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Ecological Appraisal

St Charles Borromeo Church, Worthing

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Report Summary

1. The Ecology Co-op has been commissioned by Quantum Homes to undertake an Ecological Appraisal at the St Charles Borromeo Church site in Worthing, West Sussex. A site walkover survey visit was carried out by Paul Whitby on the 3rd July 2025, to evaluate the habitat value of the site and its potential to support EU and UK protected/notable species. The purpose of this report is to record the findings of the survey and identify potential ecological constraints and opportunities in relation to a proposal, which will include the demolition of the church and an associated detached dwelling to make way for a new residential development.

2. The site includes the St Charles Borreomeo Church, which is understood to have been built in 1962, though it has a historic character. There is a detached residential property associated with the church, with a large car parking area to the north of both buildings and modest grounds comprising largely of mown lawn space.

3. The context of the site is residential, with roads and residential properties on all sides, with a railway line just to the north running east-west. As such, the potential for impacts upon protected or notable species such as reptiles, great crested newts or dormice is very limited. All the habitats present are considered to be of low biodiversity value.

4. The church was identified to have a 'low' suitability for roosting bats and the detached dwelling had 'negligible' suitability. A subsequent emergence survey of the church did not identify the presence of roosting bats and bats are likely absent from both buildings.

5. As bats can be opportunistic, and the building may deteriorate with time, the church building should be subject to a repeat inspection for roosting bats prior to demolition as a precautionary measure, and if any evidence of bat roosting or new features are found, the above assessment should be updated. Mitigation under an EPSM licence would be required where bats are confirmed as roosting. The proposed demolition works should be undertaken outside of the nesting bird season to avoid impacts on nesting birds. If this is not possible, any works should be preceded by a 'nesting bird check' by a suitably qualified individual.

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1 INTRODUCTION

1.1 Purpose of the Report

The Ecology Co-op has been commissioned to undertake a Preliminary Ecological Appraisal (PEA) of land at the St Charles Borromeo Church by Quantum Homes. This report presents the findings of a walkover survey undertaken by Paul Whitby a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM), Chartered Ecologist (CEcol), and Natural England Level 2 Bat Survey Class Licence holder on the 3rd July 2025. It provides details on the potential for any protected/notable species and/or habitats to be present at the site and a simple assessment of the potential ecological constraints and opportunities in relation to the proposed redevelopment of the site to support 9 new homes. Further surveys have been undertaken to inform a planning application and Ecological Impact Assessment (EcIA) of the proposal where necessary, and possible measures to avoid, mitigate and/or compensate for significant adverse effects are summarised. The potential to incorporate ecological enhancement measures as part of the scheme is discussed, in addition to any requirement to achieve biodiversity net gain.

This PEA report is designed to inform the client and their team (as appropriate) about the initial findings of the site walkover and desk study research in relation to the site proposals, highlighting the key ecological constraints and opportunities, and any further survey requirements. It is not intended for submission in support of a planning application but can be used to inform a future Ecological Impact Assessment (EcIA).

1.2 Background

This site measures approximately 0.32 ha and is situated on the eastern side of Worthing, West Sussex. The site is situated in an urbanised location, with residential housing immediately to the north and west and roads bordering the site to the south and east. There are no open green spaces adjacent or nearby. The postcode for the site is BN11 2AE and the six-figure grid reference is TQ159036. Figure 1 shows the boundary of the site.

The proposed development/project includes demolition of all existing structures and redevelopment of the site into residential housing.

Figure 1. An aerial image showing the location of the St Charles Borromeo site, with an approximate red line boundary illustrated. Image produced courtesy of Google maps (map data ©2025 Google)

Figure 2. Proposed scheme layout for the development at St Charles Borromeo Church, reproduced from Quantum Homes, drawing number SK 20, date:08/04/2025.

1.3 Policy and Legislation

Legal protection applying to relevant bird, mammal, herpetofauna, invertebrate species and flora, and current nature conservation planning policy is outlined in Appendix 1 of this report.

Where possible, this report provides guidance on how the proposal can be designed to meet the requirements of both local planning policy and the National Planning Policy Framework (NPPF). Details of the NPPF can be found in Appendix 1 and relevant local planning policy by Adur and Worthing District Council is provided in Appendix 2.

2 METHODOLOGY

The methodologies used for this survey are in accordance with the Guidelines for Preliminary Ecological Appraisal[1], but also consider the Guidelines for Ecological Report Writing, Second Edition[2].

2.1 Desk Study

A search for existing records of protected species, species of conservation concern and invasive non-native species was not considered necessary given the scale and context of the site.

A search of on-line mapping resources was undertaken to identify the location of any features of potential ecological interest including ponds within 500m (relevant to great crested newts *Triturus cristatus*), watercourses (relevant to riparian mammals and crayfish) and connectivity to woodland, scrub, and hedgerow networks (relevant to bats and dormice *Muscardinus avellanarius*) in the wider landscape around the site. The connectivity of the site to these features, buildings and other semi-natural habitats, such as grassland and heathland, are also relevant to great crested newts, reptiles and a wide variety of notable species of conservation concern.

The MAGIC website resource (www.magic.gov.uk) was used to identify the location of designated sites for nature conservation and European Protected Species (EPS) licences granted in relation to the survey site.

2.2 Field Survey

A site walkover survey was undertaken on the 3rd July 2025, during which the habitats contained within the site were described and evaluated. Since this site is relatively small in scale and contains limited semi-natural habitat diversity, it was not considered necessary to undertake comprehensive UKHab mapping of the site. All habitat types contained within the site, together with the dominant botanical species and indicators of important habitat types, such as ancient woodland or unimproved grassland, have simply been listed and described where identified.

Habitats and features at the site were evaluated for their potential to support legally protected species and/or species of conservation interest. In addition, observations of any important plant communities, bird assemblages or other potentially valuable ecological features were recorded.

[1] CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition.* Chartered Institute of Ecology and Environmental Management, Winchester.
[2] CIEEM (2017). *Guidelines for Ecological Report Writing, 2nd edition.* Chartered Institute of Ecology and Environmental Management, Winchester.

Details of the preliminary survey methods for each legally protected species are given below. Any site-specific limitations to the survey, e.g. access constraints or seasonal constraints, are set out in section 3.11.

2.3 Badgers

Badgers *Meles meles* exploit a range of habitats, including gardens, coniferous woodland, deciduous woodland, mixed woodland and arable land. They live in an underground system of tunnels and nesting chambers, known as a sett, with territories ranging from 30ha to 150ha or more.

Habitats within the site and surrounding area were broadly assessed for their potential to support badgers. Any signs of badger activity, for example setts, footprints, latrines, well-worn paths and foraging marks, were recorded.

2.4 Bats

Bats can use a wide range of features for roosting purposes, including loft spaces, cavity walls, loose tiles, mortice joints and cracks/gaps in a variety of built structures. They can also be found in trees with holes, splits, cracks, cavities, ivy and loose bark.

Bat Scoping Assessment

A detailed building inspection was carried out in accordance with best practice guidance as set out by the Bat Conservation Trust[3]; the inspection comprised identification of potential access points and 'Potential Roost Features' (PRFs) that bats could use and any evidence indicating the presence of bats using the building, such as rub marks, feeding remains, staining or droppings. The survey included a ground-based external inspection around the buildings and internal inspection of all enclosed loft spaces or roof voids, where safe access was possible.

The potential for roosting bats for each feature, or group of features was assessed as negligible, low, moderate, or high, in accordance with best practice. Any evidence confirming the presence of bats was clearly recorded including photos and samples taken (e.g. droppings), where appropriate. Further surveys have been subsequently been completed.

Bat Emergence survey

A bat emergence survey was undertaken of the St Charlies Borromeo church according to best practice guidance in order to determine the likley presence/likley absence of the use of the building by bats, utilising three surveyors and three supporting night vision aids. This survey follows an earlier assessment of both buildings by the Ecology Co-op in 2023.

A bat emergence survey was carried out of the church on the 26th August 2025 utilisiung three surveyors and three night-vision cameras as illustrated in Figure 4. These positions were chosen to focus upon

[3] Collins, J.(ed.) (2023*) Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.

the identified PRF's and possible access into the building via the ventilation slats. The details for the survey are provided in Table 1.

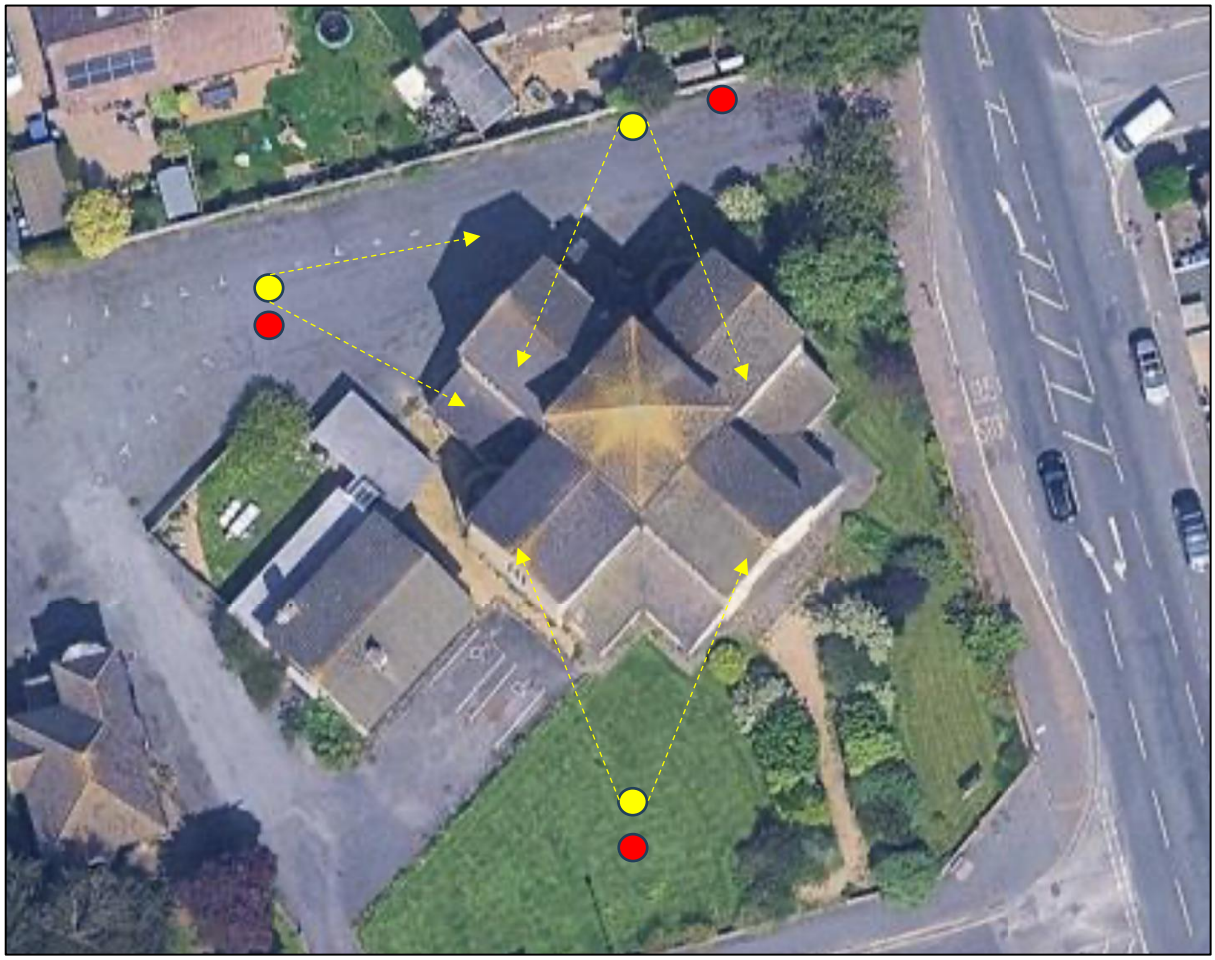


Figure 3. The Position of surveyors (red dots) and night vision aids (yellow dots) for the emergence surveys, with the camera field of view indicated.

Table 1. Details for the emergence survey undertaken on the 26th August 2025.

Date	Survey start time/end time	Temp. degrees centigrade, weather conditions throughout survey	Surveyors
26th August 2025	Start time: 19:40 Sunset: 20:03 End time: 21:33	Max/min temp: 15–16°C. 80% cloud cover and light breeze (BF2), light rain showers at start but clearing after sunset.	Paul Whitby Lara Hulbert Natalie Holmes

2.5 Breeding Birds

Birds can use a wide range of natural and artificial habitats when breeding, including trees, hedgerows, fields, houses and garden sheds. The habitats contained within the site and adjacent areas were broadly assessed for their potential to support important bird species/assemblages, and breeding birds. Any birds identified during the site visit were recorded. Special attention was paid to notable species

such as red-listed Birds of Conservation Concern[4] and those species afforded special protection on Schedule 1 of the Wildlife and Countryside Act (1981).

2.6 Dormice

Dormice are found in deciduous woodland and hedgerows, feeding on flowers, pollen, fruits, insects and nuts, favouring hazel *Corylus avellana* and honeysuckle *Lonicera periclymenum* for food and as bedding. The site was broadly assessed for its potential to support dormice. This included use of on-line mapping resources to assess the surrounding area for connectivity to large blocks of woodland, scrub and extensive hedgerow networks.

2.7 Great Crested Newt

Great crested newts breed in ponds during the spring and spend the rest of the year feeding on invertebrates primarily in semi-natural habitats including woodland, hedgerows, marshes and tussocky grassland. A desk study was undertaken to identify ponds and wet ditches within 500m of the site that might support breeding great crested newts. Where access permission was granted, or ponds could be viewed from public roads or footpaths, the ponds were assessed for their potential to support great crested newts using the Habitat Suitability Index (HSI) (Oldham et al 2000)[5]. The value of the site for terrestrially foraging great crested newts and any features that might be used by hibernating newts has also been assessed.

2.8 Reptiles

The common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis,* grass snake *Natrix helvetica* and adder *Vipera berus* are widespread species that can be found in any of these habitats, whereas smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis* have much more restricted and isolated populations on lowland heathland and sand dunes.

Habitats on the site were broadly assessed for their potential to support reptiles. Particular attention was paid to those features that provide suitable basking areas (e.g. south-facing slopes), hibernation sites (e.g. banks, walls, piles of rotting vegetation) and opportunities for foraging (rough grassland and scrub).

2.9 Other Notable Species

The site's habitats were broadly assessed for their potential to support species of principal importance

[4] Stanbury, A., Eaton, M., Aebischer, N., Balmer, N., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021). Birds of Conservation Concern 5: the status of bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man. British Birds 114, pp 723-747.
[5] Oldham, R.S., Keeble, J., Swan, M.J.S. and Jeffcote, M. (2000). Evaluating the suitability of habitat for the great crested newt (*Triturus cristatus*). *Herpetological Journal* 10, 143-155.

for nature conservation (Section 41 NERC Act 2006) and other notable species. This includes mammals such as harvest mouse *Micromys minutus*, hedgehog *Erinaceus europaeus*, brown hare *Lepus europaeus*, and many bird species. The site was broadly assessed for its potential to support important invertebrate assemblages with particular attention paid to features such as standing dead-wood, wet flushes, bare earth banks and botanically rich areas.

3 BASELINE CONDITIONS

3.1 Designated Sites and Granted EPS Licences

There are no designated sites within the zone of influence of the site and therefore sites designated for nature conservation are unlikely to be a consideration for the proposed development. The closest designated site is Cissbury Ring SSSI, more than 3km to the north.

No important or priority habitats were identified either on background mapping or from the site assessment,

There are no granted EPS licences for mitigation projects within 1km of the site boundary visible on the Magic Maps dataset. The closest EPS licence to the site concerns hazel dormice and is situated approximately 2.7km to the north of the site.

3.2 Habitats

The site includes a relatively small area of habitat classed as vegetated garden, comprising of largely tightly mown lawn spaces, with some herbaceous shrubs and scattered ornamental trees. The lawns include some common grassland plants visible, including common cats-ear *Hypochaeris radicta,* selfheal *Prunella vulgaris*, and birds-foot trefoil *Lotus corniculatus,* but are generally species-poor. Scattered trees include Mexican cypress *Hesperocyparis luscitanica,* ornamental plum *Prunus sp.*, elder *Sambucus nigra*.

Photographs 1 & 2. Lawn spaces and herbaceous shrubs on the southern and eastern sides of the church.

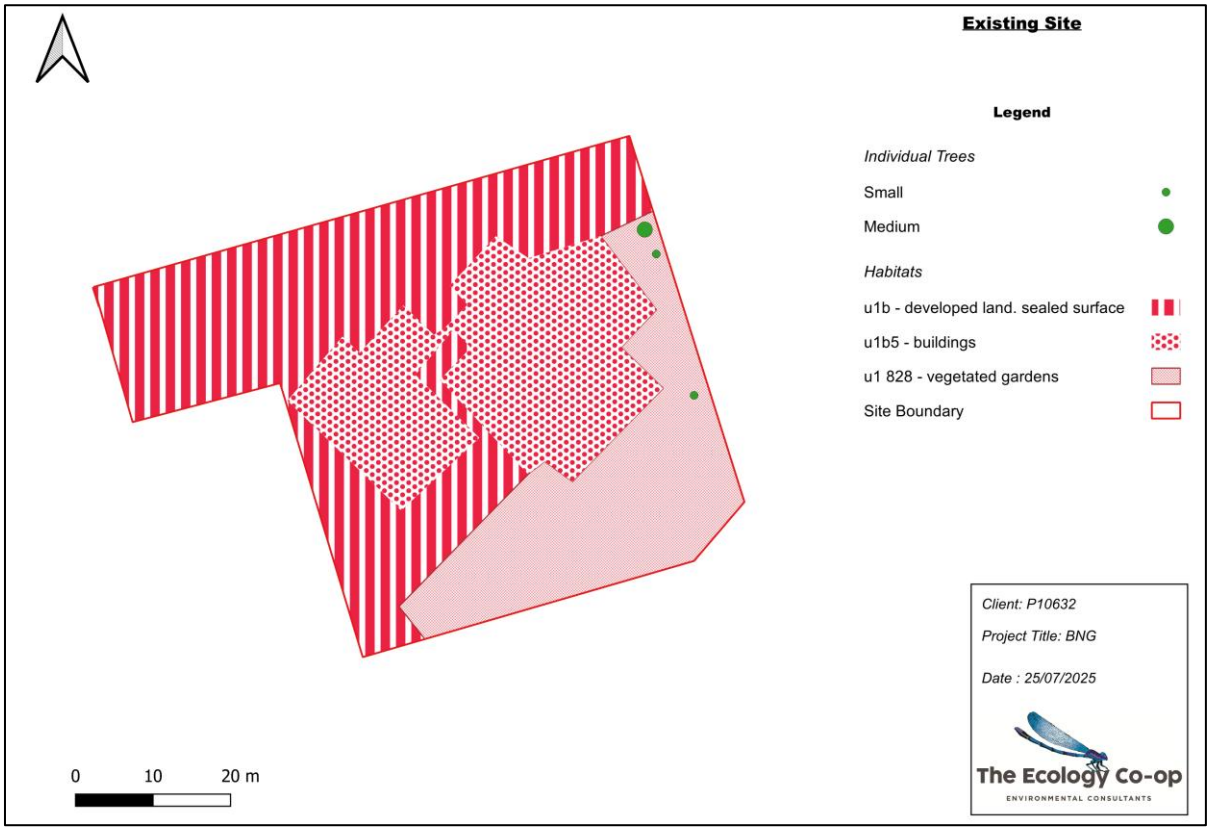


Figure 4. A UKHAB Map produced for the site, which largely comprises of buildings and car parking areas.

3.3 Badgers

No signs of any badger activity were seen during the survey assessment, and there are no habitats of value for this species within the site and surrounding landscape. It is likely that if any setts were situated within 30m of the site boundary, then evidence of badger activity would have been observed.

3.4 Bats

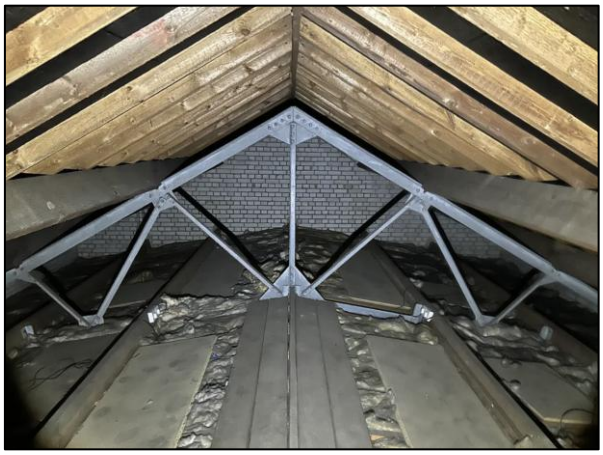
Scoping assessment

The current scoping assessment of the detached property on the west side of the church found only a single very low suitability feature with any potential to support roosting bats, which lacked a suitable landing board to facilitate access, leading to a suitability rating of 'negligible'. The church supported three clear potential roost features on the northern face, though one of these supported an active swift *Apus apus* roost with chicks heard and parent birds seen visiting the nest, whilst four scattered bat droppings that had clearly degraded with age were identified within the void, suggesting the building had been accessed in the past. A DNA test of these droppings identified serotine *Eptesicus serotinus* bats.

A bat scoping assessment and emergence survey was conducted by the Ecology Co-op at this site in 2023[6], with similar findings reported as above. An emergence survey of both buildings on the 25th July

[6] The Ecology Co-op (2023). St Charles Borromeo - Bat Emergence survey

2023 did not identify any bats emerging from either building and noted that bat activity overall was low.



Photographs 3 & 4. The church as viewed from the southwest and one of the side void spaces with a low internal height.

Photograph 5. The internal aspects of the central void with ventilation slats.

Photograph 6. Three potential external entry points/roost features identified on the northern face of the church (circled).

Table 2. Potential roost features for bats.

Building	Description of features	Assessment of suitability
The Church	This building is large, with solid stone walls and an interlocking concrete tiled roof. There are five connected roof voids present, with a central main 'tower' featuring vented faces that are blocked on the inside by wiring to keep out birds. The roof appears to lack any gaps around the eaves or verges. All roof tiles are tight-fitting, with the exception of one slipped tile at the northwestern corner. On the northern wall, two holes appear to have been cut through (these holes were visible on the inside of the building also). There is evidence of historical access to the main roof void by bats, though only 4 bat droppings could be found, and all appeared discoloured with age. One is clearly used by nesting swifts, with chicks heard calling and parent birds observed entering the nest.	Low bat roost suitability
Detached dwelling	Detached building estimated to be no more than 60 yrs old. Roof void has low height (approx 1.5m), rockwool insulation throughout and a fibreboard sarking. The gable roof is clad with large concrete interlocking tiles that sit flush and are devoid of gaps. A chimney is situated on the northern side with tightly sealed lead flashing around the base. The roof has wide eaves with plastic soffits tightly fitting to the walls. Only a single small mortar gap at the verge on the southwestern corner was identified that was considered to have negligible suitability owing to the lack of a suitable landing board.	Negligible bat roost suitability

Bat Emergence survey, 26th August 2025

No bats were recorded from the church at any time. General bat activity was exceptionally low, with only two passes recorded. The first was a non-echolocating pipistrelle sized bat at 20:28, flying west-east across the front of the church. The second was a common pipistrelle bat recorded on a detector but not seen at 21:02 on the northern side of the church.

3.5 Breeding Birds

The site has the potential to support low numbers of common and widespread birds found in urban environments within the trees and herbaceous shrubs. One birds nest was identified during the inspection of the church and residential property, together with an active swift nest present within a hole on the north-facing wall on the church.

3.6 Dormice

There are no suitable habitats present that might support dormice and this species has therefore not been considered further within this report.

3.7 Great Crested Newts and other Amphibians

There are no ponds contained by the site or that are visible on aerial imagery or background mapping within 500m of the site. The site further has an urbanised setting and contains no valuable habits for great crested newts and other amphibians; they are therefore highly unlikely to be present and are not considered further within this report.

3.8 Reptiles

The site does not contain any suitable habitat for reptiles and comprises almost exclusively of buildings, hard standing and close-mown amenity grassland. As for dormice and great crested newts, the lack of suitable habitat and ecological connectivity to any suitable habitats in the wider landscape , means they are most likely absent and this group of species is not considered further within this report.

3.9 Invasive Non-native Species

No evidence of invasive non-native species was found during the walkover survey.

3.10 Other Notable Species

Residential environments such as this can potentially support hedgehogs, where there are sufficient connected green spaces, including vegetated gardens that are accessible. The northern boundary to the side is secured with close-board fencing that would not provide access and low walls across much of the southern and eastern boundaries, but there are breaks in this for vehicle access. The areas of

herbaceous shrubs may provide sufficient cover for daytime shelter and mown grass lawn as foraging habitat as part of a wider foraging resource, but this small site is unlikely to be important for hedgehogs if present locally.

3.11 Survey Limitations

An initial site assessment such as this is only able to act like a 'snapshot' to record any flora or fauna that is present at the time of the survey. It is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

4 IMPACT APPRAISAL

4.1 Designated Sites

The site is outside the zone of influence of all designated sites and, based on this and the small scale of the development, there are no identified mechanisms of impact on designated sites as a result of the proposed development.

Therefore, in relation to designated sites, the proposed development is considered to pose a 'negligible' impact risk.

4.2 Habitats

All of the habitats present at the site are of low ecological value. A separate Biodiversity Impact Calculation report has been produced by the Ecology Co-op, which illustrates how an uplift in biodiversity value is possible, with a gain in habitat units of 28.98% based on the enhancements proposed.

4.3 Badgers

No signs of badger activity were identified during the assessment and no badger setts are situated on or near to the proposed construction zone. No further surveys or mitigation for badgers is advised, however, if any signs of digging by large animals is identified on or near to the site in the future, prior to development or the submission of a planning application, further surveys would likely be required. The urban context of the site location means that it is highly unlikely that badgers would establish a sett here.

4.4 Bats

The two buildings present have been assessed for the potential presence of roosting bats in 2023 and

updated in 2025, with bat emergence surveys confirming the likely absence of any bat roosts. Whilst there is historical evidence that the church central void has been accessed by serotine bats, the natural illumination and ventilation in this space makes it less suitable as a roost and the droppings identified appeared old and degraded. It is therefore considered highly unlikely that any active bat roosts are currently present within the site.

However, bats can be opportunistic, and the building may deteriorate with time, meaning that new suitable features may appear that could be used by bats in future. As a precautionary measure, the building should be thoroughly searched by a licensed and suitably qualified ecologist prior to demolition, to check for any evidence of new use by bats. If any evidence of bat roosting or new features are found, the above assessment should be updated. Mitigation under an EPSM licence would then be required where bats are confirmed as roosting.

As the surrounding site may be used by foraging and commuting bats, it is important that the potential for disturbance from artificial lights is considered. The proposed development is likely to require an 'ecologically sensitive lighting scheme' in accordance with guidance produced by the Bat Conservation Trust (summarised in Appendix 3).

4.5 Breeding and Wintering Birds

The presence of an active swift nest is notable as this species is of conservation concern, with the UK population estimated to have declined by nearly 70% since the mid 1990's. The loss of the nest location is unavoidable, however as all active bird nests are protected from destruction, it is important that the building is demolished outside the nesting bird season (1st March-31st August). Alternatively, the building could be sealed during the winter months when swifts have migrated to Africa to prevent future nesting activity in future years. In any case, demolition during the nesting bird period must only proceed following a check by a suitably qualified ecologist that confirms the absence of any active bird nests.

Swifts can be loyal to their nesting sites and return year after year. To compensate for the loss of this nesting location, several replacement swift bricks must be incorporated into the new development. This should include at least 1 swift brick (or similar 'built-in feature) per dwelling, installed in locations that are approved by a suitably qualified ecologist within the detailed design of the development. Ideally, the demolition work and construction should be timed to provide a continuity of nesting opportunities for swifts at the site, as a lack of nesting sites in one year could lead to the loss of the swift colony.

4.6 Other Notable Species

Whilst it is unlikely for hedgehogs to be present at the site, care must be taken during site clearance to check around the base of areas of herbaceous shrubs for sheltering animals. During the development, deep excavations (e.g. trenches for services and footings) can trap animals such as hedgehogs and it is recommended that scaffold boards should be placed into them overnight as a ramp to provide ameans of escape for animals that fall in.

5 OPPORTUNITIES FOR ENHANCEMENT*.*

The developer is also encouraged to consider including integral bat roosting opportunities into the building fabric such as bat tiles and internal voids/access points for bats. For example, two bat bricks or tubes, which are 'built-in' features could be incorporated into the eastern, southern or western faces of each property. As best practice, the lighting scheme should be designed to minimize light spill (see Bat Conservation Trust website), around these roosting features and potential commuting routes.

A separate Biodiversity Impact Calculation report has indicated that the development proposals will result in an uplift in habitat units of 28.98%.

6 CONCLUSIONS

The redevelopment of the site at St Charles Borromeo Church will not impact any habitats of value and no protected species have been identified as present. The most significant impact identified is the loss of a swift nesting site on the northern face of the church and it is proposed that each new dwelling incorporates a built-in nesting feature for swifts as compensation. It is recommended that the site is subject to a repeat check for signs of bats, breeding birds as a precautionary measure immediately prior to demolition and commencement of construction. As the BNG calculation shows that the proposed development can demonstrate a net increase in biodiversity value, it should be considered favourable against the National Planning Policy Framework at paragraph 187 (d), which supports development that achieves biodiversity net gain.

It is important that no habitat clearance or other site preparation work should be undertaken until planning permission has been granted and all relevant protections for habitats of importance and protected species have been detailed and implemented. Please be advised that any work to remove or modify habitats outside of typical management may undermine a future planning application.

Should you need any further advice on the information provided above, please do not hesitate to contact The Ecology Co-op, info@ecologyco-op.co.uk, www.ecologyco-op.co.uk, Office: 01798 861800.

APPENDIX 1 – Wildlife Legislation and National Planning Policy

Introduction

The following text is intended for general guidance only and does not constitute comprehensive professional legal advice. It provides a summary of the current legal protection afforded to wildlife in general and certain species. It includes current national planning policy relevant to nature conservation.

The 'Birds Directive', 'Habitats Directive' and 'Natura 2000 Sites'

The Council Directive 79/409/EEC on the Conservation of Wild Birds ("the Birds Directive") sets a framework for the protection of wild birds. Under the Directive, several provisions are made including the designation and protection of 'Special Protection Areas' (SPAs) – areas which support important bird populations, and the legal protection of rare or vulnerable species.

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the "Habitats Directive") directs member states of the EU to take measures to maintain the favourable conservation status of important habitats and species. This requires the designation of a series of sites which contain important populations of species listed on Annex II of the Directive (for example Bechstein's bat *Myotis bechsteinii*, Barbastelle bat *Barbastella barbastellus* and white-clawed crayfish *Austropotamobius pallipes*. Together with 'Special Areas of Conservation' (SACs), SPAs form a network across Europe of protected areas known as the 'Natura 2000 sites'.

Annex IV lists species in need of more strict protection, these are known as "European Protected Species (EPS)". All bat species, common dormice *Muscardinus avellana*, otter *Lutra lutra* and great crested newts *Triturus cristatus* are examples of EPS that are regularly encountered during development projects.

The 'Habitats Regulations'

The Conservation of Habitats and Species Regulations 2017, as amended (the "Habitats Regulations") is the principle means of transposing the Habitats Directive and the Birds Directive, and updates the Conservation (Natural Habitats, &c.) Regulations 1994 ("the 1994 regulations") in England and Wales.

'Natura 2000' sites, now known as National Site Network sites under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, receive the highest level of protection under the Regulations which requires that any activity within the zone of influence of these sites would be subject to a Habitats Regulations Assessment (HRA) by the competent authority (e.g. planning authority), leading to an Appropriate Assessment (AA) in cases where 'likely significant effects' to the conservation objectives are identified.

For European Protected Species, Regulation 41 makes it a criminal offence to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb wild animals of such species;
- deliberately take or destroy their eggs (where relevant);
- damage or destroy a *breeding or resting place* of such an animal;
- possess, control, sell or exchange any live or dead animal or plant, of such species;
- deliberately pick, collect, cut, uproot or destroy a wild plant of such species.

The Habitats Directive and Habitats Regulations provide for the derogation from these prohibitions for specific reasons provided certain conditions are met. An EPS licensing regime allows operations that would otherwise be unlawful acts to be carried out lawfully. Natural England is the licensing Authority and, in order to grant a license, ensures that three statutory conditions (sometimes referred to as the 'three derogation tests') are met:

- a licence can be granted for the purposes of "preserving public health or safety or for other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment" (Regulation 53 (2) (e);
- a licence can be granted if "there are no satisfactory alternatives" to the proposed action;
- a licence shall not be granted unless the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Wildlife and Countryside Act (1981) as amended.

This remains one of the most important pieces of wildlife legislation in the UK. There are various schedules to the Act protecting birds (Schedule 1), other animals including insects (Schedule 5), plants (Schedule 8), and control of invasive non-native species (Schedule 9).

Under the Wildlife and Countryside Act (WCA) 1981, all wild birds (with the exception of those listed on Schedule 2), their eggs and nests are protected by law and it is an offence to:

- take, damage or destroy the nest of any wild bird while it is in use or being built
- take or destroy the egg of any wild bird
- disturb any bird listed on Schedule 1, while it is nest building, or at a nest with eggs or young, or disturb the dependant young of any such bird.

Schedule 5 lists all non-avian animals receiving protection to a varied degree. At its strongest, the Act makes it an offence to intentionally kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturb animals while occupying such places. Examples of species with *full protection* include all EPS, common reptile species, water vole *Arvicola amphibius*, white-clawed crayfish *Austropotamobius pallipes* and Roman snail *Helix pomatia*. Other species are protected from sale, barter or exchange only, such as white letter hairstreak *Satyrium w-album*.

The Act makes it an offence to intentionally pick, uproot or destroy any plant or seed, and sell or possess any plant listed on Schedule 8. It is also an offence to intentionally uproot any wild plant not listed on Schedule 8 unless authorised [by the land owner]. Species on Schedules 5 and 8 are reviewed every 5 years when species can be added or removed.

Measures for the prevention of spreading non-native species which may be detrimental to native wildlife is included in the Act, which prohibits the release of animals or planting of plants into the wild of species listed on Schedule 9 (for example, Japanese knotweed *Fallopia japonica*, Himalayan balsam *Impatiens glandifera*, New Zealand Pygmyweed *Crassula helmsii*).

The Wildlife and Countryside Act 1981 (as amended) also prohibits certain inhumane methods of traps and devices for the capture or killing of wild animals and certain additional methods such as fixed trap, poisoning with gas or smoke, or spot-lighting with vehicles for killing species listed on Schedule 6 of the

Act (this includes all bat species, badger, otter, polecat, dormice, hedgehog and red squirrel).

Natural Environment and Rural Communities (NERC) Act (2006)

The NERC Act (2006) created the statutory nature conservation body Natural England, and places a statutory duty on all public bodies, including planning authorities, under Section 40, to take, or promote the taking by others, steps to further the conservation of *habitats and species of principal importance for the conservation of biodiversity* in England (commonly referred to as the 'Biodiversity Duty'). This duty extends to all public bodies the biodiversity duty of Section 74 of the Countryside and Rights of Way (CROW) Act 2000, which placed a duty only on Government and Ministers. Section 41 of the NERC Act lists the habitats and species of principle importance. This includes a wide range of species from mosses, vascular plants, invertebrates through to mammals and birds. It originates from the priority species listed under the UK Biodiversity Action Plan (UK BAP) with some omissions and additions.

Environment Act (2021)

The Environment Act sets a target of halting the decline in species through the inclusion of a legally binding 2030 species abundance target. Aiming to restore natural habitats and enhance biodiversity, the Act requires new developments to improve or create habitats for nature (through mechanisms such as mandatory Biodiversity Net Gain), and tackle deforestation. Going forwards, UK businesses will need to look closely at their supply chains as amongst other measures they will be prohibited from using commodities associated with wide-scale deforestation. Woodland protection measures are also strengthened through the Act.

The Act enables the reform of the Habitats Regulations and further improves protection for nature through the establishment of Local Nature Recovery Strategies that support national Nature Recovery Networks. In addition, the Act provides for the production of Protected Site Strategies and Species Conservation Strategies, aimed at supporting the design and delivery of strategic approaches to deliver better outcomes for nature.

Protection of Badgers Act (1992)

The badger *Meles meles* is afforded specific legal protection in Britain under the Protection of Badgers Act (1992), and Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) (see above).

Under this legislation, it is a criminal offence to:

- intentionally kill, injure, take, possess, or cruelly ill-treat, a badger, or to attempt to do so;
- interfere with a sett, by damaging or destroying it;
- to obstruct access to, or any entrance of, a badger sett; or
- to disturb a badger when it is occupying a sett.

A licence may be obtained from Natural England to permit certain prohibited actions for a number of defined reasons including interference of a sett for the purpose of development, provided that a certain number of conditions are met. Note that licenses are not normally granted for works affecting badgers between the end of November and the start of July.

National Planning Policy Framework

The National Planning Policy Framework (NPPF 2025)[7] sets out the Government's view on how planners

[7] HM Government (2025). National Planning Policy Framework. Department for Communities and Local

should balance nature conservation with development and helps ensure that Government meets its biodiversity commitments with regard to the operation of the planning system.

Paragraph 185b, states that council plans should "*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity*."

The Office of the Deputy Prime Minister (ODPM) Circular 06/2005, 2005)[8]. In accordance with the NPPF, it is important that developments should contribute to and enhance the natural and local environment by:

- minimising impacts on existing biodiversity and habitats;
- providing net gains in biodiversity and habitats, wherever possible;
- establishing coherent ecological networks that are more resilient to current and future pressures.

UK Post-2010 Biodiversity Framework

The UK Biodiversity Action Plan (UK BAP), first published in 1994, was the UK's response to the commitments of the Rio Convention on Biological Diversity (1992) until 2010, when the UK BAP was replaced by the UK Post-2010 Biodiversity Framework. This framework covers the period 2011 to 2020 and forms the UK government's response to the new strategic plan of the United Nations Convention on Biodiversity (CBD) published in 2010. This promotes a focus on individual countries delivering target for protection for biodiversity through their own strategies.

The most recent biodiversity strategy for England, 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' was published by Defra (2011), and a progress update was provided in July 2013 (Defra 2013).

'Biodiversity 2020' builds on the Natural Environment White Paper for England – 'The Natural Choice', published on 7 June 2011, and sets out the strategic direction for biodiversity policy for the next decade.

Biodiversity 2020 deliberately avoids setting specific targets and actions for local areas and species because the Government believes that local people and organisations are best placed to decide how to implement the strategy in the most appropriate way for their local area or situation.

Birds of Conservation Concern (BoCC)

In 1996, the UK's leading non-governmental bird conservation organisations listed the conservation status of all bird species in the UK against a series of criteria relating to their population size, trends and relative importance to global conservation. The lists, known as the 'Red', 'Amber' and 'Green' lists (in order of decreasing concern) are used to inform key conservation policy and decisions. The lists are reviewed every five years and are a useful reference for determining the current importance of a particular site for birds. The most recent review was undertaken in 2021 (Stanbury et al, 2021), which provides an up to date assessment of the conservation status of birds in the UK.

Government. Available online at: https://assets.publishing.service.gov.uk/media/64f991c99ee0f2000fb7c001/NPPF_Sept_23.pdf.

[8] HM Government (2005) ODPM Circular 06/05 Government Circular: *Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf.

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Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the "Habitats Directive"). Available at: http://jncc.defra.gov.uk/page-1374

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National Planning Policy Framework (NPPF) (2023) Ministry of Housing Communities & Local Government. Available at: https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf

Wildlife and Countryside Act (WCA) (1981). HMSO London. Available at: http://www.legislation.gov.uk/ukpga/1981/69/contents

APPENDIX 2 – Adur and Worthing District Council Policy

Policy Number/Title	Policy Summary
Policy 13 -The Natural Environment and Landscape Character	All new development will respect the biodiversity and natural environment that surrounds the development and will contribute to the protection and the enhancement of the area. New development along the coastline, will be designed to incorporate measures to incorporate measures which will limit any adverse impacts on the coast and marine environment. Identified sites in the Worthing Biodiversity Report that have local and nationally recognised designations, such as SNCI and a SSSI will be protected from any development that detracts from their environmental quality and sensitivity.
Policy 17 - Sustainable Construction	The BREEAM standards will be used to assess any new non-residential developments. Where viable and achievable new non-residential development will be expected to go beyond those.

APPENDIX 3 – Reducing Impacts of Artificial Light

Bright external lighting can have a detrimental impact upon foraging and commuting bat flight paths, but more importantly can also cause bats to remain in their roosts for longer. Artificial lighting can also cause significant impacts to other nocturnal species, most notably moths and other nocturnal insects. It can also result in disruption of the circadian rhythms of birds, reducing their fitness.

Guidelines issued by the Bat Conservation Trust[9] should be referred to when designing the lighting scheme. Note that lighting designs in very sensitive areas should be created with consultation from an ecologist and using up-to-date bat activity data where possible. The guidance contains techniques that can be used on all sites, whether a small domestic project or larger mixed-use, commercial or infrastructure development. This includes the following measures:

Avoid lighting key habitats and features altogether

There is no legal duty requiring any place to be lit. British Standards and other policy documents allow for deviation from their own guidance where there are significant ecological/environmental reasons for doing so. It is acknowledged that in certain situations lighting is critical in maintaining safety, such as some industrial sites with 24-hour operation; however, in the public realm, while lighting can increase the perception of safety and security, measurable benefits can be subjective. Consequently, lighting design should be flexible and be able to fully consider the presence of protected species.

Apply mitigation methods to reduce lighting to agreed limits in other sensitive locations – lighting design considerations

Where bat habitats and features are considered to be of lower importance or sensitivity to illumination, the need to provide lighting may outweigh the needs of bats. Consequently, a balance between a reduced lighting level appropriate to the ecological importance of each feature and species, and the lighting objectives for that area will need to be achieved. The following are techniques which have been successfully used on projects and are often used in combination for best results:

- dark buffers, illuminance limits and zonation;
- sensitive site configuration, whereby the location, orientation and height of newly built structures and hard standing can have a considerable impact on light spill;
- consideration of the design of the light and fittings, whereby the spread of light is minimised ensuring that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Consideration should be given to the height of lighting columns. It should be noted that a lower mounting height is not always better. A lower mounting height can create more light-spill or require more columns. Column height should be carefully considered to balance task and mitigation measures. Consider no lighting solutions where possible such as white lining, good signage, and LED cats eyes. For example, light only high-risk stretches of roads, such as crossings and junctions, allowing headlights to provide any necessary illumination at other times;
- screening, whereby light spill can be successfully screened through soft landscaping and the

[9] Bat Conservation Trust and Institute for Lighting Professionals (2018) Guidance note 8. Bats and Artificial Lighting. https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

installation of walls, fences and bunding;

- glazing treatments, whereby glazing should be restricted or redesigned wherever the ecologist and lighting professional determine there is a likely significant effect upon key bat habitat and features;
- creation of alternative valuable bat habitat on site, whereby additional or alternative bat flightpaths, commuting habitat or foraging habitat could result in appropriate compensation for any such habitat being lost to the development;
- dimming and part-night lighting. Depending on the pattern of bat activity across the key features identified on site it may be appropriate for an element of on-site lighting to be controlled either diurnally, seasonally or according to human activity. A control management system can be used to dim (typically to 25% or less) or turn off groups of lights when not in use.

Demonstrate compliance with illuminance limits and buffers

- *Design and pre-planning phase*; it may be necessary to demonstrate that the proposed lighting will comply with any agreed light-limitation or screening measures set as a result of your ecologist's recommendations and evaluation. This is especially likely to be requested if planning permission is required.
- *Baseline and post-completion light monitoring surveys*; baseline, pre-development lighting surveys may be useful where existing on or off-site lighting is suspected to be acting on key habitats and features and so may prevent the agreed or modelled illuminance limits being achieved.
- *Post-construction/operational phase compliance-checking;* as a condition of planning, post-completion lighting surveys by a suitably qualified person should be undertaken and a report produced for the local planning authority to confirm compliance. Any form of non-compliance must be clearly reported, and remedial measures outlined. Ongoing monitoring may be necessary, especially for systems with automated lighting/dimming or physical screening solutions.

Lighting Fixture Specifications

The Bat Conservation Trust recommends the following specifications for lighting on developments to prevent disturbance:

- Lighting spectra: peak wavelength >550nm
- Colour temperature: <2700K (warm)
- Reduction in light intensity
- Minimal UV emitted
- Upward light ratio of 0% and good optical control

Further reading:

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End.