



LIZARD

Landscape Design and Ecology

PRELIMINARY BAT ROOST ASSESSMENT

CROFT WORKS, 52 MILL LANE, RUSTINGTON

On behalf of: ECE Architecture

Planning Issue

Prepared by	LB
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SUMMARY

Lizard Landscape Design and Ecology has been commissioned by ECE Architecture to undertake a day-time bat roost assessment of the structures at Croft Works, 52 Mill Lane, Rustington (*Grid Reference: TQ 057 030 – hereafter referred to as 'the site'*).

The site area consists of existing single story, single skinned workshop / storage structures and an area of hard-standing and is assessed as being of 'low' ecological value. A day-time bat roost assessment of the existing structures on site were undertaken on the 07th September 2020.

There were no visible external access points or roost features present at the time of survey. The construction of the structures within the site were found to be largely unsuitable for roosting bats with no internal signs of bat presence recorded therefore, the buildings within the site boundary were deemed to be of '*negligible*' suitability for roosting bat species. It is considered that there is a '*negligible*' risk of the development proposals committing offences under prevailing UK and EU legislation and therefore no further survey work with regards bats is recommended.

Potential habitat enhancements which would increase the overall biodiversity levels of the site are shown in Section 7.0. Given the low existing biodiversity within the site, any ecological enhancements provided would result in the proposed scheme having a *positive increase* on biodiversity in the long-term.

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned by ECE Architecture to undertake a day-time bat roost assessment of the buildings at Croft Works, 52 Mill Lane, Rustington (*Grid Reference: TQ 057 030 – hereafter referred to as 'the site'*). A day-time bat roost assessment of the existing buildings on site was undertaken on the 07th September 2020.

1.2 The field survey data and analysis contained in this report were undertaken and prepared by Louise Barker (*Project Ecologist; Lizard Landscape Design and Ecology*). This report has been reviewed by Catherine O'Reilly (*MCIEEM, Senior Ecologist; Lizard Landscape Design and Ecology*).

Site Information

1.3 The site area is located on the eastern side of the B2187 Mill Lane, north of the village of Rustington and south of the A259. The site entrance is located to the west, off Mill Lane, down a single-track roadway leading to a hard-standing area containing workshop and garage outbuildings along the north eastern and western boundary. The site area is approximately four metres above sea level and measures approximately 0.08ha.

Surrounding Landscape

1.4 The site is in Rustington, with the dual carriageway (A259) only 300m north and multiple commercial units in close proximity. The immediate surrounding landscape is residential which extends into the wider landscape in every direction, interspersed only by limited public green spaces.

Development Proposals

1.5 The development proposals include demolishing the existing structures and the construction of 4no. new semi-detached 2no. bed residential properties with associated gardens and parking.

Bat Legislation

1.6 All eighteen British bat species are fully protected through their inclusion in *Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)* and in *Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (as amended)* as *European Protected Species*.

- 1.7 Under the legislation; it is an offence to intentionally kill, injure or take a bat as well as intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat or disturb an animal while it is occupying a structure or place which it uses for that purpose.

2.0 SCOPE OF THE SURVEY

- 2.1 The aims of the day-time bat roost assessment survey and protected species assessment were;

- *To identify the potential for roosting bats;*
- *Identify areas where future detailed survey effort would be required and should be focused;*
- *To establish whether other habitat features for different species groups exist to warrant further investigation.*

3.0 METHODOLOGY

- 3.1 An internal bat roost assessment survey was undertaken on 07th September 2020 by an experienced bat surveyor. The bat surveyor undertook an internal and external examination of the existing buildings. The bat surveyor assessed the buildings visually and searched for evidence such as;

- *Staining beneath or around a hole caused by natural oils in bat fur;*
- *Bat droppings beneath a hole, roost or resting area;*
- *Bat droppings and / or insect remains beneath a feeding area;*
- *Audible squeaking from within a hole;*
- *Insects (especially flies) around a hole;*
- *Dead bats.*

- 3.2 An external investigation assessed the fabric of the buildings for features which could be used by bats such as;

- *Slipped / lifted roof or hanging tiles;*
- *Gaps around dormer windows or roof lights;*
- *Lifted flashing around chimneys, roof valleys or windows;*
- *Cracks in masonry / brickwork;*
- *Gaps at the eaves.*

- 3.3 Gaps / crevices identified within the structure were examined using ladder, endoscope and head torches where appropriate.

4.0 RESULTS

4.1 Background information

Designated Sites and Habitats

- 4.1.1 The following section outlines the ecological context of the development site; describing any designated nature conservation sites in the vicinity of the development site. The following designated sites and habitats are not necessarily representative of the existing site's ecology but are indicative of the ecological context of the surrounding area.

Statutory Protected Sites

- 4.1.2 There are no Statutory Designated Sites located within 2.0km of the development site. The closest designated site is *West Beach LNR* located 3.2km southwest of the site, designated for its sand flats, shingle, sand dunes and the plants, birds, molluscs, reptiles and mammals which either live or feed on them.
- 4.1.3 The site is located within the *Impact Risk Zone (IRZ) West Beach LNR*. Current proposals will not require consultation with Natural England.

Non-Statutory Protected Sites

- 4.1.4 *Sites of Nature Conservation Importance (SNCI)* are non-statutory designations given to areas of high conservation value locally. Despite being non-statutory, *SNCI*'s are still recognised by local planning authorities in their policies and plans. *SNCI*'s within 2.0km of the site are listed in *Table No. 1* below.

Table No. 1 – SNCI's within 2.0km of development site

Name	Reason for Protection	Distance from Site
<i>East Preston SNCI</i>	<i>East Preston and Angmering beach contain groynes and pebbles and compact sand. The beach is backed by sand dunes.</i>	<i>1.7km South East.</i>

UK Priority Habitat

- 4.1.5 Within 2.0km of the site there are *UK Priority Habitats of coastal vegetated shingle, coastal and floodplain grazing marsh, ancient woodland, deciduous woodland and traditional orchards*.
- 4.1.6 Development proposals are very unlikely to have any impact upon these sites due to intervening distances between the site and other habitats. Therefore, proposals are not of a nature which would require consultation with Natural England.

UK Priority Species

- 4.1.7 UK Priority and other protected species relevant within Sussex include terrestrial mammals such as Brown Long-Eared bats (*Plecotus auritus*), Common Pipistrelle bats (*Pipistrellus pipistrellus*) and Natterer's bat (*Myotis nattereri*). Records show the presence of bat species within 2.0km of the site these are: Serotine Bat (*Eptesicus serotinus*) and Pipistrelle bats (*Pipistrellus pipistrellus*).
- 4.1.8 All species of bat and their roosts are protected under *Regulation 41* of the *Conservation of Habitats and Species Regulations 2017* and *Section 9* of the *Wildlife and Countryside Act 1981*. It is an offence for anyone intentionally to kill, injure or handle a bat, to possess a bat (*whether live or dead*), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

4.2 Field Survey

- 4.2.1 The site is formed of four built structures (*Buildings B1-B4*), a shipping container and a central area of hard-standing, details of the building assessments are in Table 2 below.

Table No. 2 – Building Assessments

Building Number	Description of Structure	Bat Roost Suitability
<i>B1</i>	<i>Single story, single skinned workshop, pitched roof with corrugated metal, wooden struts across. Wood and glass form the southern wall aspect, wood and concrete blocks on the northern wall. Internal space divided into 4 sections. No roosting features or signs of bats were found.</i>	<i>Negligible</i>
<i>B2</i>	<i>Single story, single skinned workshop, concrete composite roof. No roosting features or signs of bats were found.</i>	<i>Negligible</i>
<i>B3</i>	<i>Toilet block, small wooden structure, single skinned with corrugated roof. No roosting features or signs of bats were found.</i>	<i>Negligible</i>
<i>B4</i>	<i>Flat roof garages. 4no internal sections with wooden doors. Corrugated roof with timber struts across. No roosting features of signs found.</i>	<i>Negligible</i>

- 4.2.2 After careful external and internal inspection throughout the entire site, no signs of bats roosting such as grease or urine stains, feeding remains or bat droppings were found.

5.0 EVALUATION

- 5.1 There were no visible external access points or roost features present at the time of survey. With no internal signs of bat presence. Therefore, all built structures within the site are deemed to be of ‘*negligible*’ suitability for roosting bat species.
- 5.2 It is considered that there is a ‘*negligible*’ risk of the development proposals committing offences under prevailing UK and EU legislation and therefore no further survey work with regards bats is recommended.
- 5.3 With regard to bats the landscape that immediately surrounds the affected buildings is suggested to be poor both in terms of bat foraging potential and habitat cover. Both of these factors are also believed to reduce the likelihood of bats roosting within the proposed buildings.

6.0 CONCLUSION

- 6.1 The site area consists of existing single story and single skinned built structures of varying designs and an area of hard-standing only, overall the site is assessed as being of '*low*' ecological value.
- 6.2 All built structures were deemed to have '*negligible*' suitability for roosting bats and will therefore no further surveys for bats are required.
- 6.3 Potential habitat enhancements which would increase the overall biodiversity levels of the site are shown in section 7.0 below. Given the low existing biodiversity within the site, any ecological enhancements provided would result in the proposed scheme having a *positive increase* on biodiversity in the long-term.

7.0 ECOLOGICAL ENHANCEMENTS

7.1 The design of the proposed development should consider ecological enhancements for the benefit of wildlife in line with the *National Planning Policy Framework* and *Local Planning Policy*. Recommendations for ecological enhancements that could be considered as part of development proposals could include:

- *The use of night-scented species and pale flowers to increase bat foraging potential across site, such as evening primrose (*Oenothera fruticosa*); cornflower (*Centaurea cyanus*); knapweed (*Centaurea nigra*); yarrow (*Achillea millefolium*); honeysuckle (*Lonicera*); and lavenders (*Lavandula*);*
- *The incorporation of bat tiles within new buildings (areas made accessible to bats must be lined with a traditional bitumen lining rather than breathable roofing membrane), or integrated bat boxes;*
- *The provision of nesting boxes for urban birds such as House Martins (*Delichon urbicum*), Swallows (*Hirundo rustica*) and Swifts (*Apus apus*) within the facades of the buildings;*
- *Use of a sympathetic lighting scheme across the site, with lighting angled down and away from surrounding trees / hedges and any bat boxes.*

8.0 REFERENCES

JNCC (2003) Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit. JNCC

Mitchell-Jones and McLeish (2004) Bat Workers Manual – 3rd Edition. JNCC

Collins, J (ed.) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed) (2016)

Streever D (2010) The Most Complete Guide to the Flowers of Britain and Ireland. Harper Collins, London

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Appendix A - Site Photographs



Image 1 External view of Building B1, single story, single skinned structure with high levels of light throughout.



Image 2 Internal view of Building B1, section 1. Open to metal roof.



Image 3 Internal view of Building B1, section 2. Sealed ceiling with small area exposing metal roof.



Image 4 Internal view of Building B1, section 3. Sealed ceiling.



Image 5 External view of Building B2 (left) & Building B3 (right).

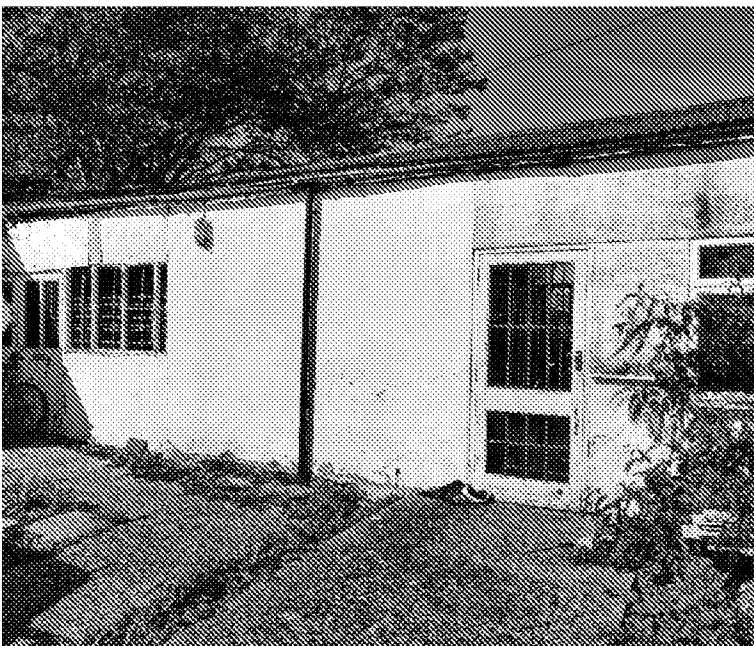


Image 6 External view of Building B2.



Image 7 External view of Building B2 and adjacent off-site tree.

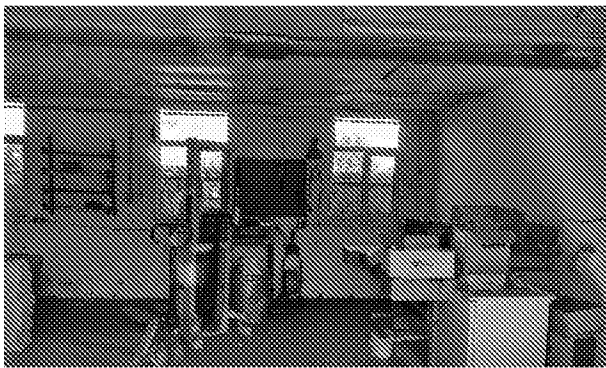


Image 8 Internal view of Building B2, section 1.



Image 9 Internal view of Building B2, section 2.



Image 10 External view of Building B4, with 4 internal sections for storage.



Image 11 Internal view of Building B4, in sections, currently used for storage.