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Dusk Survey Results

July 2021

6-8 Carlin Gate
Blackpool
Lancashire
FY2 9QX

National Grid Ref: SD3081538665

Document Title	Dusk Survey Results
Prepared for	JYM Partnership LLP
Prepared by	Tyrer Ecological Consultants Ltd

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Survey Dates	Dusk: 19/05/2021	Dusk: 08/06/2021
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1.0 Background and Introduction

1.1 As part of a proposed planning application regarding 6-8 Carlin Gate, Blackpool, Contract Ecology Ltd conducted a daytime Preliminary Roost Assessment (PRA) during March 2020 which concluded the following (Figure 1.1):

> In relation to No.6 Carlin Gate; no evidence of bats was found at the time of survey to suggest current or historical roosting at the property. The property is considered to offer negligible opportunity for bat roosting and no further survey effort is deemed necessary in relation to bats at this property.
>
> No.8 Carlin Gate has been classified as having '**low suitability**' for bat roosting in accordance with BCT guidelines. The sole notable feature of interest being restricted to the timber cladding on the southern and eastern façade of the structure.

Figure 1.1 - Extract from *Appendix I*

1.2 Development proposals for 6-8 Carlin Gate involve the demolition of the existing structures to make way for the future redevelopment of the site.

1.3 Tyrer Ecological Consultants Ltd were therefore commissioned by JYM Partnership LLP to undertake the further bat survey recommended in the preliminary assessment, along with a subsequent survey after emergence was recorded during the initial dusk survey. The attending surveyors re-categorised the building as pertaining to 'Moderate' bat roost suitability. The surveys (two dusk emergence surveys) were carried out in May and June 2021 in accordance with current Bat Conservation Trust (BCT) Guidelines during the active season of bats (see Figure 1.2).

Table 7.1 Recommended timings for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability	Moderate roost suitability	High roost suitability
May to August (structures) No further surveys required (trees)	May to September[a] with at least one of surveys between May and August[b]	May to September[a] with at least two of surveys between May and August[b]

[a] September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season.

[b] Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example, a more accurate count of a maternity colony is required but it is likely that the colony will soon disperse). If there is potential for a maternity colony then consideration should be given to detectability. A survey on 31 August followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.

Figure 1.2 - Extract from *Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016)*

1.4 The results, conclusions and recommendations following the surveys, including any indicative mitigation to inform an application to Natural England for a European protected species mitigation licence (EPSML), where necessary, will be supplied within this report.

1.5 This report should be read, understood and presented to the local authority as an additional document to Appendix I (see Contents page).

1.6 In accordance with *Biodiversity Net Gain: Good practice principles for development* (CIEEM *et al*, 2019), measures have been recommended proportionate to anticipated impacts to ensure that the proposed development results in a biodiversity net gain.

2.0 Bats - Legislation & Policy

2.1 All British bats and their **roosts[1] are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

2.2 Use of Buildings by Bats

a) Summer breeding roost (May-August)
b) Hibernation roost (October-March)
c) Transitional or temporary roost (Mainly spring/summer months)

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

Policy

2.3 The National Planning Policy Framework (NPPF) has replaced the Planning Policy Guidelines (PPG's). In relation to wildlife, PPG 9 was one of the documents to which Planning Authorities referred to, particularly where a specially protected species is or may be present and will be affected by a development for which a Planning application seeks consent. The aims of the NPPF, in relation to species and habitats, are that it places a clear responsibility on Local Planning Authorities to conserve and enhance biodiversity and to encourage on the consideration that should be given to Protected Species where they may be affected by development.

Paragraph 175 of the National Policy Planning Framework (as revised in 2019) stipulates:

"*if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused*".

... whilst Paragraph 174 states:

"To protect and enhance biodiversity and geodiversity, plans should… promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."

[1] **The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "*a breeding site or resting place of such an animal"* and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.

2.4 The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation:

"*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision."*

2.5 This is supported by a guide to good practice entitled 'Planning for Biodiversity and Geological Conservation: Building in Biodiversity' in which paragraphs 5.34 and 5.35 identify that species such as bats are highly dependent upon built structures for survival and that roosts can be easily incorporated into existing and new developments to benefit these species.

2.6 The policies contained within the NPPF are echoed within Policy CS6: Green Infrastructure of the Blackpool Council Core Strategy which states that:

"1. High-quality and well connected networks of green infrastructure in Blackpool will be achieved by:

a. ***Protecting*** *existing green infrastructure networks and existing areas of Green Belt. The loss of green infrastructure will only be acceptable in exceptional circumstances where it is allowed for as part of an adopted Development Plan Document; or where provision is made for appropriate compensatory measures, mitigation or replacement; or in line with national planning policy.*
   In terms of existing open space, sports and recreational buildings and land, including playing fields, theses will be protected unless the requirements of paragraph 74 of the NPPF are met.
   In terms of Green Belt areas, the Council will apply national policy to protect their openness and character, and retain the local distinctiveness. There is no planned strategic review of the existing Green Belt boundary during the plan period.
b. ***Enhancing*** *the quality, accessibility and functionality of green infrastructure as part of new development and supporting urban greening measures within the built environment.*
c. ***Creating*** *new accessible green infrastructure as part of new development and supporting urban greening measures within the built environment.*
d. ***Connecting*** *green infrastructure with the built environment and with other open space including the creation, extension or enhancement of greenways, green corridors and public rights of way.*

2. All development should incorporate new or enhance existing green infrastructure of an appropriate size, type and standard. Where on-site provision is not possible, financial contributions will be sought to make appropriate provision for open space and green infrastructure.

3. International, national and local sites of biological and geological conservation importance will be protected having regard to the hierarchy of designated sites and the potential for appropriate mitigation. Measures that seek to preserve, restore and enhance local ecological networks and priority habitats/species will be required where necessary."

3.0 Bats in Lancashire

3.1 Up to eleven bat species have been recorded in Lancashire, many of which use built structures and trees for roosting. A variety of building types and features are utilised by bat species at different times of year, ranging from occupied residential dwellings to disused barns and bridges. The most frequently encountered species is the common pipistrelle bat (*Pipistrellus pipistrellus*) and its abundant status in Lancashire is mirrored throughout the UK.

4.0 Survey Methods

4.1 Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) edition states:-

"*The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. The guidance should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive."*

Relative to the above the survey protocol has been determined using the collective and long standing experience of Tyrer Ecological Consultants Ltd and knowledge of the specific nature of the site.

Survey Protocol

4.2 The timing of the surveys took place in May-June thus within the main active period of bats, at a time when maternity colonies have formed / returned to summer roosts and bats are in a highly active and social stage.

In accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), it is specified that:

"*The bat active period is generally considered to be between April and October inclusive*", though the period of May - August is the optimal most productive period that Natural England accept bat surveys and grant European Protected Species Mitigation licences (EPSML).

When considering survey protocol the decisions about whether dusk or dawn surveys are selected are based on the extensive experience of Tyrer Ecological Consultants Ltd, the nature of the building and species that can be anticipated as being present either at the property or in the locality and how complex a building is relative to observations.

In this case the bat roost potential that exists at 6-8 Carlin Gate presents no problems for dusk observations; if a building is complex, or observations were restricted, or species that are difficult to detect at dusk are suspected then dawn surveys would be conducted. At 6-8 Carlin Gate there are no visual constraints and to date there is no evidence to suggest the presence of such species.

It should also be noted that at dawn temperatures are usually lower than at dusk as a result bat activity can, in some locations, be less frequent. Additionally, where singular/small numbers of bats are present and there are no survey constraints then dawn surveys are of no more value than dusk surveys; singular bats can and do return to a roost before dawn and as a result a

dawn survey would not record them anyway. Dawn surveys are more productive when "back tracking" bat to a roost from foraging grounds.

Survey protocol should not be determined by parties who are 1) not familiar with the site 2) do not have a sufficient level or experience in relation to the undertaking of dusk/dawn bat surveys.

4.3 The number of surveys and surveyors was adequate relative to the roost potential that was identified on attendance of the site i.e. 'Moderate', and requiring two surveyors to accurately monitor potential roost features (PRF's) on the buildings at any one time.

4.4 Surveyors were strategically positioned so that all elevations with bat roost potential, as described in the daytime report, could be observed without limitations. The surveys were aided with Anabat electronic bat detectors that enable the locating and recording of the high frequency calls that are emitted by bats; echolocation calls were analysed the next day using Analook computer software to verify field observations.

5.0 Results

Two dusk emergence surveys were undertaken on the 19th May 2021 and the 08th June 2021 by two surveyors at any one occasion. Surveyor credentials have been given within Table 5.1. Tables 5.2 and 5.3, alongside Figure 5.1 and 5.2 document the results of the dusk surveys, whilst 5.3 provide a visual aid of emergence locations.

Table 5.1 - Surveyor Credentials

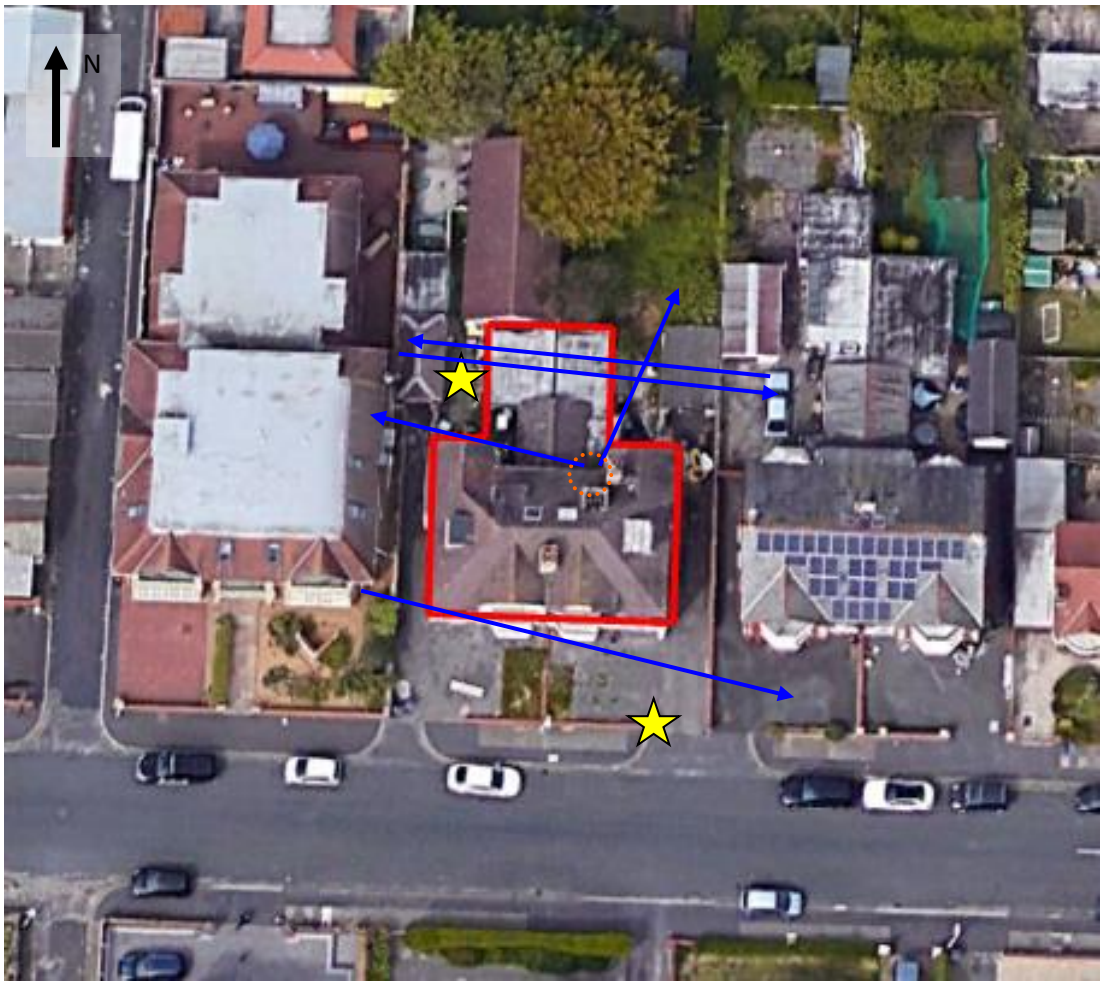
Surveyor(s)	Experience	Surveyor Credentials
Mr. L. Moat	6 years	A highly experienced freelance surveyor working as a sub-contractor for Tyrer Ecological Consultants Ltd. Great Crested Newt - CL08 Level 1 licence 2015-12345-CLS-CLS
Mr. D. Boyd	7 years	A highly experienced surveyor currently working as a sub-contractor for Tyrer Ecological Consultants Ltd
Mr. P. Leatham MCIEEM	9 years	An experienced surveyor currently working as a sub-contractor for Tyrer Ecological Consultants Ltd Great Crested Newt: CL08: 2015-18019-CLS-CLS
Mr. M. Moss	1 year	A seasonal ecological consultant with experience of undertaking professional bat surveys

Table 5.2 – Survey dates, times and weather conditions

Times of Survey	Date	Weather Conditions
Dusk survey 2055 - 2245	17th May 2021	**Sunset: 2115**: Dry, Gentle Breeze, 80% cloud cover Start temp: 11 º C End temp: 10 º C
Dusk survey 2120 - 2310	08th June 2020	**Sunset: 2140**: Dry, Calm, 10% cloud cover Start temp: 10 º C End temp: 9 º C

Table 5.3 – Dusk Survey Results

Dusk Survey	Time	Activity
173/05/2021	2055 - 2245	**Summary: Emergence of 3 Common Pipistrelle from number 8 Carlin Gate from the open eaves on the northern elevation at wall-plate level.** 2144 hrs: a Common Pipistrelle (CP) emerged from under the open eaves on the northern elevation at wall-plate level and commuted north. 2144 hrs: 2 CP emerged from under the open eaves on the northern elevation at wall-plate level and commuted west. 2154 hrs: a CP commuted west to east past the south of the building. 2157 hrs: a CP commuted east to west to the north of the building. 2215 hrs: a CP commuted west to east to the north of the building. Activity comprised of emergence and commuting by a maximum of 3 CP bats.
08/06/2021	2120 - 2310	**Summary: No emergence of any bats during the survey.** 2231-2240 hrs: a CP foraged around the north and east of the building constantly. Activity comprised of frequent foraging by a single CP bat.



Dusk Survey 1 - 17/05/2021

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
N	Directional compass		Bat emergence point

Figure 5.1 - *Visual Aid - Dusk Survey 1 Results with Key*

Dusk Survey 2 - 08/06/2021

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
N	Directional compass		

Figure 5.2 - *Visual Aid - Dusk Survey 2 Results with Key*

Figure 5.3 - *Visual Aid - Emergence location at the open eaves of the northern elevation, where 3 Common Pipistrelle emerged during the first dusk survey from wall-plate level.*

6.0 Survey Conclusions & Recommendations

6.1 The survey results gathered by Tyrer Ecological Consultants Ltd conclude that number 8 Carlin Gate is being used by up to 3 Common Pipistrelle (*Pipistrellus pipistrellus*) bats for roosting purposes. Based upon the evidence, the building is host to a 'Day roost' for the named species in low numbers, with 3 bats emerging from the open eaves on the northern gable elevation ridge.

6.2 Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) describes a 'Day roost' as a place:

"Where individual bats, or small groups of males, rest or shelter in the day, but rarely on summer nights."

6.3 The destruction/modification/damage of a bat roost will therefore need to be addressed from both a conservation and legal perspective along with the application of appropriate mitigation. A European Protected Species Mitigation Licence (EPSML) will be required to legally destroy a place that is actively used for breeding, rest or shelter (roost) by bats, however, before a licence can be applied for all planning issues need to be resolved.

6.4 In order that the LPA can implement its obligations under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), appropriate and proportionate mitigation will need to accompany the planning application which will demonstrate that the "*favourable conservation"* of the species concerned can be maintained.

6.5 Installation of new lighting as part of a development scheme that exceeds current levels may have a negative impact upon foraging/commuting bats confirmed as present in the vicinity, particularly if increased light spillage occurs in areas currently free from illumination such as illumination of boundary features. There are several measures that can be used to offset impacts upon bats, where lighting is unavoidable; these include, however are not limited to, the light source used and luminaire design, and accessories to direct light at its intended target. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site. Refer to the Bat Conservation Lighting Guidelines for further strategic information if applicable.

7.0 Indicative Mitigation

7.1 From the evidence gained during the dusk surveys, the use of 6-8 Carlin Gate by bats is considered to be of 'low' level significance relatable to Common Pipistrelle bats and their current status (as according to - English Nature: Bat Mitigation Guidelines 2004); the proposed mitigation is proportionate to that use. However, if at any time that assessment is revised to a higher level, then the mitigation will also be accordingly revised.

7.2 The following procedures and mitigation recommendations are designed to allow the Local Planning Authority (LPA), in association with their ecological advisers, to determine a Planning Application where a European Protected Species has been identified and will be affected by the work for which the Planning Application seeks consent.

In addition Local Planning Authorities in accordance with the obligations placed upon them by way of their duties under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579) have to take into consideration the presence of a

European Protected species (EPS) before determination of an application where it/they have been identified.

7.3 The LPA need to consider the mitigation in relation to the potential success of a Natural England licence application and/or if in their opinion the mitigation is considered as being appropriate, or if it is over and above what is required; if they determine that the mitigation is appropriate then a Planning Condition should be attached requiring the roost provision to be implemented.

If the LPA consider that the mitigation is over what is necessary but require "enhancement" as part of their Local Biodiversity/Net-Gain Planning Policies this should be included in the terms of Consent. The acting bat ecologist deems the proposed new roost creation as appropriate and not over and above what is required.

7.4 **Notwithstanding that Planning Consent is granted or equally if the work is undertaken outside of the planning system, whereby projects that do not require planning consent may affect bats or their roost, including disturbance, it does not absolve the applicant, site owner, developer or any other party involved with the work from ensuring that an application is made for a Natural England development licence, to legally undertake work that will affect bat(s) or their roost(s).**

If work is undertaken without a licence and bat(s) or their roost(s) is/are affected then a breach of current wildlife legislation will occur for which penalties are severe.

7.5 Under Regulation 53(1) and 56(3)(a) of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), a licence is required prior to disturbing bats or destroying/damaging or obstructing any place that is used by bats as a resting place or breeding site. The licence is issued by the EPS Licensing Team of Natural England.

Summary of Mitigation

7.6 The demolition of the existing building at 6-8 Carlin Gate to allow the future redevelopment of the land is the key component of the applicant's plans for the site; however it is acknowledged that the presence of roosting bats needs to be addressed from both a legal and conservation perspective.

The mitigation proposals outlined in this report are seen to be the most productive way forward that will retain long term roosting opportunities for bats.

7.7 No foraging habitat will be lost as a result of the proposals, and all proposed new roost(s) will not be at any further distance from valuable foraging areas of the site.

7.8 To ensure that bats are not left without a roost while the work takes place one Schwegler 2F bat box (or suitable equivalent) will be mounted on a tree in proximity to the survey area. The box will act as a receptor should bats have to be captured and relocated during the work schedule (See Figure 7.1). Should this tree not be retained under the development proposals, alternatives including pole-mounted boxes may be considered.

The receptor bat box will act as a receiver box for if bats have to be captured by hand and relocated to it by the ecologist during the work schedule; it will be retained permanently post-development to provide a permanent roost opportunity for bats.

Figure 7 - *Proposed location of receptor roost [ ] (Google Earth, 2020), and 2F Schwegler Bat box (overlayed)*

Assigned Ecological Clerk of Works - EcOW

7.9 At the pre-commencement stage a suitably qualified Ecologist is to undertake induction 'toolbox talk' on possible bat presence and present/discuss document features taken from the license i.e. License, Method Statement, Mitigation Figures and Work Schedule to be kept on site for the duration of the work.

Prior to any work being undertaken the presence/absence bats as far as is possible will be established by undertaking detailed investigation of the areas at which bats have been observed using the building; typically at the northern elevation at the open eaves of the building. The ecologist will supervise careful dismantling of all places that will be removed as part of the proposed work which have been identified as offering roost access or roost potential at the ecologist discretion. In addition wherever opportunities for bats exist in other parts of the building the supervised dismantling will extend to these areas with strategies for safely removing bat(s).

All dismantling of roost features will be undertaken during favourable weather conditions.

An increase in external lighting is expected during the works; should additional lighting be installed it must be directed away from any bat roost access points, flight paths and foraging areas.

Mitigation proposed is subject to the approval of the Natural England EPS team; all proposed roost provisions outlined hereafter will be dedicated for bats and permanent.

7.10 Work undertaken by the Ecologist

Capture/Exclusion: Once an EPSML licence is in place the contractor will provide a safe means of access to allow the ecologist to investigate the confirmed roost area for bat presence at 6-8 Carlin Gate.

In addition wherever opportunities for bats exist in other parts of the building the supervised dismantling will extend to these areas at the discretion of the ecologist in attendance. In the event of bat(s) being present, it/they will be removed, placed in a secure box with soft tissue and immediately transferred into the receptor bat box that will have previously been erected on a tree nearby as indicated in Figure 7.1. Once it has been established by the ecologist that bat(s) are absent the building works will continue to completion.

In the unlikely event that bats are found outside of supervision time, then as legal requirement and conditions of the granted licence work will immediately cease and the ecologist contacted for further advice; contractors must not touch, handle or in any way cause bats to move.

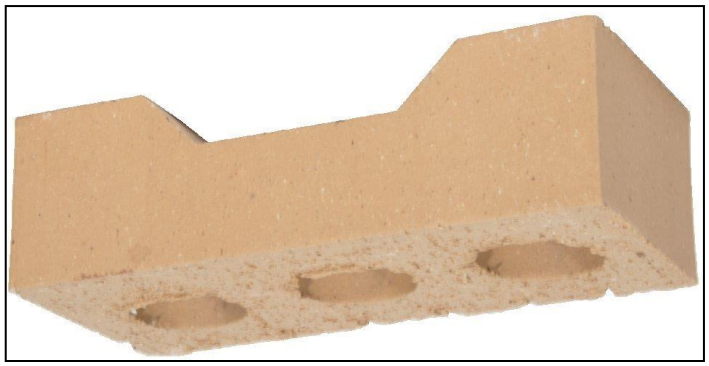
7.11 Work undertaken by the Contractor

A number of viable ingress points and roosting opportunities were identified at 6-8 Carlin Gate, notably including gaps in the render, missing tiles and flashing, and warped wooden cladding, which will be lost during the redevelopment of the site; new roost provision is therefore recommended to be built into the design of the redevelopment of the site. No plans for the new development at the site have been provided, however indicative mitigation that might be implemented subject to the suitability of any new buildings is given below:

- New roosting provision will be re-created in the form a bat brick on the northern elevation of a new building: the bat brick will be installed under the eaves with the entry hole at the top to make an inconspicuous access point.

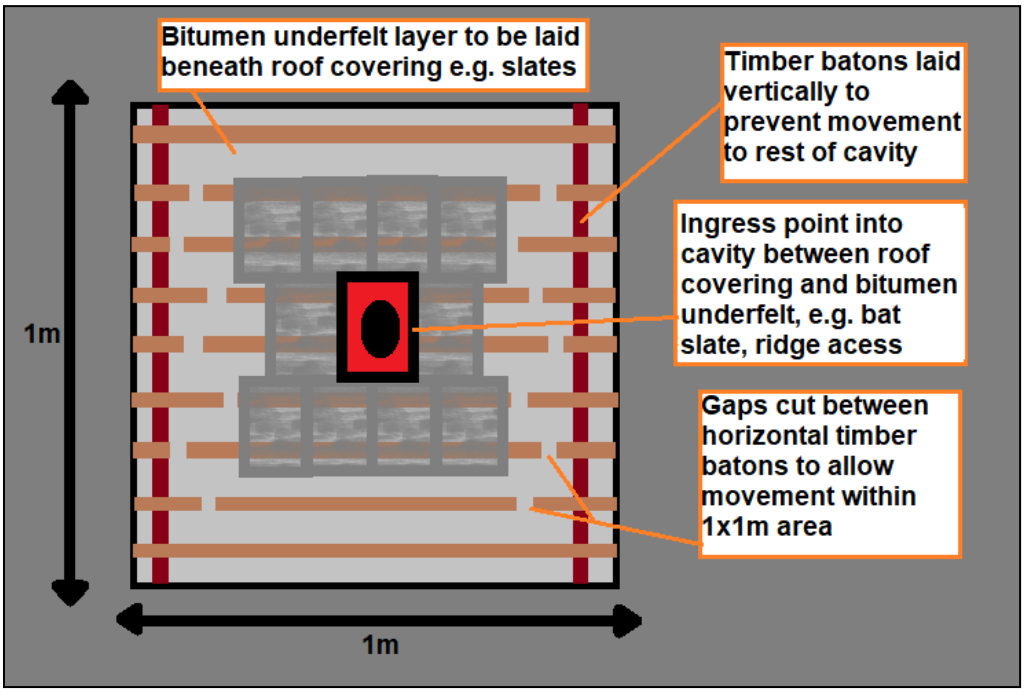
- As part of this roost creation process it is imperative that traditional bitumen 1F roofing felt will be used as the chosen **local** underfelt/roof lining as opposed to any breathable roofing membrane (BRM). Modern breathable roofing membranes (BRM) entrap bats through wear and tear in the synthetic polymers used to protect the breathable membrane causing bats harm, injury and death. Where bitumen 1F felt is not the chosen roof lining for the building, an area of the felt may be instated in a $1m^2$ area around the access points; however, this must be separated from the rest of the roof space using timber roofing batons to prevent bats moving out of this area.

See below for illustrative descriptions of new roost provision.



The bat brick should be placed with the entrance hole at the top, at wall plate level on the southern elevation of the north-east wing.

https://www.nhbs.com/bat-brick?bkfno=197697



Breathable Roofing Membranes (BRMs) can trap the feet of bats, resulting in death or injury. It is therefore essential that any ingress points lead to areas lined with traditional bitumen 1F underfelt which is bat safe. It is also essential that there is no access to areas lined with BRM from the ingress point; therefore sections of timber baton must be laid vertically between the horizontal roofing batons, effectively preventing movement between areas.

This area of Bitumen 1F underfelt should be incorporated during the roofing of the new development, with the bat brick installed at the northern elevation.

7.0 References

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Appendix I: *Preliminary Roost Assessment (Bats)* (Contract Ecology Ltd, March 2020)