Buildings off Sheffield Road,
Chapel-en-le-Frith, Derbyshire
(NGR: 406400, 380928)

PROTECTED SPECIES INVESTIGATION SURVEY REPORT (BATS)

For

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1.0 INTRODUCTION

1.1 Ecology Services Limited was commissioned by MPSL Planning and Design Limited in October 2011, to carry out a bat investigation and assessment survey of buildings on land off Sheffield Road, Chapel-en-le-Frith, Derbyshire; National Grid Reference (NGR) 406400, 380928.

1.2 The aim of the survey was to:

- Undertake an inspection and assessment survey of the buildings to ascertain if potential or evidence of use existed for any bat species
- And if found, to determine if more detailed surveys are required.

1.3 It is understood that the proposals at the site involve the demolition of some of the existing buildings and the construction of residential properties.

1.4 As part of the Local Authority's environmental policies, surveys are required to be undertaken on schemes which may have the potential to affect protected species, i.e bats.

1.5 All daytime survey works were undertaken by an experienced senior bat ecologist: Mr. G. Clayton, who holds a Natural England Science & Education Licence, (Number 20113011).

2.0 STATUTORY AND PLANNING CONTEXT

Bats and their Requirements

2.1 All British bats and their roosts are afforded protection under the 1981 Wildlife & Countryside Act (as amended) and are listed in Schedule 2 of the Conservation of Habitats & Species Regulations 2010.

2.2 When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the 2010 Regulations and therefore has a statutory duty to have due regard to the provisions of the Regulations in the exercise of its functions. Therefore the provisions are clearly relevant in reaching planning decisions and these should be made in a manner which takes them fully into account.

2.3 Guidance is contained in Planning Policy Statement 9 (PPS9) on the consideration that should be given to Protected Species where they may be affected by development. PPS9 'Building in Biodiversity' Paragraphs 5.34 & 5.35 identifies that bats are highly dependant upon built structures and new developments/conversions can take account of this by incorporating roosts into such structures.

2.4 Where bats are impacted by development, the Planning Authority will require adequate surveys to have been completed and a method statement for their approval will need to be submitted along with the planning application.

2.5 Where bats are affected by development then a licence to derogate from the Habitats Regulations 2010 would be required. The EPS mitigation licence applications are processed and issued by Natural England and the licence can only be applied for, once planning permission is granted.

2.6 Natural England may grant an EPS mitigation licence for the purpose specified in paragraphs 2 of the Regulation. The purposes are:-

- 53(2)e preserving public health or safety or other imperative reason of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment.

- 53(2)f preventing the spread of disease.
- 53(9)a that there is no satisfactory alternative.
- 53(9)b that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable status in their natural range.

2.7 A bat roost may be defined in several ways:

a) Summer breeding roost.
b) Hibernation roost.
c) Transitional or temporary roost.

2.8 Roost selection is often closely correlated, to suitable foraging habitat within a reasonable commuting distance from the roost. Different sites are used throughout their active season which is dependent upon insect densities and abundance. Climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

3.0 SURVEY METHODOLOGY

Desktop Study Methodology

3.1 Ecological data and historic records of protected species were collated from the following sources listed in Table 1.

Table 1: Desktop Study Results and Record Centres Consulted

Source of information	Information supplied
UK Biodiversity Action Plan	Identification of national priority species known to occur in the region.
Local Biodiversity Action Plan	Identification of national priority species known to occur in the region.
National Biodiversity Network (NBN)	To identify protected/priority species and their distribution throughout the United Kingdom.

Inspection & Assessment Survey Methodology

3.2 The optimum time to investigate buildings for evidence of a bats or a bat roost is May to August. However that is not to say they cannot be inspected and assessed outside of that time and frequently the results can be conclusive which can save time and expense for Planning Applicants.

3.3 The daytime survey was conducted on the 2nd of November 2011 when the buildings were inspected for potential places that may be of value to bats, and if evidence of use was present.

3.4 The daytime survey was conducted at a time when bats would be more likely to be entering periods of torpor prior to hibernation rather than being active. As a result, finding the presence of bat droppings on external elevations would be reduced, as the weather is likely to have displaced any that might have been deposited there.

3.5 However it should be borne in mind that equally the inspection can be inconclusive. If potential was found to be medium or high or the results of the survey were inconclusive, then recommendations would indicate the requirement for nocturnal observations to be undertaken at the site, during the breeding season of bats, (May to August).

3.6 In relation to assessing the level of bat roost potential, a relatively full and unrestricted investigation of the buildings was achievable, although internal access to all sections of building (B3) was unobtainable.

3.7 However, two of the buildings contained a loft space, and whilst the buildings were inspected internally the investigation mainly focussed on external elevations and their potential to attract use by roosting bats.

3.8 All external elevations of all buildings were searched for signs of bat use which mainly includes droppings; additionally any gaps that may be used to access a building to enter a roost or as access points into roost chambers were investigated for stains, which can be present when regular use of an ingress point is made.

3.9 The survey was conducted with the aid of close focussing binoculars, an endoscope, ladders and a high powered torch.

3.10 During the survey the surrounding area was assessed in relation to suitable habitat that may be of value to bats, as roost selection is often correlated with the quality of the habitat.

3.11 Surveys were conducted following "The Bat Workers Manual "(JNCC 2004), "The Bat Mitigation Guidelines" (EN 2004) and the Bat Conservation Trust Bat Survey Guidelines (2007) recommendations.

4.0 SURVEY RESULTS

Desktop Study Results

European Protected Species

4.1 Desktop searches revealed two records of a bat species, in neighbouring 1km and 2km squares of the site and are as follows:

- Pipistrelle species (*Pipistrellus* sp).

UK Biodiversity Action Plan

4.2 The United Kingdom Biodiversity Action Plan (BAP) lists several species of bat as priority terrestrial mammal species. Chapel-en-le-Frith is situated within the boundaries of the Peak District Local BAP where three of the species have been recorded:

- Noctule (*Nyctalus noctula*) – Marked decline in UK (21% decline over 6 years (National Bat Monitoring Programme 2004 Report));
- Soprano pipistrelle (*Pipistrellus pygmaeus*) – Marked decline in UK (42% decline over six years);
- Brown long-eared (*Plecotus auritus*) – Marked decline in the UK (20% decline over 7 years (National Bat Monitoring Programme 2004 report).

Peak District Local Biodiversity Plan

4.3 The Peak District Local Biodiversity Action Plan does not list bat species.

National Status

4.4 There are 18 species of bat that are native to the United Kingdom. Little is known about the status of most species although the available evidence suggests a general decline in populations nationally Harris, S. et al. (1995). The commonest bats are pipistrelle but these are estimated to have declined in numbers by 70% between 1978 and 1993.

Local Status

4.5 Derbyshire Bat Conservation Group website states that 11 species of bat have been recorded in Derbyshire, but only seven could be considered as being widespread. Of these species, according to the NBN, there are five that are recorded in closest proximity to the Chapel-en-le-Frith site:

- Common pipistrelle (*Pipistrellus pipistrellus*);
- Daubenton's (*Myotis daubentonii*);

- Natterer's (*Myotis nattereri*);
- Noctule;
- Soprano pipistrelle.

Inspection & Assessment Survey Results

4.6 The buildings off Sheffield Road are located in the north-eastern outskirts of the small town of Chapel-en-le-Frith.

4.7 Immediately north and east of the site boundary, in the wider survey area, is the western boundary of the Peak District National Park which is less than 700m to the north-east of the site. Providing ideal habitat for foraging and this would be the natural direction for any bats using the site to commute to suitable foraging grounds.

4.8 The land within the site where the buildings are situated is generally bare ground and of limited foraging value which is currently utilised as a storage area for commercial vehicles and trailers.

4.9 The buildings on site have been constructed and are of various ages, without any uniformity in their design or the construction materials. They are in various stages of condition ranging from maintained buildings that are functional to abandoned buildings.

4.10 The results from the buildings inspection and assessment survey are within Table 2. Please note that some of the buildings have been grouped together (i.e. building B3). However, the units are described separately despite being physically attached. Buildings B6 and B7 are also physically attached as well as having internal connectivity, but only by a relatively recent corridor, so they are detailed separately. Building numbers refer to Drawing 1 and where there are open spaces they are generally car parking facilities or roads. Also see Photographs of the buildings at the end of the report.

Table 2: Building Descriptions & Roost Potential

Building	Description	Roost Potential
B1	B1 is a single-storey outbuilding constructed from corrugated metal (sides and a supporting sloping corrugated metal roof). B1 is open to the front apart from a short fascia on the front. Internally it is separated into nine bays, two of which are occupied by portable offices. The walls and roof are without cover or insulation and some of the sheets are damaged or missing. The guttering is bracketed directly to the northern side and is incomplete in places. The portable offices are generally tight, but the fascia has slightly warped away from southern side.	Low potential: A loft space is absent and the building is constructed of corrugated metal with no internal layering resulting in crevices being absent. The building is open fronted and will be subject to drafts, it is considered to offer low potential for roosting bats. The internal portable office contained a gap at the fascia, which was inspected with the use of an endoscope and no evidence of use by bats was found. Old birds' nests were evident.
B2	B2 is a single-storey outbuilding constructed from corrugated metal (sides and a supporting sloping, corrugated metal roof). B2 is open to the front apart from a short fascia. Internally it is separated into three bays. The walls and roof are without cover or insulation and some sheets are damaged or missing. The guttering is bracketed directly to western side. There is a breeze block extension attached to the western	Low potential: A loft space is absent and the building is constructed from corrugated metal with no internal layering resulting in crevices being absent. The wooden fascias carrying the guttering are tight fitting and the breeze block extension has folded barge boards on

	side of B2 which has a sloping corrugated metal roof. Guttering is mounted on a wooden fascia which is tight fitting. There are folded metal barge boards over northern and southern sides which are very loosely fitting resulting in a large gap with no suitable crevices.	northern and southern aspects, neither contains suitable crevices for bats. No evidence of use by bats was found.
B3	B3 is comprised of three attached buildings. This building was not able to be accessed internally during the survey. B3a is the largest and southernmost part of B3. It is constructed from brick which supports a corrugated cement fibre pitched roof. There are wooden barge boards over-laid with folded metal on northern gable and wooden barge boards on southern gable. The guttering is bracketed directly to the western side and to a wooden fascia on the eastern side of the building. There is a mixture of metal and wooden door frames. B3b is a two storey building with cement rendered brick walls and a supporting corrugated cement fibre pitched roof. Barge boards are present on the northern gable, which are damaged. The guttering is bracketed directly onto the western side of the building and fixed to a wooden fascia on the eastern side. There is a mixture of metal and wooden windows and door frames. Storage areas on the ground floor are mainly open on the western side, with no doors or shutters. B3c is a lean-to attached to the northern side of B3b. It has brick walls on the eastern and western sides, and a corrugated metal wall on the northern side. The roof is of corrugated cement fibre. The barge board is absent from the western wall and incomplete on the eastern wall.	All B3 (a/b/c) contain medium potential: B3a has an almost continuous gap between the southern gable barge board and the eastern pitch that may be accessed by crevice-seeking bats. There is space beneath folded metal covering on the northern barge board (unable to properly assess from the ground). The wooden fascia on eastern side is warped in places which also created gaps that could be accessed by crevice-seeking bats. B3b has numerous ingress points where the northern barge board is broken and ill-fitting. The ridge tile is damaged at the apex and has created a gap. Fascias are tight to the walls and windows and door fittings are generally tight. B3c has numerous gaps between the roof and brickwork where the barge boards are either absent or damaged and which may be suitable for crevice seeking bats. No evidence was recorded of use by bats in any of B3's buildings.
B4	Building B4 has brick walls supporting an unequally pitched roof of corrugated cement fibre, with a double pitch to the eastern side of the roof. The double pitch to the eastern side is hidden from view from the ground by a corrugated metal fascia. The building is divided into four bays covered by metal roller shutter doors housed within a wooden framework. There are cement fibre barge boards on the northern gable end. The door	Medium potential: The building is of relatively sound construction but the cement fibre barge boards on northern gable contain continuous gaps that could be accessed by bats to gain entry into the space between the fibre insulation boards and the roof. Windows and door frames tight.

	and framework is wooden with recently refurbished uPVC windows. There is fibre board insulation that is complete in some bays and sealed with tape.	No evidence was recorded in the building of use by bats.
B5	Building B5 has brick walls supporting an unequally pitched roof of corrugated cement fibre, with a double pitch to the eastern side of the roof. There is a wooden dormer window in the eastern pitch. The ridge fitting is made of cement fibre. There are cement fibre barge boards on the northern and southern gable ends. The building is divided into four bays covered by metal roller shutter doors housed within a wooden framework, with a fifth section used as an office and storage. The window and door frames are wooden. There is a corrugated metal extension along the majority of the western side and extending to the northern gable end. Internally, the roof is partially insulated by fibre boards.	Medium potential: The building is not as well maintained as B4, but it is of a similar design. There are gaps apparent between the roller shutter wooden framework and there are gaps in the brickwork that bats could access. There are extensive gaps between barge boards and the gable ends that bats could use to gain access to the space between the fibre board insulation and the roof. Some of the fibre board insulation is incomplete but there is still extensive coverage sealed by tape. No evidence was recorded in the building of use by bats.
B6	Building B6 comprises three separate houses converted into one and used as offices. B6 is constructed of stone walls with a grey slate covered pitched roof with clay ridge tiles. There are no barge boards on either gable end. The guttering is bracketed directly to the northern and southern elevations. There are wooden windows and door frames. The roof felt is not entire. Relatively recent loft work has involved the installing of a partial false ceiling but access was still available. Loft height varied between approximately 1.5 – 2m high. The building interconnects internally with building B7.	Medium potential: Roof slates have become dislodged in places creating gaps that would allow ingress by bats between the slates and the roofing felt. Gaps are also apparent that would allow ingress by bats against some ridge tiles and where mortar is displaced on both gables between the stonework and slates. Light was seen to be penetrating into the loft at the gable ends between the stonework and the roof and through the dislodged slates. No evidence of use of the building by bats was recorded.
B7	Building B7 comprises of two separate houses converted into one and used as offices. It has stone walls and a tiled roof pitched roof with clay ridge tiles. There are no barge boards on either gable end. The guttering is bracketed directly to the southern side of the building and fixed to a wooden fascia on the northern side. The window frames are uPVC and the door frames are wooden and generally tight. The roof felt is entire and the loft height varies between approximately 1.5 – 2m high. The building interconnects internally with building B6.	Medium potential: There are numerous gaps between the wooden fascia carrying northern side guttering and the stonework that could be accessed by crevice-seeking bats. Some roof tiles are lifting, particularly on the northern pitch creating gaps that could allow ingress by bats. The gable ends have been relatively recently pointed up between the roof tiles and stonework. No evidence of use of the building by bats was recorded.

5.0 CONCLUSION

5.1 The wider survey area contains habitats that are considered ideal for bat species including roosting and foraging habitats and in close proximity to the north and east of the site. Black Brook, an open stream, bisects the site in a south-easterly/north-westerly direction. It is highly likely that bats will use the survey area during their active period.

5.2 From the survey results it can be concluded that only the stone buildings (B6 and B7) to the south of the site have adequate roof spaces that could be considered to have any realistic potential for loft dwelling bats. These are also limited due to their inhibited height for a flight area and the lofts retaining their brick divisions from their original construction. Ingress points for bats into the roof space of these buildings have also been restricted by relatively recent pointing up and fitting/replacement of roofing felt.

5.3 There are areas mentioned in Table 2 that would allow ingress by crevice-seeking bats such as Pipistrellus into parts of all of the buildings highlighted as containing medium bat potential. For example:

- The crevices apparent between the roof and brickwork where barge boards are absent and the frequent gaps between the wooden fascias and barge boards and the brickwork of building B3;
- The numerous gaps between the cement fibre barge boards and the northern gable of building B4;
- The extensive gaps between the barge boards and gables of building B5;
- The frequent spaces apparent on the roof of B6 through dislodged tiles, displaced mortar against slates and gaps against ridge tiles;
- The gaps created by lifting roof tiles and the spaces between the wooden fascia and stonework of building B7.

5.4 Due to the findings from the bat investigation and assessment survey and the features present that may provide access for bats into areas of the buildings, it is concluded that further activity surveys are required of buildings containing medium potential in order to establish the presence or absence of bats, and if present to identify the number and species and their use of the building(s).

5.5 The buildings may also be suitable to support breeding birds which are protected under the Wildlife and Countryside Act (WCA) 1981. Under the WCA it is an offence to kill, injure or take any wild bird; to take, damage or destroy the nest of any wild bird, or to take or destroy the egg of any wild bird. It is good practice to carry out any works outside the breeding season (March to August inclusive) that might affect nests of those species and result in an offence being committed.

6.0 IMPLICATIONS AND RECOMMENDATIONS

6.1 The bat investigation and assessment survey identified features at the site that may provide suitable bat roosting habitat, within buildings B3, B4, B5, B6 and B7. Therefore, it is recommended that further activity surveys should be undertaken on all buildings that contain medium potential to further assist in determining the presence/absence of roosting bats.

6.2 It is recommend that an internal inspection of building B3 be carried out which could be achieved immediately prior to the activity surveys proposed for buildings B3, B4, B5, B6 and B7

6.3 The activity surveys will need to be undertaken during the breeding season of bats i.e. between May and August. Generally three activity surveys are required over that

time as bats, particularly pipistrelle, do not necessarily use one roost site over their entire breeding season. The additional activity surveys will be required to support a planning application.

6.4 If a bat/s or evidence of a roost is/are located during the further survey works then the Local Planning Authority will require a Method Statement detailing mitigation measures in support of a planning application.

6.5 In addition to this if a bat roost is affected by the works a European Protected Species Licence (EPSL) will be required. The EPSL can only be applied for once full planning permission is granted and it should be in place prior to any works that will affect the roost or bats. Natural England, the licensing authority, will require the species, numbers and use of a roost to be ascertained before granting a licence. There are timing restrictions in relation to obtaining and implementing bat mitigation works.

6.6 The inspection and assessment survey of buildings (B1 and B2) found them to contain low potential to support roosting bats and no signs of bats were found. Therefore, there are no apparent implications with regards to roosting bats and Buildings 1 and 2. However it should be borne in mind that bats are occasionally found in the most unexpected places. If at any time bats are observed or suspected during the works, then all works must stop immediately and advice should be sought from the acting Consultant or Natural England.

7.0 REFERENCES

Harris, S. et al. (1995) A review of British mammals: population estimates and conservation status of British Mammals other than cetaceans. JNCC, Peterborough.

UK Biodiversity Steering Group (1995) Biodiversity – the UK Steering Group Report. Volume 2: Action Plans. P89 SAP for Pipistrelle. London, HMSO.

Mitchell-Jones, A.J. (2004). The Bat Workers Manual (2nd Edition) JNCC

The Bat Mitigation Guidelines" (English Nature 2004)

The Bat Conservation Trust Bat Survey Guidelines (2007)

Drawing 1:
Buildings Inspected on Land off Sheffield Road, Chapel-en-le-Frith

Drawing 1 Buildings Inspected On Land Off Sheffield Road, Chapel-en-le-Frith

Key

- Development Site Boundary
- Building
- **B1** Building Number

Map not to scale

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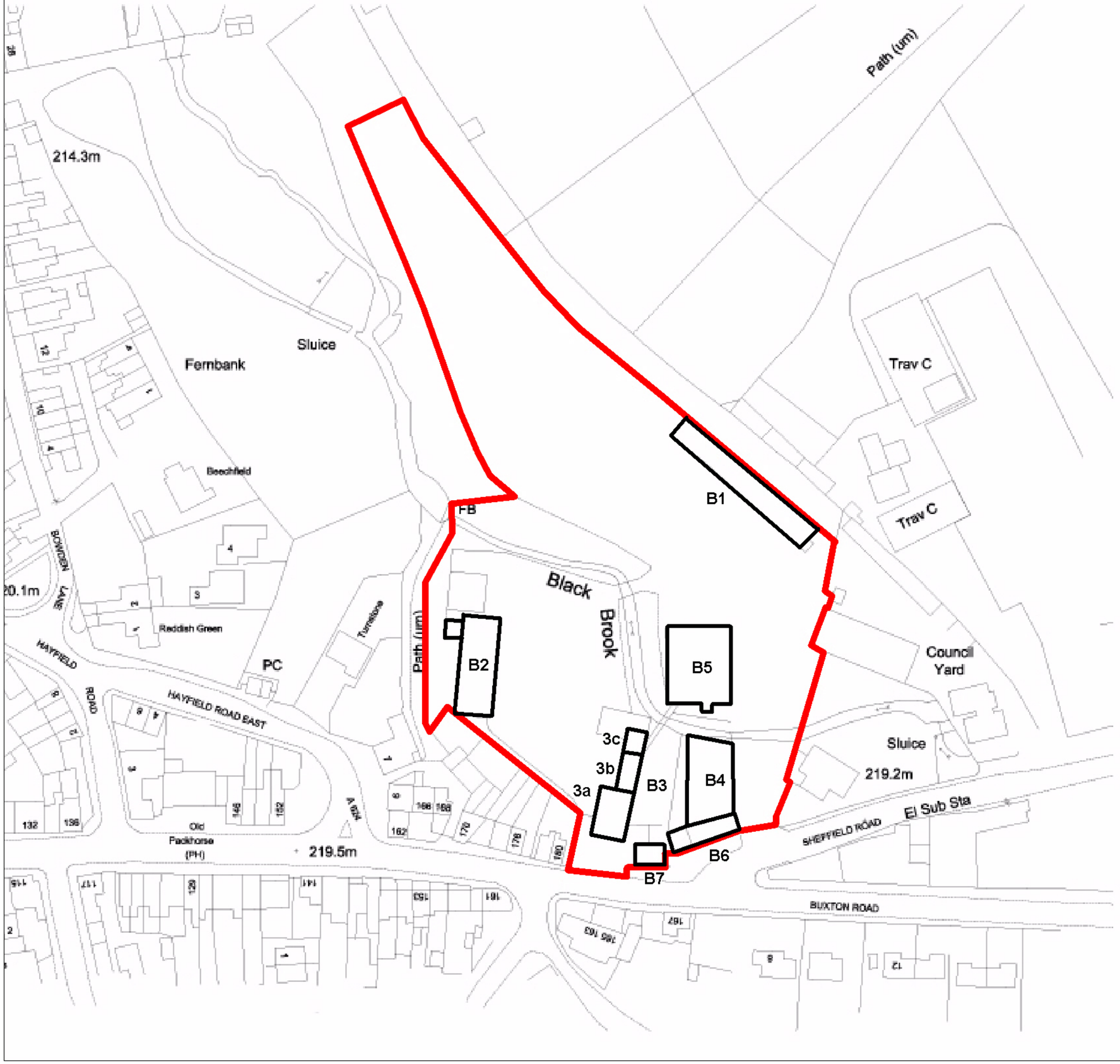


Photographs:

Photograph 1: Building B1 viewed from the south-east

Photograph 2: Building B2 viewed from the north-east

Photograph 3: Building B3 viewed from the north

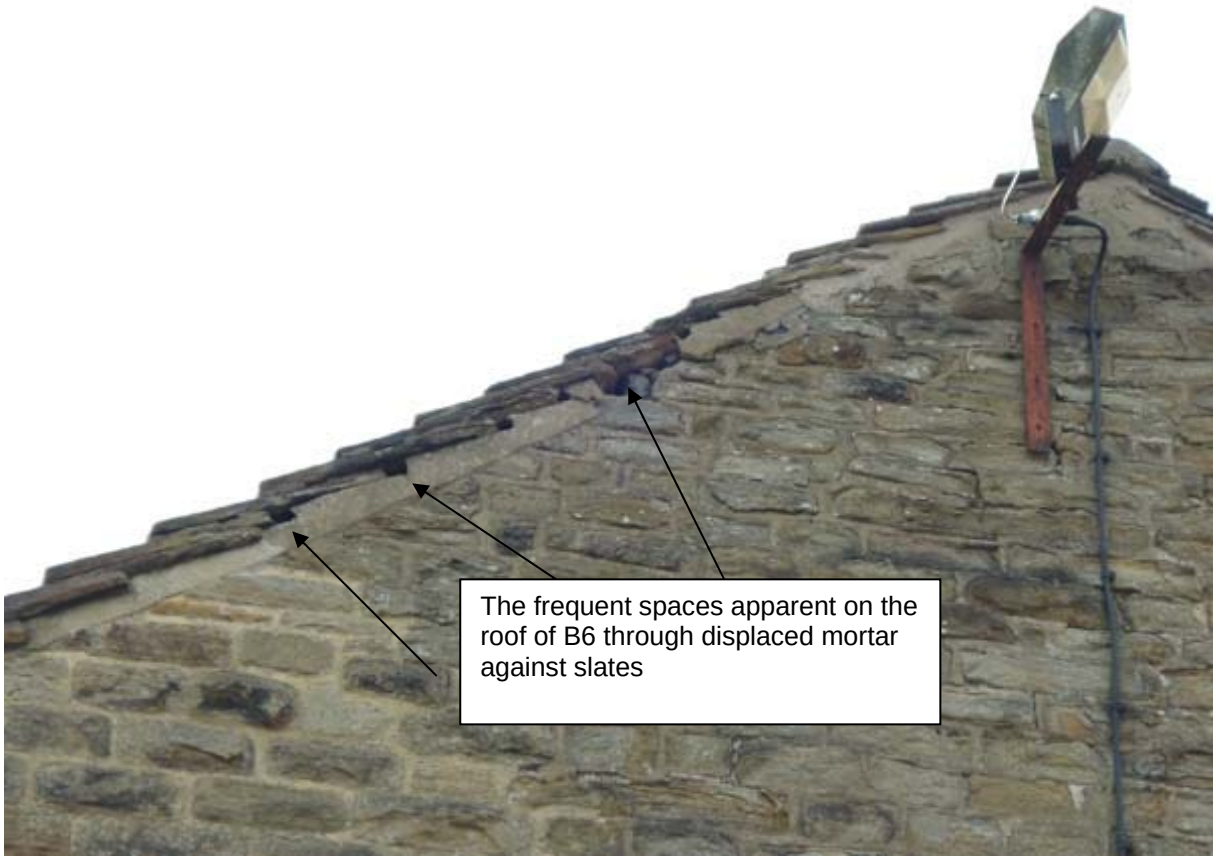
Photograph 4: Building B3c with roost opportunities

Photograph 5: Building B3b with roost opportunities

Photograph 6: Building B4 viewed from the north-east

Photograph 7: Building B5 viewed from the south-east

Photograph 8: Building B6 viewed from the south-east



Photograph 9: Building B6 showing roost opportunities

Photograph 10: Building B7 viewed from the north