



**Oxford Road Community School,
146 Oxford Road, Reading, Berkshire RG1 7PJ**

Bat Survey Report

September 2021

***on behalf of* Reading Borough Council**

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1 Executive Summary

Site Details	Oxford Road Community School is located to the north side of Oxford Road, to the western side of the town of Reading in Berkshire RG1 7PJ. The approximate Ordnance Survey grid reference for the site is SU 705 734.
Proposals	There is a proposal to undertake roofing repairs/works to the roof of the main school building (Building 1).
Methodology	An initial bat survey and preliminary roost assessment was undertaken on the 10th February 2021 by Reuben Hayden MSc QCIEEM. Bat activity (emergence) surveys, focused on Building 1 at Oxford Road Community School were conducted at dusk on 22nd July and 19th August 2021, in accordance with best practice (Collins, 2016).
Evaluation	• No bats or evidence of bats was found in association with the buildings. • Building 1 is assessed as having 'moderate' potential to offer shelter to roosting (Collins, 2016). • Buildings 2, 3, 4 and 5 are assessed as having 'negligible' potential to offer shelter to roosting (Collins, 2016). • No evidence of nesting birds was noted in association with the buildings. • No bats were observed emerging from Building 1 during the bat activity surveys.
Impact Assessment	There is no evidence to suggest that Building 1 of Oxford Road Community School is being used as a place of shelter/protection by roosting bats. As a result of this conclusion, roofing works to the building 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).
Recommendations	The erection of bat and bird boxes are also recommended to maximise the sites value to wildlife.

2 Introduction

2.1 Site Description

Oxford Road Community School, hereafter referred to as the 'site', is located to the north side of Oxford Road, within the suburbs to the western side of the town of Reading in Berkshire RG1 7PJ. The approximate Ordnance Survey grid reference for the site is SU 705 734.

The site comprises an active school, with a number of school buildings set within grounds of hard-standing. Whilst all of the school buildings were surveyed within this study, the focus of this report is the main school building which is of brick construction with a pitched roof of clay tiles. The building dates from 1882, and was built within the Victoria era.

The site is located to the western side of Reading town centre, within the suburbs of the town, with built development surrounding the site in all directions; characterised by terraced dwellings, roads and gardens. Habitats are limited to areas of open green space, amenity grassland and amenity parkland.

The River Thames is located approximately 1.3km to the north of the site, providing potential foraging and commuting habitats for bats within the local area. However, there are no strong habitat connections between the site and the habitats associated with the river, nor are there any other strong habitat connections to other habitats that may support bat species.

2.2 Proposed Works

There is a proposal to undertake roofing repairs/works to the roof of the main school building (Building 1); details are currently unknown.

2.3 Aims of Study

The aims of this study are to survey the buildings for bats and/or evidence of bats, and other protected species including nesting birds. The study assesses the overall potential of the building to support roosting bats and other protected species. The report discusses the potential impacts of the proposed works on bats, protected species and their habitats.

The report assesses the potential impacts in accordance with the legal protection afforded to bats under The Conservation of Habitats & Species Regulations 2017, and recommendations are made with regard to further bat surveys, where considered necessary. European Protected Species (Bat) licences are also discussed in light of the impact assessment.

2.4 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 copulate.

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.

3 Methodology

3.1 Limitations on Survey Data

As with any survey undertaken on a certain date, the data presented within this report provide information at a particular point in time and present a 'snap-shot' of the ecological status of the site. Ecosystems and species behaviour/activity are dynamic and can change over time. Whilst this report presents a characterisation and evaluation of habitat and species status at the time of the study, it should not be taken as an exhaustive representation of the ecological status of the site either at present or into the future.

The eastern loft void (loft void 3) within Building 1 was not accessible at the time of the survey due to health and safety concerns. It is considered that loft void 3 is similar in dimensions and structure as loft void 1, and this has been taken into account when assessing Building 1 for its bat roost potential.

3.2 Field Surveys

3.2.1 Preliminary Roost Assessment (PRA)

A Preliminary Bat Roost Assessment was undertaken on the 10th February 2021 by professional ecologist Reuben Hayden *MSc QCIEEM*. Mr Hayden acts as a 'duly accredited agent' to survey for bats in accordance with the personal bat licences of Edward Bodsworth MA (Cantab) PhD MCIEEM (Natural England Licence no. 2015-12114-CLS-CLS, 2020-45379-CLS-CLS & 2020-45382-CLS-CLS).

A detailed internal and external survey of the buildings within the site (where access allowed) 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 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 to the interior spaces and the fabric of the walls.

The bat survey was undertaken according to best practice guidelines published by the Bat Conservation Trust (Collins, 2016).

The study also takes into account the structure and ecological context of the buildings, including the following factors which 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 at the same time not being too draughty and cool.
- Roof warmed by the sun, south-facing roofs in particular
- 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 foraging habitat, in particular mature trees, parkland, woodland or wetland, especially in a rural setting.

The following criteria are used for 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 indicates that a building or other structure is used by bats, this includes:

- bats seen roosting or observed flying from a roost or freely in the habitat;
- droppings, carcasses, feeding remains etc. found and/or
- bats heard '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 the bat survey, the buildings were checked for evidence of nesting birds including old birds' nests, bird droppings, feathers and eggs. Specific observations were made with regard to species such as the barn owl, swallow and house martin; species that are often associated with buildings.

3.2.1.1 Weather Conditions

The weather on the day was cold and dry (3°C), with moderate amounts of loose cloud (40% cloud cover) and a light breeze (Beaufort scale 2).

3.2.2 Bat Activity Surveys

Bat activity (emergence) surveys of Building 1 at Oxford Road Community School were conducted at dusk on the 22nd July 2021 and 19th August 2021, in accordance with best practice (Collins, 2016).

No emerging bats were recorded during both of the activity surveys. For details of the surveyors employed during each of the surveys please see Table 1 below.

Table 1. Bat activity survey schedule.

Date	Surveyors
	Robbie Birkett (Bat Survey Licence 2019-39934-CLS-CLS)

Date	Surveyors
22.07.2021	Oliver Bevan (Bat Survey Licence 2021-53108-CLS-CLS) Mateusz Lewis Samuel Prior
19.08.2021	Reuben Hayden (Bat Survey Licence 2021-54302-CLS-CLS) Robbie Birkett (Bat Survey Licence 2019-39934-CLS-CLS) Samuel Prior Infrared Camera

Please refer to Table 2 for timing and weather conditions during the bat activity surveys and Figure 1 for the location of surveyors during each survey. Surveyors watched for bats emerging from the building at dusk and were equipped with Echometer Touch bat detectors to record and analyse bat calls in real time.

Table 2. Timings and weather conditions during the bat activity surveys at Oxford Road Community School.

Date	Timing	Sunset	Temp (Start)	Temp (Finish)	Weather (at start of survey)
22.07.2021	20:53-22:37	21:07	22°C	21°C	Dry, clear skies (0% cloud cover) with light air (Beaufort Scale 1).
19.08.2021	20:04-21:49	20:19	17°C	17°C	Intermittent light drizzle throughout, overcast (100% cloud cover) with light air breeze (Beaufort Scale 1).



Figure 1. Aerial photograph showing the position of the surveyors during the bat activity surveys in 2021. Red circles indicate the positions of the surveyors on the 22nd July and 19th August 2021 and the yellow circle indicates the position of the infrared camera on the 19th August 2021. The study building is shown by the red outline.

4 Results

4.1 Description of Buildings

Please refer to Appendix 1 for photographs of the buildings. Location plans can be found within Appendix 2. The locations of the buildings within the site can be seen in Figure 2.

Bats will choose to roost within different locations within the summer and winter periods (see Figure 3), favouring dark, enclosed, humid and cool locations for hibernation such as caves and cellars. These locations must maintain a constant low temperature (2-8°C), but temperatures must also not go below freezing.

In addition, bats favour places that are undisturbed and retain relatively high humidity during the winter period. The buildings within the site are considered to be unsuitable for bat hibernation and the interior and exterior features of the buildings will most likely be affected by fluctuating temperatures that could reach freezing throughout the winter months.



Figure 2. Buildings within the site, outlined in white. Loft voids are outlined and labelled in blue.

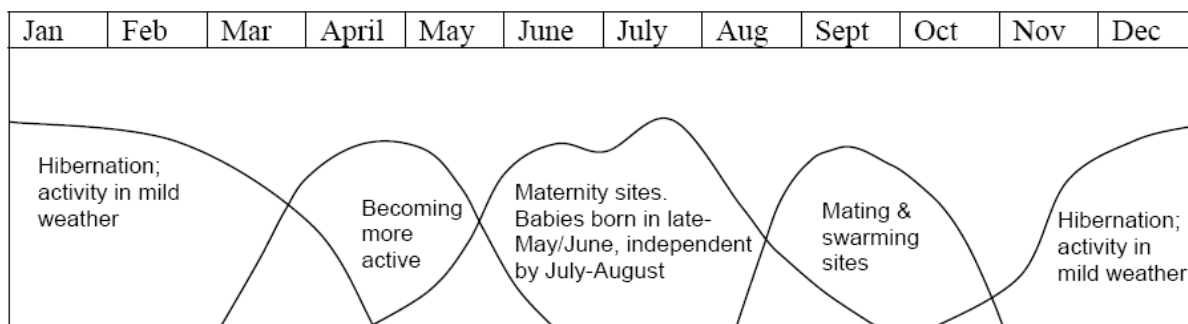


Figure 3. Diagram showing the yearly life cycle of a bat. Taken from the Bat Mitigation Guidelines by Mitchell-Jones (2004).

4.1.1 Building 1 - Main School Building

The main school building is of brick construction with a pitched roof of clay tiles, dating from 1882, and being built within the Victoria era. The roof has multiple ridges with eaves that extend out from the brick walls and connect to the mortaring along the roof.

The building has three loft voids:

- Loft void one is found on the western side of the building and covers a section of roof pitching. It has a window on the northern elevation that brings light into the space. The loft void has a floor to ridge height of approximately 2.5m and the roof is supported by a wooden king post frame with common rafters and has no underlay.
- Loft two is found on the western side of the building and is situated above a restroom. The loft is approximately 3m wide and has a floor to ridge height of approximately

1.5m. The void is completely devoid of light without artificial lighting and the roof underlay is plastered over, with no access points into the space.

- Loft three is found on the eastern side of the building and covers the section of the northern pitch. This loft void was inaccessible at the time of the survey due to safety reasoning, but is considered to be similar to loft void one in design.

The interior spaces within the building are well illuminated by windows on multiple elevations, being made of corridors, classrooms and halls that are used for school purposes regularly.

The external solid brick walls are in an excellent state of repair with no gaps or crevices present. The pitched roof sections with clay tiles are in a relatively poor state of repair with a number of missing/slipped tiles being noted. These features can be seen in Figure 4.

The building is assessed as having 'moderate' potential (Collins, 2016) to offer shelter to roosting bats. This is due to the crevice features noted in the external fabric of the building (lifted/missing tiles, gaps under metal flashing) and loft spaces 1 and 3; as shown below.



Missing tile on north western elevation.



Missing tiles on northern elevation.



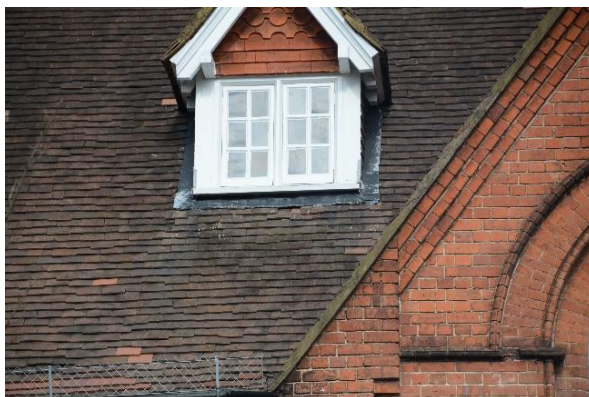
Missing tile on northern elevation.



Gap under lead flashing on northern elevation.



Dislodged tiles on southern elevation.



Gap under metal flashing on southern elevation.



Missing hanging tile on southern elevation.



Missing tiles on southern elevation.



Missing tiles on southern elevation.



Missing hanging tile on southern elevation.

Figure 4. Identified potential bat roost features of the main school building.

4.1.2 Building 2 - Western Outbuilding

The western outbuilding is of render construction with a pitched roof of concrete tiles. The building has wooden soffited eaves and wooden barge boarding on the northern and southern elevations.

The interior spaces within the building are well illuminated by windows on multiple elevations. The external solid render walls are in an excellent state of repair with no gaps or crevices present. The concrete tiled roof is also in a good state of repair with no notable gaps or crevices.

The building is assessed as having 'negligible' potential (Collins, 2016) to offer shelter to roosting bats. This is due to the lack of external features and the lack of a loft void.

4.1.3 *Building 3 - Western Outbuilding*

The western outbuilding is of brick construction with a sloped roof of corrugated cement-fibre. The building has wooden barge boarding on the southern and eastern elevations. The western elevation is constructed from overlapping wooden panels and has no barge boarding.

There are no windows that illuminate the interior space, and it is currently used for storage purposes. The external brick walls/wooden panelling are in an excellent state of repair with no gaps or crevices present. The cement-fibre roof is also in a good state of repair with no notable gaps or crevices.

The building is assessed as having 'negligible' potential (Collins, 2016) to offer shelter to roosting bats. This is due to the lack of external features and the lack of a loft void.

4.1.4 *Building 4 – Wooden Shed*

The wooden shed is found within the north eastern corner of the site and is of wooden panel construction with a pitched roof of bitumen felt. The building is of very simple construction.

There are no windows that illuminate the interior space, and it is currently used for storage purposes. The wooden panelled walls are in an excellent state of repair with no gaps or crevices present. The bitumen felt roof is also in an excellent state of repair with no notable gaps or crevices.

The building is assessed as having 'negligible' potential (Collins, 2016) to offer shelter to roosting bats. This is due to the lack of external features and the lack of a loft void.

4.1.5 *Building 5 – Covered Outbuilding*

The covered outbuilding is found within the northern area of the site and is a covered structure with a wooden frame and an overlapping wooden panel roof.

The roof has no underlay, and the external structure is in excellent repair with no notable gaps or crevices.

The building is assessed as having 'negligible' potential (Collins, 2016) to offer shelter to roosting bats. This is due to the lack of external features and the lack of a loft void.

4.2 **Evidence of Bats**

No bats or evidence of bats was found during the initial bat survey and preliminary roost assessment. In particular, no bat droppings were found inside any of the buildings (including loft space 1 and 2) or associated with accessible external features.

4.2.1 *Bat Activity*

4.2.1.1 *22nd July 2021*

No bats were seen to emerge from Building 1 during the survey on the 22nd July 2021. Full results of the dusk emergence survey undertaken on 22nd July 2021 are presented in Table 3.

Table 3. Results of the dusk emergence survey of Building 1 at Oxford Road Community School, undertaken on 22nd July 2021.

Time	Species	Emergence (Y/N)	Observation
21:23	Noctule	N	Commuting overhead.
21:30	Noctule	N	Heard not seen.
21:50	Common pipistrelle	N	Heard not seen.
21:44	Common pipistrelle	N	Commuting overhead from S towards N.
21:57	Common pipistrelle	N	Low pass above playground towards N.

4.2.1.2 19th August 2021

No bats were seen to emerge from Building 1 during the survey on the 19th August 2021. Full results of the dusk emergence survey undertaken on 19th August 2021 are presented in Table 4.

Table 4. Results of the dusk emergence survey of Building 1 at Oxford Road Community School, undertaken on 19th August 2021.

Time	Species	Emergence (Y/N)	Observation
20:33	Common pipistrelle	N	Heard not seen.
20:36	Common pipistrelle	N	Flew round E side towards W.
20:38	Common pipistrelle	N	Commuting from S to N overhead.
21:02	Common pipistrelle	N	Heard not seen.
21:03	Soprano pipistrelle	N	Heard not seen.

4.3 Evidence of Birds

No evidence of nesting birds was noted in the interior or on the exterior of the buildings. In particular, there is no evidence of swallows or house martins, and the buildings are unsuitable for barn owls.

5 Discussion

5.1 Assessment of Results

5.1.1 Bats

The combined results of the initial building inspection and subsequent bat activity surveys have confirmed the likely absence of roosting bats within Building 1 at Oxford Road Community School.

There is no evidence to suggest the presence of a roost of higher conservation significance, such as a maternity roost; the buildings are not considered to be suitable for hibernation.

Two bat activity surveys are considered adequate in this instance, as there is no indication that bats are using the internal space of Building 1, and the potential for roosting bats was always considered to be within the loft spaces and the external fabric of the roof.

5.1.2 Birds

Nesting birds are considered absent in association with the buildings at Oxford Road Community School.

5.2 Legislative Guidance

5.2.1 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 land use 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 2017. 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 2017 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 2017, 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’.

5.2.2 *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.

5.3 Potential Impacts

5.3.1 *Bats*

There is no evidence to suggest that Building 1 of Oxford Road Community School is being used as a place of shelter/protection by roosting bats.

As a result of this conclusion, roofing works to Building 1 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).

Since no significant impacts on bats are predicted under The Conservation of Habitats and Species Regulations 2017, 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 2017 in this instance.

5.3.2 *Birds*

There is no evidence to indicate that nesting birds are using the buildings and the proposed works to the building will not result in any foreseeable impacts on nesting birds.

6 Recommendations

6.1 Further Surveys

No further surveys are considered necessary.

6.2 Bats

6.2.1 Timing

There are no constraints with regard to the timing of works and bats.

6.2.2 Careful Work Practices

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 and that bats can move between roost sites on a regular basis.

In the very 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.

6.2.3 Enhancement

Although it is not necessary from a legal perspective, it is recommended that a bat box is erected on the southern elevation of one of the buildings at Oxford Road Community School.

This could be a traditional wooden bat box, or longer-lasting woodcrete boxes (Schwegler box) specifically designed for buildings and houses (e.g. the Schwegler 1FQ or 1WQ bat boxes) or a solid oak-built, double-chambered box.

If a bat box is adopted, it is recommended that it be installed as high as possible on the exterior wall of the southern elevation. The erection of a bat box would be seen as an enhancement to the existing situation.

6.3 Birds

6.3.1 Enhancement

The erection of bird nesting boxes is recommended in order to provide suitable nest sites for species within the local area, as nest boxes can be excellent substitutes for the nesting potential of trees. Over 60 species are known to adopt nest boxes including blue tits, great tits, starlings, robins and sparrows.

The location and nature of the nest box depends on the species it is designed for; boxes for tits, sparrows or starlings should be fixed two to four metres up a tree or a wall; open-fronted boxes for robins and wrens need to be low down, below 2m, and well-hidden in vegetation. Unless there are trees or buildings which shade the box during the day, boxes should be faced between north and east, thus avoiding strong sunlight and the wettest winds. Boxes can either be integrated into new buildings or erected on the exterior of buildings and trees.

7 References

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8 Appendix 1. Photographs



Photograph 1. The eastern side of the northern elevation of Building 1.



Photograph 2. The western side of the northern elevation of Building 1.



Photograph 3. The western side of the southern elevation of Building 1.



Photograph 4. The eastern side of the southern elevation of Building 1.



Photograph 5. Loft void 1 of Building 1.



Photograph 6. Loft void 1 of Building 1.



Photograph 7. Loft void 1 of Building 1.



Photograph 8. Loft void 2 of Building 1.



Photograph 7. Loft void 2 of Building 1.



Photograph 8. The southern elevation of Building 3.

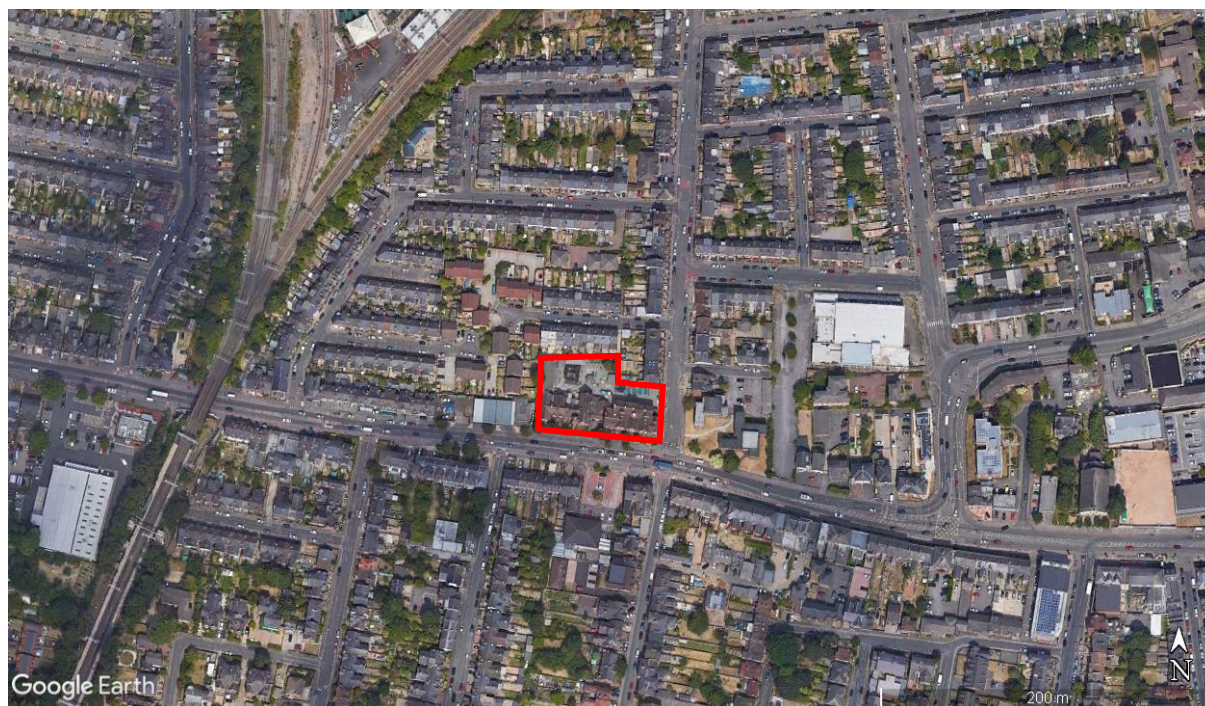


Photograph 9. The southern elevation of Building 4.

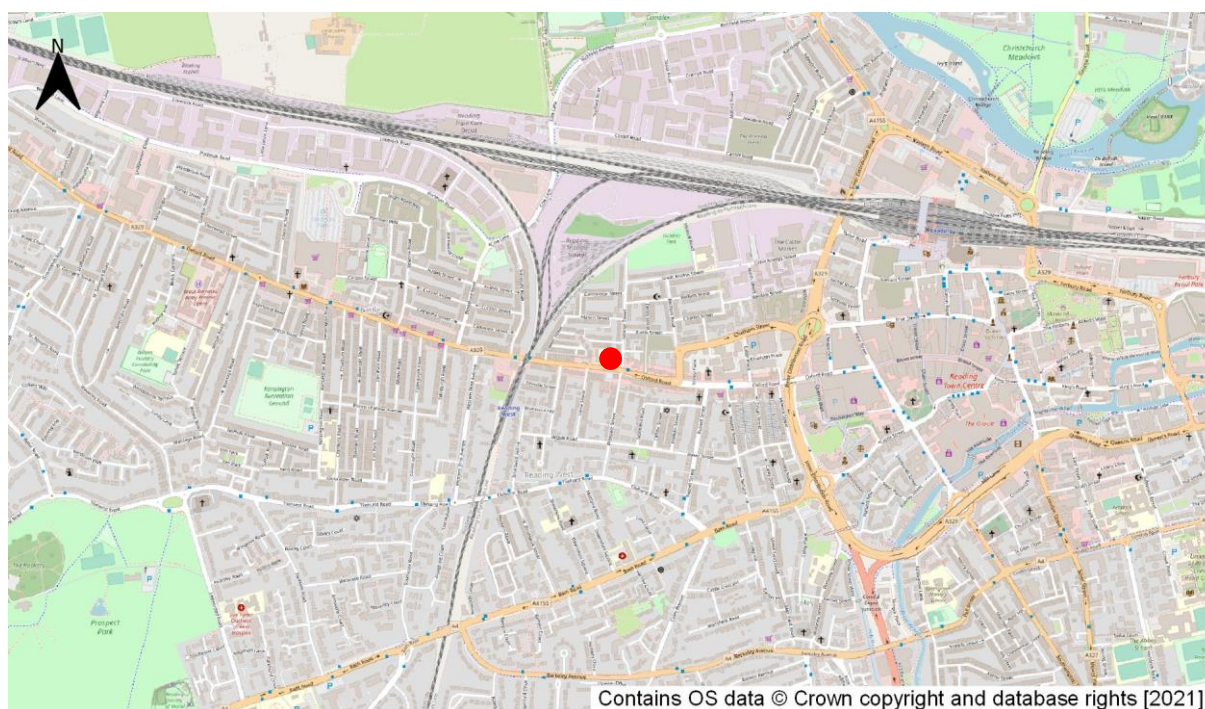


Photograph 10. The northern elevation of Building 5.

9 Appendix 2. Site Location Plans



An aerial photograph showing the location of Oxford Road Community School (outlined in red). *Source: Google Earth Pro*



An Ordnance Survey map showing the approximate location of the site (indicated by the red dot) within the wider local area. *Source: OSM Standard*