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Methodist Church Site, School Road, Lowford, SO31 8BU

Bat Survey Report

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1.0 Summary

The proposal is to internally convert the church into three two bed dwellings. The internal attic will be lost and new velux windows will be created. There are gaps under the slate tiles, under the soffits and where rafters protrude thorough the external walls. Bats may also roost in cavity walls. The existing bat roosting features on the main building can be retained and new ones can be built into the new scheme. Three bat emergence surveys were undertaken in 2021 and these did not recorded roosting bats in the building although several different species of bats were recorded commuting and foraging nearby and potentially roosting close by. A repeat site inspection was undertaken on the 7th July 2023 and this concluded that the site was in a similar condition to 2021. A further updated bat emergence surveys was undertaken in June 2024 and this did not record any roosting bats in the building, similar bat activity was recorded during this 2024 survey as previous emergence surveys. A toolbox talk must be carried out by a suitably qualified ecologist prior to any works on site to highlight locations with bat potential and the required working practices regarding these. Any works to the roof, including installing new roof lights, will be undertaken under ecological supervision. Retaining the attic areas is not required, as they showed no signs of bats. If external lighting is planned, it will be pointed down to where it is needed and not up onto bat roosting areas or onto the surrounding trees and hedges. The small loss of the existing boundary vegetation will be mitigated for with new planting and bird boxes will be incorporated into the proposals as an enhancement.

2.0 Introduction

Background

2.1 Peach Ecology was commissioned in December 2018 to carry out an Ecological Assessment of the Methodist Church at School Road, Lowford SO31 8BU (Grid Reference: SU 48275 10196). Site location is shown in **Appendix A**, with the current site layout shown in **Appendix B**. This report has been produced to support the planning application to Eastleigh Borough Council as shown in **Appendix C**. This report describes the existing ecology potentially impacted by the proposals, based on the findings of a site visit, a European protected species data search and review of local and national policies. The site was reassessed in 2021 and then again in July 2023. Following an Appeal in January 2024 and further consultation with the Council Ecologist a further check and bat emergence survey was undertaken in June 2024 – this report provides the results of the additional survey in 2024.

Description of site and surrounding area

2.2 The building is a brick-built church with roughcast exterior walls, the building is now used for storage. It has a slate tile roof with clay or concrete ridge tiles. There are two distinctly separate but interconnected attics. The site features a small hardstanding car park to the front (west) and walkways down either side (north, south), bordered by an area of mature native and ornamental shrubs and hedgerow with occasional small trees that extend across the site boundary.

2.3 The church is located in the village of Bursledon, close to the city of Southampton. Roads and dense residential housing with gardens surround it. Burslesdon recreation ground is located 186m to the southeast. There is an area of woodland 90m to the south that stretches 2km further south. This would provide good foraging habitat for bats and connectivity into the surrounding countryside for bats and birds.

Brief

2.4 To carry out an Ecological Assessment of the site and inform the clients of any ecological implications associated with the current proposals.

3.0 Methodology

Desk Study

3.1 Ecological data relating to European Protected Species licenses from within 2km was gathered using Multi-Agency Geographic Information for the Countryside (MAGIC), a DEFRA-run website. The results of this are shown in **Appendix D**. Ordnance Survey maps and aerial images were assessed to check for other relevant data on notable habitats and species nearby including wildlife corridors where the site connects into the surrounding area.

Site Assessment

Bats

3.2 The property was surveyed internally and externally in accordance with current bat survey guidance (BCT, 2016) for roosting features that could support bats. An up to date assessment was undertaken on the 7th July 2023. The building was checked externally for gaps in the roof features which would allow access for bats, and internally for bats or signs of bats, including droppings, insect feeding remains, worn entrances and staining and for gaps in wooden beams. The search took place from ground level and using ladders inside and outside the building. Both attic spaces were accessed.

3.3 Three bat emergence surveys took place, two dusk surveys and a dawn survey. The dusk surveys started at least 15 minutes before sunset and continued until 1.5 hours after sunset, the dawn survey started approximately 1.5 hours before sunrise and finished just after. 2 surveyors were present during each survey positioned at different points giving good coverage of all access points, one surveyor was positioned at the door to the stables so that they could check inside from time to time. A static bat detector and infra-red camera was set up inside the barn to check for signs and footage, the static bat detector was left in overnight after each survey and collected the next morning. Equipment used included hand-held Elekon Bat Logger M bat detector/recorders and a static elekon detector, and sounds were analysed on Elekon Software. Details on the environmental conditions were taken at the time of survey. Davog McCloskey (Licence number 2015-11951-CLS-CLS) was present at all the surveys along with Nick Cowen, Jack Horn and Rob Neal.

Birds

3.4 The site was surveyed for signs of breeding birds and any nesting activity was noted along with birds in the area. Signs looked for included nesting material, droppings, pellets and streaking, vegetation was also assessed.

4.0 Results and Discussion

Bats

4.1 Six European Protected Species licences for bats have been granted within 2km of the site, demonstrating the importance of the local area to this species. These included:

- 2015-9288-EPS-MIT common pipistrelle, 1.7km to the north
- 2014-1952-EPS-MIT common pipistrelle, 1.6km to the northeast
- 2014-4817-EPS-MIT common pipistrelle, 1.6km to the northeast
- 2017-31720-EPS-MIT common pipistrelle, 1.3km to the south
- 2014-2574-EPS-MIT common pipistrelle, 1km to the southeast
- 2017-28698-EPS-MIT common pipistrelle, 1km to the southeast

4.2 The Church (**figure 1**) has two connected loft spaces – above the taller section of the building to the west and above the shorter section to the east (**figure 2**).

Figure 1: Methodist church, viewed from the west

Figure 2: Church as viewed from the north

4.3 The building has bat roosting potential. There are gaps under the slate tiles (**figure 3**), under the soffits (**figure 4**) and where rafters protrude thorough the external walls (**figure 5**). The roof has no lining under the slate tiles. Bats may also roost and in cavity walls. There also smashed windows where bats could gain access to the building.

Figure 3: Slate tile roof with potential gaps for bats.

Figure 4: Gap where soffit meets the external wall; this was present around the building at different locations

Figure 5: Gap under soffit, to left above, and where rafters protrude through the external wall, to the right above; these were present around the building at different points

4.4 The lack of a lining under the slate roof tiles allows greater access for bats to access the attic and the building in general. Although no direct evidence of bats was found, the building has features with bat roosting potential and if these areas cannot be avoided and have minimal levels of disturbance during construction then further surveys would be necessary to ascertain the bat roosting status and to determine if a European Protected Species licence is required to proceed with the proposals. The proposals include two new dormer windows and several conservation style rooflights, all of these will be where there are existing slate tiles with no bat access potential and therefore it is unlikely that there will be an impact on bats. There were no signs of bats in the attics so losing the attic to the development is considered to have a negligible impact on bats.

4.5 The woodier species of trees and bushes adjacent to the building at the site boundary (**figure 6**) provide some low quality foraging habitat for bats. These should be retained and protected from any disturbance during building works and protected from external lighting post construction, however if this is not possible then new planting will need to be included as part of the scheme.

Phase 2 bat surveys

4.6 Three Phase 2 emergence surveys took place. These took place between August and September 2021, with two surveyors, giving good coverage of the building. Each survey was carried out by surveyors using bat detectors to record ultrasound calls, in order to establish whether any of the buildings were being used by bats. Surveyors monitored the presence of bats and the direction bats flew when they left the roost or where they came from when going to roost, they also looked for flightlines, foraging and commuting areas. Table 1 below shows a summary of the conditions, equipment and personnel present during the bat surveys.

Survey Date	Survey type	Surveyors	Equipment used	Duration	Weather	Sunset /sunrise time
9th August 2021	dusk	DM & NC	2x Elekon Batlogger M, Elekon Static, Infrared camera	2022 - 2207	30% cloud cover, wind force 1-2, no rain, 18°C at start of survey and 17°C at end	2037
23rd August 2021	dusk	DM & RN	2x Elekon Batlogger M, Elekon Static, Infrared camera	2055 - 2139	1% cloud cover, wind force 1, no rain, 19°C at start of survey and 16°C at end	2009
9th September 2021	dawn	DM & JH	2x Elekon Batlogger M, Elekon Static, Infrared camera	0501 - 0646	10% cloud cover, wind force 2, no rain, 20°C at start of survey and 20°C at end	0631
16th June 2024	Dusk	GL & BH	2x Elekon Batlogger M, Elekon Static, Infrared and thermal camera		5% cloud cover, wind force 2-3, no rain, 16°C at start of survey and 14°C at end	2121

Table 1: Environment conditions and surveyors present during bat surveys

4.7 During the first survey no bats were recorded roosting although a common pipistrelle was recorded at 2133 coming from the south, from outside the site boundary and it is

likely that this bat was roosting very nearby. Common pipistrelle made up the majority of the recordings, there was only one soprano pipistrelle recording at 2113 and this was recorded flying from south to north to the west of the site near the road. The other common pipistrelle recordings were from individual bats to the west of the site potentially foraging or commuting, and from occasional recordings to the north of the building where some foraging activity was recorded around the streetlight there and occasional recordings of commuting bats.

4.8 During the second survey no bats were recorded roosting. At around 2030 a common pipistrelle was recorded to the east of the site, outside the site boundary, flying from north to south – the bat was picked up by both surveyors. Common pipistrelle activity was recorded throughout the survey in the garden to the south of the church, this garden is used for foraging and commuting and it is likely that there is a bat roosting nearby. at 2051 a common pipistrelle was recorded flying from west to east along the north of the site – this bat may have been roosting in a house nearby. Bat activity was recorded regularly to the west of the site along the road and on one occasion a common pipistrelle came in and hunted around the front of the church but then flew off to the west, which is part of a wildlife corridor leading from east and west in the local area. Common pipistrelle made up the majority of the recordings although a soprano pipistrelle was recorded to the south at 2047 for a couple of passes, and then again at 2124. At 2115 a long-eared bat was recorded to the west of the site flying but was not seen. At 2122 a myotis species was recorded once but was not seen. From 2129 – 2133 there were some common pipistrelle social calls on several occasions to the north of the site but these bats were not seen.

4.9 During the third survey no bats were recorded roosting in the church although there was some activity to the north, west and south of the building outside of the site boundary. A myotis species was recorded five times combined by both surveyors at 0536 to the north and west of the church, indicating that it was foraging nearby – the bat then disappeared but its direction was not seen. Common pipistrelle were recorded flying north away from the site at 0619. From 0600 until the end of the survey several recordings were made of common pipistrelle – it is likely that these recordings were from a single bat to the south of the site in the neighbouring garden, the main activity was from 0615 – 0620.

4.10 During the survey in 2024 no bats were recorded roosting. Common Pipistrelle were recorded foraging regularly next to the church and in the immediate area. Regular passes were recorded along Spring Grove, the track that runs along the northern side of the church boundary. Soprano Pipistrelle were also recorded during the survey and sometimes both species were recorded at the same time. noother bat species were recorded.

4.11 The building is not used as a bat roost so a European Protected Species licence will not be required to proceed with the proposals. Bats were recorded passing by close to the building and using vegetation features nearby as a wildlife corridor and therefore it is important that external lighting is avoided or considered to ensure it does not cause a negative impact on bats nearby. what seems like a wildlife corridor in the wider area is located east west from the site – this will need to be protected and enhanced.

4.12 Mitigation for the loss of crevice features will require mitigation in the form of new crevice features, installed into the new design.

4.13 New landscaping will also be of benefit to bats locally by creating new wildlife corridors and additional foraging habitat.

Birds

4.14 The building was surrounded by butterfly bush (*buddleja* sp.), some ruderals and species such as ivy (*Hedera sp.*) and bramble (*Rubus sp.*). A dead blackbird was discovered in the western attic, which may have gained access through one of the broken windows and then became trapped. No other signs of any birds were noted during the assessment. Creating new bird nesting features would be an ecological enhancement for the scheme in line with local and national policies.

Figure 6: Southern aspect of building

5.0 Requirements and Recommendations

Bats

5.1 The slates required to be removed for the dormer windows and the rooflights will be done so under ecological supervision after a tool box talk has been given. The toolbox talk must be carried out by a suitably qualified ecologist prior to any works on site to highlight locations with bat potential and the required working practices regarding these or near to them.

5.2 Any new external lighting must be avoided wherever possible. Where it is necessary, it should be pointed downwards and away from any trees and buildings in the vicinity of the site.

5.3 Two new bat roosting crevice features will be incorporated into the proposals under the eaves facing south, see Appendix E.

5.4 The site will be monitored during construction to ensure bat features are installed correctly.

Landscaping

5.5 The hedgerow along the northern side will be retained although this will be done by removing the excess ivy and buddleia and then new hedgerow planting will take place to add diversity and structure. See Appendix E for more details.

5.6 The existing boundary vegetation and yew tree will be retained (except for the proposed new access for plot 3) and enhanced with some new planting along the boundary using wildlife beneficial species like privet or box with native bulbs at the base.

5.7 At least 20m of new planting will take place along the southern side of the site to create a new low hedge using privet or box, with native bulbs planted at the base at a density of 10-20 per m^2. Additional native species can be used in the hedge also.

Birds

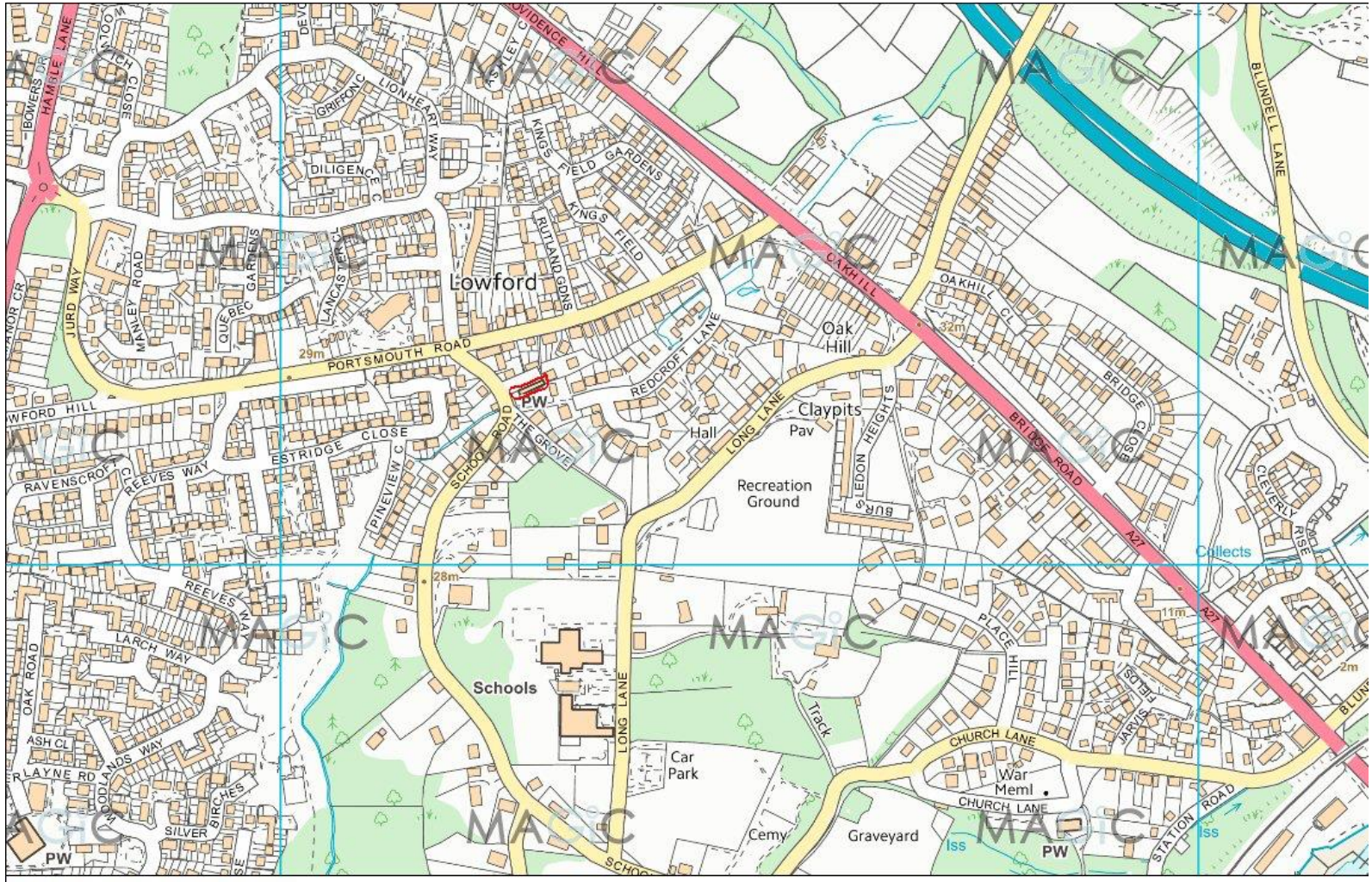
5.8 Any vegetation clearance will be undertaken under ecological supervision (or outside of the bird nesting season which runs from March – August inclusive) to ensure birds are not harmed and to ensure the wildlife corridor is maintained. Any loss of vegetation will be mitigated for with new boundary vegetation planting.

5.9 A bird box for sparrows and one for swifts will be located under the eaves at a suitable location, see Appendix E.

Pollution prevention and drainage

5.10 It is important that the proposals follow appropriate pollution prevention guidelines (PPG 6) and drainage guidelines (Defra guidelines for Sustainable Urban Drainage) to protect the nearby watercourse and other habitats connected hydrologically.

Appendix A: Site Location (outlined in red)



Map produced by MAGIC on 22 December, 2018.
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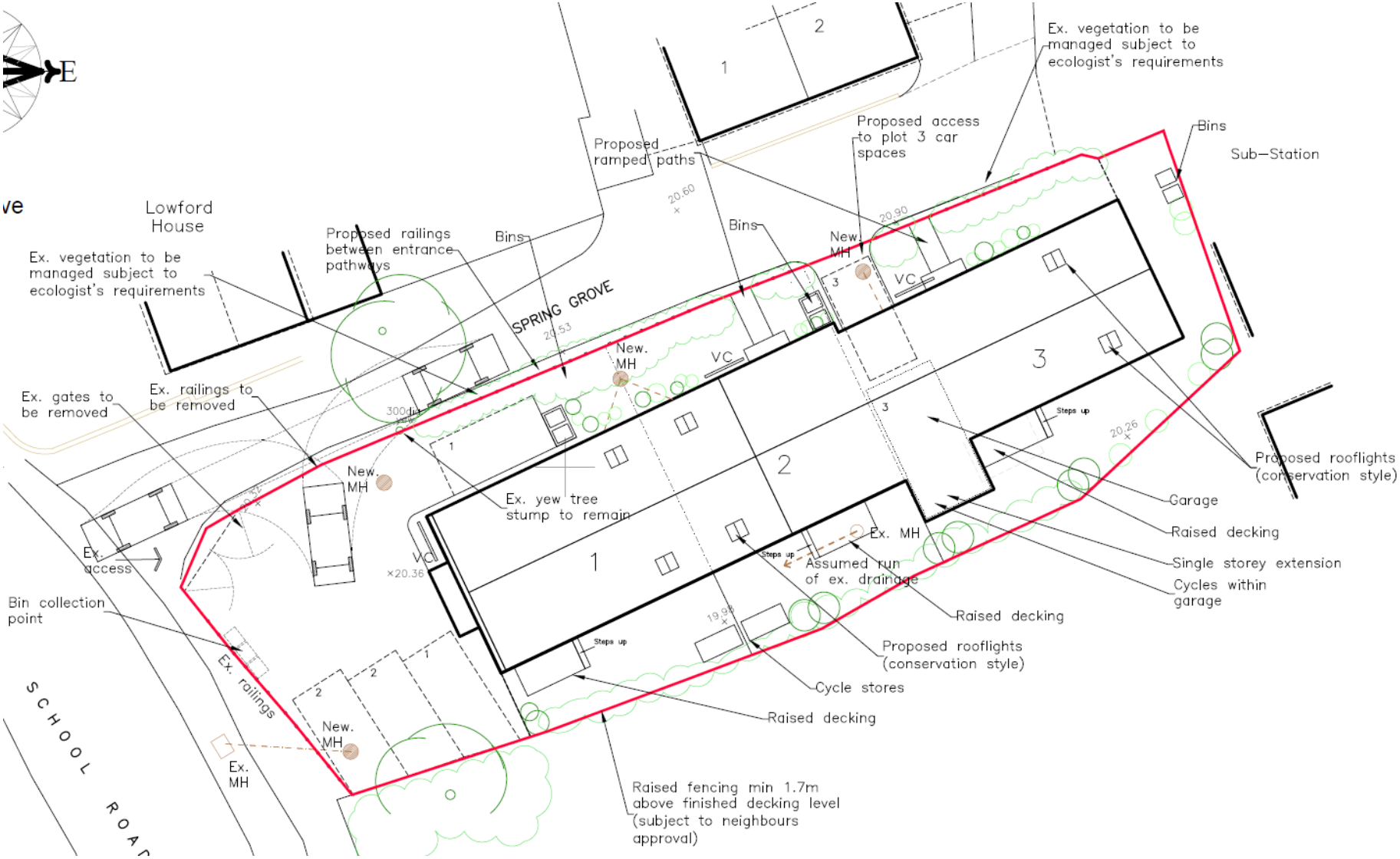
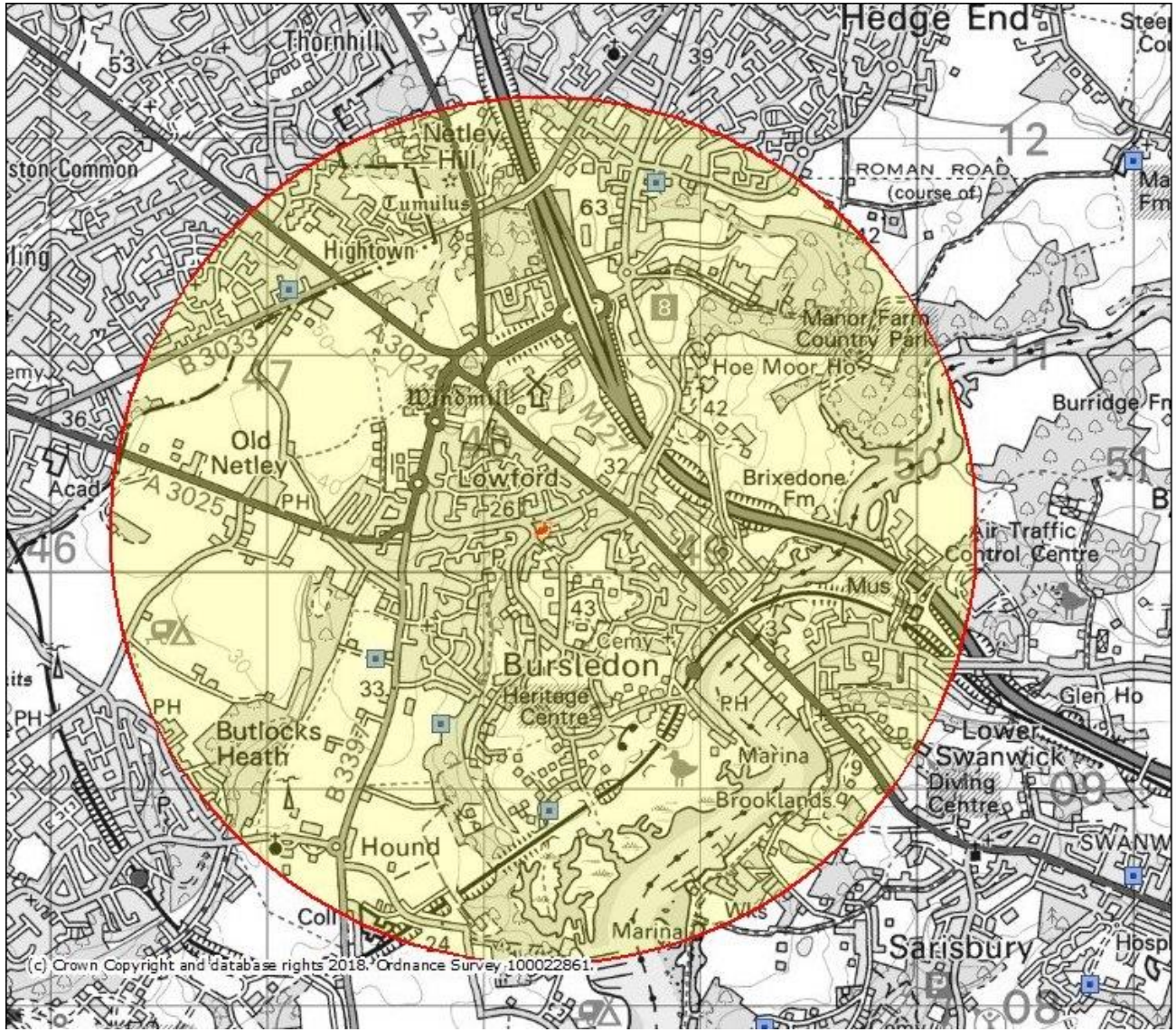
Appendix B: Existing Plans

Appendix C: Proposed Plans



Appendix D: European Protected Species Licence Data Within 2km



Legend

Granted European Protected Species Applications (England)

- Amphibian
- Bat
- Cetacean
- Invertebrate
- Other Mammal
- Plant
- Reptile

Projection = OSGB36
xmin = 443900
ymin = 107900
xmax = 453000
ymax = 112600

0 0.5 1 km

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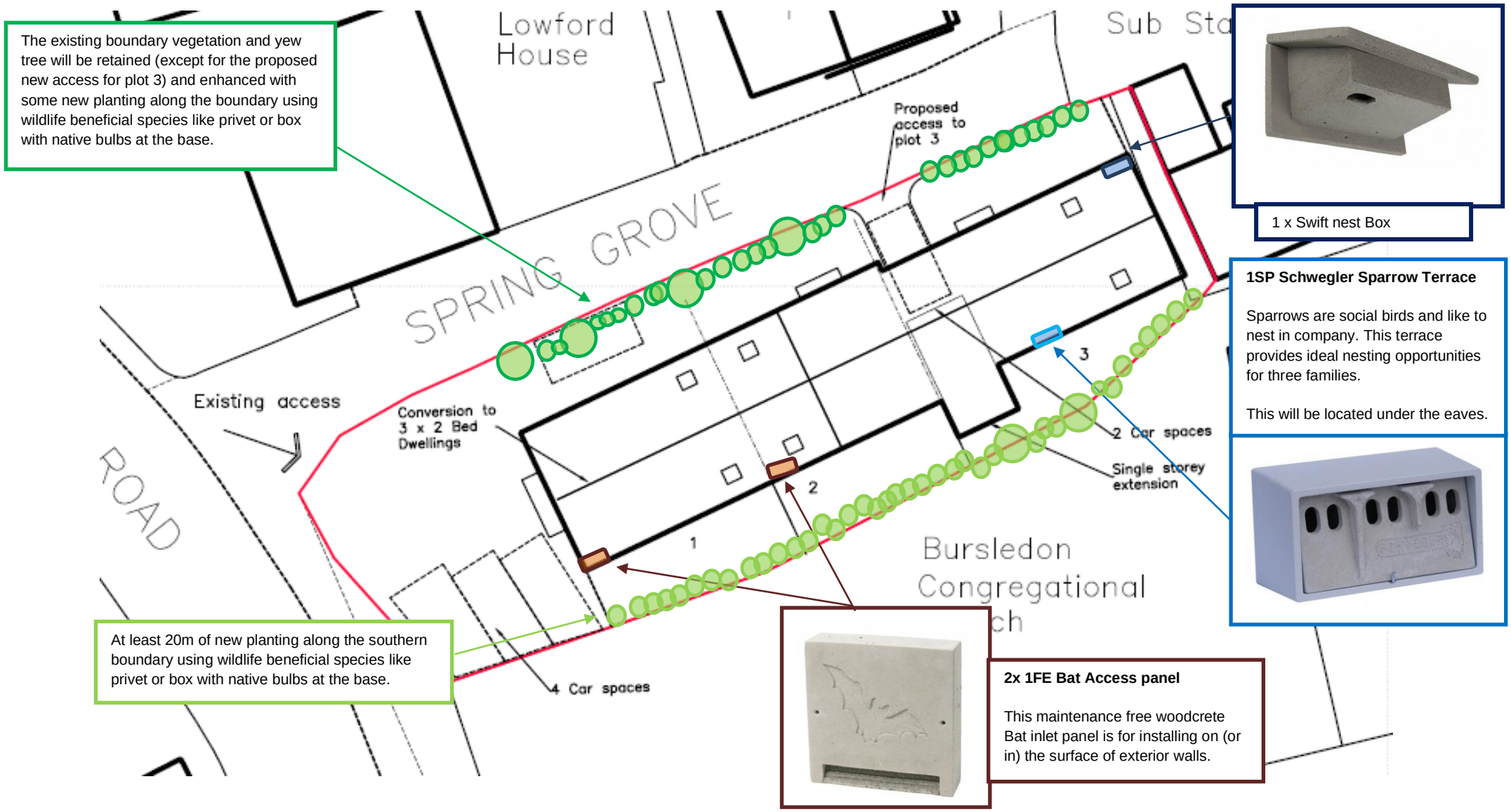
Appendix E: Mitigation and Enhancements



Appendix F: Protected Species Legislation

European Protected Species

Bats

These species are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of the *Conservation of Habitats and Species Regulations 2010*. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, *inter alia*, to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely:
  - to impair its ability to survive, breed, or rear or nurture their young;
  - to impair its ability to hibernate or migrate;
  - to affect significantly the local distribution or abundance of that species; or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (Rhinolophus ferrumequinum);
- Lesser horseshoe bat (Rhinolophus hipposideros);
- Bechstein's bat (Myotis bechsteinii);
- Barbastelle (Barbastella barbastellus);
- Greater mouse-eared bat (Myotis myotis).

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Nationally Protected Species

Breeding Birds

With certain exceptions[1], all wild birds, their nests and eggs are protected by section 1 of the *Wildlife and Countryside Act 1981* (as amended). Therefore, it is an offence, *inter alia*, to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls.

Bird species listed on Schedule 1 of the Act (like Barn Owls) receive further protection, thus for these species it is also an offence to:

- intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- intentionally or recklessly disturb the dependent young of any such bird.

[1] Some species, such as game birds, are exempt in certain circumstances