



Kingston  
Bridge House,  
Church Grove,  
Hampton  
Wick, KT1 4AG

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## Outline Bat Mitigation Plan

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February 2023

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Ref 22-9244

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<i>Revision</i>	-
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## 1. Executive Summary

1.1 Syntegra was commissioned to design an outline mitigation plan for bats in line with the proposed plans for Kingston Bridge House. This report was commissioned due to works being undertaken to the building without a European Protected Species License (EPSL). The details of this are described below. The purpose of this report is to provide a robust mitigation and compensation strategy in order to prevent any further offences and replace/enhance the roosting interest of the site for pipistrelle bats.

1.2. This report should be read in conjunction with the Syntegra phase two survey results, detailing the locations of bat droppings and entrances as described within this report.

1.3. Recommendations for bat mitigation include:

- Works to be undertaken as soon as possible in order to provide compensatory/enhancement bat roost availability for the coming maternity season.
- Supervision of any further works to areas with previous bat evidence.
- Before commencing any work affecting sensitive areas on site, all contractors will be inducted by a licensed Bat Ecologist or accredited agent in a toolbox talk.
- Immediately prior to works commencing, the building must be subject to an internal and external survey by a licensed ecologist to ensure no bats are present within any accessible areas. In addition, hand removal/soft strip of all features suitable for use by bats must be undertaken under the direct supervision of a licensed ecologist.
- Numerous alternative roosting points will be created for soprano pipistrelle bats *Pipistrellus pygmaeus*, compensatory roost features will be created up to maternity roost level. These will include lead flashing access to wall cavity features as this is the likely structure of the previous maternity roost. Specific sizes and details of these bespoke features will be informed by a Licensed Bat ecologist whilst supervising their installation.
- Enhancements for bats will be created. These will comprise a set of 3x 2FR Bat Tubes, internally connected to provide a continuous space for bat roosting.

## 2. Introduction & Background

2.1. Syntegra was commissioned to undertake a mitigation plan for bats in line with the proposed plans for Kingston Bridge House, situated centrally within Richmond. At the time of survey, some of the works had already been undertaken, including stripping of lead and insulation from numerous parts of the building.



**Figure 1. Proposed development site in the context of the wider landscape (Copyright GoogleMaps, 2023).**

### Site Overview

2.2. Kingston Bridge house is situated within central Richmond, with the River Thames located just east. A main road is present to the south of the building, with Bushy Park present to the west, providing grassland and trees for commuting and foraging.

2.3. The wider landscape is predominantly urban with residential and commercial development surrounding.

2.4. The building is a large block of residential buildings formerly used as university accommodation. At the time of survey this was vacant. The building spans four storeys on the

northern elevation and seven storeys on the southern elevation and has numerous windows and a flat roof.

2.5. Bat monitoring over several years has confirmed the main building to be a maternity roost for soprano pipistrelle. *Requests for this data were submitted by Syntegra in 2023 however no access was provided.* A Preliminary Roost Assessment by AAE ecology in 2022 gave the building negligible roosting potential. During the consultation period for the application, the council ecologist was informed that the building hosted a known pipistrelle roost. Subsequent emergence and endoscope/DNA analysis surveys were conducted by Syntegra in 2022 to inform the planning application. A bat mitigation plan has now been commissioned to further inform the strategy for the site.

### Status of Bats at the Site

2.6. Evidence of bats was historically recorded by an independent surveyor from approximately 2017-2020. Emergence surveys conducted in 2022 noted moderate levels of pipistrelle and noctule *Nyctalus noctula* activity around the vicinity of the site, however, no emergences were noted from the building on any of the three surveys.

2.7. The dusk and dawn surveys therefore concluded that the historic roost is no longer in use, likely from a combination of the internal works and plastic cladding. The endoscope surveys carried out by Syntegra in 2022 identified droppings in four main points on the building. These droppings were confirmed by DNA analysis to be a mix of soprano pipistrelle and common pipistrelle *Pipistrellus pipistrellus*.

2.8. An updated site visit was carried out by Katie Crawford MRes and Jessie Forster MSc on the 1<sup>st</sup> February 2023 to update the baseline conditions and inform this mitigation report. Conditions were largely unchanged from the 2022 assessment, with droppings present at the four points. No fresh droppings were recorded to be present. No bats were discovered with the endoscope survey. Therefore it is considered that following the removal of the lead and insulation from numerous parts of the building have damaged and destroyed a maternity roost for soprano pipistrelles., The below mitigation, compensation and enhancement measures are therefore required.

2.9 The points with droppings were described as follows (indicative locations are shown on **Figure 2**):

- Point 1- On the north-east corner of the north wing. This roosting point appeared to have

access under the lead cladding which had been pulled away during works to expose droppings. It was noted that this could have run along the whole wall and provided enough space for a maternity roost.

- Point 2- located behind the remnant cladding strip within the south-eastern corner of the south wing. In the update survey, this space was noted to be very open and was inspected in as much detail as possible from every level of the building.
- Point 3- This point noted droppings located on the window ledge, north facing on the south wing. Droppings found were a mixture of older remnants on outside of wall that were presumably behind cladding originally, and slightly fresher looking droppings on ledges. The updated survey noted numerous droppings at this point, including many around the window. These all appeared old.
- Point 4- This point could not be fully surveyed due to location and it was assumed that the gaps between the wall and cladding could have held potential for roosting bats prior to the cladding removal. The update survey noted similar conditions.

## Impact of Proposals and Recommendations

2.9. The proposals involve retaining the main structure of the building and renovating both the interior and exterior to provide residential housing. The extent of the works to date has removed all likely suitability for bats, and the building is considered to have Negligible potential, and further supported by lack of emergences on activity surveys in 2022. It is considered that the bat roosts are no longer in use/have been destroyed by previous works . However, further works to areas identified as being historic bat roosts are proposed As no bats are considered to be present, there are no Licensable works are taking place. However, a method statement detailing precautionary methods along with robust compensation measures and enhancement to provide abundant roosting opportunity for pipistrelle bats is required, and provided below. This will ensure that no further offences are committed and that the long term interest for bats onsite is reinstated and suitable for as a maternity roost for pipistrelle bats.

2.10. A method statement will instead be followed and supervision by an ecologist to be undertaken where deemed necessary, further details on this are provided below.



### 3. Legislative and Policy Background

#### Bat Legislation

3.1. All British bat species are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2010 ('Habitat Regulations'). This legislation combined makes it an offence to:

- Damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a bat.
- Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair the ability of bats to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating bats, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species;
- Deliberately kill, injure or take any bat.

3.2. The government's statutory conservation advisory organisation, Natural England, is responsible for administering European Protected Species (EPS) licences that permit activities that would otherwise lead to an offence.

3.3. A licence can be obtained if the following three tests have been met:

- Regulation 53(9)(a) - there is "no satisfactory alternative" to the derogation, and;
- Regulation 53(9)(b) - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range" and;
- Regulation 53(2)(e) - the derogation is for the purposes 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 for the environment".

## 4. Bat Mitigation Plan

4.1. A mitigation plan is illustrated in **Figure 2**.

4.2. *Toolbox Talk:* Before commencing any work affecting sensitive areas on site, all contractors will be inducted by a licensed Bat Ecologist or accredited agent in a toolbox talk, to ensure they are aware of the risks to wildlife on site, particularly the presence and signs of bat roosts, their legal protection and of working practices to avoid harming bats and other species in order to follow legal requirements.

4.3. *Ecological Supervision:* Immediately prior to works commencing, the building must be subject to an internal and external survey by a licensed ecologist to ensure no bats are present within any accessible areas. In addition, hand removal/soft strip of all features suitable for use by bats and the installation of compensatory roosting features must be undertaken under the direct supervision of a licensed ecologist.

4.4. *Mitigation/Compensatory Roosts:* Compensation on site will require the provision of numerous bespoke bat features, including lead cladding access to wall cavity features or timber cladding features and integrated bat boxes. This will be created to provide a variety of roosting spaces at different elevations and to provide micro-climates. The specific details of these will be determined onsite by a Licenced Ecologist. A 2FN Bat Box (similar as available) will be installed on a suitable tree within the site (If this is not possible a 2FN may be installed on the building- preferably south-west facing). This will be installed at a height of at least 4m and will be retained once works have been completed and will be suitable as a release box in the unlikely event that a bat is recorded onsite. This box will remain on site in perpetuity, and count towards the Mitigation of the site.

4.5. *Enhancement:* To enhance the site for pipistrelle bats, four groups of 3x2FR Bat Tubes (12 in total) will be installed at different elevations around the building. These will be connected internally and will provide further roosting opportunity for bats suitable for a maternity roost.

4.6. *Timing:* Works should be completed as soon as possible to allow features to be available for bats in the next maternity season (Prior to May 2023).

4.7. *Lighting:* Any new external lighting must be directed to avoid light spillage onto

vegetation, particularly linear habitat features such as woodland edges or potential roosting sites within trees and buildings. Bats are sensitive to light and could potentially avoid the area if access points or the surrounding areas become lit. Appropriate lighting options will prevent a negative impact on bats potentially using the habitats on site and should be approved by a suitably qualified Licensed Bat Ecologist.

4.8. Any potential impact on bats can be minimised by: using low - pressure sodium lamps instead of high - pressure sodium or mercury lamps. “Warmer” lights should be used as a preference as these are less penetrating than bright white lights (such as LEDs). Maintaining the brightness as low as possible; limiting the times during which the lighting can be used to provide some dark periods.

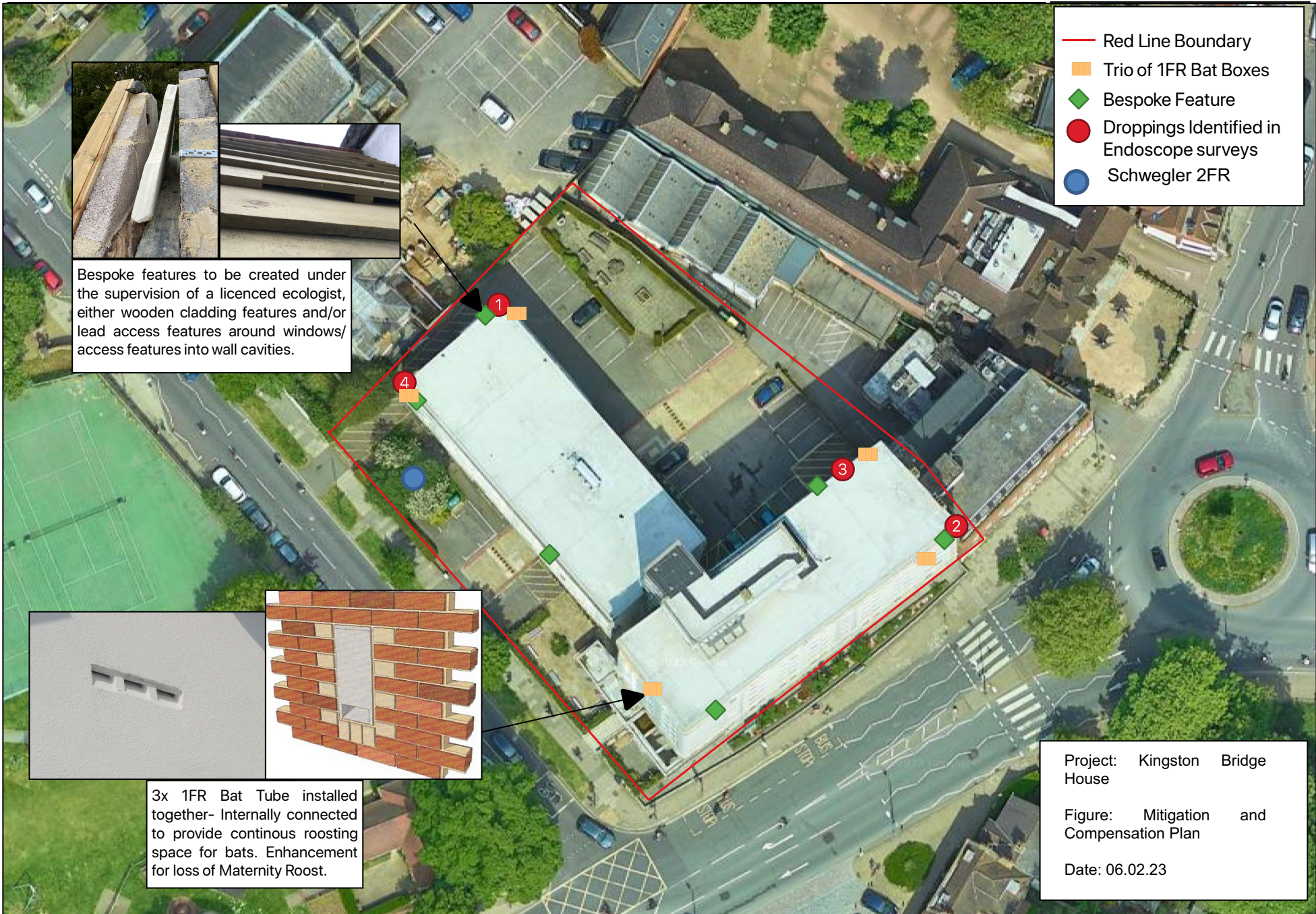
4.9. Motion sensors are strongly recommended, using a short timer to reduce the duration of lighting and reduce disturbance to bats. Directing the lighting to where it is needed to avoid light spillage onto vegetated margins; and minimising upward lighting by fitting lights with downward facing baffles to avoid light pollution.

4.10. Light can be restricted by fitting hoods which direct the light below the horizontal plane, at an angle less than seventy degrees. Limiting the height of lighting columns and directing light at a low level away from vegetation reduces the ecological impact of the light.

**4.11 No breathable roofing membrane will be permissible.**

4.12 *Timber treatment:* Any use of timber-treatment or pest control treatment must be selected from the approved lists for safe use in or near bat roosts which can be provided on request.

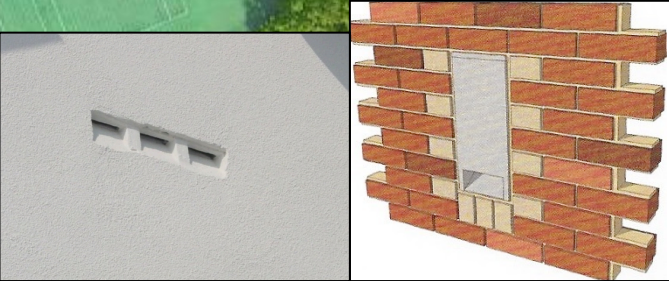
4.14 *Bat Procedure:* In the unlikely event that a bat is discovered during works, it will be immediately moved into a bat box or suitable alternative roosting location and works will be halted. Natural England will be consulted in the first instance.



- Red Line Boundary
- Trio of 1FR Bat Boxes
- ◆ Bespoke Feature
- Droppings Identified in Endoscope surveys
- Schwegler 2FR



Bespoke features to be created under the supervision of a licenced ecologist, either wooden cladding features and/or lead access features around windows/access features into wall cavities.



3x 1FR Bat Tube installed together- Internally connected to provide continous roosting space for bats. Enhancement for loss of Maternity Roost.

Project: Kingston Bridge House  
 Figure: Mitigation and Compensation Plan  
 Date: 06.02.23

## 5. References

Bat Conservation Trust (2013) Encouraging bats - A guide to bat friendly gardening and living. BCT, London

Bat Conservation Trust (2016). *Bat Surveys – Good Practice Guidelines*. BCT London.

Gunnell, K., Murphy, B., Williams, C. (2013) *Designing for Biodiversity: A technical guide for new and existing buildings (2nd Edition)*. RIBA Publishing.

Mitchell-Jones, A.J., (2002). *Bat Mitigation Guidelines*. English Nature, Peterborough.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual* (3RD Edition). JNCC, Peterborough.

Schofield, H. W. & Mitchell-Jones, A.J. (2004). *The Bats of Britain and Ireland*. Vincent Wildlife Trust, Ledbury.