



HYBRID ECOLOGY LTD

*joined up thinking*

## **Low Impact EclA:**

**35 Chantry Way, Billericay, Essex**

**On behalf of:**

**Mr. Pateny**

**Prepared by:**

Gemma Holmes BSc (Hons) ACIEEM

**Report version control:**

Version 1:

June 2023

## Summary

35 Chantry Way, Billericay, Essex was visited on 15<sup>th</sup> February 2023 in response to a proposal for extensions and alterations. The site consists of a semi-detached property with small garden.

### Designated sites and priority habitats

- The site is not the subject of a conservation designation and does not contain Priority Habitat.

### Legally protected species

- Bats: The house was subject to Preliminary Roost Assessment (PRA) for bats which involved an internal and external inspection, including the loft space. No evidence of or potential for roosting bats was found. The house therefore has negligible bat roost suitability (BCT, 2016) and requires no further survey. In the unlikely event that bats are encountered during demolition, work must cease until ecological advice has been sought.
- Nesting birds: Boundary vegetation including trees and hedgerows are likely to support nesting birds. There is a low risk of nesting birds around the house. Nesting birds are legally protected from direct harm, therefore any tree management, or any work on site that could impact an active nest will take place between September-February inclusive (outside nesting season) or following a negative active nest check by a qualified ecologist.
- Badger: [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].

### Habitats

- Boundary vegetation will be protected in accordance with arboricultural best practice, including consideration of Root Protection Zones and installation of Heras fencing, where appropriate.

### Enhancement opportunities

There is scope to include habitat boxes for bats and nesting birds on the new house. Small trees could be included in the garden where space permits. These measures would contribute to Government aims under Paragraph 170(d) of the National Planning Policy Framework 2019 and Local Plan policies which encourage all development to incorporate enhancements, where possible.

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## 1.0 Introduction

### Personnel

- 1.1 This report has been prepared by Gemma Holmes; Consultant Ecologist at Hybrid Ecology Ltd. Gemma is a qualified ecologist with 16 years' experience in professional survey work and is an Associate member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Gemma holds licences to survey for great crested newt and bats in the UK (Licence numbers 2015-19096-CLS-CLS and 2016-27305-CLS-CLS respectively).

### Brief

- 1.2 Mr. Pateny instructed Hybrid Ecology to produce a Low Impact EclA for 35 Chantry Way, Billericay, Essex (grid reference: TQ 67656 94625) in relation to a development. A Location Plan is in Figure 1 and Survey Boundary is in Figure 2. We understand the proposal involves extensions and alterations to the property.

### Aims

- 1.3 This Low Impact EclA has been produced to advise the client/developer and relevant members of the project team as to the key ecological constraints and opportunities associated with this project and any necessary mitigation requirements to ensure legal obligations in respect of protected species, designated sites and habitats are met.

### Limitations

- 1.4 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. Wildlife is transient and mobile, and results of a survey can reasonably vary from one day to the next or across the seasons.
- 1.5 The protected species assessment provides a view of the likelihood of protected species occurring on the site based on the known distribution of species in the local area and the suitability of the habitat. However, it should not be taken as providing a full and definitive survey of any protected species/group.
- 1.6 Biological records can be patchy, and some areas/species are under recorded, therefore absence of records for a species or group does not necessarily mean that there is a lack of ecological interest. Equally, the presence of records does not necessarily mean the habitat is still suitable for the species/group in question.
- 1.7 In accordance with CIEEM Guidelines, this report is valid for 18 months, after which habitats are reasonably expected to have changed to warrant a re-survey. Beyond this point, this report should not be accepted in support of any planning application nor relied upon.
- 1.8 The information contained within this report is intended for supporting a planning application for external alterations/extensions and should not be used for any other purpose.

**Figure 1.** Location plan



**Figure 2.** Survey boundary (approximate)



## 2.0 Planning Policy and Legislation

### National Planning Policy Framework (2019): Conserving and Enhancing the Natural Environment

Please note the below policies have been taken directly from the National Planning Policy Framework, which can be found here: [National Planning Policy Framework - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

#### Paragraph 170

2.1 Planning policies and decisions should contribute to and enhance the natural and local environment by:

- Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

#### Paragraph 175 (d)

2.2 Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

## Legislation: Protection of Designated Sites, Habitats and Species

Please note this section is a summary of legislation only and should not be taken as a definitive interpretation of any law. UK wildlife legislation can be found here: [Legislation.gov.uk](http://legislation.gov.uk)

### Designated sites

#### ***RAMSAR***

- 2.3 Ramsar sites are designated under the Convention on Wetlands of International Importance especially as Waterfowl Habitat. Wetlands are designated, protected and promoted in order to stem the progressive encroachment on and loss of wetlands, which are broadly defined to include marsh, fen, peatland and water.

#### ***Special Areas of Conservation (SAC)***

- 2.4 Special Areas of Conservation are sites designated by Member States under the EC Habitats Directive. The aim is to establish a network of important high quality conservation sites that will make a significant contribution to conserving habitats and species considered to be most in need of conservation at an international level.

#### ***Special Protection Areas (SPA)***

- 2.5 Special Protection Areas are designated under the EC Birds Directive, to conserve the habitat of certain rare or vulnerable birds and regularly occurring migratory birds. Any significant pollution or disturbance to or deterioration of these sites has to be avoided.

#### ***National Nature Reserves (NNR)***

- 2.6 National Nature Reserves are statutory reserves established for the nation under the Wildlife and Countryside Act, 1981 (as amended). NNRs may be owned by relevant national body (e.g. Natural England in England) or established by agreement; a few are owned and managed by non-statutory bodies. NNRs cover a selection of the most important sites for nature conservation in the UK.

#### ***Sites of Special Scientific Interest (SSSI)***

- 2.7 Sites of Special Scientific Interest are areas notified under the Wildlife and Countryside Act, 1981 (as amended), as being of 'special interest for nature conservation'. They represent the finest sites for wildlife and natural features in Great Britain supporting many characteristic, rare and endangered species, habitats and natural features. Notification as a SSSI is primarily a legal mechanism organised by Natural England and selected according to specific criteria.

#### ***Local Nature Reserves (LNR)***

- 2.8 Land owned, leased or managed by Local Authorities and designated under the National Parks and Access to the Countryside Act. A site of some nature conservation value managed for educational objectives - no need for SSSI status. Some reserves are managed by a non-statutory body. Local authorities have the power to pass bylaws controlling (e.g.) access, special protection measures.

### ***Local Wildlife Site / Wildlife Sites***

- 2.9 Local Wildlife Sites (LoWS) are non-statutory sites designated at a county level as being of conservation importance and often recognised in Local authority development plans. The aim of this identification is to protect such sites from land management changes, which may lessen their nature conservation interest, and to encourage sensitive management to maintain and enhance their importance. Although LoWSs have no statutory protection they need to be considered in the planning process and impacts should be avoided wherever possible.

### ***Regionally Important Geological / Geomorphological Site (RIGS)***

- 2.10 Regionally Important Geological/Geomorphological Sites are non-statutory earth science sites. The RIGS networks are locally based voluntary groups drawing on both professional and interest groups identifying sites using a methodical and rational approach. RIGS are analogous to non-statutory biological sites - they are not a second tier but sites of regional or local importance in their own right.

### **Legally protected species**

- 2.11 The Conservation of Habitats and Species Regulations (2019, EU Exit) affords protection to various species/species groups including bats (all species), great crested newt, otter and dormouse.
- 2.12 The Wildlife and Countryside Act 1981 (as amended) is the main source of legal protection for wildlife in England and was strengthened by the Countryside and Rights of Way Act 2000. Species protection is provided under Schedules 1, 5, 6 and 8 to species including bat, great crested newt, water vole, otter and nesting birds. Badgers are protected separately under the Protection of Badgers Act (1992).

### **Species and Habitats of Principal Importance in England (or Priority habitats/species)**

- 2.13 The Natural Environment and Rural Communities Act (2006) places a duty on Local Planning Authorities to conserve and enhance certain habitats and species. The species that have been designated to be of "principal importance for the purpose of conserving biodiversity" are those that are most threatened, in greatest decline, or where the UK holds a significant proportion of the world's total population. They mainly derive from lists originally drawn up for the UK Biodiversity Action Plan (UK BAP). Similarly, the list of habitats of principal importance in England also derive from the UK Biodiversity Action Plan.



## **3.0 Methodology: Desktop Study**

### **Mapping exercise**

- 3.1 Aerial imagery (Google Earth Pro, 2021) was used to examine the landscape context of the site in relation to significant ecological assets such as woodland, established hedgerows, grassland and any naturalised features that would allow wildlife use and dispersal.
- 3.2 Multi-Agency Geographical Information for the Countryside (MAGIC) was used to:
- Determine the proximity to international, national and locally designated sites.
  - Determine whether the site falls within the Zone of Influence of Essex coastal designated sites, specifically to establish whether any financial contribution is needed in compliance with the Essex Coast Recreational Avoidance and Mitigation Strategy (Essex Coast RAMS).
  - Identify any areas of land mapped by Natural England as Priority Habitat within 250 metres of the site.

### **Biological Records Search**

- 3.3 In accordance with CIEEM report writing guidelines (December 2017) a data search was not included in this assessment due to the limited habitats present.

## 4.0 Methodology: Habitats and Species

### Phase 1 Habitat Survey

4.1 An initial Extended Phase 1 Habitat Survey was carried out on 15<sup>th</sup> February 2023 by ecologist Gemma Holmes (BSc Hons ACIEEM). The weather conditions were conducive to surveying, with good visibility, no wind and no rain. In both cases the surveys were undertaken in accordance with the Handbook for Phase 1 Habitat Survey (JNCC 2010).

### Protected/priority species scoping

4.2 The survey also included an assessment of the site’s potential to support any legally protected species; or Species and Habitats of Principal Importance, as identified by Section 41 of the Natural Environment and Rural Communities Act (2006).

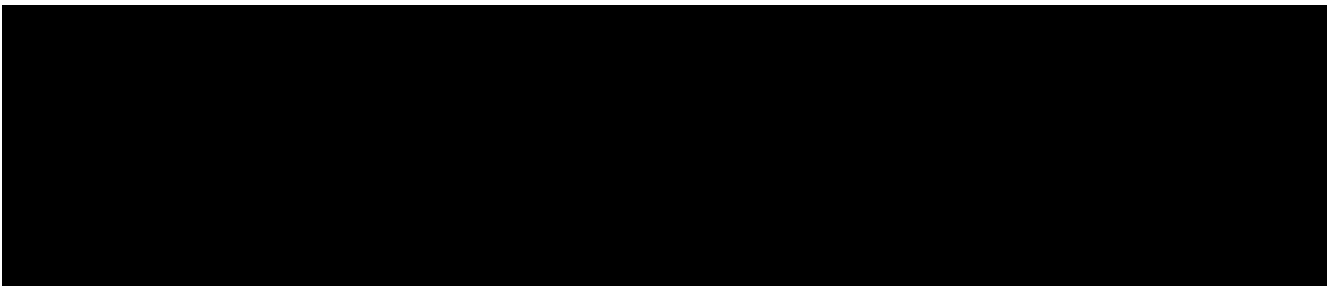
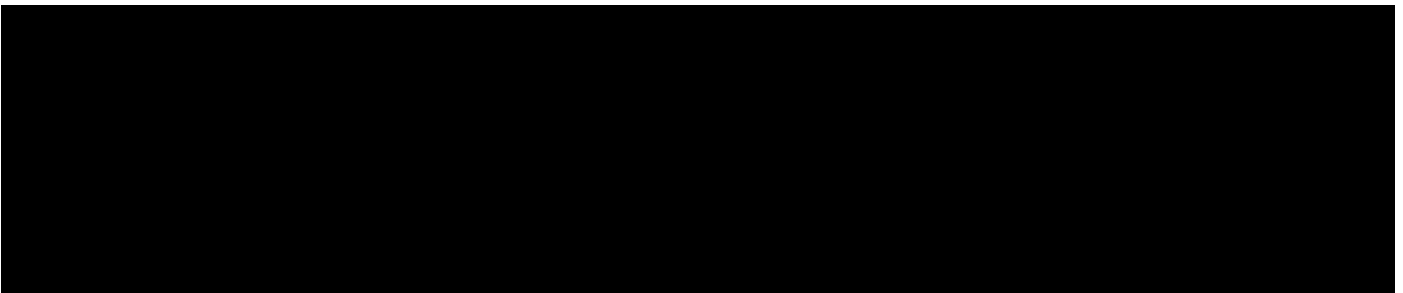
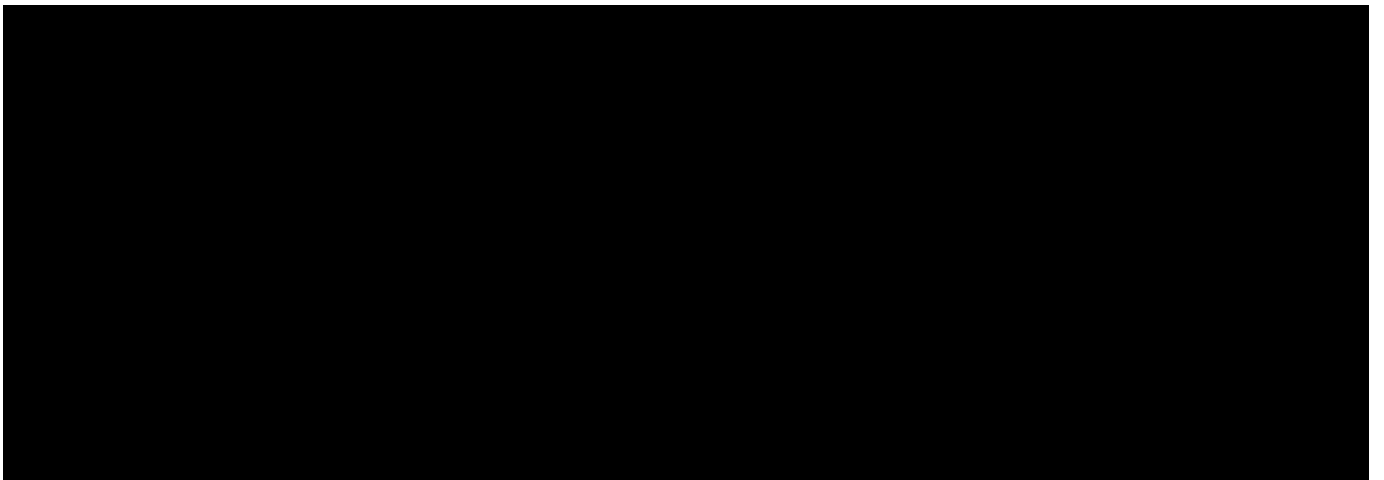
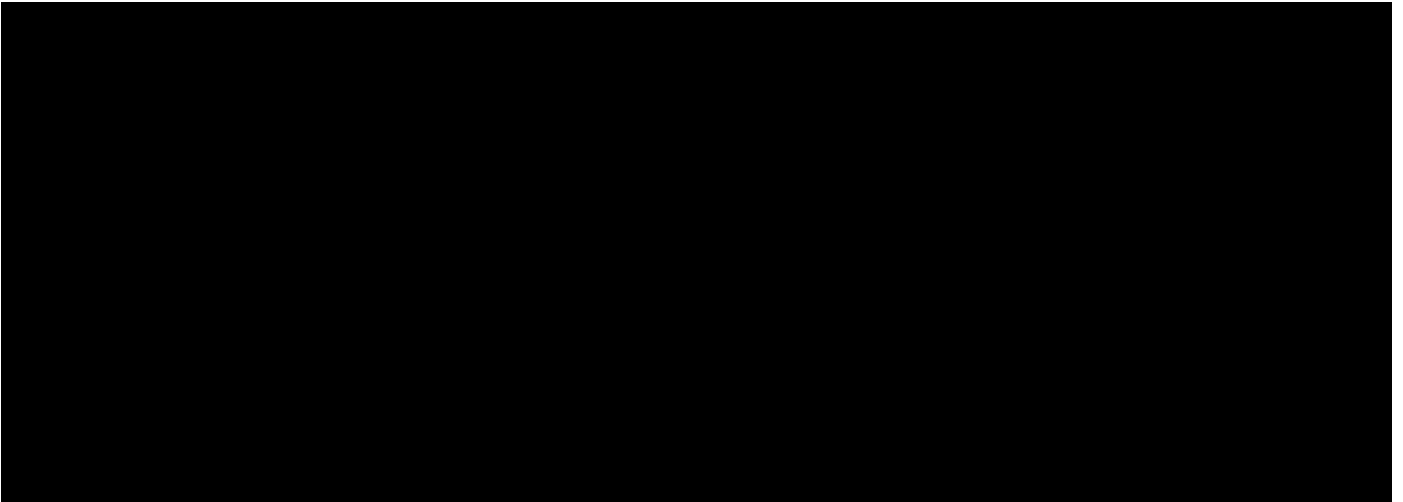
4.3 Where best practice guidelines exist, these have been used to assess the likelihood that individual species will be present, for example Bat Surveys: Good Practice Guidelines (BCT 2016) and Habitat Suitability Index for Great Crested Newt (Oldham et al, 2000).

4.4 The house was subject to Preliminary Roost Assessment which involved an internal and external inspection looking for potential access points (e.g. gaps under roof tiles) and any field signs (e.g. droppings) that may indicate a roost. The loft void was inspected. The building was assigned a “potential roost suitability” in accordance with Table 4.1 of the BCT (2016) Guidelines, shown below in Figure 3.

**Figure 3.** Guidelines for assessing potential suitability of development sites for bats (BCT, 2016)

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.		
Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging 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 <sup>a</sup> 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 <sup>b</sup> ).  A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. <sup>c</sup>	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.  Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions <sup>a</sup> 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 presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.  Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree 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 <sup>a</sup> and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.  High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.  Site is close to and connected to known roosts.

## Badger survey



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<sup>1</sup> Harris, S., Cresswell, P. & Lance, D. (1989) Surveying Badgers: Occasional Publication No.9: The Mammal Society.

## The Mitigation Hierarchy

4.8 All development is expected to meet the highest planning standards and follow the Mitigation Hierarchy of avoid, mitigate, compensate and enhance to ensure that significant natural environment impacts are avoided.

- Avoid - Avoiding any loss of or damage to wildlife sites or to protected / Priority species – development must not damage or destroy important national and Local Wildlife Sites.
- Mitigate - Impacts considered unavoidable should be mitigated at the site where the impact occurs, if at all possible.
- Compensate - Any remaining significant biodiversity loss should be compensated for, as close to the area of loss as possible.
- Enhance: Improve degraded ecosystems/return an area to original ecosystem including creating new habitat - habitat creation should be a standard feature of all new development, wherever it is.

## Evaluation criteria

4.9 Ecological features (designated sites, habitats and species) were evaluated where possible in relation to a geographical context (i.e. International, National, Regional, Metropolitan, County, District, Borough, Local and Site), in accordance with CIEEM Ecological Impact Assessment Guidelines (2016). Criteria include designations, quality of habitat in relation to the site context, ability to support notable assemblages of species, contribution to habitat connectivity, dispersal opportunities or providing intrinsic ecological value.

## 5.0 Results: Desktop Study

### Landscape context

- 5.1 The site is on a residential estate, housing surrounds the property on all aspects. The closest features of note ecologically are the railway line, 250 metres to the north-east, and Mill Meadows (LNR and SSSI) approximately 200 metres to the south. Otherwise, the local landscape is dominated by housing.

### Designated sites and Priority Habitats

- 5.2 The site is not the subject of a conservation designation. The closest designation is Mill Meadows Local Nature Reserve, c. 200 metres to the south. Part of Mill Meadows is designated as a SSSI. Since the project is well below the threshold for impacts (100 units) and there is no functional connectivity between the site and the SSSI, further consideration of impacts is not required.
- 5.3 Norsey Wood LNR and SSSI is approximately 870 metres to the north-east. There is no reason this site will be impacted given the distance and intervening land-use.
- 5.4 As the proposal involves an existing property, there is no requirement for a financial contribution in relation to the Essex Coast RAMS – since there is no net-gain in residential units.
- 5.5 There is no Priority Habitat (PH) on site.

**Sites evaluation: The project will not impact national or locally designated conservation sites nor Priority Habitat. No mitigation is required.**

## 6.0 Results: Phase 1 Habitat Survey

Photographs from the site visit are provided in Appendix 1. For full details on legally protected species, please refer to Section 7. Latin names appear in the text once.

### Buildings/hard standing

- 6.1 The site contains a two-storey semi-detached house with brick walls and pitched tiled roof. Some windows are bricked and there is a central brick chimney. The garage as seen on aerial views has been demolished. The loft void has a 2.7 metre floor to ridge height. The lining was damaged in places, exposing roof tiles above. There was limited scope for wildlife ingress, other than minor gaps in roof lining, all cladding and roof tiles were in good sealed condition.
- 6.2 Extending to the north of the property is a paved driveway. There is a new retaining wall structure to the west.

### Vegetation

- 6.3 To the west, beyond the retaining structure is an established beech *Fagus sylvatica* hedge, off-site. There are various ornamentals and conifers overhanging the garden boundary to the rear.

### Bare ground

- 6.4 The remainder of the site consists of bare ground.

<p><b>Habitats evaluation:</b> Habitats present are typical of domestic/garden environments and are significant at Site Level only.</p>
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## 7.0 Results: Protected/Priority Species Scoping

*This section includes a summary of habitat requirements and site assessment, along with recommendations for further survey/mitigation/enhancements as appropriate.*

### Bats

#### Habitat requirements:

- 7.1 Bats roost in buildings, trees and underground sites. Buildings with large, uncluttered loft voids, external crevices (e.g. hanging tiles, fascias, weatherboarding) and missing roof tiles are often suitable, particularly when a building is close to a foraging resource – e.g. woodland or water. Trees with cavities, woodpecker holes, hazard beams and flaking bark are also suitable for roosting.

#### Assessment:

- 7.2 There were no possible ingress locations on the house, all roof and ridge tiles plus all external cladding was in good, sealed condition. No evidence nor any potential for roosting bats was identified in the loft void. The house therefore has negligible suitability for roosting bats.
- 7.3 As a precautionary measure it is recommended that roof tiles are removed from the top down and checked prior to discarding.
- 7.4 None of the vegetation on/adjacent to the site contain potential roost features.
- 7.5 Low numbers of common bat species are likely to use the site and surrounding gardens for foraging, this is typical of such an environment and should not be affected by small-scale development/disturbance.

**Outcome: Further surveys are not required. Precautionary measures apply during construction. If at any point bats are encountered, work must cease until the advice of an ecologist has been sought.**

### Great crested newt

#### Habitat requirements:

- 7.6 Great crested newt (GCN) require both terrestrial and aquatic habitats, returning to aquatic habitat to breed March-June, using small to medium ponds with no fish and suitable marginal vegetation including watercress and float grass (Froglife 2001). Terrestrial habitat includes refuges and foraging and dispersal opportunities as well as hibernation sites such as rubble piles or mammal burrows. It is rare to find GCN over 250 metres from a breeding pond (Cresswell & Whitworth 2004).

#### Assessment:

- 7.7 There are no ponds on the site and the site is wholly unsuitable, lacking in diverse habitats, shelter and possible hibernation opportunities.

**Outcome: No ponds will be affected by the proposal and given the distance to surrounding ponds there is negligible potential of encountering this species on the site. Taking all factors into consideration, this species is unlikely to be present.**

#### **Dormouse**

##### **Habitat requirements:**

- 7.8 The hazel dormouse requires wooded habitats, usually semi-natural woodland containing hazel coppice and oak, and a rich understorey cover through which to disperse safely between trees (English Nature 2006).

##### **Assessment:**

- 7.9 The habitat on site is wholly unsuitable for this species, with a lack of continuous hedgerows or dense scrub. Hedgerows that are present are species-poor and ornamental in nature, with no onward connectivity.

**Outcome: No impacts predicted. Further survey is not required.**

#### **Otter and water vole**

##### **Habitat requirements:**

- 7.10 Both species require flowing water, deep enough to support foraging behaviour and with connectivity into the wider landscape.

##### **Assessment:**

- 7.11 There is no suitable habitat on/adjacent to the site for either species.

**Outcome: No impacts predicted. Further survey is not required.**

#### **Reptiles**

##### **Habitat requirements:**

- 7.12 Reptiles (common lizard, slow worm, grass snake and adder) require mosaic habitats with features in which to bask, forage and shelter. These habitats need to have onward connectivity for dispersal. Suitable habitats include grassland with scrub edges or small woodland coppices (Edgar et al. 2010).

##### **Assessment:**

- 7.13 The site is unsuitable for reptiles, in its current form. If the garden were to be neglected, common reptiles such as slow worm may disperse, although this is typical of a connected garden environment and would not be ecologically significant.

**Outcome: Negligible risk of harm. Ensure the garden remains mown until development commences to discourage colonisation.**



## Birds

### Habitat requirements:

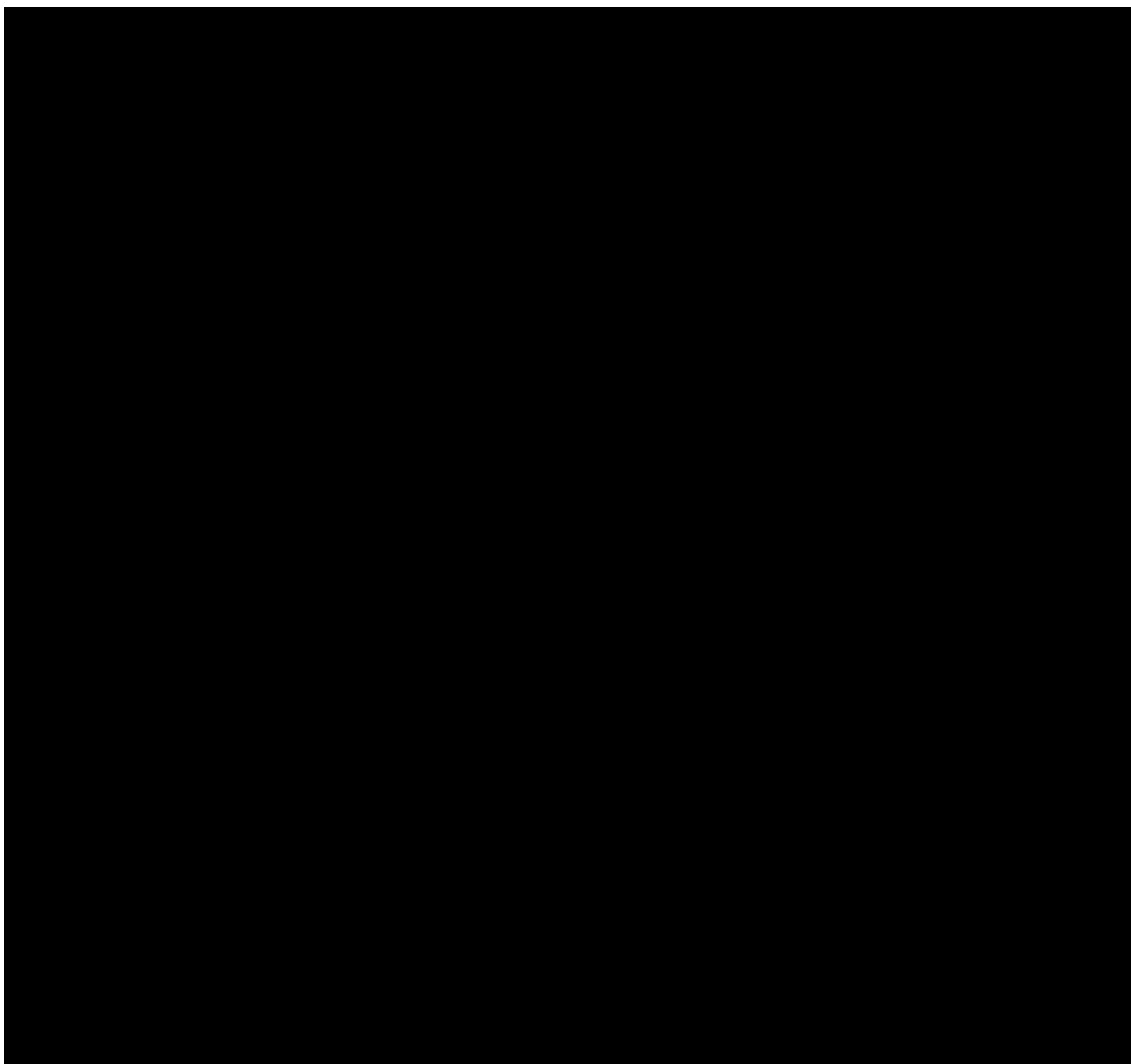
- 7.14 Nesting birds use a wide range of habitats including buildings, scrub and woodland between March and August inclusive (note some species including pigeon will nest all year round).

### Assessment:

- 7.15 Boundary vegetation is likely to attract nesting birds. However, we understand no tree work/management is required in relation to this proposal. There is a low risk of nesting birds using the house between March – September inclusive.

**Outcome: Negligible risk of harm. Ensure any vegetation management (where required) avoids the nesting season. In the unlikely event that nesting birds are encountered around the house during works, they will be left alone, undisturbed until the young have fledged.**

## Badger




**Outcome: Mitigation measures to be strictly followed.**

**Legally protected plants/invertebrates**

**Data records:**

7.20 The site comprises a domestic house and garden with very limited plant diversity. No notable plants were identified, and as such the invertebrate population is likely to be limited.

**Outcome: No impacts expected, mitigation not required.**

**Species evaluation: Species presence is important at Site Level only. Mitigation is required to ensure nesting birds and badgers are protected and the precautionary measures will be followed in relation to reptiles.**

## 8.0 Ecological Constraints and Opportunities

### Site constraints

- 8.1 The site is of limited ecological value. Species constraints relate to nesting birds and badger. Any work that could impact an active nest will be carried out between September and February inclusive. All mitigation measures outlined in this report will be followed in relation to badger.

### Opportunities

- 8.2 Biodiversity net-gain is now encouraged under Paragraph 175(d) of the National Planning Policy Framework (2019) and recommended in Local Plan policies. The following enhancements are recommended:

- At least 1 no. long lasting woodcrete/woodstone bird box targeting house sparrow, swift, wren and starling could be provided within the site boundaries. Bird boxes should be located at a height of at least 2m, and face between north and east. Wren roundhouses / boxes should be located c.1m high in hedges, shrubbery or similar vegetation cover.
- Integrated bat roost features (such as bat brick, tile or tube) could be installed on the house, 3 metres above ground and facing south and south-east.

*For recommended long-lasting habitat boxes, please see Appendix 2.*

- Garden fence lines should be made penetrable to hedgehog, a priority species. Gaps should be created/allowed at ground level, measuring 13x13cm. A gap of this size is unlikely to cause issues for domestic pets.
- Small trees such as apple, pear, cherry, rowan, guelder rose could be included in the garden design.

## 9.0 Conclusions

- 9.1 The survey has established ecological constraints to developing the site and identified opportunities that new development could bring.
- 9.2 The site is of limited ecological value. Further surveys are not required. Provided all measures relating to habitats and species described in this report are followed, there is no reason the proposal will cause adverse impacts to local biodiversity.
- 9.3 The development presents an opportunity to implement enhancement measures such as a habitat boxes and new planting, where possible, which will serve to improve the wildlife value of the site post-development. These measures will also ensure compliance with the requirement for measurable “biodiversity net-gain” and provide new habitat opportunities in accordance with Paragraph 175(d) of the NPPF and Local Plan policies.

## References

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**Appendix 1. Photographs**



a) Northern aspect of property.



b) Southern aspect of property.



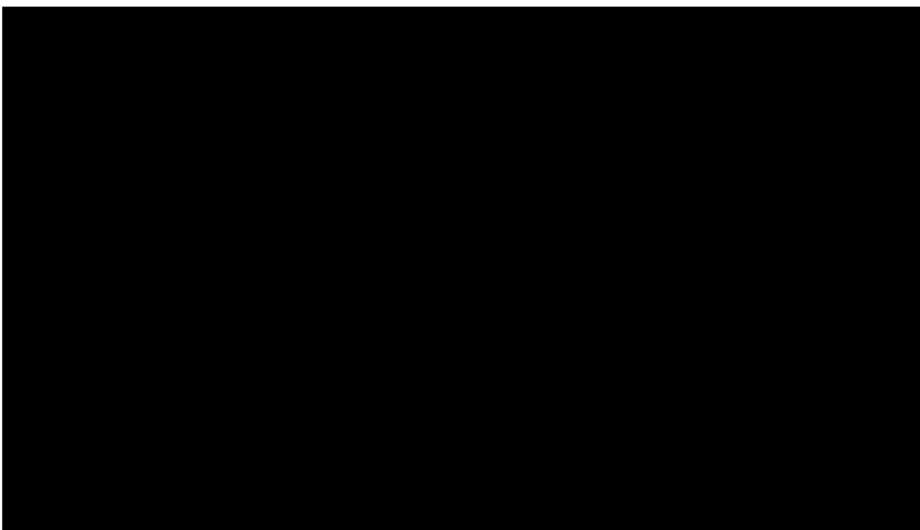
c) Loft void.



d) Retaining wall structure to the west of the site. Beech hedgerow beyond.



e) Badger [redacted]



f) [redacted]

**Appendix 2.** Habitat boxes/features suitable for the site



a) Sparrow terrace (<http://www.wildlifeservices.co.uk/nestboxes/sparrowterrace.jpg>)



b) Woodcrete open-fronted bird box



c) Habitat 003 Built in Bat Box faced with red brick. Dimensions 44 x 21.5 x 10.2 cm plus facing bricks. Self cleaning.





- d) Schwegler 1FR Bat Tube, to be integrated into building wall, and either bricked in or rendered. Self cleaning. Dimensions: 47.5 x 20 x 12cm.



- e) Bat access tile (<https://www.nhbs.com/bat-access-tile-set>)