



13-21 Crown Street, Reading, Berkshire RG1 2SN

Updated Ecology Report

May 2017

***on behalf of* Thomas Homes
c/o McLaren Clark Consultancy**

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1 Introduction

1.1 Site Description & Context

13-21 Crown Street (hereafter referred to as 'the site') is located in an urban area, towards the town centre of Reading in Berkshire. The approximate Ordnance Survey grid reference for the site is SU 718 728. The site is currently being used for site parking within areas of hard-standing. There are a number of derelict warehouse buildings set within areas of concrete and tarmac hard-standing. An area of scrub and ruderal vegetation has been cleared within the eastern section of the site. The site boundaries include a mixture of fences (wooden and wire mesh), adjacent residences and garden walls. The site is surrounded by built development including offices, residences, commercial properties and business centres.

The site is within an urban setting, and the wider land use surrounding 13-21 Crown Street is dominated by built development. Semi-natural habitats are scarce within the immediate environs of the site and tend to be limited to gardens and communal green spaces such as parks and recreational grounds. The River Kennet flows past the site approximately 500m to the west of the site and the River Thames is located approximately 1.1km to the north, at its closest point. Both rivers create ecological corridors within the wider landscape of the site.

1.2 Background

The land at 13-21 Crown Street was the subject of a previous extended Phase 1 Habitat Survey undertaken on 19th May 2015 by Windrush Ecology Ltd. The main focus of the survey was to describe and evaluate the habitats present within the site and to assess the potential for the site to support protected species, including undertaking a bat survey of the buildings. The current report presents the results of an updated survey undertaken in May 2015.

1.3 Proposals

There is a proposal to demolish the existing buildings and to erect a block of flats within the site, with associated gardens, access and car parking areas (see Appendix 3).

1.4 Aims of Study

The aim of the current study is to provide updated ecological information of the site. The updated survey aims to document any changes in the ecology of the site, to describe and re-evaluate the habitats present and to assess the potential for the site to support protected and notable species. The report discusses any changes in the ecology of the site and the likely impacts of the proposed development on the ecology of the site and protected/notable species. Recommendations are made for appropriate mitigation & compensation measures in light of the impact assessment.

1.5 Bat Ecology

Bats are the only mammals to have developed the ability of true flight. At present, over 1,100 species of bat are recognised worldwide, making bats the second largest mammal group after rodents. As well as flight, bats have evolved a system of navigation and orientation using echolocation which has allowed many species to become nocturnal. There are 18 species of bat that occur within the British Isles, of which 17 are known to breed here. More species occur in the south and west of the country, with species numbers declining towards the north and into Scotland.

All bat species in the UK are nocturnal and feed exclusively on insects (they are insectivorous) which they catch in flight during their night-time activity, using echolocation to locate and home-in on their prey. Bats will roost during the daytime and seek out dark, enclosed and undisturbed places in which to do so, often using a variety of roosting sites within their home range. Different roost sites are used for different purposes (such as mating, giving birth and hibernation) and at different periods of a bat's life cycle.

During the summer, female bats will gather together in a maternity or breeding roost. In the UK, this starts to occur towards the end of May and the females will seek out a warm and undisturbed site in

which to give birth. Because maternity roosts require a particular set of environmental attributes (such as location, temperature, orientation and size), breeding bats tend to return to roost and breed in the same locations year after year. Given that bats live a relatively long time (anywhere from 10-20 years), and only give birth to one pup a year, maternity colonies are crucial to the reproduction and survival of the local population and can be very sensitive to environmental change.

Relatively little is known about hibernation roosts, as tracking and locating hibernating bats is very difficult. However, many species (particularly those within the genera *Myotis* and *Rhinolophus*) have been found within underground sites such as caves, mines and cellars, where the temperature remains constant and low throughout the winter allowing the bats to remain in a state of torpor. The spring and autumn are periods of transition and bats can use a number of different locations on a temporary basis, often moving between roosts as environmental conditions change and temperatures fluctuate. In the autumn, bats will mate and it has been shown that male and female bats will gather at particular locations (such as a building, cave or tree) to meet, socialise and mate.

Bats choose to roost in a number of different locations, depending on the species, their activity pattern and the period of their lifecycle. Certain species, such as the pipistrelles, favour crevices and small cavities for roosting and will use features such as cracks, crevices and small rot holes in the boughs and trunks of trees and within certain features of buildings such as boxed eaves, gaps under roof tiles, hanging tiles and soffit boards. Other species favour large, uncluttered roof spaces and lofts within buildings where they can hang up on the underside of the roof and use the interior space for flying prior to emergence. Hollow trees, cellars, caves, barns, churches and cavity walls can also all be used for roosting, given suitable access. Certain species, such as the noctule, favour roosting sites within trees whilst others tend to favour buildings. Roost sites may be used by only a very small number of bats, such as solitary males, or may offer shelter to tens or hundreds of bats within maternity and hibernation roost sites.

The suitability of roosting sites is also highly influenced by the location or context of a tree, building or cave. Roost sites are most often favoured when they are within close proximity to foraging habitats and where those habitats are connected to one another within the landscape by features such as hedgerows, woodlands, rivers or sunken lanes along which bats disperse and 'commute' from place to place. Suitable foraging habitats are any places where insect prey is diverse and abundant such as woodlands, ponds, lakes, rivers, scrub, hedgerows and unimproved grassland or pasture. Thus, the ecological context of a site is very important for determining if bats may be present within a roost and the potential for a roost to be present tends to be much higher within rural or village locations.

1.6 Legislative Guidance

1.6.1 Bats

As with many animal species within the UK, declines in the abundance and distribution of many bat species have been documented through recent decades. The reasons for these declines are various and complex but it is considered that the major factors are changes in landuse and agriculture, the loss of woodlands and hedgerows and the loss of suitable roosting sites.

Bats are particularly sensitive to human activity due to the fact that they roost within buildings, trees and underground structures such as mines, and the availability of suitable roost sites is considered to be a key factor in the conservation of bats within the UK. As a consequence, all species of bat and their roost sites are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and under The Conservation of Habitats and Species Regulations 2010. Taken together, these make it an offence to:

- (a) Deliberately capture or intentionally take a bat
- (b) Deliberately or intentionally kill or injure a bat
- (c) To be in possession or control of any live or dead wild bat or any part of, or anything derived from a wild bat

- (d) Damage or destroy a breeding site or resting place of such an animal or intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection
- (e) Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection
- (f) Deliberately disturb any bat, in particular any disturbance which is likely
 - to impair their ability;
 - (i) to survive, breed, reproduce or to rear or nurture their young; or
 - (ii) in the case of hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong

A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.

Although the law provides strict protection to bats, it also allows this protection to be set aside (derogation) under The Conservation of Habitats and Species Regulations 2010 through the issuing of licences. Where a lawful operation is required to be carried out but which is likely to result in one of the above offences, a licence may be obtained from Natural England (the statutory body in England with responsibility for nature conservation) to allow the operation to proceed. However, in accordance with the requirements of The Conservation of Habitats and Species Regulations 2010, a licence can only be issued where the following requirements are satisfied:

- The proposal is necessary 'to preserve 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';
- 'There is no satisfactory alternative';
- The proposals 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'.

These three criteria are often referred to as the 'three tests' of the Regulations. All three must be satisfied in order for a licence to be granted.

1.6.2 *Nesting Birds*

Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The nesting season for most species is between March and August inclusive.

2 **Methodology**

The field survey was undertaken on the 29th March 2017. The weather on the day was warm (12°C), dry and overcast (100% cloud cover) with a slight breeze (Beaufort Scale 1-2).

2.1 **Personnel**

The field survey carried out as part of this study was undertaken by Tracy Gray *BSc GradCIEEM*, an experienced ecologist. Miss Gray holds a licence from Natural England to survey for bats within all counties of England (Natural England Level 2 WML-CL18 Licence 2015-14396-CLS-CLS) and has over five years of experience in undertaking bat surveys.

2.2 **Phase 1 Habitat Survey**

A walkover of the site was conducted and a description of the habitats present was prepared using standard Phase 1 habitat survey methodology (JNCC 2010). Target notes were prepared on features of particular ecological interest and an assessment was made of the sites potential to support protected and notable species (such as species listed within the UK Post-2010 Biodiversity Framework and Section 41 of the NERC Act 2006).

2.3 Building Inspection Survey

A detailed external survey of the buildings was undertaken using a 1 million candle-power torch and close-focusing binoculars in order to look for bats and/or evidence of bats and to assess the potential of the buildings to support roosting bats. The external elevations of the buildings were inspected for evidence of bats including, bat droppings, urine stains, feeding remains (such as moth wings) and characteristic fur staining around access points. Notes were made on the relative freshness, shape and size of bat droppings and the location and quantity of any feeding remains. 'Clean' gaps and crevices within the structure of the buildings were looked for as this can indicate where bats may have gained access the fabric of the buildings.

The study takes into account the structure and ecological context of the buildings, and the following factors that may increase the likelihood of roosting bats being present:

- Age of the building (pre-20th Century or early 20th Century construction);
- Nature of construction- traditional brick, stone or timber construction;
- Large and complicated roof void with unobstructed flying spaces;
- Large (>20 cm) roof timbers with mortice/tenon joints, cracks and holes;
- Entrances and gaps for bats to fly and crawl through;
- Poorly maintained fabric providing ready access points for bats into roofs, walls (but not being too draughty and cool).
- Roof warmed by the sun (south-facing roofs particularly favourable);
- Weatherboarding and/or hanging tiles with gaps;
- Undisturbed roof voids;
- Buildings and built structures in proximity to each other providing a variety of roosting opportunities throughout the year;
- Buildings or built structures close to good bat foraging habitat, in particular mature trees, parkland, woodland or wetland, especially in a rural setting.

The criteria used as guidelines for assessing the potential suitability of buildings for bats are shown in Table 1 below.

Table 1. Criteria are used as guidelines for assessing the potential suitability of buildings for bats (Collins, 2016)

Suitability	Description of Roosting habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after the presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitats.

Confirmed presence of roosting bats is where evidence is found to show that a building or other structure is being used by bats, such as:

- bats seen roosting or observed flying from a roost or freely in the habitat;
- droppings, carcasses or feeding remains and

- audible calls from bats 'chattering' inside a roost on a warm day or at dusk.

Where the possibility that bats are present cannot be eliminated or evidence of bats is found during the building inspection survey, then further surveys (such as winter hibernation, presence/absence and/or roost characterisation) are likely to be necessary if impacts on the roosting habitat (or the bats using it) are predicted.

In addition to this bat survey, the buildings were checked for any evidence of nesting birds including old birds' nests, bird droppings, feathers and eggs. The buildings were assessed for their suitability to house particular species of bird such as house sparrows *Passer domesticus*, swallows *Hirundo rustica* and barn owls *Tyto alba*.

2.4 Survey Constraints

It was not possible to survey the interior spaces of the buildings in detail, as large amounts of material have been stored within the rooms. It is not known whether hazardous substances are included within the stored material. In addition, the buildings are in a poor state of repair and are unsafe to enter. This is not considered to be a significant constraint due to the fact that no evidence of bats was found during the internal inspection in 2015.

The buildings do not contain loft spaces or significant crevices and are largely unsuitable for roosting bats. The buildings have deteriorated in suitability since the previous survey in that there are windows that have been further broken, the interiors are increasingly damp and mouldy due to the damaged roof structures of most of the buildings have been filled with stored material. Apart from this there is no change in the buildings within the site.

3 Results

3.1 Habitats

The site comprises areas of concrete and tarmacked hard-standing (western and southern sides of the site), a area of cleared scrub (eastern side of the site) and several modern warehouse style buildings which are located towards the centre of the northern section (see Figure 1 below). The site is currently in use as a parking facility for the site. The buildings are disused and in a state of disrepair. Please refer to Appendix 1 for photographs of the site in 2017 and 2015.

3.1.1 Buildings

So that complete descriptions of the buildings (including the interior spaces) can be included within the report information has been used from the previous ecology report (Windrush Ecology Ltd 2015). The interior spaces have not altered fundamentally since the building inspection survey in 2015.

Building 1

Building 1 is modern warehouse of red brick construction with a pitched roof of corrugated asbestos, there is no loft space above the building. The interior is sectioned into a number of ground level rooms, with a single room above (two skylights are set within the roof above this upper room). Access to the ground floor is gained through double wooden doors set within the western elevation. A door and large opening are present within the eastern elevation which creates access into the adjacent building (Building 2) creating an interconnected internal space.

The upper room of Building 1 has a wooden frame that supports the roof with a number of large crossbeams; no tenon and mortise joints are present. Plaster board with painted on rafters covers the majority of the ceiling, except for a section to the northern gable end which is open to the asbestos sheeting. Insulation is tightly packed between the plaster board and the asbestos sheeting of the roof, so very little gaps are created between the boarding and the sheeting. Access to the upper room is gained via a brick staircase on the exterior of the building.

The brick work of the building is in good state of repair with no missing mortar visible. However, overall the building is considered to be in a very poor state of repair, with missing sections of

asbestos sheeting creating numerous leaks and a damp and mouldy interior. A small chipped section of the asbestos roof that overlaps the walls is present to the north-western corner of the building, this feature does not create a crevice and is very exposed. No obvious crevice features suitable for roosting bats were found on the exterior or interior of the building. As a result Building 1 is considered to have 'negligible' potential to offer shelter to roosting bats.

Building 2

Building 2 is also a modern warehouse of simple construction. It has red brick walls with a pitched roof of corrugated asbestos containing a number of corrugated plastic skylights along each pitch (eastern and western). As previously mentioned, an internal doorway and opening along the western elevation of this building, lead through into Building 1. The interior of Building 2 comprises a single long room above which is a partially collapsed false-ceiling, only a small number of panels remain intact and for the most part, the building is open to the metal frame supporting the roof. A flat roofed extension is integrated to the northern end of the building, the internal walls have been extended into the interior of the main building (see Photograph 12, 2015). This flat roofed extension is of a single-storey height. A further single-storey sloping roofed extension is located to the west of the flat-roofed section. A number of glazed windows and an access door are set within the western elevation of the sloping extension and an internal door leads through into the flat roof extension. An internal doorway to the south of the flat roofed extension links all three sections of the building internally.

There are no dark enclosed loft spaces above any sections of the building which is in a very poor state of repair. Large sections of asbestos sheeting and some of the skylights are missing. The interior of the building is damp and very water damaged. However, the brick walls are in a good state of repair with no areas of missing mortar, that create crevice features. No crevices are created by the missing sections of asbestos sheeting, the holes lead straight into the interior. In some areas the asbestos sheeting is secured over the top of the walls of the building, creating a bargeboard like feature, the asbestos is relatively tight and where gaps were noted they were densely covered in cobwebs. No bats, or evidence of bats were found in association with any of these features. Due to its very poor state of repair and lack of opportunities the building is considered to have 'negligible' potential to offer shelter to roosting bats.

Building 3

Building 3 is similar in its construction to the two previous buildings, it has red brick walls and an off-centre pitched roof which has no loft space below. The northern section of the roof is constructed of corrugated asbestos to the western side and glass panels to the eastern side. The southern end of the building has a pitched roof of corrugated asbestos to the western side and corrugated plastic to the eastern side (the plastic is covered in debris and does not let a large amount in). The interior of the building is sub-divided into a number of rooms, with the two largest rooms being located towards the southern side of the building (northern large room and southern large room). Towards the southern end of the building an open doorway which links Building 3 with Building 4 internally.

Building 3 is in a very poor state state of repair, numerous cracks and broken sections are present within the glass panelled section of the roof. The building has been neglected and the exterior brickwork is beginning to erode in several locations especially along the eastern elevation; however these eroded sections do not appear to create any crevice features. The interior space is covered with mould and is extremely damp. Due to the very poor state of repair and lack of suitable crevice features the Building 3 is considered to have 'negligible' potential to offer shelter to roosting bats.

Building 4

Building 4 is a large modern warehouse, it has lower elevations of red brick and corrugated asbestos sheeting to the upper elevations. The roof is pitched with a covering of corrugated asbestos sheeting containing a number of skylights and is supported by a metal frame. There is no dark enclosed loft space within the building and the building is set over two floors. The upper floor is reached via an internal staircase, with the lower space being divided into a small number of rooms. Building 4 is accessed via a doorway in the northern elevation, connecting this building to Building 3.

Building 4 is in an extremely poor state of repair with a large number of holes within the corrugated asbestos sheeting of the roof and within the corrugated plastic skylights. A large hole is present within the upper northern elevation to the eastern corner, the hole leads through into the interior of Building 4. Holes are also present within the asbestos sheeting of the upper elevations of the building, and large gaps are present all the way around the building between the asbestos sheeting of the walls and the roof. These gaps do not create any crevice features. The building is considered to have 'no' potential to offer shelter to roosting bats.

Building 5

Building 5 is a single-storey flat roofed building that is raised from ground level by approximately 1m and has 'cubby holes' below. There is no loft space above the building and the roof has a covering of bitumen roofing felt. The walls are of a red brick construction and double wooden doors are set within the western elevation. The interior comprises a single space that is used for the storage of old office chairs. There are no windows and the only access is the double wooden doors within the western elevation.

The brick work is in a good state of repair, however the roof is leaking as the interior space is wet and mouldy. The building is considered to have 'no' potential to offer shelter to roosting bats.

Figure 1. The location of buildings at 13-21 Crown Street. Source: <https://maps.google.co.uk/>



3.1.2 Cleared Scrub & Ruderal Vegetation

An area of cleared scrub and ruderal vegetation is located to the north-eastern side of the site. This area is dominated by bare ground with butterfly bush *Buddleja davidii* stumps and ruderal species such as stinging nettle *Urtica dioica*, greater burdock *Arctium lappa* and sycamore seedlings and saplings *Acer pseudoplatanus*.

Area of cleared scrub and ruderal vegetation do not offer any habitat to wildlife and as a result are considered to be of no ecological value.

3.1.3 *Hard-standing*

Areas of tarmacked and concrete hard-standing support no vegetation and are in constant use for parking cars. These areas do not offer any habitat to wildlife and as a result are considered to be of no ecological value.

3.1.4 *Site Boundaries*

The boundaries of the site are marked by wooden fences, brick walls and residences. The boundaries are considered to have no ecological value.

3.2 **Species**

3.2.1 *Bats*

No bats or evidence of bats were observed during the surveys undertaken in 2015 or 2017.

No bat droppings were noted within any of the buildings in 2015 and no evidence of bats was noted with the exterior of the buildings during either of the surveys. In addition, there are no dark enclosed loft spaces within any of the buildings that bats could use for shelter and protection.

The buildings are considered to be largely unsuitable for roosting bats. This is due to the materials and nature of construction, the lack of suitable loft spaces and the very poor state of repair of most of the buildings. Although there are habitats within the local area that may support common bat species, these areas are limited to river corridors, the network of gardens and green spaces within the town of Reading.

There are no trees within the site that could offer shelter to roosting bats.

3.2.2 *Birds*

No evidence of nesting birds was noted within the interior spaces during the survey undertaken in 2015. It cannot be entirely ruled out that birds' nests are present within the buildings as the interior cannot be safely accessed.

3.2.3 *Other Species*

The site offers no habitat to other protected or notable species, such as reptiles, amphibians or badgers.

3.3 **Relevant Legislation & Policy Guidance**

3.3.1 *Nesting Birds*

Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The nesting season for most species is between March and August inclusive.

3.3.2 *The Natural Environment and Rural Communities Act 2006*

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on the Secretary of State to publish, review and revise lists of living organisms and types of habitat in England that are of principal importance for the purpose of conserving English biodiversity. It also requires the Secretary of State to take, and promote the taking of, steps to further the conservation of the listed organisms and habitats. The current list of species and habitats is (in a large part) the same as those listed under the UK Biodiversity Framework.

3.3.3 *The National Planning Policy Framework*

The National Planning Policy Framework (NPPF) was published in March 2012 and this new document forms a key part of the Government's reforms to make the planning system less complex

and more accessible, to protect the environment and to promote sustainable growth. The NPPF states that the planning system should contribute to/enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;
- recognising the wider benefits of ecosystem services;
- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks. To minimise impacts on biodiversity and geodiversity, planning policies should:

- plan for biodiversity at a landscape-scale across local authority boundaries;
- identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;
- promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;
- aim to prevent harm to geological conservation interests; and
- where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas.

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- if significant harm 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;
- proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and
- the following wildlife sites should be given the same protection as European sites:
 - ❖ potential Special Protection Areas and possible Special Areas of Conservation;

- ❖ listed or proposed Ramsar sites; and
- ❖ sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites

The Government will “now embark on a new exercise to consider what underpinning guidance continues to be needed” with the outcome of this process being “an appropriate and easy to use set of guidance, focussing on issues that require national expression, to support implementation of the National Planning Policy Framework.” The Government has “not established the process or set a timetable” for this yet and “until such time as the guidance review is complete, the existing guidance where relevant can still be used.” Regarding what guidance is still relevant, “Annex 3 of the NPPF indicates that ODPM Circular 06/2005: *Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System* (Circular 06/05) is still relevant. This Circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England.

3.3.4 UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework succeeds the UK Biodiversity Action Plan (BAP) and ‘Conserving Biodiversity - the UK Approach’. The Framework continues the conservation work initiated by the UK BAP following the establishment of the Convention on Biological Diversity in 1992. The purpose of the Biodiversity Framework is to set a broad enabling structure for conservation action across the UK until 2020, in summary:

- To set out a shared vision and priorities for UK-scale activities, in a framework jointly owned by the four countries, and to which their own strategies will contribute.
- To identify priority work at a UK level which will be needed to help deliver biodiversity targets and the EU Biodiversity Strategy.
- To facilitate the aggregation and collation of information on activity and outcomes across all countries of the UK, where the four countries agree this will bring benefits compared to individual country work.
- To streamline governance arrangements for UK-scale activity.

Many of the tools developed under UK BAP remain of use, for example, background information about the lists of priority habitats and species and the plans for the priority species and habitats agreed under UK BAP still form the basis of the Framework.

There are no priority or species habitats covered by the UK Post-2010 Biodiversity Framework and/or Berkshire Biodiversity Action Plan that are considered to be relevant to the site.

3.4 Potential Impacts

3.4.1 Bats

There is no evidence to indicate that the buildings are being used as a place of shelter/protection by roosting bats and the buildings are considered to have little or no potential to offer shelter to roosting bats. As a result of this conclusion, works to demolish the buildings are unlikely to result in any significant impacts on bats or the places that they use for breeding, shelter and/or protection (roosts) and no specific compensation measures are considered necessary (Mitchell-Jones 2004).

In addition, since no significant impacts on bats are predicted under The Conservation of Habitats and Species Regulations 2010, a European Protected Species (bat) licence will not be required for the proposed works to proceed. Since there are no predicted impacts on bats or their habitats, it is not necessary to consider the ‘three tests’ of The Conservation of Habitats and Species Regulations 2010 in this instance.

3.4.2 Birds

Without mitigation, demolition of the buildings during the bird breeding period has the potential to result in the damage or destruction of active birds' nests, and the killing/injury of eggs and young. Recommendations to avoid direct impacts on nesting birds are provided in Section 4.2.2 below.

4 Recommendations

4.1 Further Surveys

No further surveys are considered necessary.

4.2 Mitigation Measures

4.2.1 Bats

Works should proceed in a careful and controlled manner. Contractors should be briefed with regard to the fact that individual bats can often exploit very small crevices as roost sites (such as gaps beneath boarding) and that bats can move between roost sites on a regular basis.

In the unlikely event that bats or significant evidence of bats (for example large accumulations of fresh bat droppings) are encountered, works should stop immediately and advice sought from a qualified ecologist and/or Natural England.

If it is confirmed that bats are, or have been, roosting within the building a European Protected Species Licence will be required to allow for the demolition to proceed under the legal protection afforded to bats under The Conservation of Habitats and Species Regulations 2010. This is because the demolition will result in 'destruction' of a place used by bats for shelter.

4.2.2 Birds

Removal of the buildings should be undertaken outside the breeding bird season (avoiding March to August, inclusive) in order to avoid any impacts on active birds' nests. A bird check of the buildings is not suitable in this instance as the buildings are unsafe to enter.

It is recommended that six Woodstone Build-in Swift Nest Boxes (Figure 2 & 3) will be integrated into the walls of the apartment building's northern and eastern elevations (Figure 4 shows an indicative plan of the locations of the swift nest boxes). The self-contained bricks will be installed as high as possible on the building and in numerous locations to increase the chances of the features being adopted by nesting birds. The swift boxes will provide nesting opportunities for up to six pairs of swift *Apus apus*.



Figure 2. A Woodstone Build-in Swift Nest Box



Figure 3. Example of a Woodstone Build-in Swift Box integrated into a wall

Figure 4. Plan showing the indicative locations of the Woodstone Build-in swift nest boxes, shown by yellow stars



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6 Appendix 1. Photographs

Photographs 2017



Photograph 1. Building 1 viewed from the west, showing the door to the upper room (far right of the photograph).



Photograph 2. The northern gable end of Building 1, with barge board features to the apex of the roof.



Photograph 3. The western elevation of Building 2.



Photograph 4. The single-storey sloping roof extension to the north-western corner of Building 2.



Photograph 5. The northern flat roofed extension of Building 2.



Photograph 6. The eastern elevation of Building 3, showing the glass panelled roof.



Photograph 7. The northern elevation of Building 3.



Photograph 8. The western elevation of Building 5.



Photograph 9. View of the road that leads through the southern section of the site, along the western side, to the northern section (car wash area).



Photograph 10. Photograph showing the tarmacked hardstanding that surrounds the buildings.



Photograph 11. Showing the area of cleared scrub and ruderal vegetation.



Photograph 12. The cleared scrub and ruderal vegetation area, showing the ruderal vegetation (mainly stinging nettle) to the sides.

Photographs 2015



Photograph 1. Building 1 viewed from the west, showing the door to the upper room (far right of the photograph).



Photograph 2. The northern gable end of Building 1, with barge board features to the apex of the roof.



Photograph 3. The plaster board on the ceiling of the upper room in Building 1 (southernmost end)



Photograph 4. The northern end of the upper room of Building 1, note there is not plaster board cover to this end.



Photograph 5. An example of a hole noted within the plaster ceiling and asbestos sheeting of the roof.



Photograph 6. Broken end of the asbestos that is moulded over the top of the wall, creating a bargeboard like feature.



Photograph 7. The western elevation of Building 2.



Photograph 8. The single-storey sloping roof extension to the north-western corner of Building 2.



Photograph 9. The northern flat roofed extension of Building 2.



Photograph 10. The interior of Building 2, looking south.



Photograph 11. An example of one of the many holes within the asbestos sheeting of the roof of Building 2.



Photograph 12. The flat roofed extension to the north of Building 2 extends into the interior to create a number of rooms.



Photograph 13. The partial false ceiling in Building 2, only a small number of panels remain.



Photograph 14. The eastern elevation of Building 3, showing the glass panelled roof.



Photograph 15. The northern elevation of Building 3.



Photograph 16. One of the interior rooms of Building 3.



Photograph 17. One of the larger rooms within Building 3 (towards the northern end).



Photograph 18. The second of the large rooms within Building 3 (southern end).



Photograph 19. The ground floor level of Building 4.



Photograph 20. The upper level of Building 4.



Photograph 21. Photograph showing the large gap within the interior wall of Building 4, leading into Building 3.



Photograph 22. The western elevation of Building 5.



Photograph 23. Showing the raised height of Building 5.



Photograph 24. The interior of Building 5.



Photograph 25. The poor repair of the roof of Building 5.



Photograph 26. Showing the tarmacked hard-standing that surrounds the buildings.



Photograph 27. View of the road that leads through the southern section of the site, along the western side, to the northern section.



Photograph 28. The eastern boundary of the site.



Photograph 29. The dense scrub within the site.

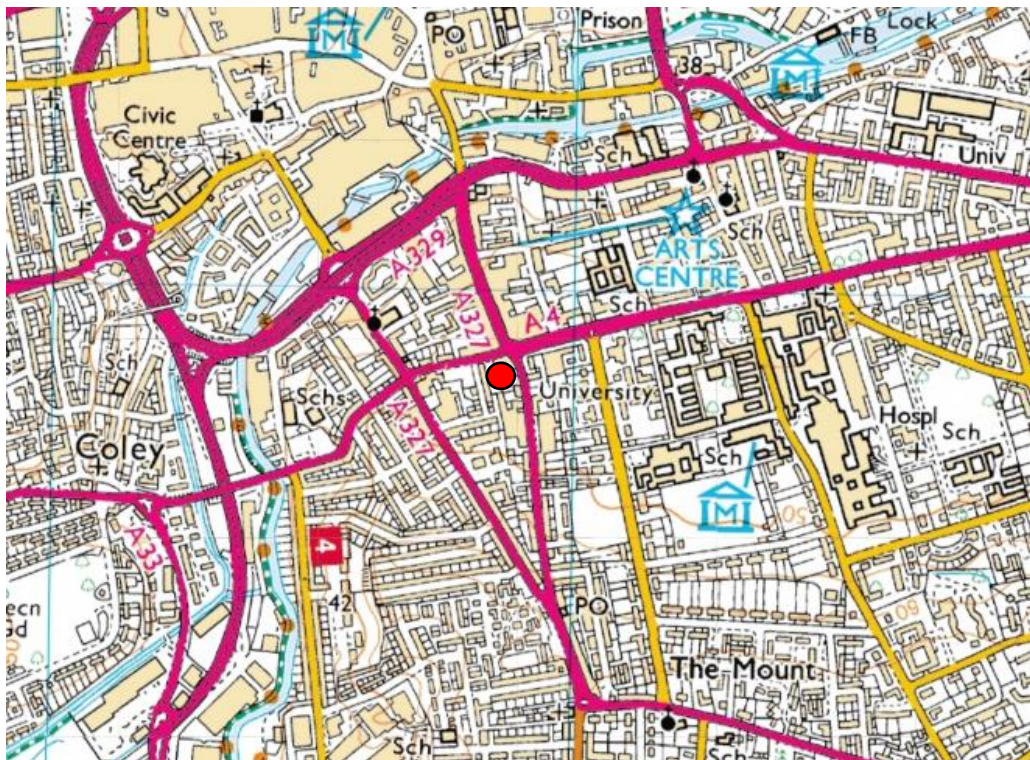


Photograph 30. The ruderal vegetation, in patches between the scrub and to the peripheries.

7 Appendix 2. Site Location Plans



Aerial photograph showing the location of the land at 13-21 Crown Street, Reading (outlined in red). Source: <https://maps.google.co.uk/>



Ordnance Survey map showing the approximate site location (red dot) within the local area. Source: www.bing.com/maps

8 Appendix 3. Proposals' Plan

