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# INITIAL BAT SURVEY

## 84 – 86 LEICESTER ROAD HINCKLEY

A Report to Matthew Homes (West Midlands) Ltd

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January 2008

# INITIAL BAT SURVEY

## 84 – 86 LEICESTER ROAD
## HINCKLEY

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01 OF 02

01 MATTHEW HOMES (WEST MIDLANDS) LTD
02 MIDDLEMARCH ENVIRONMENTAL LTD

This study was conducted and compiled by
John Polley BSc (Hons) and Elizabeth Jacovou MSc

*The contents of this report are the responsibility of Middlemarch Environmental Ltd.*
*It should be noted, that whilst every effort is made to meet the client's brief,*
*no site investigation can ensure complete assessment*
*or prediction of the natural environment*

Contract Number C101717

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# 1. INTRODUCTION

Middlemarch Environmental was commissioned by Matthew Homes (West Midlands) Ltd on the 15th January 2008 to undertake an initial bat survey at 84 – 86 Leicester Road in Hinckley. Middlemarch Environmental Ltd understands these buildings are to be demolished under a planning agreement and a number of residential properties are to be built.

In England, Scotland and Wales all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales, this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994, (or Northern Ireland, 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The following account represents a simplified summary of the legislation provided by Mitchell-Jones and McLeish (2004). *Taken together, the Act, Order and Regulations make it illegal to:*

*intentionally or deliberately kill, injure or capture (or take) bats;*
*deliberately disturb bats (whether in a roost or not);*
*recklessly disturb roosting bats or obstruct access to their roosts;*
*damage or destroy bat roosts;*
*possess or transport a bat or any part of a bat, unless acquired legally;*
*sell (or offer for sale) or exchange bats, or parts of bats.*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording in the legislation is 'any structure or place which any wild animal…uses for shelter or protection' (WCA) or 'breeding site or resting place' (Habitats Regulations). Because bats tend to re-use the same roost after periods of vacancy, legal opinion is that the roost is protected whether or not the bats are present at the time. The reader is referred to the original legislation for definitive interpretation.

# 2. APPROACH

## 2.1 Initial Survey

In line with the specifications detailed by English Nature (2004), a daytime survey of the site was conducted. A visual assessment was undertaken of the site internally and externally for activity and signs of possible bat presence. All likely roosting areas were visually assessed. Any accessible holes/cracks and crevices, which could have allowed bat access into potential roosting areas were inspected using a endoscope and clu-light (torch) where safe to do so.

As bats are currently in hibernation, a nocturnal bat survey was not undertaken.

# 3. RESULTS

## 3.1 Survey details

The initial survey was conducted on 22nd January by John Polley (Ecological Consultant) and Elizabeth Jacovou (Ecological Project Officer). Weather conditions during the time of the initial survey were recorded and details are presented in Table 3.1.

| Parameter | Conditions |
|---|---|
| Temperature °C | 5 |
| Cloud Cover % | 80 |
| Wind Force | F1 |
| Precipitation | Dry |

**Table 3.1 Weather conditions during the bat survey**

## 3.2 Site Description

The site was located at National Grid Reference SP 433 946, in a residential area of Hinckley. The site comprised of two two-storey residential buildings and their associated gardens. The B4668 (Leicester Road) defined the southeast boundary of the site.

### Habitats on Site

Habitats within the site included: buildings, hard standing (driveways/patio areas), amenity grassland, mixed scattered trees, scrub and ornamental planting.

### Surrounding Land

The site is situated in the residential area of Hinckley with associated gardens and road networks surrounding the site. To the northeast there is the Hinckley Golf Club providing a large area of open grassland, ponds and scattered trees. To the northwest there are large pools of standing water located close to Barwell Lane.

## 3.3 Initial Survey Results

### 3.3.1 External Assessment

**84 Leicester Road**

The building was a two storey detached house with a cross-gabled roof creating an 'L' shape. A tile pitched roof ran from south to east and a half pitched roof extended to the northwest (Plate 3.1). Three red brick chimneys surrounded by lead flashing were present on the roof. The gable end (southwest facing) had exposed wooden purlin beams and was rendered.

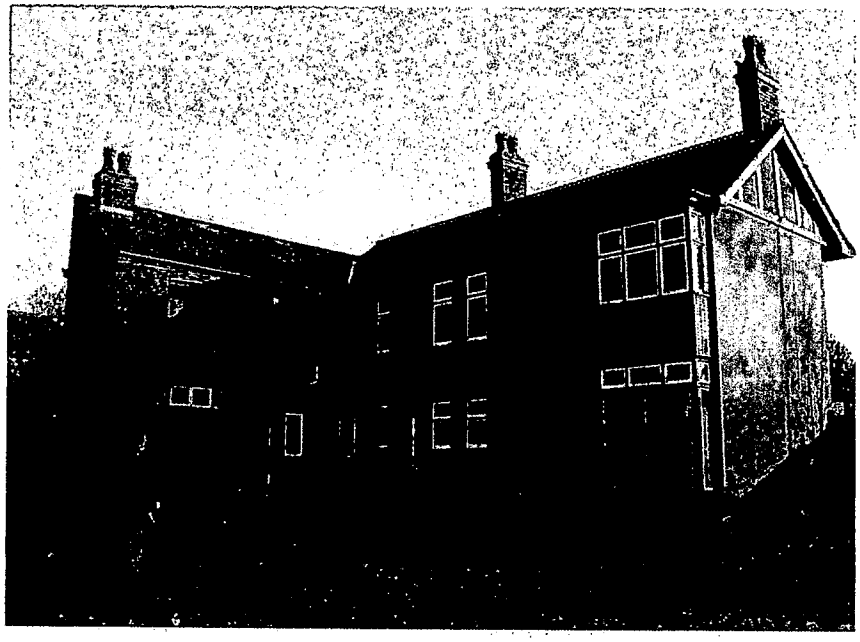


**Plate 3.1: Rear view of 84 Leicester Road (northwest facing)**

Front of building

The front of the building (southeast facing) was rendered and painted white (Plate 3.2). A two-storey bay window was present with barge boarding overhanging the top of the bay. Ornamental wooden trimming was present around this bay window. A single storey bay window with a flat roof covered in felting was also present. A dormer pitched roof extension with exposed beams was present on the front of this building. A section of wooden edging was missing from this dormer extension providing access into the loft space beneath the tiles (Plate 3.3). Due to the height of the building it was not possible to inspect this gap closely.

The windows to the front of the building were single glazed with wooden frames. These were in good condition and the frames were all tight fitting to the wall providing no potential access points to bats. The roof tiles and ridge tiles were generally in good condition although some had lifted in places providing potential access points for bats. Due to the height of the building it was not possible to inspect these gaps closely.



**Plate 3.2: Front view (southeast facing) of 84 Leicester Road**

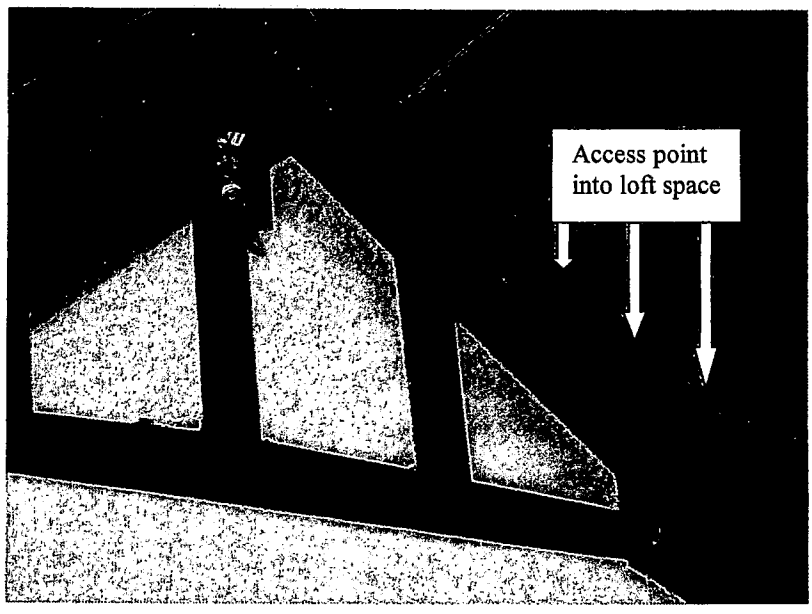



**Plate 3.3: Missing wooden panelling providing access into loft space**

Rear of building

The rear of the house was red brick (Plate 3.1). The brickwork was weathered in places and mortar was missing which created small gaps. These gaps were too small to have any roosting bat potential. The roof was in a poorer condition than the front of the building with numerous lifted, slipped or missing tiles which provided potential access points into the loft space of the building for bats. Mortar was missing from between the ridge tiles creating further potential access points for fauna. Due to the height of the building it was not possible to inspect these gaps closely (Plate 3.4).

The lead flashing around the chimney located on the half pitched extension was lifted providing a potential access point for bats. Due to the height of the building it was not possible to inspect this gap closely.

The majority of the windows were single glazed in wooden frames. In places, gaps were noted between the frames and the brickwork providing potential access points for bats. These gaps were inspected closely and were found to be covered in cobwebs indicating that no fauna had used these access points recently.

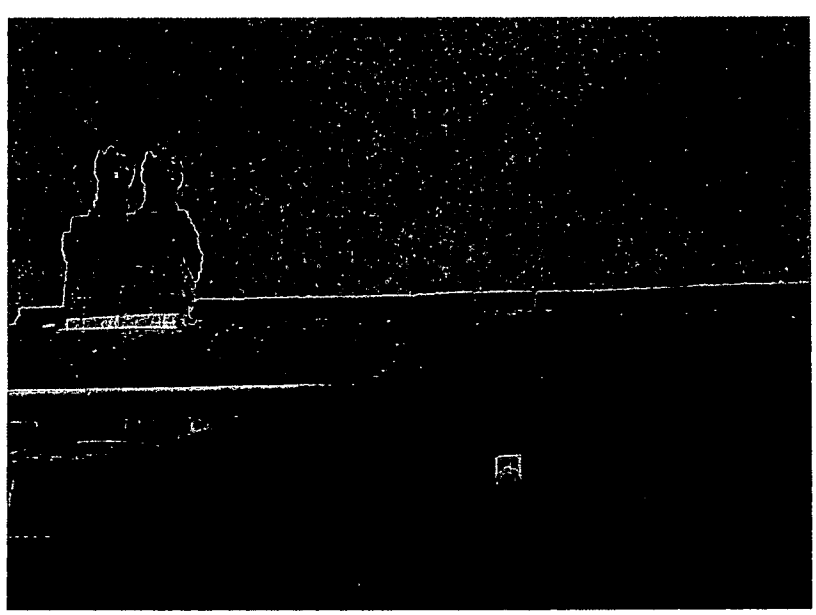


**Plate 3.4: Example of missing or slipped tiles and missing ridge tile mortar**

The northeast face of the building was red brick built. There were cracks in the brickwork and mortar was missing in places. Due to the height of the building it was not possible to inspect these gaps closely although they did not appear to extend very deep when observing from the ground. The northwest end of the half pitched extension was also red brick built and in a good condition.

Outbuilding

A wood panelled building was located to the southwest of the main building. This was a single storey building with a tiled shallow pitched roof. This building was used for storage. The building was in good condition with no potential access points. This building was deemed as having negligible bat roosting potential (Plate 3.5).



**Plate 3.5: Outbuilding to the southwest of 84 Leicester Road with no bat potential**

### 86 Leicester Road

This building was a two storey detached house with a hipped single pitched tiled roof with a dormer tiled front window extension. The building was red brick built and pebble dashed. A flat roofed extension covered in felting was present on the southwest face of the building (garage and kitchen area) (Plate 3.6).

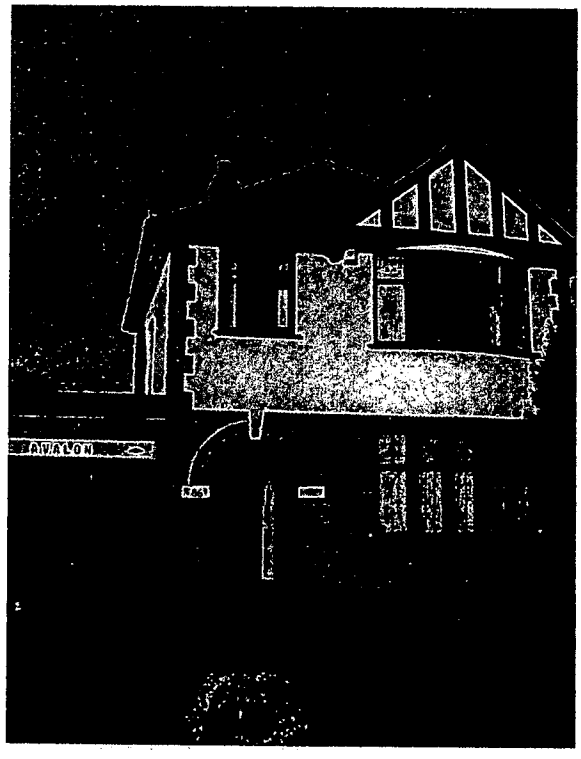



**Plate 3.6: Front of 86 Leicester Road (southeast facing)**

The roof was generally in good condition with a few lifted tiles noted in places. Lifted tiles provided potential access points to bats into the loft space of the building. Due to the height of the building it was not possible to inspect these gaps from the outside.

All windows were double glazed with PVC frames. All windows were in good condition with frames tight fitting to the wall. A wooden soffit box surrounded the roof. This was in good condition with no gaps present.

A dormer tiled front window extension was present with wooden panelling. Gaps were present between the wooden panels. These gaps were inspected from the ground

and were cobweb free. This indicated that fauna might have used this gap to access the loft space recently.

To the rear of the building (northwest facing) there was an area of lifted pebbledash which created a cavity in the wall (Plate 3.7). The cavity was approximately 15 cm in height and 3 cm in width. The entrance to this cavity was free from cobwebs indicating that fauna may have accessed this gap recently. It was not possible to inspect this gap with an endoscope due to the risk of dislodging the lifted material and damaging the building.

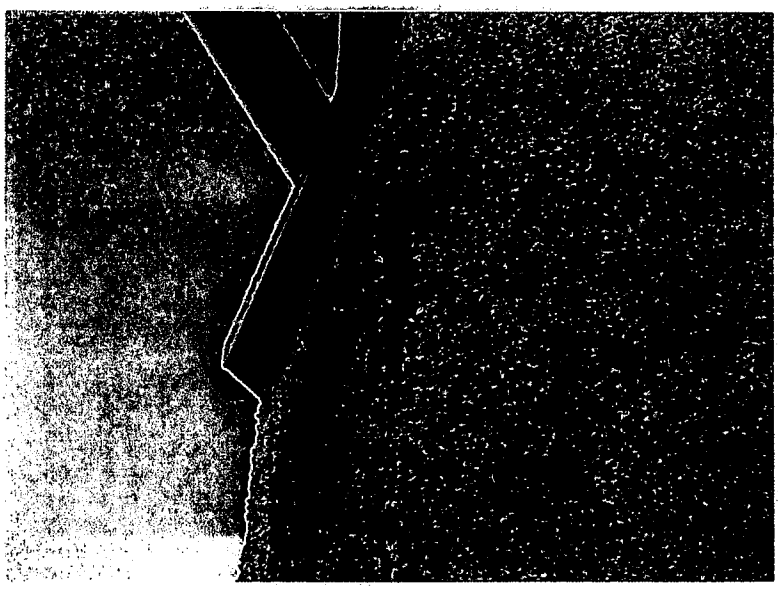


**Plate 3.7: Lifted pebbledash creating cavity in wall**

### 3.3.2 Internal Assessment

**84 Leicester Road**

The loft space was 'L' shaped. For ease of reading and to provide a detailed description of the loft, the loft space has been divided into three separate sections. Figure 3.1 details these three separate loft sections within 84 Leicester Road. The loft space was continuous throughout Sections 1, 2 and 3 providing flight access to bats into all areas of the loft.

Wooden purlins supporting the roof ran throughout all loft Sections and rested on the brick walls.

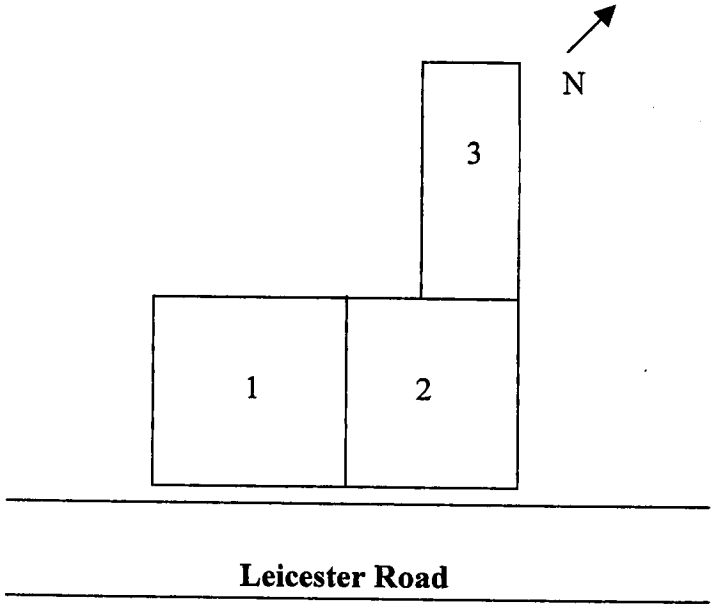



**Figure 3.1: Loft space divided into three sections**

Section 1

A dividing wall, approximately 1 m in height was present partially dividing Section 1 into two halves. To the southwest of this dividing wall the loft was fully boarded (covering the floor, ceiling and ridge beam) with a PVC liner behind the ceiling boards. It was not possible to inspect the gap between the boarding, PVC liner and the tiles as the boards were all tight fitting (Plate 3.8). A red brick chimney was present at the southwest end of this section. All bricks were in good condition. A small gap was present between the boarding and the chimney. This gap was heavily cobwebbed

(Plate 3.9). This gap was inspected with an endoscope. No evidence, such as droppings, scratch marks and urine staining was recorded.

To the northeast of the dividing wall the loft was lined with PVC. No boarding was present. It was possible to inspect behind some of the PVC lining but access behind all of it was not possible. The areas that were inspected were cobweb and dust covered. No evidence of bats, such as droppings, scratch marks and urine staining, was recorded within this section of the loft.

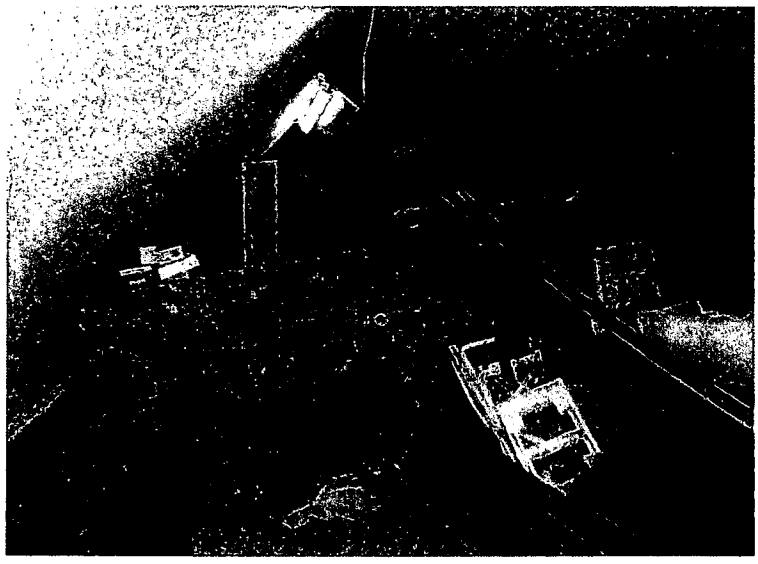


**Plate 3.8: Fully boarded loft space and dividing wall in Section 1**



**Plate 3.9: Cobweb covered gap between brickwork and boarding**

Section 2

Section 2 was separated from Section 1 by a red brick chimney. Access into Section 2 was from around the northwest side of the brick chimney dividing Sections 1 and 2 and beneath the wooden purlin beam. This section had PVC lining covering the southeast facing pitch of the roof and tiles positioned directly wooden rafters with no boards of PVC present, on the northwest facing pitch of the roof (Plate 3.10).

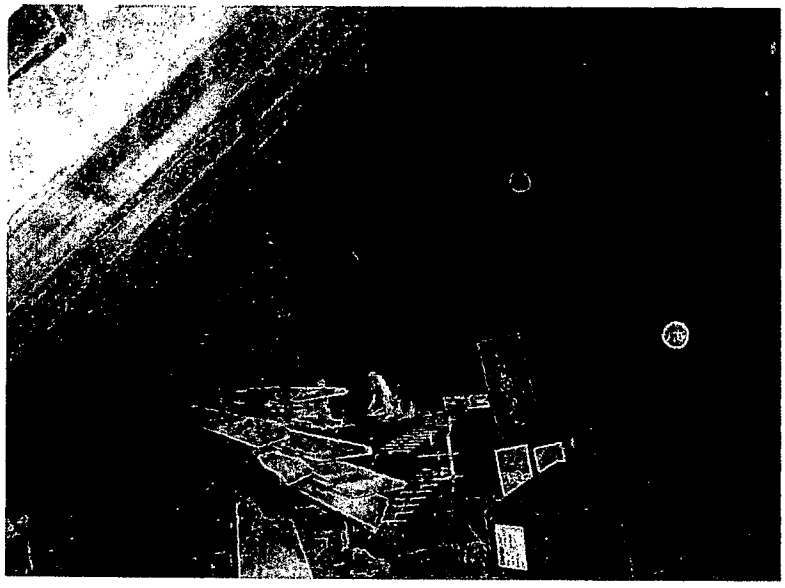


**Plate 3.10: Exposed tiles and eaves and PVC lining in Section 2**

Light penetration was visible at the eaves and between tiles, however all gaps were cobweb covered indicating that no fauna had used these as access points recently. The ridge beam was exposed and heavily cobwebbed (see Plate 3.11). No evidence of bats i.e. droppings, urine staining and scratch marks, was found beneath this ridge beam or in any part of this section of the loft.

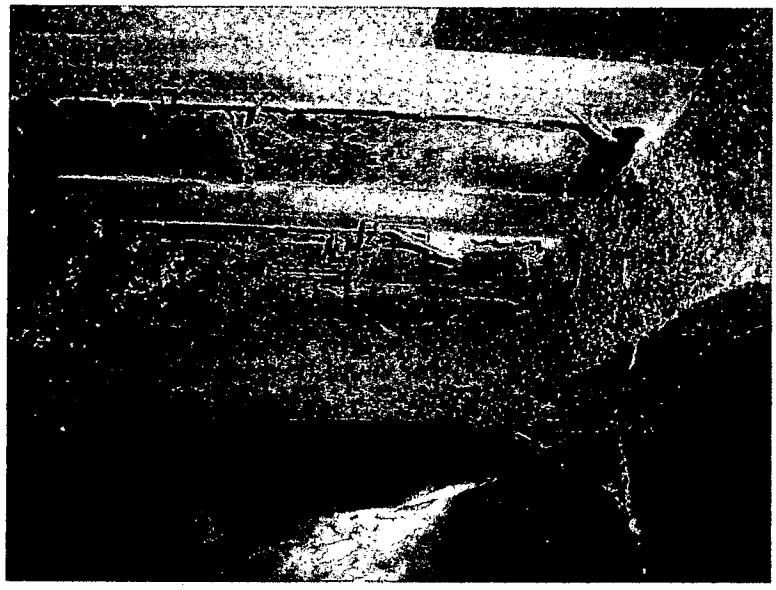


**Plate 3.11: Heavily cobwebbed ridge beam (Section 2)**

Section 3

Section 3 was heavily cobwebbed and dusty with tiles positioned directly onto exposed wooden rafters (Plate 3.12). Wooden roof supports and wooden joists were present between Sections 3 and 2. Access points into the loft space were present at the apex, eaves and between tiles. All of these gaps could be fully inspected and were all cobweb covered indicating that no bats had used these points to access the loft space recently. No evidence of bats i.e. droppings, urine staining or scratch marks, was found at any location within this section of the loft.



**Plate 3.12: Cobweb and dust covered loft space**

## 86 Leicester Road

The roof structure of this loft space had exposed tiles positioned directly onto wooden rafters and an exposed ridge beam (Plate 3.13). It was possible to access all parts of this loft space. All areas of the loft were covered in dust and cobwebs. No evidence of bats was recorded (i.e. droppings, scratch marks, urine staining). The floor was boarded.

The loft floor dropped down approximately 0.5 m where the dormer roof extension was present. This area was partly boarded. Gaps were present between the wooden panels of this extension (see Plate 3.14). These gaps were free from cobwebs indicating that fauna may have utilised this gap to access the loft space. However, no evidence of bats was recorded (i.e. droppings, scratch marks, urine staining). Small gaps were also present at the eaves and between some of the tiles. These gaps were cobweb covered indicating that no fauna had used these gaps to access the loft space recently.

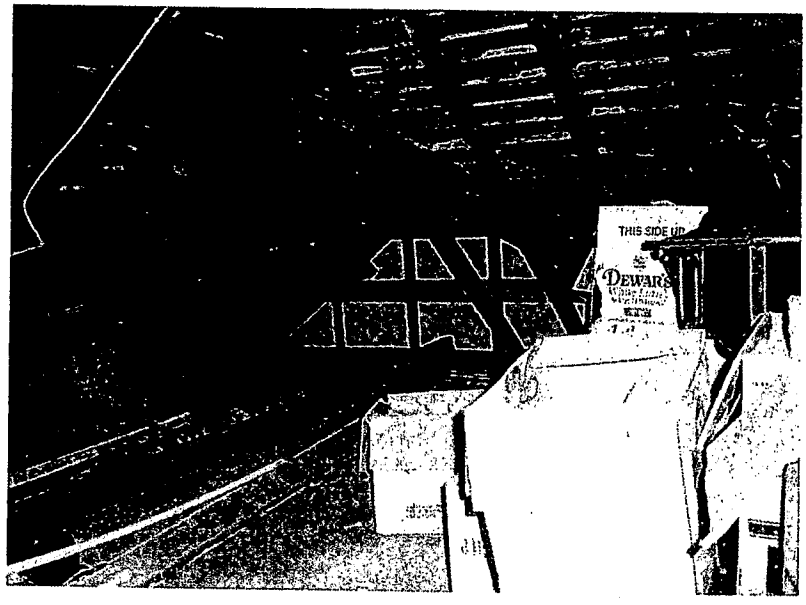



**Plate 3.13: Roof structure of 86 Leicester Road**

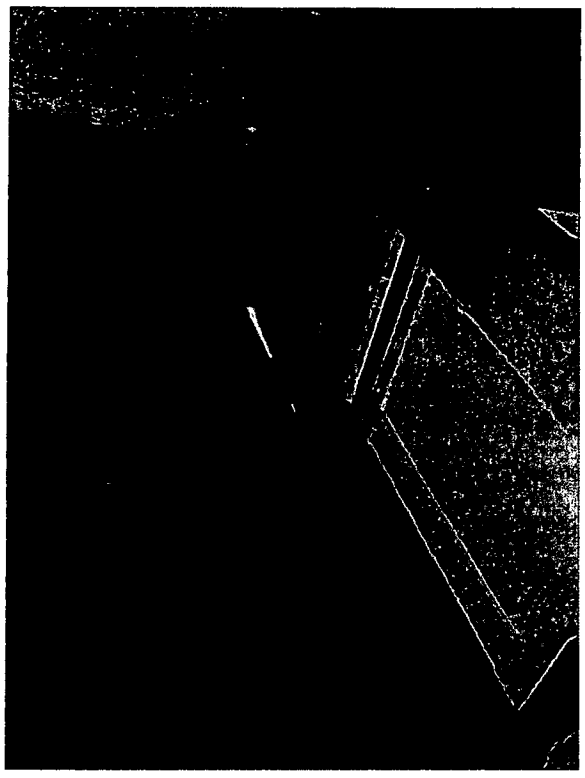


**Plate 3.14: Access point into the loft space between wooden panels of the dormer extension**

### 3.3.3 Site Grounds

The site grounds consisted of two residential gardens divided by a line of trees, shrubs and scrub. No mature trees were present on site. None of the trees on site had any suitable features for roosting bats i.e. no crevices, cracks or peeling bark. The semi mature trees, scrub and shrubs provided good foraging habitat for bats that may be utilising the site.

# 4. DISCUSSION

## 84 Leicester Road

The external assessment of 84 Leicester Road identified potential bat access points into the building. Suitable features for bats to utilise included:

- Lifted lead flashing
- Dislodged tiles
- Missing tiles
- Missing mortar between ridge tiles

The outbuilding had no roosting potential for bats.

The internal assessment identified no evidence of bats roosting within the building. Although no evidence of bats (i.e. bat droppings, feeding remains, scratching, staining) was observed within the main loft space, the loft provided potential roost locations. The areas between the wooden sarking and roof tiles could not be inspected. This area is a suitable roosting location for bats.

A nocturnal survey will be required to assess if bats are using any of these access points to gain entry into the areas inaccessible during the initial survey and as suitable roosting locations (that were not being utilised as a roost at the time of the survey) were identified, they could be utilised by bats in the future.

## 86 Leicester Road

The external assessment of 86 Leicester Road identified potential bat access points into the building. Suitable features for bats to utilise included:

- Lifted tiles
- Eaves access points
- Gap in wooden panels

All of these potential access points could be inspected from inside the loft space. These gaps were mostly cobweb covered indicating that fauna had not utilised these gaps as access points recently. There was no evidence of bats roosting within the building i.e. droppings, scratch marks or staining. The gap between the wooden panels of the dormer extension were cobweb free indicating that fauna may have utilised this gap as an access point recently. However this gap was not deemed a highly suitable access point for bats. No evidence of bats i.e. droppings, scratch marks or urine staining, was found during the internal inspection and it is deemed very unlikely that bats are utilising this access point to gain entry into the loft space of 86 Leicester Road to roost.

The lifted pebbledash in the rear wall of the building created a cavity suitable for roosting bats. After a discussion with the owner of the property it was noted that this cavity was a recent development having formed during winter 2007 and as such it is deemed very unlikely that any bat would have colonised this cavity during this time. It is possible that bats may roost within this cavity in the future.

The habitats on site provide foraging and commuting habitat for bats.

# 5. CONCLUSIONS & RECOMENDATIONS

## 84 Leicester Road

Suitable features for bats to access and utilise the loft space of 84 Leicester Road were identified during the initial survey. The majority of these areas could be fully inspected with no evidence of bats being recorded. Voids behind boarding and beneath the ridge beam could not be fully inspected during the survey and therefore further survey work is required to determine if bats are utilising the building as a roost. These will include either nocturnal surveys or inspection using an operated lifted platform. Discussions with the County Ecologist will identify which process can be applied to the building. These two processes are outlined below.

The operated lifting platform will allow all external access points for bats (e.g. lifted tiles and ridge tiles, gaps in soffit box etc) to be inspected using an endoscope and high powered torch. If no evidence of bats can be identified then no further survey work is required. If any areas cannot still be inspected a nocturnal survey will be required.

The nocturnal bat surveys can be undertaken during the active season. This is weather dependent, but generally extends between April and September.

The Bat Conservation Trust Guidelines (2007) state that up to three nocturnal/dawn surveys may be required. It is recommended once the first survey has been undertaken that the results are discussed with the county ecologist/Natural England to determine if further surveys are required.

If from either the further inspection using an operated lifting platform or the nocturnal surveys, a bat roost is identified, a mitigation strategy can be developed.

If a bat roost is identified, a Natural England Development Licence will be required in order to comply with the legislation cited in Section 1 of this report.

## 86 Leicester Road

Suitable features for bats to access and utilise the loft space of 86 Leicester Road were identified during the initial survey, however all of these areas could be fully inspected with no evidence of bats recorded. It is recommended that 86 Leicester Road be demolished before April 2008 (when bats become active) to prevent any bats colonising this building in the future.

If 86 Leicester Road is not demolished in the timescale specified further surveys would be required to establish if bats have colonised the building in the interim.

## REFERENCES AND BIBLIOGRAPHY

**Bat Conservation Trust (2007).** *Good Practice Guidelines*. Bat Conservation Trust, London.

**English Nature (2004).** *Bat Mitigation Guidelines*. English Nature, Peterborough.

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**MIDDLEMARCH ENVIRONMENTAL**

**QUALITY ASSURANCE**

**TITLE: 84 – 86 LEICESTER ROAD HINCKLEY**

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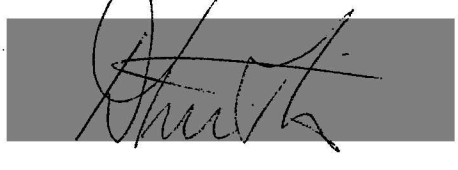
Date: January 2008

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