for roosting bat due to poor thermal retention properties. Collectively the structure is considered to have low potential for roosting bats.

Structure Four:

	
3.2.20 Roof area is constructed of corrugated Asbestos (presumed) and insulated corrugated steel panels laid over timber rafters – internal features considered to have low-negligible roost potential.	3.2.21 Walls are constructed with prefabricated concrete panels – negligible roost potential. Roof is constructed with multiple layers of corrugated sheet roofing materials providing numerous openings between layers – materials considered undesirable for roosting bats and collectively considered to have negligible roost potential.

Structure Five: Demolition TBC

	
3.2.22 Inside of structure has previously been used as a workshop. No evidence of bat activity, such as droppings, was identified during the survey undertaken.	3.2.23 Internal features within the structure are considered to be optimal for roosting bats. However, a heavy build-up of cobwebs to underside of timber roof and timber rafters suggests bats roosting internally is unlikely.

	
3.2.24 Corrugated steel cladding to north-west elevation - considered low suitability for roosting bats. Timber fascia board behind PVC guttering - considered to have low potential for roosting bats.	3.2.25 South-east elevation is timber clad with a timber fascia board and overlapping bitumen membrane along the top edge – numerous moderate potential roost features throughout. Gaps beneath corrugated steel roofing panels - negligible roost potential.
	
3.2.26 Free flight access point into structure on north east elevation – no evidence of bat activity, such as droppings adhered to wall near opening on inside and outside were identified. Feature considered to be a moderate potential roost access feature. Gap to underside of protruding gable allowing access into timber cladding. Also, vertical fracture through timber cladding allowing access within – features in this location considered to be high potential roost features.	3.2.27 Free flight access point into structure on south east elevation – no evidence of bat activity, such as droppings adhered to wall near opening on inside and outside, were identified. Feature considered to be a low potential roost access feature.

*It should be noted that external signs such as droppings can be removed by wind and rain and therefore a negative result does not necessarily equate to bat absence.

3.3 Foraging and Commuting Habitats

Open areas of farmland, water courses and mature deciduous woodland in the immediate area surrounding the site offers optimal habitat and will support a wide range of invertebrate prey and is therefore considered to be optimal for foraging bats of mixed species.

Hedge rows, trees and man-made structures in the area provide optimal connectivity for commuting bats.

3.4 Nesting Birds

Numerous birds' nests were identified during the preliminary survey undertaken.

3.5 Limitations

None.

4 Evaluation and Recommendations

4.1 Bat Roosts

No evidence of bat activity was found within the structures during the preliminary survey undertaken.*

Externally and internally the structures offered a number of potential roost features throughout, features included:

- Large 'free flight' openings and small openings into structures with roost potential
- Openings into roof panels
- Loose timber roof trim details
- Openings in timber ceilings
- Openings in and gaps behind timber fascia boards
- Access into wall cavities

See Section 3.2 for further details on listed details above.

Roosting opportunities within the structures were associated mostly with timber features to the external elevations. However, several of the structures offered good roosting potential within internal roof spaces and had openings to allow access to bats. It should be noted however, that a heavy build-up of cobwebs in the roof structural timbers suggests this is unlikely.

Corrugated steel roof panels, installed to each structure, are generally considered to be less desirable to roosting bats due to their poor thermal retention properties and surface properties that provide little purchase for bats to grip onto while at roost. However, it should also be taken into account that the habitat surrounding the structure is optimal foraging habitat, that will enhance the structures desirability for roosting.

Structures surveyed have been categorised as having the following potential for roosting bats:

Structure Reference No.	Roost Potential Categorisation
One	Negligible
Two	Low
Three	Moderate
Four	Negligible
Five	Moderate - High

The data search, revealed a moderate level of bat activity in the 2km buffer zone area surrounding the site. Most roost locations highlighted were within the areas of Shelley village and Kirkburton surrounding the site, suggesting there is a reliance on made structures in the area for roosting bats.

A number of Brown Long-eared (BLE) roosts were identified as being present in the area. The site is considered highly suitable for bats such as BLE, further survey design should be modified to account for this species.

Roost features available within the structures, as outlined in section 3.2, would be suitable to support a larger sized roost.

*It should be noted that external signs such as droppings can be removed by wind and rain and therefore a negative result does not necessarily equate to bat absence.

4.2 Foraging and Commuting Habitat

The habitat in the area surrounding the site will support a wide range of invertebrate prey for bats and is there considered to be optimal for foraging bats of mixed species.

The outlying rural environment surrounding the sites location, is also considered optimal foraging habitat for various species of UK bats.

It is considered that the proposed development will have negligible effect on the surrounding habitat to bats so long as features, such as external lighting, is installed and operated in a manner favourable to bats. General mitigation recommendations will be given following further surveys recommended.

4.3 Further Surveys

Structures 'one' and 'four' are considered to have negligible potential for roosting bats. Therefore, further survey to these structures is considered to be unnecessary prior to their demolition.

Following the preliminary roost assessment, it was not possible confidently ascertain the status of bats utilising several of the structures (structures 'two', 'three' & 'five'). Due to the high number of potential roost features within the structures, outlined in Section 3.2, and the optimum habitat surrounding the plot, these structures have been categorised as having higher than negligible potential for roosting bats and therefore further survey is recommended.

In accordance with current best practice guidelines, further survey recommendations shown in Section 2.3, specifying in brief that a structure with higher than negligible potential for roosting bats should undergo the following survey effort respective of the roost potential.

Low Roost Suitability:

One survey visit; Either one dusk emergence survey or one dawn re-entry survey.

Moderate Roost Suitability:

Two separate survey visits; One dusk emergence and one separate dawn re-entry.

High Roost Suitability:

Three separate survey visits. One dusk emergence and a separate dawn re-entry. Followed by a third dawn re-entry or dusk emergence survey.

Surveys to be undertaken within bat activity season (May – September inclusive). Spaced at least 2 weeks apart. A moderate potential site should have at least one survey before the end of August, a high potential site should have at least two surveys before the end of August.

It is recommended that further survey effort will include a static bat detector being positioned within several of the structures.

4.4 Licencing

At this stage there is no reason to assume the proposed development will require a European Protected Species Licence to proceed. This view, however, is dependent on the outcome of the further survey recommendations, see Section 4.3.

4.5 Mitigation

Any mitigation will be advised if required post further survey recommended.

4.6 Nesting Birds

Numerous birds' nests were identified during the preliminary survey undertaken.*

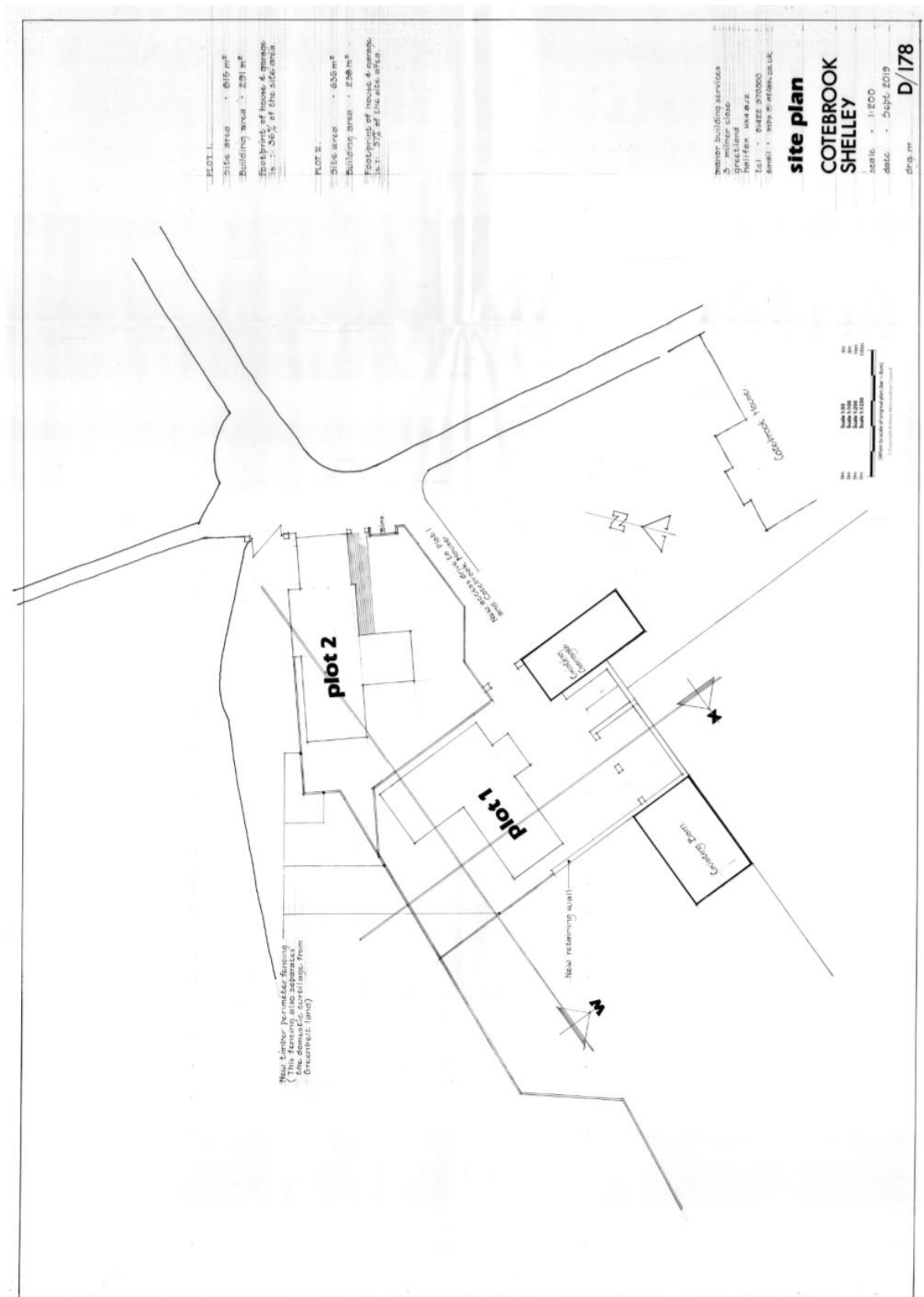
*It is recommended that, during works, care is taken not to disturb nesting birds during their sensitive nesting season.

5 References

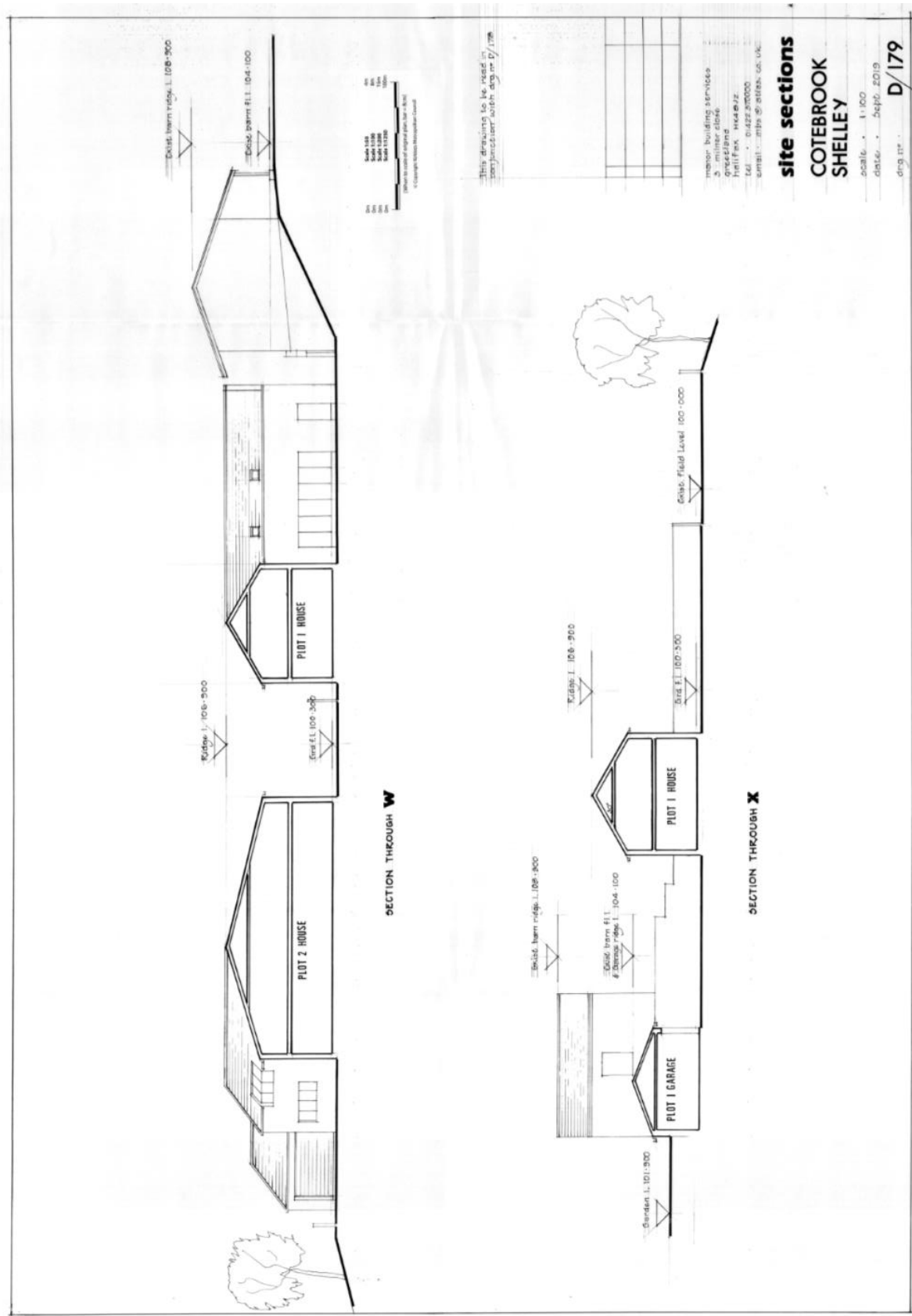
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Peterborough

6.1 Proposed Site Plan [Architect Drawing]



6.2 Proposed Site Sections [Architect Drawing]



6.3 Location Map & Ecological Search 2km Buffer – 3 Cote Close, Shelley – Known Bat Roosts and Other Records

