

HAWKESWOOD ECOLOGY

Specialists in Ecological Survey and Assessment

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PRELIMINARY ROOST ASSESSMENT AND OBSERVATION SURVEY, MELYN CLOSE, NEATH.

On behalf of

TAI TARIAN LTD

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All habitat and protected species surveys present a ‘snapshot’ of conditions existing and species present, or considered having potential to be present, at the time of survey. Many species are mobile and distributions can vary across time. Results and findings presented in this report should be considered with these factors in mind.

Protected species surveys are recognised as having a ‘shelf life’ of two years maximum. Surveys older than this are unlikely to be accepted by a Local Planning Authority or Natural Resources Wales as viable documentation.

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SUMMARY

Hawkeswood Ecology was instructed to carry out a daytime Preliminary Bat Roost Assessment (PRA) at Melyn Close, Neath. The building is a block of flats which originally had a flat roof but has been modified on a number of occasions with works including the provision of a 'false' double pitch roof and external wall insulation cladding. It is proposed to demolish the existing building and replace with an affordable housing development on the same Site.

The building is a concrete framed structure of five storeys. Originally a flat roofed structure it has had a double pitched roof built over. This is covered with composite slate tiles and underlined with bitumen felt. The original building showed very few opportunities for bat access during the Preliminary Roost Assessment (PRA) with missing tiles on the roof presenting the only obviously opportunities. As a result of this, the building was considered to be of low potential to support roosting bats and a single observation was recommended in accordance with current guidance. The building was also assessed for breeding birds over the course of the surveys.

The PRA found no evidence of bats with only limited potential for bats to access the building interior. The observation found fairly consistent foraging by a small number of soprano pipistrelle bats to the rear of the flats and a passage of bats from housing to the east. Common pipistrelle, whiskered and noctule bats were also recorded overflying the Site in small numbers.

A soprano pipistrelle was observed emerging from the pier support of the lower walkway balcony at the rear of the building (see report text). No other activity was recorded to suggest use of the building by roosting bats and it is considered that this represents an opportunistic roost for a solitary animal. Such is the building construction that such roosts may be present between the cantilever supports to the balcony and the concrete balcony base itself in this part of the structure. No significant roost is considered present and the roost is an opportunistic day roost for a single or possibly small number of animals. However, due to timing constraints with the survey, particularly the lateness of the observation survey, a worst case scenario has been adopted where an assumption of a high status roost being present has been considered and compensated for.

No breeding bird species associated with the building were noted during the Site visits.

As a day bat roost for a single or possibly small number of soprano pipistrelle bats has been identified in the building a European Protected Species Derogation Licence will need to be obtained from Natural Resources Wales if any works affecting the roost is undertaken.

The conclusions of this report are considered valid for two years from the survey dates noted in Section 1 of the report.

1 INTRODUCTION

- 1.1 Hawkeswood Ecology was instructed by Tai Tarian Ltd to undertake a Preliminary Bat Roost Assessment (PRA) and an observation survey at Melyn Close, Neath in relation to a block of flats. The building stands in a heavily developed area of Neath with a wooded bank approximately 50 metres to the east and the Neath Canal approximately 100 metres to the west; the River Nedd is approximately one hundred metres beyond that. It is located at Grid ref SS 74481 96175.
- 1.2 The flats are five storey and date from the 1970's. They were originally flat roofed but a double pitch roof has been retro-fitted; that roof is covered with composite slate tiles with bitumen underfelt. Externally they have been clad with External Wall Insulation and have glass and plastic fronted balconies.
- 1.3 The objectives of the survey were to:
 - To establish whether the building is currently used by bats;
 - To assess the potential impacts on bats of the proposed works;
 - To provide mitigation proposals in the case of bats being found.
- 1.4 The PRA was carried out on 6th August 2019. A single dusk emergence observation was carried out on 2nd September 2019. Any evidence of breeding birds using the building was also looked for during the survey period.

2. METHODOLOGY

Desk Top Study

- 2.1 Hawkeswood Ecology records were searched for data in the local area. Hawkeswood Ecology has carried out survey work in the immediate area of the flats in the last 5 years and given the location of the building, this was considered to be a commensurate level of search.

Field Survey

- 2.2 The study methodology followed accepted guidelines set out in the Bat Conservation Trust documents '*Bat Surveys for Professional Ecologists, Good Practice Guidelines*' 2016.
- 2.3 The principal aim of the daytime inspection was to survey the main structures of the building for the presence of, and potential to, support roosting bats. Firstly, an external examination was made of the design and structure of the building to assess the suitability for use by bats and for potential access points. Following this an internal search of the building was made. Evidence such as bat droppings (faeces) or urine staining on doors, walls or other surfaces was looked for.
- 2.4 The daytime inspection was carried out with the aid of close focusing binoculars, an endoscope, ladders and a 1,000,000 candlepower spot lamp (but see constraints).

- 2.5 Observations involved three observers and covered all relevant aspects of the buildings. Machines used were Echo Meter 3 Real Time Expansion units. All machines automatically record bat calls. Locations of the observers are shown in Figure 1.
- 2.6 Recordings were made continuously on the EM3 machines. The recordings were analysed using AnalookW and Batsound software, by use of which it is possible to separate most species present from the sonograms produced.

Constraints

- 2.7 The building is a five storey structure and direct observation of the roof was not possible; the position of the observers allowed a clear assessment as to whether any bats above the building were overflying or could have emerged.
- 2.8 The survey and single observation were undertaken late in the season. Although this means a full assessment over the season could not be carried out, the potential for the building to support bats was considered low and it is unlikely that it would support a significant roost of bats due to its construction and later 'improvement' works. This is not considered to be a major concern in this instance however, the recommendations made do allow for the potential use of the building as a high status roost.

3. SURVEY TEAM EXPERIENCE

- 3.1 The survey leader and report author is Eric Hawkeswood. Eric has been an active member of the Brecknock Bat Group since 1999 and been involved in a number of long running surveys within the county. He is a Natural Resource Wales (NRW) and Natural England licensed bat worker (nos. S085546-1, 2018 and 2017-28420-CLS-CLS respectively) and has extensive experience of roost inspections and emergence work. He has been a professional in the nature conservation field for thirty years formerly working as Reserves Manager and Conservation Officer at Gwent Wildlife Trust and Woodland Manager for the Ruperra Conservation Trust. Eric has worked as an Ecological Consultant as joint proprietor of Hawkeswood Ecology since 2001.
- 3.2 Assistant surveyors on the evening observation were Emma Adamson, Liam Kelly and David Norton. Emma has worked with Hawkeswood Ecology for over 12 years and Liam since 2012. Both have extensive experience of emergence/re-entry surveys. Emma and Liam were paired together for safety reasons. David has started working with Hawkeswood Ecology this year. He has received appropriate training and works under close supervision.

4 DESK TOP STUDY FINDINGS

- 4.1 Hawkeswood Ecology hold records of common and soprano pipistrelle and noctule bats from the immediate area of Melyn Close. These records are from an earlier survey undertaken on an adjacent building in 2013.

- 4.2 From a Site approximately 400 metres to the east there are records of *Myotis* species bats and brown long-eared bats as well as pipistrelles and noctule; there are also records of a noctule from a site approximately 750 metres to the north east.
- 4.3 Further records of common pipistrelle and common and soprano pipistrelle come from sites approximately 900 metres and 2 kilometres to the south west.
- 4.4 The Site does not fall within 10 kilometres of a Special Area of Conservation (SAC) or Sites of Special Scientific Interest (SSSI) notified for the presence of bats.

5 **FIELD SURVEY**

Daytime Inspection

- 5.1 The building appears to be a concrete framed structure which is faced with brick and block, the upper three storeys have been clad with External Wall Insulation (EWI) and there are full height balconies of UPVC and glass.
- 5.2 The original build was with a flat roof which has been overbuilt with a later double pitch roof of lightweight truss construction. The gables of this part of the building are of block construction. It is assumed that cavities are present in the walls.
- 5.3 There was no access possible to the flats below, the communal access areas showed a well sealed ceiling and no opportunities for bats to access the original building. The double pitch roof is covered with composite slate tiles with bitumen underfelt. Some tiles were seen to be broken, but no direct evidence of bats was found either internally or externally. Photographs of the building are given in Appendix 1.

Surrounding area

- 5.4 The immediate surrounding area is dense urban housing, with woodland approximately 50 metres to the east and the Neath Canal approximately 100 metres to the west and the River Nedd approximately one hundred metres beyond that.

Evidence and Potential for roosting Bats

- 5.5 The PRA found no direct evidence of bats using the building. Very limited access to the roof space was noted via the broken tiles. No obvious access for bats was identified elsewhere due to the EWI cladding and the building was considered to be of Low potential to support roosting bats; as such a single observation was carried out in line with the accepted guidelines.

Birds

- 5.6 No evidence of breeding birds having used the building was noted during the PRA.

Observations

- 5.7 A dusk observation was carried out on 2nd September 2019. The conditions at the time of the observation are detailed below in Table 1:

Table 1: Weather conditions for dusk observations:

Date	Survey type	Times	Weather conditions
1 st September 2019	Evening emergence	19.50 – 21.05 (sunset 20.00)	15 -15°C, ~80% cloud. Dry, good visibility, F1 gusting F2 SW breeze.

- 5.8 Activity was limited to small numbers of bats with a small number of soprano pipistrelle bats from the south east which foraged in the grounds at the rear of the building between it and Helen's Road. The first bat noted was a soprano pipistrelle at 20.12 with another shortly after, both bats entering the Site from the south east. **At 20.13 a soprano pipistrelle emerged from a gap between a balcony floor and the supporting concrete pier.**
- 5.9 No further activity was associated with the building but pipistrelle foraging activity continued sporadically throughout the observation. Other species recorded included common pipistrelle and noctule, the latter overflying the Site. At 20.52 a *Myotis* species bat flew from the rear of the building (EA) and past the observer at the front northern end of the flats (EH).

6 ECOSYSTEM RESILIENCE

- 6.1 Under the Environment (Wales) Act 2016 Local Planning Authorities (LPA's) and other public bodies must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems. LPA's are directed to consider the resilience of ecosystems early in the planning process to aid assessment of the impacts of any proposed development upon biodiversity.
- 6.2 The premise for Ecosystem Resilience is laid out in Section 4 of The State of Natural Resources Report, a 2018 document produced by Natural Resources Wales (NRW) on behalf of the Welsh Government. It lays out a framework for assessing ecosystem resilience. However, despite the duty placed on LPA's, there is no currently agreed format for this assessment.
- 6.3 Section 4 names five attributes that NRW consider 'building blocks' of ecosystem resilience, these are:
- Diversity
 - Extent
 - Condition
 - Connectivity
 - Adaptability
- 6.4 These factors are considered below, although none of them are considered 'stand alone' and all interrelate to some extent. It is also important to note that it is the responsibility of the LPA to assess Ecosystem Resilience and that any Site based report is not able to

make judgements on a wider scale. It should also be acknowledged that there is as yet no agreed format to undertake such an assessment.

Diversity

- 6.5 The habitats on Site can be placed into two distinct areas, the built landscape of Melyn Close flats and amenity areas which include formally mown grassland and hard-standing. There is a small area of scrub to the rear of the building, mainly associated with the retaining wall of Helen's Road, and this is to be retained post development and re-instated as necessary (see Landscape drawing 19.12.16 R482-P-04C). It is considered overall that habitat diversity on Site is low leading to a probable low diversity of species with limited opportunities for foraging bats. There was no evidence of breeding birds using the buildings during survey.
- 6.6 The Site is relatively isolated within the built environment of the Melyn which will restrict its value and limit its potential to support species. As noted elsewhere, it is approximately 50 metres from woodland and 100 metres from water habitats so there is potential for animals to use the Site to and from foraging and roosting areas and this will particularly relate to bats. The Site is small and offers little value for foraging birds.

Extent

- 6.7 This is a key factor in this Site, particularly with the majority of the associated land being either built on or hard standing (car parking, drying areas, recycling areas etc). The whole Site is approximately 0.19Ha, including the built areas with approximately 0.06HA to formally mown grass and a small area of scrub. Its small size is further impacted upon by the lack of connectivity to other habitats.

Condition

- 6.8 The Site is not in good condition for biodiversity. The grassland is managed by mowing and is typical of many urban grassed areas. The building offers no opportunities for breeding birds and is very limited in relation to roosting bats. There is very limited potential for common birds to utilize the scrub for breeding but even this area is unmanaged and subject to regular interference and rubbish tipping.

Connectivity

- 6.9 The Site is relatively isolated in the urban environment and does not lie on any specific wildlife corridor. As the survey has shown, bats can and do utilize the site for foraging purposes and a single bat was noted using the building as a day roost. The activity through the survey shows the Site to be used by bats soon after emergence and then less so as the evening passed. It is assumed bats are making their way to foraging areas within the nearby wooded or saltmarsh areas.

Adaptability

- 6.10 NRW comments that:
'Adaptability differs from the other attributes because it is part of the definition of resilience rather than an attribute that supports it. However, its inclusion in the Environment (Wales) Act is important because it emphasises one of the most important features of resilience: dynamism and the ability to adapt to change.'

- 6.11 NRW also comments that '*Adaptability cannot yet be quantified in an equivalent way to the other attributes and so we have not used it in the assessment of resilience in this State of Natural Resources Review*'. As such this cannot be considered in this report.

7 DISCUSSION AND IMPACT ASSESSMENT

- 7.1 The daytime inspection of the buildings found no direct evidence of bats using the buildings but did find limited potential for them to gain access to the roof via some broken tiles. The whole of the roof was not visible from the ground, but apart from the observed broken tiles, it seemed to be in generally fair condition. Apart from this the fabric of the building was well sealed by the External Wall Insulation and glass fronted UPVC balconies. No direct evidence of bats was found in the loft space which was fully accessible.
- 7.2 The flats had a 'false' double pitch roof built over the original flat roofed structure. These are normally covered with light gauge metal sheets designed to mimic tiles or slates, however in this instance, composite slates had been used as with a normal roof cover. Because of this, and the damage that was evident to a small number of tiles, a single observation was recommended.
- 7.3 The soprano pipistrelle bat emerged during the observation emerged from an unexpected location, an gap between a concrete supporting pier, or cantilever, and the concrete walkway floor at the rear of the building allowing access to the flats on the second floor (see photographs). It is considered most likely to be an opportunistic day roost and may be used as it is adjacent to a heating flue. It could also possibly be a mating roost although no specific social activity was recorded near it and the animal was seen simply to fly from the roost.
- 7.4 The building is not considered to be a suitable hibernation site due to the well sealed nature of it.

Potential Impact on Bats

- 7.5 The loss of the building will result in the destruction of an opportunistic soprano pipistrelle bat day roost. Foraging bats were noted to the rear of the building particularly during the observation and any development has the potential to deter animals from this location if not mitigated for. Given the very limited potential for bats to access the building and the apparent opportunistic nature of the roost it is considered that the proposed works will have **no impact** upon the favourable conservation status of bats within the local area if appropriate compensation is provided.
- 7.6 As a soprano pipistrelle bat roost has been identified, a derogation licence will need to be sought from Natural Resources Wales (NRW) before any demolition works can commence. The works will need to properly address the potential for bats to be present and to offer appropriate compensation in the new build. A licence application to NRW must be accompanied by a detailed Method Statement showing how the works can

proceed safely in relation to bats and what measures will be taken to protect and enhance the local environment for them. The application must set out clearly why the destruction of the bat roost is justified.

Birds

- 7.7 No breeding bird species were noted. The proposed works will be of **no significance** in relation to nesting birds in either a local or wider context.

8 RELEVANT LEGISLATION

Birds

- 8.1 Part I of the Wildlife and Countryside Act 1981 (as amended) makes it an offence (with certain limited exceptions and in the absence of a licence) intentionally to kill, injure or take any wild bird, or intentionally to damage, take or destroy its nest whilst being built or in use, or to take or destroy its eggs. Consequently, even common birds such as blackbirds or robins, and their nests and eggs are protected in this way. Any works involving removal or other management of trees or shrubs must be undertaken outside the breeding bird season (March- August).
- 8.2 Further, section 1(5) of Part 1 of the W&C Act states any person intentionally disturbing any wild bird included in Schedule 1 whilst it is building a nest or is in or near a nest containing eggs or young or disturbs the young of such a bird is committing an offence and liable to a special penalty.
- 8.3 The Conservation of Habitats and Species Regulations 2017 has strengthened the protection of wild birds and their habitats. The amendment is “To help preserve, maintain and re-establish habitats for wild birds.”
- 8.4 Under the amended Regulations, Local Planning Authorities (as well as national statutory conservation bodies such as Natural Resources Wales) are required to protect, enhance and create bird habitat.

Bats

- 8.5 British bats are protected under the Wildlife and Countryside Act 1981 (as amended). Schedule 5 of this act made it illegal to intentionally kill, injure or take any British bat. It is also an offence to intentionally damage or destroy their place of rest (the roost).
- 8.6 Further all bat species are protected under Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (The Habitats Directive) as amended which requires the United Kingdom government to provide bats with strict protection.
- 8.7 The Habitats Directive is transcribed into England and Wales Law by The Conservation of Habitats and Species Regulations 2017, this legislation consolidates amendments made to the earlier 2010 act. This legislation states in Part 3, Protection of Species, paragraph 43(1) that a person who:

- (a) deliberately captures, injures or kills any wild animal of a European protected species,
 - (b) deliberately disturbs wild animals of any such species,
 - (c) deliberately takes or destroys the eggs of such an animal, or
 - (d) damages or destroys a breeding site or resting place of such an animal,
- is committing an offence.

- 8.8 Further, with regard to disturbance of EPS, Paragraph 43(2) that disturbance is an act which is likely to:
- (a) to impair their ability—
 - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 - or
 - (b) to affect significantly the local distribution or abundance of the species to which they belong.
- 8.9 In the case of a development involving the loss or modification of a building which may affect bats the above legislation must be considered and it may be necessary to apply to Natural Resources Wales (NRW) for a European Protected Species Licence (EPSL).
- 8.10 The introduction of the Conservation of Habitats and Species Regulations 2017 has removed the defence of killing or injuring a protected species during a lawful operation, thus even in an instance where planning permission is granted, the presence of bats must be considered and mitigated for prior to commencement of works. Under the above regulations, a NRW licence can only be given if three tests are satisfied:
- The action proposed is in the interest of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance to the environment;
 - That there is not a satisfactory alternative;
 - That the action proposed will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 8.11 Failure to satisfy the regulations and obtain an EPSL where required is likely to result in prosecution and can lead to severe fines of up to £5000 per bat and possible imprisonment.
- 8.12 Eight species of bat are listed under section 7 of the Environment Wales Act (2106). Section 7 of the Act provides a list of living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. This is a list of species considered at threat within Wales and in need of conservation management to maintain and enhance population numbers.
- 8.13 A duty is placed on the Local Authority by the Welsh Assembly Government to maintain and enhance populations of species listed in Section 7.

TAN 5

- 8.14 Planning Policy Wales Technical Advice Note (TAN) 5, Nature Conservation and Planning, provides advice on how the planning system should contribute to biodiversity protection and enhancement. TAN 5 recognises the importance of biodiversity and the enjoyment of it. TAN 5 requires Local Planning Authorities (LPA's) to protect and enhance biodiversity during the planning process and to encourage sustainable developments. It also requires LPA's to ensure that protected Sites are properly accounted for within the planning system.

9 RECOMMENDATIONS

- 9.1 The opportunistic roost will be destroyed as the building is to be demolished. An Ecological Clerk of Works will be appointed to oversee ecological issues through the development period. The ECW will be available to oversee planned works affecting protected species and also be available on standby to assist in the case of unforeseen ecological issues arising.
- 9.2 The building has been identified as supporting an opportunistic day roost of a single soprano pipistrelle. A derogation licence will therefore be required before the works can proceed. Due to the timing of the survey the compensation roost will be based on a worst case scenario and part of the new development will allow potential for a high status roost (maternity).
- 9.3 The applicant must show in the licence application that the works satisfy the 'three tests' of the Conservation of Habitats and Species Regulations (2017). These are detailed in Section 7, Relevant Legislation and Policies, paragraph 7.10.
- 9.4 The application for an EPSL must be accompanied by a detailed Method Statement showing the measures to be taken to protect bats during the works and to mitigate and compensate against any unfavourable impacts in the longer term. The Method Statement will detail the necessary requirements of the renovation process to secure the safety of any bats present; it will identify timing requirements and how bats are to be excluded or otherwise removed from the building. An application for a derogation licence can only be undertaken once planning permission has been granted. NRW aspire to turn-round a licence application within thirty working days if all the relevant and required detail is provided at the application stage.
- 9.5 Mitigation and compensation **must** be appropriate and as a minimum must maintain the favourable conservation status of the species affected. Compensation proposals will include both temporary (whilst the works are in progress) and permanent provision (in the new build) suitable for the species present. Given the presence of common pipistrelle in the locality and the similarity of roost spaces these two species will use, it is recommended that the application is made for the presence of both soprano and common pipistrelle.

- 9.6 Bats are mobile species and can use a number of roosts or change roosting places through the year; as such the works will take account of the potential for bats to be present at any time during the works.
- 9.7 Guidance on appropriate mitigation is shown in **bold type** in Table 2 below. It is considered in this instance that the roost is of low conservation importance. It is important to note that whatever the conservation importance of a roost, it remains fully protected under European and UK law even if the bats are not present.

Table 2: Guidelines for Proportionate Mitigation (English Nature Bat Mitigation Guidelines – bold font indicates status of the present roost and appropriate mitigation)

Conservation significance	Roost Status	Mitigation Requirement
	Feeding perches of common/rarer species	Flexibility over provision of batboxes, access to new buildings etc. No conditions about timing or monitoring
Low High	Individual bats of common species	
	Small numbers of common species. Not a maternity site	Provision of new roost facilities where possible. Need not be exactly like-for-like, but should be suitable, based on species' requirements. Minimal timing constraints or monitoring requirements
	Feeding perches of Annex II species	
	Small numbers of rarer species. Not a maternity site	
	Hibernation sites for small numbers of common/rarer species	Timing constraints. More or less like-for-like replacement. Bats not to be left without a roost and must be given time to find the replacement. Monitoring for 2 years preferred.
	Maternity sites of common species	
	Maternity sites of rarer Species	Timing constraints. Like-for-like replacement as a minimum. No destruction of former roost until replacement completed and usage demonstrated. Monitoring for at least 2 years.
	Significant hibernation sites for rarer/rarest species or all species assemblages	
	Sites meeting SSSI Guidelines	Oppose interference with existing roosts or seek improved roost provision. Timing constraints. No destruction of former roost until replacement completed and significant usage demonstrated. Monitoring for as long as possible.
	Maternity sites of rarest species	

Toolbox Talk

- 9.8 Prior to the commencement of any works affecting the bat roost, a toolbox talk will be undertaken with all relevant members of staff working on the project. The toolbox talk will provide details of basic bat ecology, the species involved and the applicable legislation. Before works commence, a temporary bat box will be placed at a location agreed with the ECW to support any bats found during the demolition. This will be a simple timber bat box and will be fixed at an appropriate location on the Site or near to it on land in the ownership of Tai Tarian Ltd.; the box location will be selected by the ECW. The bat box will be left in place for the duration of the works and flight access to it will not be obstructed.

Demolition works

- 9.9 The building is currently largely occupied and currently Hawkeswood Ecology does not have a timetable for works. The status of the roost does mean that there are no timing restraints however.
- 9.10 The gaps between the concrete piers and balcony walkway will be inspected by the ECW before any dismantling of them occurs. All such structures will be inspected as there is a possibility that further roosts could be present in them if available.
- 9.11 If bats are not present they will be sealed with either a silicon sealant or expanding foam following inspection to prevent re-entry. Should a bat be present, the roost will be monitored during the evening and the access sealed once the bat has emerged.
- 9.12 The roof cover should be carefully removed. Given the height of the structure, advice will be needed on how best to safely remove the tiles. We would suggest that at least the bitumen underfelt is removed by hand internally prior to any other works and this work is carried out under ecological supervision. No bats were noted emerging from the roof, however best practice would imply a safe demolition method is necessary.
- 9.13 A temporary bat box will be fitted in an appropriate location (to be agreed with the ECW) before works commence.

Mitigation

- 9.14 Pipistrelle species bats are crevice dwelling bats, normally residing in such places as behind bargeboards, soffits, between the roof slates and underfelt, on wall tops and in the wall rubble, in ridge tiles and in the cavity walls of buildings. Provision of integral mitigation within the new build must be aimed at ensuring the continued presence of the species affected and maintaining the Favourable Conservation Status of the species present in the long term.
- 9.15 Permanent bat compensation is proposed in the new build. One roof on Building B will be developed to allow access for bats and will have bitumen underfelt provided with no Breathable Roofing Membrane present. Bat access points to this roof will be cut into the soffit and will be 15mm deep by 75-100mm in length allowing bats to crawl into the soffit and then into the cavity and wall top. This mitigation is detailed in drawing number 19.12.17-R481-P-10, Block B (elevations and Section).

- 9.16 In addition a number of integral bat boxes will be incorporated in the new build walls at locations shown in the planning drawings (and see Figure 2). A typical example of such boxes is shown in Figure 3.

Artificial Lighting

- 9.17 All bat species are affected by artificial light to a greater or lesser extent. Their emergence time may be delayed if exit points are lit or they may no longer enter the Site. This can have an impact upon their foraging success. Consideration will therefore be given to the level of external lighting around the Site. If lighting is considered necessary, installation of security or other external lighting will be:
- Located with consideration for bats and other nocturnal species, i.e. any lights will be pointed towards the ground and not to the surrounding areas and should be no higher than 3 metres from the ground;
 - Will be confined only to areas where there is access or particular security considerations and where health and safety issues need to be considered. Light spill into the adjacent areas should be prevented.

Monitoring

- 9.18 As the buildings have been subject to licensable works and the proposals require the provision of replacement roosts, it is proposed to monitor the compensation roost and integral boxes in year 2 post construction.

General Recommendations

- 9.19 Bird boxes will also be fitted to the new build, see the planning drawings and Figure 2.
- 9.20 A soft landscaping drawing has been submitted (drawing number 19.12.16 R482-P-04C). This includes enhancements to the Site with trees planted which will add to the Site diversity and also retention and reinstatement of the scrub are to the rear of the existing building.

10 CONCLUSIONS

- 10.1 Surveys have found that the building is used as an opportunistic day roost by a single soprano pipistrelle bat. Other species recorded during survey included common pipistrelle which has similar roost requirements to the soprano pipistrelle bat.
- 10.2 A derogation licence must be sought to allow the works to proceed in accordance with the current regulations (see Section 7). It is recommended that both common and soprano pipistrelle bats are included in the licence application.
- 10.3 The recommendations made in Section 8 offer a methodology and appropriate compensation that will form the base for the detailed application and also enhancements to the biodiversity potential of the Site.

11 BIBLIOGRAPHY

Bat Conservation Trust (2016), *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. Bat Conservation Trust, London.

Mitchell Jones, A J & Robertson C J (Eds) *Bat workers Manual*, 3rd Edition, Joint Nature Conservation Committee, 2004

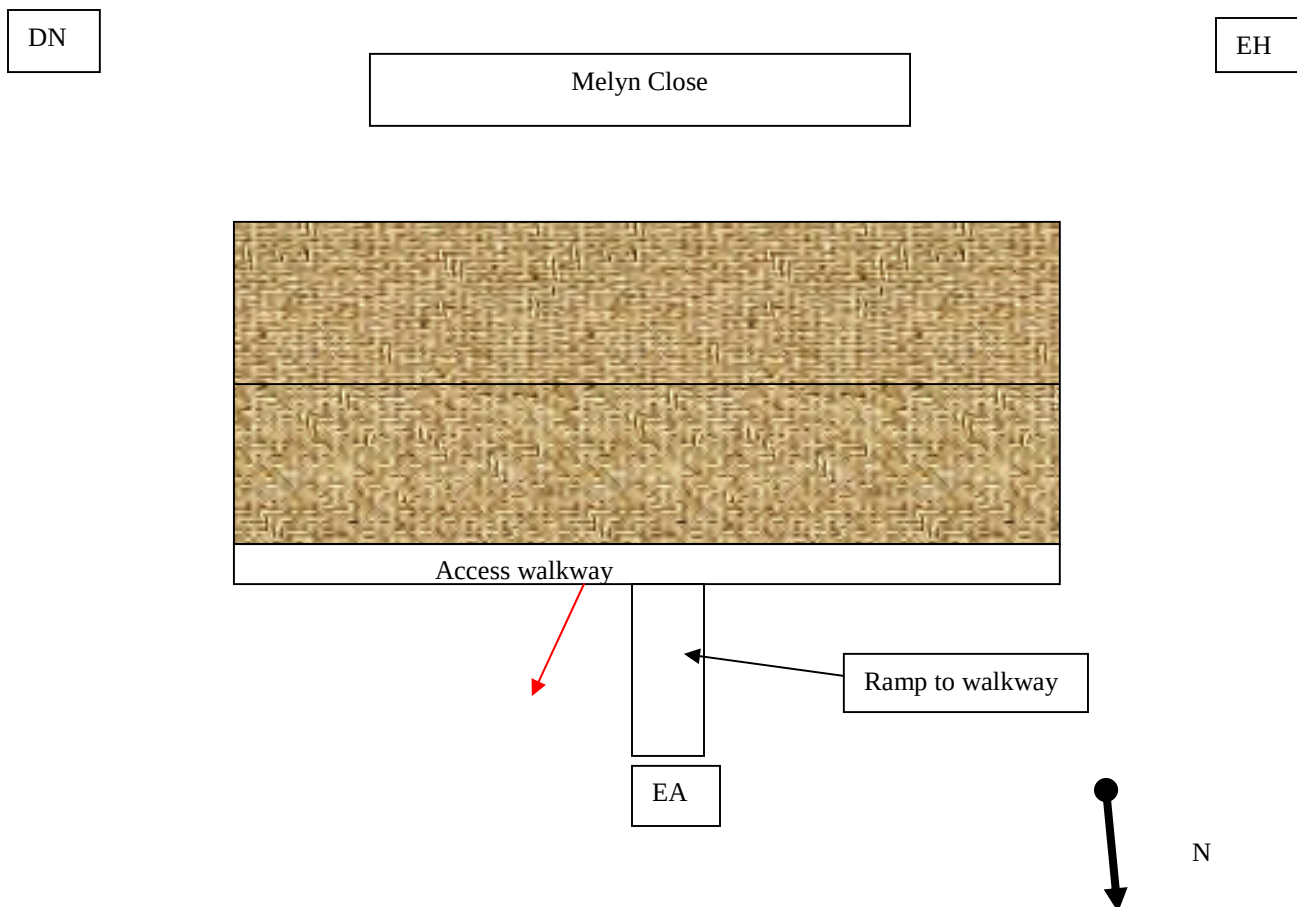
Mitchell Jones, A J, *Bat Mitigation Guide*, English Nature 2004

Russ, J. (1999) *The Bats of Britain and Ireland, Echolocation Calls, Sound Analysis and Species identification* – Alana Books.

Russ, J. (2012), *British Bat Calls, A Guide to Species Identification*, Pelagic Publishing, Exeter.

**FIGURE 1:
LOCATIONS OF THE OBSERVERS**

Preliminary Roost Assessment and Observation, Melyn Close, Neath
Hawkeswood Ecology - December 2019



Key to Observers and equipment

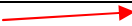
LK	David Norton
EH	Eric Hawkeswood
EA	Emma Adamson
	Emergence

FIGURE 2
APPROXIMATE LOCATION OF PROPOSED PERMANENT COMPENSATION
BOXES IN NEW BUILD (see planning drawings for full detail)

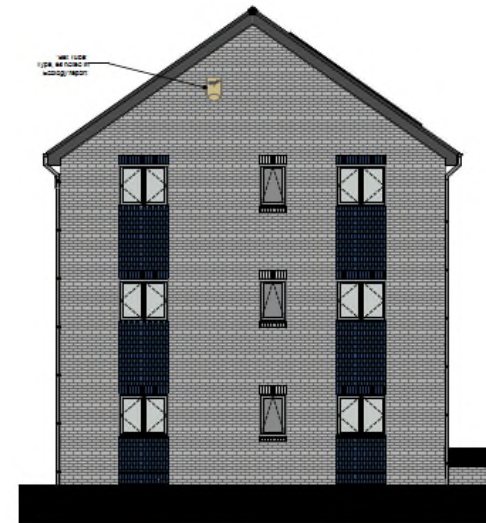
Preliminary Roost Assessment and Observation, Melyn Close, Neath
Hawkeswood Ecology - December 2019

Proposed Locations of Bat and Bird Boxes on Block A
Planning drawing 19.12.16 R841-P-08C Block A



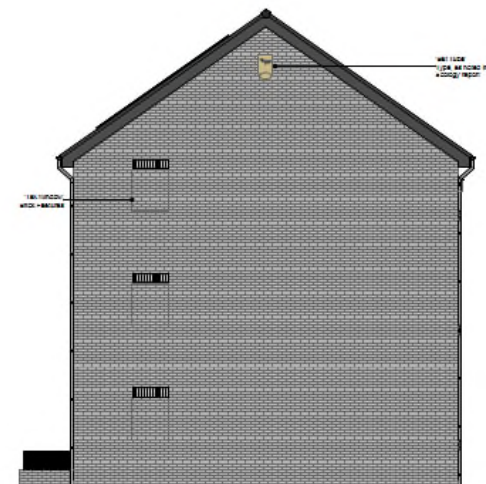
Front Elevation

1:100



Left-Side Elevation

1:100



Preliminary Roost Assessment and Observation, Melyn Close, Neath
Hawkeswood Ecology - December 2019

Proposed Locations of Bat and Bird Boxes on Block B
Planning drawing 19.12.17 R841-P-10D

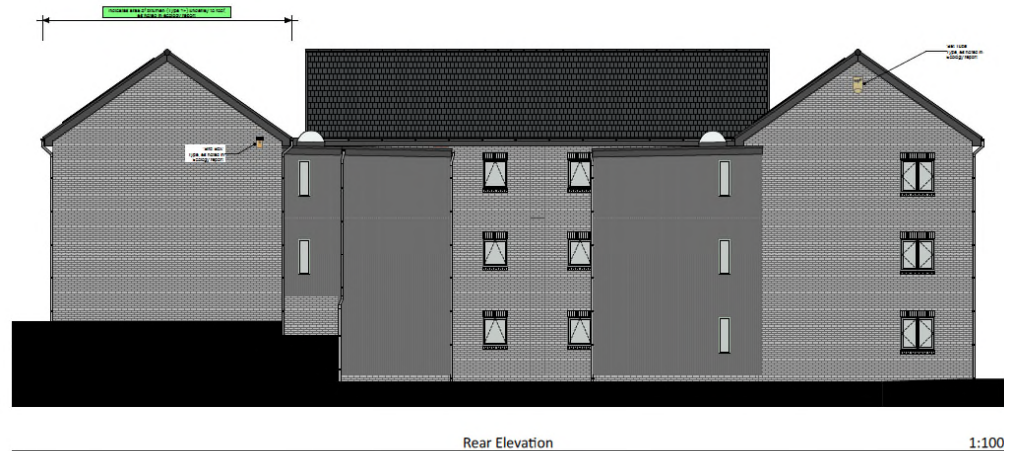
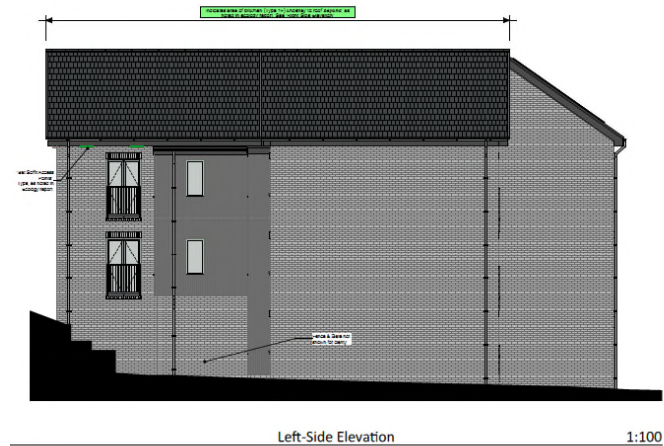
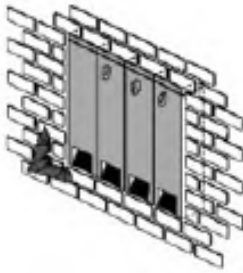


FIGURE 3
TYPICAL INTEGRAL BAT BOXES

Figure 2, Typical Integral Bat Boxes,
Schwegler tubes, can be over rendered



2FR - Bat tube

This is a slightly updated version of the 1FR and several can be installed next to each other to create a larger roost. The tubes include an internal panel to increase the roost space and also an optional passage at the rear allowing access into existing cavities.

Size: 470x200x125mm

Weight: 9.5kg



1FE - Bat Access Panel

This maintenance-free access panel can be installed in the outer skin of most cavity wall constructions due to its slim 80mm depth. The open rear also allows access into the building cavity so that bats can continue to use an existing roost space.

Size: 300x300x80mm

Weight: 7.8kg



1FR Bat Tube

The bat tube meets the characteristic behavioral requirements of the types of bats that inhabit buildings. The durable wooden rear panel maintains excellent climatic conditions and provides a surface which they can cling on to. The tube system requires no cleaning or maintenance.

Figure 2, Typical Integral Bat Boxes,
a, Habitat Custom Stone faced box



Habitat 001 - Bespoke Facing

Dimensions: 215 mm wide x 440 mm high x 102 mm deep

Material: Concrete plus facing product

Weight: approximately 7 kg

The Habitat Bat Box is a large, solid box made of insulating concrete which provides an internal roost space, and can be seamlessly integrated into the fabric of a building as it is built or renovated. Suitable for most species commonly found in the UK, this single chambered unit features an integrated V system to increase the surface for bats to roost against, whilst allowing them to move around.

The Habitat Bat Box can be faced with a number of products to suit the design build. This includes, brick, block, stone, wood or a rendered finish, ensuring the box is unobtrusive and aesthetically pleasing. There are a choice of 3 plinth colours available: smooth blue, smooth red, or buff.

This box is made to order with a choice of finishes.

BIM

BIM versions of the Habitat 001 Bat Box are available for download, to request these please contact us.

To get a quote for this product, please use the Request a Quote form below.

[Request a Quote](#)

Product Category:

Bat Boxes

**APPENDIX 1:
PHOTOGRAPHS**



The front of the building from Melyn Close



The rear of the building showing location of roost



Inside the double itch loft space, built over the original flat roof structure



A view of the western gable showing cladding and tight soffits

HAWKESWOOD ECOLOGY

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