

Arbtech Consulting Ltd
European protected species licence application
June 2013
Green Dragon Salop Road Wrexham LL13 7AF

Mitigation Licence Application for Bats

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Document 1 Background and Supporting Information

A. Executive Summary

Green Dragon Salop Road Wrexham LL13 7AF (Green Dragon) is subject to planning (pending) to convert and extend the current building to a new dwelling, planning permission is being sought.

Ecological surveys of the site identified that bats could use the building via missing tiles and soffits which are damaged/loose. No evidence of bat use was found.

Further surveys found that a roost was situated in the building under a soffit, with a common pipistrelle emerging (a maximum of 1). A small number of bats, 1 in total were recorded as emerging. This is most likely to be either a male or non-breeding female as other roosts are highly likely to be found in the wider area.

Common pipistrelles could be disturbed, injured or killed whilst works are undertaken. The roost in the roof/soffits will be lost when the extensions and remedial works occur. The roost will be compensated for its loss by installing bat boxes and bat access tiles in the building being development on site.

The impact on the populations and individual bats of the above species and within the surrounding habitat and region is considered to be of low conservation significance.

B Introduction

B1. Background to Activity/Development

Green Dragon is currently an unoccupied building and is seeking planning permission. The building will be renovated and extended to allow for the re-development of the site that is to include conversion to a dwelling.

A scoping bat survey was undertaken in April 2013 on request of the client to establish if bats were using the building for roosting. No evidence was found, however roosting features were found externally.

Two dusk surveys were undertaken these being on 10/05/2013 and 17/05/2012. The dusk surveys results showed bats emerging from soffits/fascia's these bats were of common pipistrelle *Pipistrellus pipistrellus* emerging from the main building. The building is required to be extended and renovated to make way for the re-development and therefore the roosts will be lost.

B2. Full details of proposed works on site that are to be covered by the licence

The licence is required for the renovation and extension of the building. The work is part of the redevelopment of the site described above and planning is being sought.

C. Survey and Site Assessment

C1 Pre-existing information on the bat species at the survey site

No previous records on the site existed before the scoping bat survey was undertaken.

The NBN has been consulted, however no data can be reproduced for commercial purposes.

C2 Status of bat species

Common pipistrelle (Pipistrellus pipistrellus)

This species are common and widespread, found throughout the UK. The species appear to be equally abundant as soprano pipistrelles having a combined estimated UK population of two million making them by far the commonest of our bats.

C3 Objectives of survey

To examine the buildings at the site, to determine the presence or likely absence of bats and to advise on any necessary bat mitigation and compensation measures. The results of survey have been recorded and an assessment of the likely impacts for the proposed work has been made. The survey results have been used to propose a compensation and mitigation strategy to be able to undertake the proposed works with minimal disturbance to bats and ensuring the status of bat species on site is protected and maintained.

C4 Plan/map of survey

Green Dragon lies close to Wrexham at grid reference SJ336497 or nearest postcode LL13 7AF (see Figures 1 and 2).

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Figure 1 Site location near Wrexham.

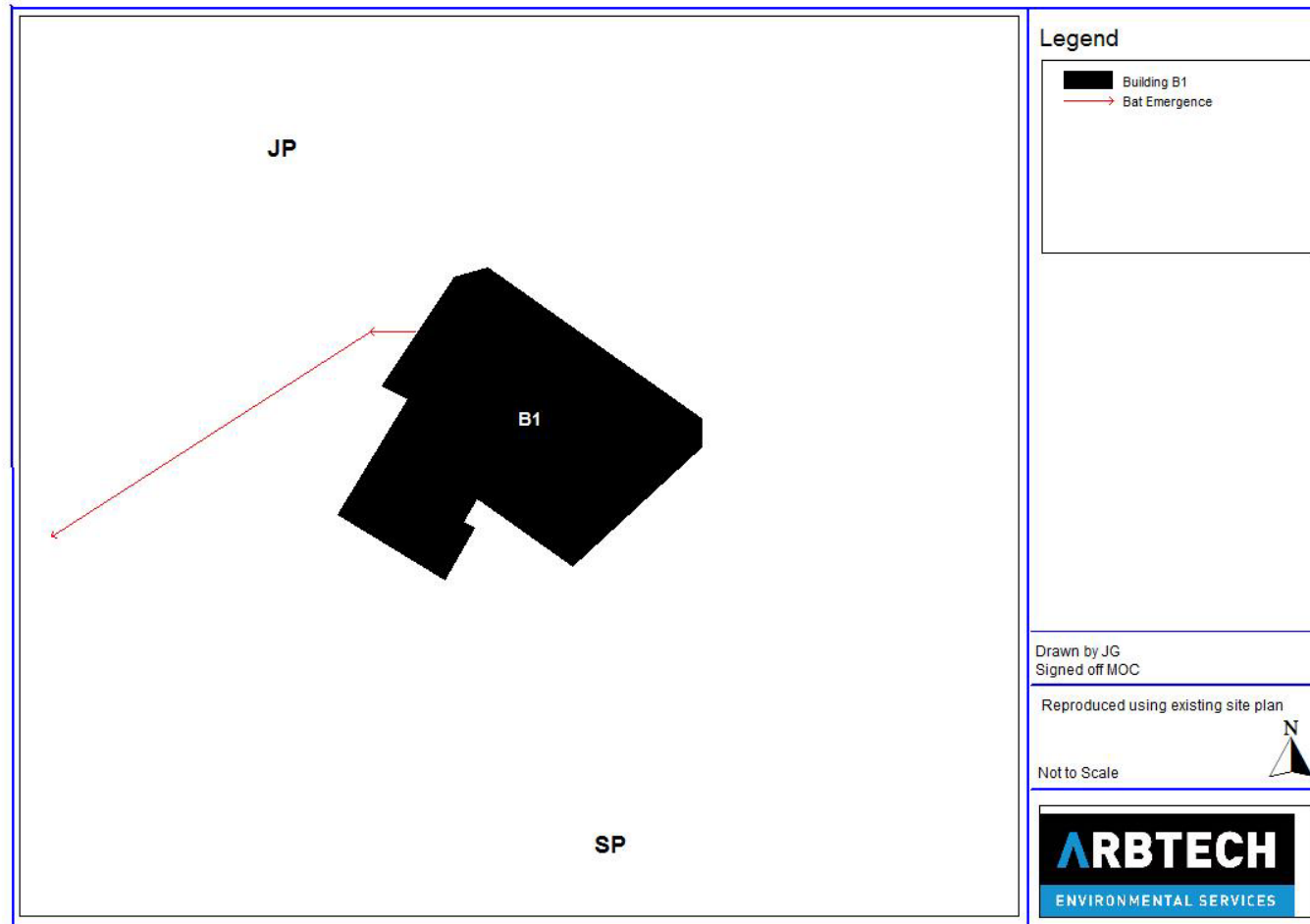


Figure 2: Site plan showing building, flight lines and surveyors

C5 Site/Habitat Description

The site is surrounded by housing and supermarkets in the immediate vicinity. Woodland is located approx. 672m away to the northwest (Parciau Bellevue Park), approx. 328m to the north (within the grounds of St Giles Church in Wales), approx. 613m to the east and approx. 824m to the south. Open water cannot be located with 1km of the site however a large lake is situated within Erddig Country Park approx. 1262m to the south. Fields are located approx. 1739m to the east, approx. 971m to the southeast, approx. 1210m to the south and approx. 1343m to the southwest of the site. Hedgerows and tree-lined roads are located immediately adjacent to the site offering commuting routes to and from the woodland and other foraging areas.

The site comprises of a single building (B1). A two-storey brick built former public house (The Green Dragon) with a slate tiled pitched roof with smaller hipped sections and decorative ridge tiles. A large spire is present on the south east corner of the building. Decorative overhanging wooden soffits are present on the northeast, northwest, and southeast elevations and around the base of the spire. Wooden barge boards are present on the southwest elevation.

C6 Field Surveys

C6.1 Methods

A daylight survey was conducted in April 2013 after the emergence surveys. This survey was conducted to national standards where the internal and external areas were searched for evidence of bats. An interior search was conducted and an external examination looking for droppings and potential access points for bats to be using. No evidence of bats was found, however features suitable for roosting were found externally on the main building.

Two dusk surveys were conducted in May 2013. The surveys commenced 15 minutes before sunset and continued for a minimum of 2hrs.

These surveys concentrated around the main building where features had been found on the daylight inspection. Three surveyors were used for each survey. Standard bat surveying equipment was used for these surveys, with results recorded to paper.

C6.2 Timing/Weather conditions

Table 1: Survey data

Date	Survey	Time: from/to	Weather: Start	Weather: Finish
April 2013	Scoping Bat	N/A	Temperature: 8.8°C. Cloud Cover: 80%. Precipitation:	

			None. Wind: 2/8.	
Date	Survey	Time: from/to	Weather: Start	Weather: Finish
10/05/2013	Dusk	20:25 - 23:00	Temp: 10 °C Humidity: 30% Cloudy: 60% Wind: 2/8 Rain: None	Temp: 6 °C Humidity: 40% Cloudy: 60% Wind: 2/8 Rain: None
17/05/2013	Dusk	20:30 - 23:10	Temp: 9 °C Humidity: 30% Cloudy: 80% Wind: 2/8 Rain: None	Temp: 5 °C Humidity: 40% Cloudy: 80% Wind: 2/8 Rain: None

C6.3 Personal

All the surveys were conducted and/or organized by a current Licenced bat workers at Arbtech Consulting Ltd.

Dusk emergence and daylight inspection:

Scoping: - Jo Gregory BA (Hons) MSc GradICEEM England: 20122461. Wales: 39248.

Emergence: -

Simon Parker, Surveyor

James Porter, Surveyor

C7 Survey Results

C7.1 Daylight inspection

The survey of the buildings identified suitable roosting features on the main building. No evidence of bat use was located. The roosting features included loose tiles in the roof and gaps around the eaves.

C7.2 Dusk Surveys

10th May 2013 Dusk

No activity recorded by Simon Parker. James Porter saw and heard a common pipistrelle emerge from the northwest elevation at 21.27. No further activity recorded.

17th May 2012 Dusk

No activity recorded by either surveyor.

Table 2: Summary of survey results

Date	Survey	Results
10/05/2013	Dusk	One common pipistrelle emerged No further activity
17/05/2013	Dusk	No activity recorded

Table 3: Summary of bat evidence

Building /Tree	Potential	Actual status	Unknown
B1	High	Transitional roost for a small number of either male or female common pipistrelles.	Unknown if used for hibernation

A common pipistrelle was found to be roosting in the building. No further commuting or feeding activity was recorded.

C8 Interpretation/evaluation of survey results

C8.1 Estimated Population

An estimated total population of 1 individual has been recorded, the report results show a maximum of 1 common pipistrelle, seen to emerge from the main building. This indicates that the roost is likely to be a small transitional roost.

The building is drafty and poorly insulated; it is likely the roost is not used as a hibernation site.

C8.2 Status of Roost

It is concluded that the roost is a male or pre-breeding female summer roost. At any one time there may be a maximum of 1 bat using the roost. The proposed development is unlikely to have long term effect on the roosting bats present.

C8.3 Survey Constraints

There were no constraints to the survey.

D Impact assessment in absence of mitigation

D1 Short-term impacts: disturbance

Disturbance is likely to occur by the removal of the roof, the extension works and the construction work following. This could lead to damage, death or encasement.

D2 Long-term impacts: roost modification

There will no modification to the roost in the long term.

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D3 Long-term impacts: Roost Loss

The current roost will be lost when the building is re-roofed extended and renovated.

D4 Long-term Impacts: Fragmentation and isolation

No fragmentation or isolation of bat roosting sites is likely as a result of the development on site. New roosting opportunities will be provided.

D5 Post development interference impacts

It is possible that human activity will contribute to disturbance of the roost when the building has been development. This however is unlikely as the building forms part of former occupied public house. Extra lighting will be deflected downwards, be on PIR sensors and will not be directed at the new roosting sites or enhancements.

D6 Predicted scale of impact

The predicted scale of impact on the populations and individuals, in Wales and the region is of low conservation significance, due to the suggested re-placement roosting opportunities.

E Land Ownership - Mitigation Site

The site is owned by:

Beatus Properties
40 Rodney Street
Liverpool
L1 9AA

F References

Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature

Mitchell-Jones, A.J & McLeish, A.P eds (1999). The Bat Workers Manual 3rd Edition. JNCC

Bat Scoping and Emergence Survey, Arbtech Consulting Ltd, 2013

G Annexes

Arbtech Consulting Ltd scoping and emergence reports, 2013

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Document 2 - Delivery Information

A Mitigation and Compensation

A1 Summary of Mitigation Strategy

The main buildings will have the roof and eave sections removed by hand, under ecological supervision.

During suitable weather conditions before the demolition of the roof and eaves occurs, any bats will be removed where possible by hand and placed in a suitable bat box that has been erected on retained trees.

Currently the timing of the works is unknown therefore two options are detailed below, once planning is granted this can be confirmed:

If the works are scheduled for the winter period a period of three to four days of mild weather will be utilized to help minimize the chance of torpid or hibernating bats being encountered. Temperatures will be of 7°C or above for this period.

Should a torpid or hibernating bat be found incidentally or accidentally the bat will be either left to disperse of its own accord or if in immediate danger be moved to a hibernation box installed close by.

If the works are scheduled for the spring/summer period no restrictions to when work occurs will be necessary.

All contractors and those involved with the work will be informed of any action that must be taken should bats be encountered at any stage. Work will stop and further advice sought if the roost is larger than surveys indicate.

Replacement bat roosting is to be provided in the form of bat boxes and a bat loft in the new development. Boxes will be in place before the demolition/renovation and the loft built into the new development.

These boxes will be checked a minimum of once following development.

B Works to be Undertaken by the Ecologist or Experienced Person

B1 Capture and Exclusion

Before works commence the Ecologist will check all accessible likely roost locations in the building where access is possible. The Ecologist will remove the bats by hand (where possible) and without harming them, they will be placed in a suitable bat box located as close as possible to the works area on retained trees.

All construction staff will be briefed on the procedure to follow should a bat be found whilst the demolition/renovation occurs.

The Ecologist will be present for the demolition of the building sections e.g. roof and eave sections. Whilst these structures are removed by hand any bats found will be safely relocated to a suitable bat box which will be in place before the works

commence. This bat box will be located as close as possible to the existing building.

Any bats accidentally harmed will be safely put in a suitable container (vivarium) and passed to the local bat group carer, until at which time the bat can be re-released at the roost site.

These works will commence once the licence is issued, during the months of September 2013 to April 2014.

This will be confirmed once planning is granted.

As the works maybe scheduled for the winter/early spring period, a period of three to four days of mild weather will be utilize to help minimize the chance of torpid or hibernating bats being encountered, although unlikely to be found. Temperatures will be of 7oC or above for this period.

Should a torpid or hibernating bat be found incidentally or accidentally found the bat will be either left to disperse of its own accord or if in immediate danger be moved to a hibernation box installed close by.

C Works to be Undertaken by the Developer

C1 Bat Roosts

C1.1 *In Situ* Retention of Roosts

The existing bat roost will be lost when the re-roofing occurs.

C1.2 Modification of Existing Roost

There will be no modification to the current roost.

C1.3 New Roost Creation

A minimum of two Schweglar 1FF bat boxes will be located as close as possible to the existing roost. These will be attached to retained trees, be a minimum of 3m above ground level and face south/southwesterly.

Three bat access tiles have been included, which will be incorporated into the new dwelling (see plans).

C1.4 Plans/Maps

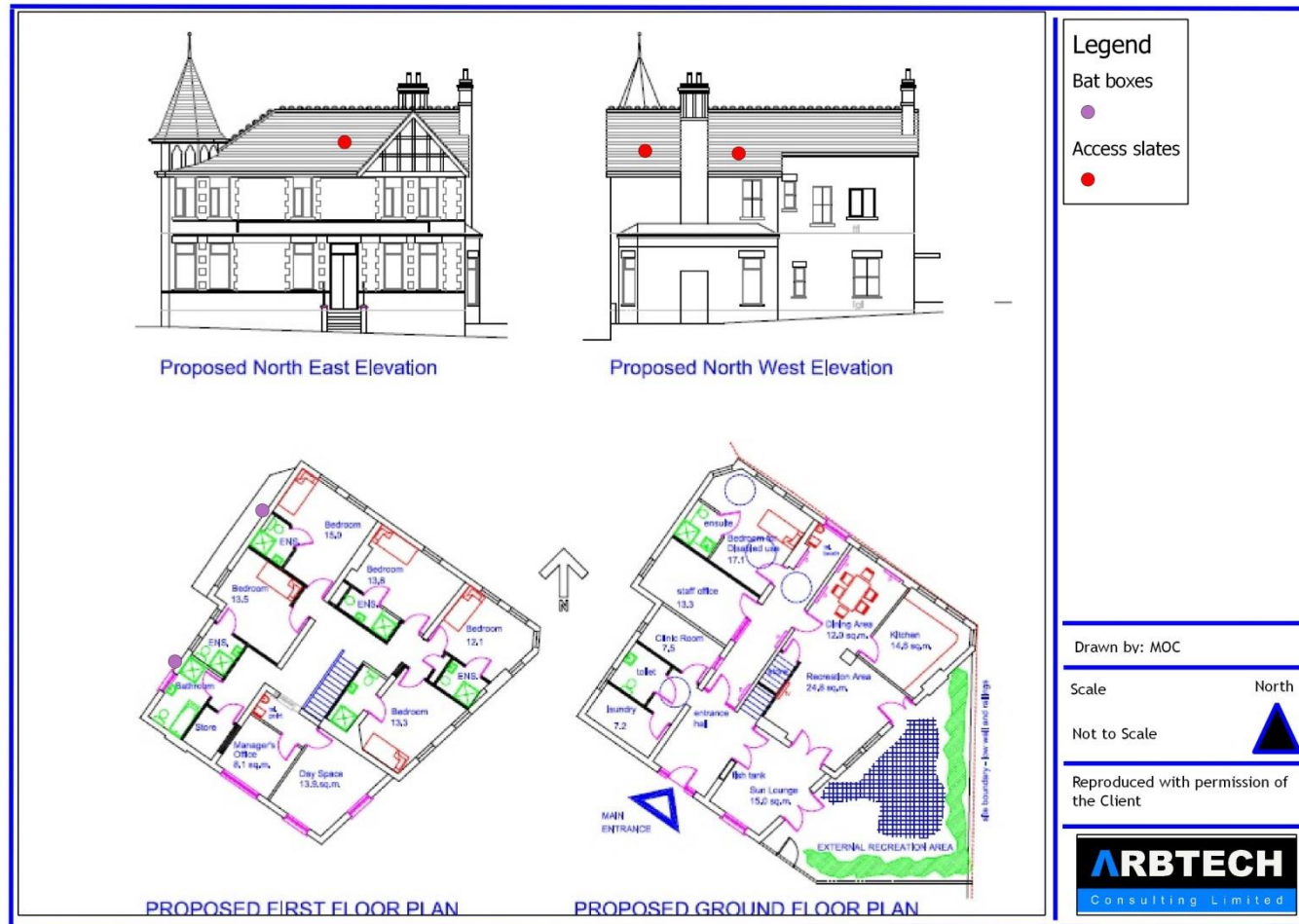


Figure 1: Proposed compensation in new dwelling (layout).

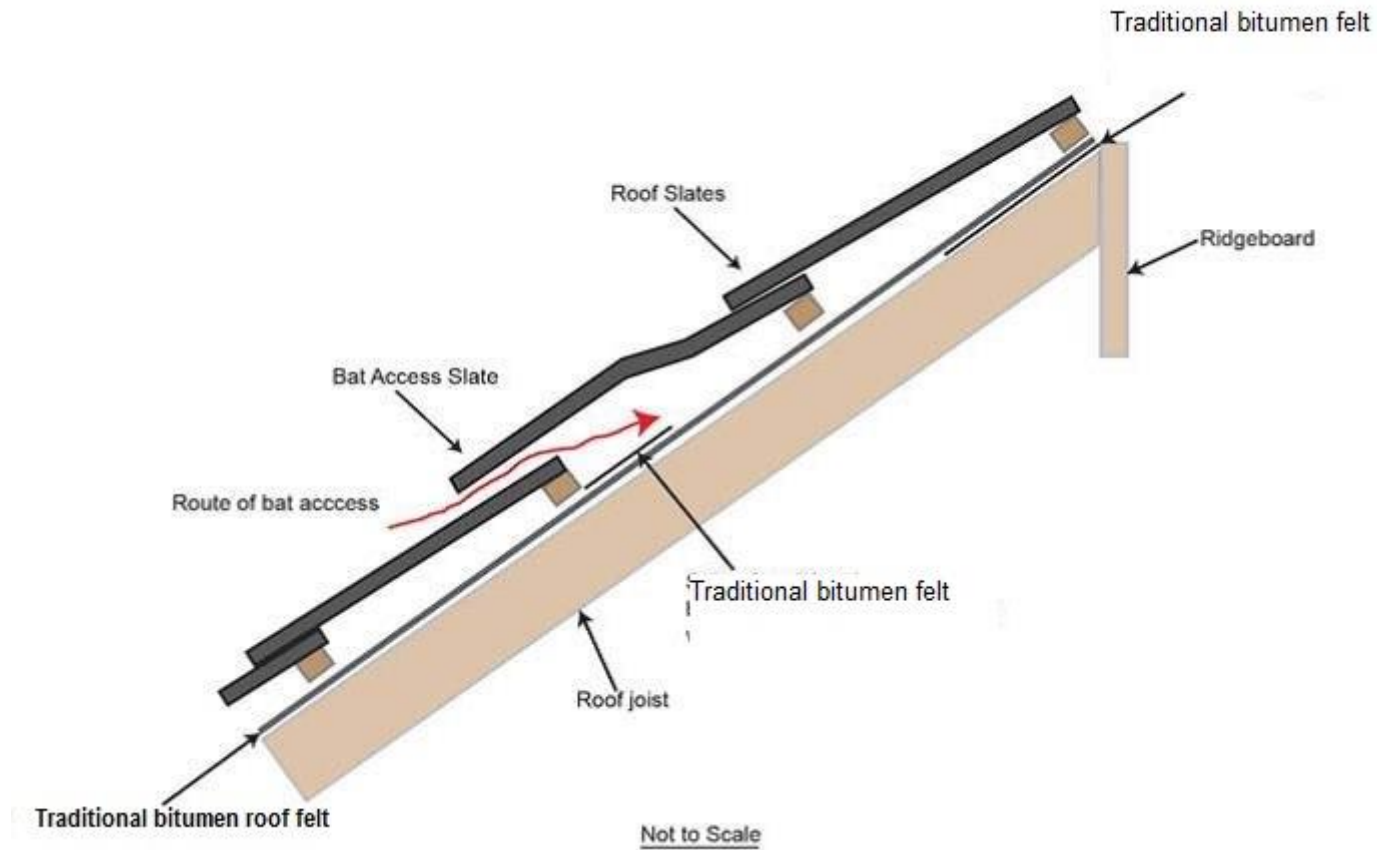


Figure 2: Detail of access tiles for bats

D Post-development Site Safeguard

D1 Habitat/Site Management and Maintenance

The new roosts provided will require minimum maintenance due to the longevity of the boxes/access tiles construction. When the boxes are checked this will require a licenced bat worker.

No permanent lighting will illuminate any created roost or entrance.

It is the owner's responsibility to purchase and install the suggested mitigation and maintain these.

D2 Population Monitoring, Roost Usage etc.

The boxes will be checked once at the end of the first summer after development by a licenced bat worker.

This can be carried out during daylight hours and will require the use of a ladder to reach the boxes.

D3 Mechanism for Ensuring Delivery of Post-development works

The Natural England licence will facilitate the measures are carried out and a report of works will be carried out in the licence return.

E Timetable of Works

A: Development activities and timing		
Activity	Timing	Notes
Install bat boxes	Sept 2013	Will be installed before demolition
Removal of roof and eave sections by hand	As above	Supervised by licenced ecologist, any torpid/hibernating bats found allowed to disperse of own accord or if in immediate danger moved to hibernation box.
Build in tile	Before April 2014	

B Post Development Monitoring

B: Post development monitoring						
Year	April 2014					
Details	Final check of the mitigation installed					