# Ecological Appraisal of 205-213 Henley Road, Caversham

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NATURAL SOLUTIONS

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# Non-technical Summary

## Background

In October 2020 Crossman Associates was commissioned by Mr L Anthony to undertake an ecological appraisal of a proposed development site at 205, 207, 209, 211 & 213 Henley Road, Caversham, Reading, Berkshire, RG4 6LJ. The site consists of five adjoining dwellings that are proposed for demolition to make way for a new housing development.

## Methodology

The ecological appraisal included a standard Phase 1 habitat survey methodology that was extended to record provisional signs or evidence of protected or notable species. An inspection of the buildings was made for the presence or evidence of roosting bats. The survey work was undertaken by Fairbrass Knowles, an experienced ecologist and licenced bat worker, licence number 12392-CLS-CLS.

Evening emergence/re-entry survey were undertaken of 205. 211 and 213.

A reptile presence/absence survey was undertaken.

## Results

The site is occupied by three detached dwellings (205, 207 and 209) and two semi-detached dwelling (211 & 213). Dwellings are mid 20th-century dwellings with small front gardens and above average sized rear gardens. The gardens tend to be well-maintained and are mainly composed of amenity lawns with mature shrub borders with dividing hedgerows and a few semi-mature and mature trees.

None of the buildings are considered to support roosting bats.

Dense shrub borders and hedgerows provides habitat for nesting birds.

The site supports a small population of reptiles.

**Recommendations**

It is recommended that the following is undertaken as part of the proposals;

- Implementation of landscape buffer and planting
- A precautionary approach to demolition in relation to roosting bats
- Precautionary removal of vegetation in relation to nesting birds
- Reptile mitigation strategy
- Incorporation of bird nesting features within the proposals

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# 1. Background

1.1. In October 2020, Crossman Associates was commissioned by L Anthony to undertake an ecological appraisal, including daytime bat scoping survey of 205, 207, 209, 211 & 213 Henley Road, Caversham, Reading, Berkshire, RG4 6LJ (site Ordnance Survey grid reference SU 730 752).

1.2. Figure 1 under Appendix I provides a site location map.

1.3. The objectives of the ecological appraisal were to:

- Provide a map of existing habitats on site.
- Assess the likely presence of any notable or protected species.
- Identify the need for any mitigation, compensation as appropriate.

## Site Description

1.4. 205, 207, 209, 211 & 213 Henley Road consist of five neighbouring dwellings that consist of three detached dwellings (205, 207 and 209) and two semi-detached dwelling (211 & 213). Together, these are properties are referred to as 'the site'. All five dwellings have adjoining, long narrow, sloping, rear gardens that occupy the southern sides and provide managed amenity lawns, mature shrub plantings and hedging. The front gardens provide small areas of managed garden and paved driveways. All gardens tend to be well-managed and are mainly composed of amenity lawns, however shrub borders are well established and some areas; particularly the ends of the rear gardens provide less managed areas.

1.5. The site is located adjacent to the southern carriageway of Henley Road (A4155) in Caversham a northern suburban district of Reading. Immediate surroundings to the north, east and west are predominantly urban and include adjoining and similar

dwellings that form dense residential areas along the edges of Henley Hill Road and adjacent roads, dwellings tend to have gardens which provides an element of green infrastructure. To the south the gardens bound onto an area of semi-natural habitat which includes a small stream (passing directly past the boundary), grassland and scrub; this habitat extends east and west.

1.6. The wider landscape is occasionally punctuated with green spaces, including parks and school playing fields. To the south the landscape is mainly un-populated and consists of low-lying areas of naturalistic habitat that include flooded gravel pits and the River Thames which flows in an approximate west-east direction.

## Proposals

1.7. Demolition of no.s 205 to 213 Henley Road and rear gardens of no.s 205-219 Henley Road and erection of 2 retirement living apartment blocks (C3 use) comprising a mixture of 60 no. 1 & 2 bedrooms with several communal spaces such as lounges, terraces, external gardens and associated access from the adjacent development on Henley Road, car parking and landscaping

# 2. Methodology

## Desktop Study

2.1. The MAGIC website was accessed to gain information on any statutory site designations within 2 km of the site. This was extended to 4 km in relation to bats.

*Planning policy*

2.2. National planning policy has been reviewed for policies that relate to nature conservation relevant to the site.

## Field Survey

2.3. The ecological appraisal follows standard Phase 1 habitat survey methodology, which is a survey method and habitat classification system that was developed by the Nature Conservation Council, now Joint Nature Conservation Committee (JNCC, 2003) to map habitats and land use categories to a 'consistent level and accuracy'. Habitats present on site are shown in Figure 1, which is the Phase 1 Habitat Map, and are also described within the text below. Where appropriate, Target Notes are used within the map to locate features or areas of interest that are described in the text.

*Species Observations*

2.4. The Phase 1 habitat survey is extended to also record evidence of protected or notable species and assesses the suitability of the habitats on-site and within the accessible surroundings of the site to support such species.

<u>Bat scoping survey</u>

2.5. All five dwellings were methodically inspected internally and externally for any evidence of roosting bats, including actual bats, droppings, urine staining and evidence of feeding activity such as discarded insect wings and cases.

2.6. The buildings and trees were also assessed for their suitability to support roosting bats by considering several factors including whether bats can access internal and external voids within the building and whether these voids provide adequate protection and shelter for roosting bats. If the building is not confirmed as a roost, it is assessed from High to Negligible Suitability as follows;

- **High Suitability** – many roosting opportunities. Buildings tend to be old, large and rural
- **Moderate Suitability** – some roosting opportunities. Building tend to be old, rural with some recent maintenance
- **Low Suitability** – few roosting opportunities. Buildings tend to be modern, urban and well maintained
- **Negligible Suitability** – insignificant roosting opportunities. Buildings tend to be small, modern, urban and very well maintained

2.7. The buildings were also inspected for the presence of birds including house sparrow *Passer domesticus*. The buildings were checked for field signs including nesting material, accumulations of droppings.

Evening emergence surveys

2.8. An appropriate number of emergence or re-entry surveys were undertaken of each building that was assesses to be suitable for bats. An appropriate number of surveyors attended each survey and were positioned so that all aspects of the building suitable for roosting bats could be observed. Surveys were undertaken during suitable weather conditions. The emergence surveys commenced 15 minutes before sunset and continued for two hours. The dawn re-entry survey

commenced 1.5 hours prior to sunrise and continued until 15 minutes after sunrise. All general bat activity on site was noted.

2.9. Anabat, SSF 2 and Echo Meter Touch bat detectors were used together with visual observations on flight patterns and feeding behaviour to aid identification to species level. Recordings of bat calls were made and later analysed using dedicated computer software BatScan.

2.10. Survey work was led by Alex Crossman and Fairbrass Knowles, both licensed bat workers. Assistance was provided by George Heaven, Billy Malone, Miguel Canovas, Carla De Sousa and Elena Vasileva.

## Site Evaluation

2.11. The site evaluation for the habitat areas and species present (where appropriate) is based on published criteria given in the CIEEM guidelines for ecological impact assessment. Values are assigned between International Value and Negligible Value to habitats that are likely to be directly or indirectly affected by the proposed development.

2.12. The value categories used the assessment are as follows:

- International – Europe
- National – England
- Regional – South-east
- District – Reading
- Local – Caversham
- Site – Within the immediate zone of influence

2.13. The conservation and ecological status of the site is assessed using the Ratcliffe criteria (1977).

# 3. Results

## Desktop Study

3.1. The Magic website informed of one statutory site within 2 km of the site.

*Clayfield Copse Local Nature Reserve (LNR)*

3.2. The site provides an area of ancient woodland that includes boundary banks and ditches and plough baulks can be seen in the woodland. The site amounts to 8.65 hectares and is located approximately 2 km to the north of the site. The LNR has no direct connectivity with the proposed development site.

3.3. LNR's are primarily designated for their accessibility by residents as opposed to the rarity of the habitats and species present. Both LNR's are of local ecological value.

3.4. There are no statutory sites within 4 km of the site that are designated for bats.

*Planning Policy*

3.5. The National Planning Policy Framework (NPPF) contains sections of relevance to nature conservation that include:

- Paragraph 174: To protect and enhance biodiversity and geodiversity, plans should:

  a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas

identified by national and local partnerships for habitat management, enhancement, restoration or creation;

b) and 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.

- Paragraph 175: When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) 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.

## Field Survey

3.6. The habitats on site are described in the paragraphs below and are mapped on Figure 1, Appendix I. Photographic reference can be found within Appendix II.

3.7. Habitats are considered to fall into the following categories;

- Amenity grassland
- Introduced shrub
- Hedgerows
- Trees
- Ruderal
- Watercourse
- Hardstanding
- Buildings

*Amenity Grassland*

*3.8.* The majority of the rear gardens and small areas of the front gardens are composed of well-maintained amenity lawns, with fescues *Festuca sp.*, rye-grass *Lolium perenne* and other amenity species. Herb species are present on all lawns, and include, mouse-eared hawkbit *Pilosella officinarum,* yarrow *Achillea millefolium,* ribwort plantain *Plantago lanceolate* and dandelion *Taraxacum officinale*.

*Introduced shrub*

3.9. The rear gardens, and to a lesser extent the front gardens, provide well-established areas of mainly ornamental shrubs. These areas are situated along the edges of the gardens but include individual plants and in the rear garden of 213 they are used to create a more structured layout.

3.10. Shrubs and shrub borders tend to be periodically pruned and contained to specific areas.

3.11. Shrub species present include; Mexican orange-blossom *Choisya ternata*, box-leaved honey suckle *Lonicera nitida*, cherry laurel *Prunus laurocerassus*, rose of Sharon Hypericum sp, yucca *Yucca sp* barberry *berberis sp*, Laurustinus *viburnum tinus,* buddleia *Buddleja davidii,* grape vine *Vitis sp,* pampas grass *Cortaderia selloana,* perrywinkle *Vinca major,* bamboo, holly *Ilex aquifolium,* hazel *Corylus avellana* and hawthorn *Ctrataegus monogyna.*

*Trees*

3.12. A few mature/semi-mature trees are present in the gardens of 209 & 211 and consist of a lime tree *Tilia europaeus,* an unidentified ornamental species and an overly mature willow tree *Salix sp*; (Target Note 1), all are present at the bottom of the rear garden of no 209. The garden of no 213 has an ivy-clad cherry tree *Prunus sp* and a lime tree along the north-eastern boundary.

*Hedgerows*

*3.13.* Well-managed lengths of hedgerow are present in the front (north) garden of 205, 211 & 213 and the bottom southern end of gardens 209 & 213. The hedgerows form boundary features and have been kept well-trimmed. Woody species are a combination of native and ornamental species and include privet *Ligustrum vulgaris*, box leaf-honeysuckle, ivy *Hedera helix,* hawthorn, leylandii conifer *Cupressus x Leylandii,* hornbeam *Carpinus betulus* and field maple *Acer campestre.*

*3.14.* A mature conifer hedge (Target Note 2) forms a screened-off and U-shaped area at the extreme end of the rear garden of 211. The hedge is unmanaged, which has allowed the conifers to grow into trees. Due to the close planting distance, the lower branches have mainly died back with the significant green foliage mainly higher up.

*Pond*

3.15. A small square shaped and approximately 1.5 m x 1.5 m sized ornamental pond is present on the rear patio adjacent to no 213. The pond is well stocked with goldfish.

*Ruderal and scrub*

3.16. While the five gardens are generally well maintained a few areas are less managed with small areas of light ruderal and bramble scrub.; this is mainly in the rear gardens, notably the bottom garden of no 211. Ruderal species include nettle *Urtica dioica,* nipplewort *Lapsana communis.* Scrub is mainly bramble *Rubus fruticosus* and occasional elder *Sambuca nigra.*

*Hardstanding*

3.17. Areas of hardstanding form patios, paths, and parking / driveways. Areas are composed of brick paving, concrete, and concrete slabs. All areas are free of any significant vegetative cover.

*Bare ground*

3.18. The extreme southern ends of the rear gardens provide areas devoid of any significant live vegetative cover. This is largely due to the heavy shading cast by the conifer trees associated with the hedgerow; Target Note 2.

<u>Compost heaps</u>

3.19. Two open style compost heaps are present in the gardens of 209 & 211; shown as Target Notes 3. Both heaps provide substantial piles of cut vegetation.

*Buildings*

3.20. The buildings on site are described in the Species Observation section below, under Bats.

*Off-site habitats*

Stream

3.21. A small stream (Target Note 3) runs past the southern boundary of the site. The stream is approximately 2 m wide with 1 m high banks which are mainly composed of bramble scrub and native trees and shrubs which provides considerable shading. On the day of the survey, the depth was approximately 150 mm deep with a slight flow towards the north-east. The substrate is silty and there is no submergent emergent vegetation.

## Species Observations

*Flora*

3.22. All gardens are artificially created which precludes the presence of any rare or notable species of flora.

3.23. No non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act (1981) As Amended were noted during the site; however, absence of such species cannot be confirmed.

*Invertebrates*

3.24. The site includes hedgerows and introduced shrub planting and these areas provide a nectar source for invertebrates. The site is therefore likely to support a moderate assemblage of invertebrates.

*Amphibians*

3.25. The site does not support any significant watercourse which precludes any significant population of amphibians. There is also no known significant watercourse within 250 m of the site suitable as a breeding site for great crested newt *Triturus cristatus* and the presence of this species on site is considered very unlikely.

3.26. It is possible that the gardens support small populations of common toad *Bufo bufo* and common frog *Rana temporaria,* in association with neighbouring gardens; both these species are known to make use of garden ponds as a breeding site.

*Reptiles*

3.27. All gardens provide habitat for common reptiles; particularly slow worm *Anguis fragilis;* which is a species strongly associated with mature gardens, even within urban areas. The gardens offer a mosaic of habitats which include areas of mature vegetation, hedgerows, lawns and compost heaps. Such habitats offer slow worms with basking, foraging, cover and hibernation opportunities, all of which are fundamental requirements for this species.

3.28. In respect of slow-worms, the five gardens provide one continuous interconnected habitat which is further augmented by adjacent and similar gardens which occupy land to the east and west and provide further potential habitat, increasing the potential for this species to be present.

*Birds*

3.29. The site has mature vegetation in the form of trees, hedgerows and shrub planting and therefore provides a good nesting resource to birds, including wren

*Troglodytes troglodytes*, dunnock *Prunella modularis* and blackbird *Turdus merula* which were all recorded on site during the survey. The site also provides a foraging resource for nesting birds by providing seed and berry resources.

*Badgers*

3.30. There are no badger *Meles meles* setts on site and no evidence of badger activity recorded in any of the gardens or in close proximity to the site where access allowed for inspection.

*Hedgehog*

3.31. The site provides habitat for hedgehogs *Erinaceous europaeus*. With a mosaic of habitats that are considered to offer hedgehogs with excellent foraging, sheltering and hibernation suitability, all which are fundamental requirements for this species.

3.32. The compost heap in the garden of 209 is suitable as a hibernation site for hedgehog.

*Bats*

Bat Habitat

3.33. The gardens are likely to provide suitable foraging and commuting habitat for more urban tolerant bats; notably common pipistrelle *Pipistrellus pipistrellus* and the gardens are likely to be used in conjunction with habitats within the wider surrounding landscape. The site is however small and in isolation, is not considered to form a significant habitat component for any local bat population.

Dwellings and tree

3.34. The dwellings and one tree (Target Note 1) on site are described in the table below along with any evidence of bat activity or suitability for roosting bats (refer to Appendix III).

Table 1: Building descriptions.

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| **205 Henley Road** | Exterior | A two-storey residential dwelling constructed of clay bricks, painted render and pitched gable roof. A single storey extension with steep pitched roof was present on the eastern elevation of the structure which appeared to be in good condition. | High suitability ☒ |
| | Interior | Internally the structure had a single loft void with timber roofing structure and bitumen roofing felt which was mostly in good condition with several small tears noted. A small number (<20) bat droppings, attributable to pipistrelle, were identified near the southern gable of the building. | |
| | Roof | The roof comprised of composite interlocking tiles which were tight with no potential roosting features noted. Composite hanging wall tiles are present on the northern gable and although were tight fitted still provided ample roosting opportunities. The wooden soffits are in good condition with no gaps noted between the soffit and the external wall. | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| **207 Henley Road** | Overview | An older style, detached 4-bedroom dwelling thought to date from the 1950's. The dwelling is constructed from brick or block and all exterior walls are finished in painted render. The main roof is standard double pitched roof clad with flat peg toiles and fitted with two small decorative cross gable roofs fitted on the front; northern elevation.<br><br>Overall, the dwelling remains in good condition, but the main roof is old and is showing signs of deterioration. | Negligible suitability ☒ |
| | Exterior | Supporting walls are of masonry (brick or block) and all sections are finished with a smooth render and painted finish and all sections remain free of any significant cracks or holes.<br><br>All windows and doors remain in good condition and fit and shut well within their respective reveals. | |
| | Interior | Areas of living space are formed from well decorated rooms with plaster and painted walls and ceilings. | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| | | The roof void has been converted into extended living accommodation and provide well-decorated rooms. A small and cramped roof void still exists as well as small eaves crawl spaces. These features remain well-sealed and during the inspection provided no evidence of bat occupation | |
| **209 Henley Road** | Overview | An older-style semi-detached dwelling probably dating from the 1960's. The dwelling follows a standard and conventional build. The dwellings are rectangular-shaped with a double pitched roof of peg tiles.<br><br>The dwelling has historically had its roof void converted to provide additional living accommodation and does not have a loft.<br><br>209 remains in excellent condition and appears to have recently received renovations works. | Negligible Suitability ☒ |
| | Exterior | Supporting walls are a mixture of brick and painted render, and all walls remain in good order, lacking any significant cracks or holes.<br><br>All windows and doors remain in good condition and all seal well within their respective reveals. | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| | Interior | Areas of living space are formed from decorated rooms with plaster and painted walls and ceilings.<br><br>The original roof void has been converted into extended living accommodation and provide decorated rooms. | |
| | Roof | The main roof is a simple double pitched design clad with flat peg tiles and all tiles and ridge tiles remain in place. The roof appears to be in slightly newer condition than the attached 211 Henley Road. Velux windows are present on the north and south elevation. A large dormer window has been fitted to the southern elevation; the roof of the dormer is flat and clad with mineralised felt which remains in good condition with edges folded tightly around the eaves. The sides are clad with modern concrete hanging tiles, which all fit well and provide no significant crevices.<br><br>The roof has a central shared brick-built chimney stack which remains well-sealed to the roof with well fitted lead flashings.<br><br>A small linear shaped half span roof runs along the entire front; northern elevation and covers ground floor bay windows and provides an open | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| | | canopy cover over that extends across both 209 and 211. The roof is clad with flat peg tiles which all remain present and well-sealed. Lead flashings seal the top - apex part of the roof to the masonry of the outside walls.<br><br>The rear extension has a roof of both pitched tiles and flat felt. All remain well-sealed and provide no significant crevices.<br><br>All roof sections have well-sealed eaves and verges with no evidence of any significant gaps or crevices. | |
| **Rear garden of 209** | Willow tree | A mature willow tree located at the extreme end of the rear garden of no 209; Target Note 1. The tree is present adjacent to the stream and due to age has significant areas of decay including a partially hollowed out trunk. Such features provide bats with potential roosting features (PRF's) that would be suitable as a summer roost. The features lack deep or complex cavities and are sub-optimal as a hibernation site for bats. | Moderate Suitability ☒ |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| **211 Henley Road** | Overview | Am older-style semi-detached dwellings probably dating from the 1960's. The dwelling follows a standard and conventional build. The dwelling is rectangular-shaped with a double pitched roof of peg tiles.<br><br>211 has a simple precast concrete sectional garage with a corrugated roof. | Low Suitability ☒ |
| | Exterior | Supporting walls are a mixture of brick and painted render, and all walls remain in good order, lacking any significant cracks or holes.<br><br>All windows and doors remain in good condition and all seal well within their respective reveals. | |
| | Interior | The property has a small outhouse connected to the dwelling rear; northern elevation and this remains well-sealed.<br><br>The roof void has been converted into extended living accommodation and provides a decorated room<br><br>The property has a small well-sealed eaves crawl space and during the inspection no bats or bat related evidence was found to be present | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| | Roof | The main roof is a simple double pitched design clad with flat peg tiles and all tiles and ridge tiles remain in place.<br><br>Velux windows are present on the north and south elevation. A large dormer window has been fitted to the southern elevation; the roof of the dormer is flat and clad with mineralised felt which remains in good condition with edges folded tightly around the eaves. The sides are clad with modern concrete hanging tiles, which all fit well and provide no significant crevices.<br><br>The roof has two chimneys; one is a central shared brick-built stack which remains well-sealed to the roof with well fitted lead flashings. The other chimney is present adjacent to the eastern gable; this is a low height (approximately 6 courses) brick chimney and the lead work that seals the chimney's base to the roof tiles is no longer well-fitted and provides significant crevices; refer to photograph 11.<br><br>All roof sections of the rear extension have well-sealed eaves and verges with no evidence of any significant gaps or crevices. | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| **No 213 Henley Road** | Overview | An older style, detached 4-bedroom dwelling thought to date from the 1950's. The dwelling is constructed from brick or block and all exterior wall are finished in painted render. The main roof is standard double pitched roof clad with flat peg toiles and fitted with two small decorative cross gable roofs fitted on the front; northern elevation. The dwelling has historically been enlarged on the front elevation, with a small flat roofed covered entrance porch and a small flat roofed extension and sunroom on the rear, southern elevation.<br><br>Overall the dwelling remains in good condition, but the main roof is old and is showing signs of deterioration. | Low Suitability ☒ |
| | Exterior | Supporting walls are of masonry (brick or block) and all sections are finished with a smooth render and painted finish and all sections remain free of any significant cracks or holes.<br><br>The sunroom has sides formed from large glazed panels from base to eaves. | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| | | All windows and doors remain in good condition and fit and shut well within their respective reveals. | |
| | Interior | Areas of living space are formed from well decorated rooms with plaster and painted walls and ceilings.<br><br>The roof void has been converted into extended living accommodation and provide well-decorated rooms. A small and cramped roof void still exists as well as small eaves crawl spaces. These features remain well-sealed and during the inspection provided no evidence of bat occupation | |

| Building | Feature | Feature Description | Bat suitability |
|---|---|---|---|
| | Roof | The main roof is a standard style double pitched roof with two small and decorative cross gables fitted at eaves height on the front; northern elevation. The roof has two Velux windows on the north elevation and three Velux windows on the southern elevation.<br><br>The roof is clad with clay peg tiles and simple triangular ridge tiles. Tiles are all present and most remain well fitted, however the roof is old and shows evidence of deterioration; particularly with the ridge tiles, of which a number appear to be no longer well cemented in place with evidence of missing bedding mortar, resulting in significant crevices, refer to photograph 5. Further significant gaps are present in association with the front cross gable sections where significant crevices are present in the valleys, refer to photograph 6.<br><br>The roof of the extension present on the southern elevation is a simple and standard style flat design covered with mineralised felt, which remains well fitted including around the edges which remain tightly folded and fixed along the eaves. | |

Bat emergence/dawn re-entry surveys: 205

| Survey Date | 18/8/2020 | 30/8/2020 | 25/9/2020 |
|---|---|---|---|
| Survey type | Emergence survey | Re-entry survey | Emergence |
| Building | 205 | 205 | 205 |
| Survey Conditions | Start temperature: 17°C<br>End temperature: 15°C<br>Wind level (1-12): 1<br>Cloud 90%<br>Weather summary: Dry<br>Start time: 20.00<br>End time: 22.00 | Start temperature: 12°C<br>End temperature: 12°C<br>Wind level (1-12): 1<br>Cloud 0%<br>Weather summary: Dry<br>Start time: 05.00<br>End time: 06.30 | Start temperature: 12°C<br>End temperature: 12°C<br>Wind level (1-12): 1<br>Cloud 20%<br>Weather summary: Dry<br>Start time: 18.39<br>End time: 20.30 |
| Emergence survey | No emergence | No re-entry | No emergence |

| | | | |
|---|---|---|---|
| General bat activity. | <u>South-west of building</u><br><br>A pass by a Noctule at 21.25 bat seen flying from N to S high over the building.<br><br>A constant activity by a soprano pipistrelle from 21.11 to 21.27 bat seen flying back and forth foraging over the back garden.<br><br>A pass by a Noctule at 21.14 bat not seen.<br><br>A pass by a Myotis at 21.21 bat not seen.<br><br><u>North-east of building</u><br><br>A pass by a common pipistrelle at 20.41 bat not seen.<br><br>A pass by a Noctule at 21.25 bat seen flying from N to S over the building.<br><br>A constant activity by a soprano pipistrelle from 21.07 to 21.32 | <u>South-west of building</u><br><br>3 x common pipistrelle passes to south of building<br><br><u>North-east of building</u><br><br>No activity | <u>South-west of building</u><br><br>A pass by a common pipistrelle at 19.28 bat seen flying from NE to SW in front of the building.<br><br>A pass by a common pipistrelle at 19.45 bat not seen.<br><br><u>North-east of building</u><br><br>A constant activity by a soprano pipistrelle from 21.11 to 21.27 bat seen flying back and forth foraging over the garden.<br><br>A pass by a common pipistrelle at 19.44 bat not seen. |

| | | | |
|---|---|---|---|
| | bat seen flying back and forth foraging around the house front and right-side garden. | | |

Bat emergence survey/dawn re-entry 211-213

| Survey Date | 27/8/2021 | 27/8/2021 |
|---|---|---|
| Survey type | Emergence survey | Emergence survey |
| Building | 211 | 213 |
| Survey Conditions | Start temperature: 16°C<br>End temperature: 15°C<br>Wind level (1-12): 1<br>Cloud: 20%<br>Weather summary: Dry<br>Start time: 18.35<br>End time: 20.30 | Start temperature: 16°C<br>End temperature: 15°C<br>Wind level (1-12): 1<br>Cloud: 20%<br>Weather summary: Dry<br>Start time: 18.35<br>End time: 20.30 |

| | | |
|---|---|---|
| Emergence survey | No emergence | N0 emergence |
| General bat activity. | North-west of building<br><br>A constant activity by a soprano pipistrelle from 7.16 to 7.48 bat seen flying from SE to NW front garden and foraging around the hedges.<br><br>South-east of building<br><br>A pass by noctule at 19.14 bat not seen.<br><br>A constant activity by a soprano pipistrelle from 7.16 to 7.45 bat seen flying from SE towards the front garden and back, at times over the building.<br><br>A pass by a common pipistrelle at 7.31 bat seen flying from S to N over the building. | North-west of building<br><br>A pass by noctule at 19.14 bat not seen.<br><br>A pass by a common pipistrelle at 7.26 bat seen flying from NW to S near the eastern elevation of the building.<br><br>A pass by a soprano pipistrelle at 7.29 bat seen flying from SE to S over the building.<br><br>A pass by a common pipistrelle at 7.30 bat seen flying from SE to W across the front of the building.<br><br>A pass by a common pipistrelle at 7.32 bat seen flying from NW to S near the eastern elevation of the building.<br><br>A distant pass by a common pipistrelle at 7.55 bat not seen.<br><br>South-east of building |

| | | |
|---|---|---|
| | | A pass by noctule at 19.14 bat not seen.<br><br>A constant activity by a soprano pipistrelle from 19.21 to 19.58 bat seen flying from NW to SE foraging around the back garden.<br><br>Multiple passes by a common pipistrelle from 19.29 to 19.55 bat seen flying around the buildings. |

## Evaluation

3.35. The site is composed of five adjoining residential properties that contain mature gardens with established boundaries which provide structural diversity and afford the site an element of permanence. Gardens are mainly well-managed and maintained and therefore lack any significant fragility or naturalness; however small areas provide more natural habitat; notably the southern end of the garden of 209 where a mature willow tree is present and provides an element of naturalness.

3.36. The site contains linear features in the form of hedgerows and introduced shrub which provide commuting routes and steppingstone habitats for mobile species such as bats and birds. Hedgerow and shrub bases will facilitate the movement of smaller terrestrial animals such as hedgehog and common reptiles, particularly slow worm. Linear features increase the component value of this site and it is considered that the site has **Local Value.**

205 Henley Road

3.37. A small number of old bat droppings attributable to pipistrelle sp. were noted in the loft of the building. Three subsequent bat surveys, sufficient to prove likely presence/absence of bats did not record any roosting bats. It is considered that the building is not currently functioning as a bat roost.

207 and 209 Henley Road

3.38. Due to the lack of evidence of roosting bats within any aspect of the building and the buildings lack of any significant bat PRF's, 207 and 209 is assessed as providing bats with **Negligible Roosting Suitability.**

211 and 213 Henley Road

**3.39.** Dwellings 211 and 213 are assessed to provide bats with **Low Roosting Suitability.**

3.40. A subsequent emergence survey of each property in 2021 has confirmed likely absence of bats in each building.

Willow tree

3.41. The mature willow tree (Target Note 1) provides bats with significant PRF's which consist of sections of hollowed out trunk and are considered suitable in providing bats with **Moderate Roosting Suitability.**

# 4. Recommendations

4.1. The recommendations in the paragraphs below are provided to help ensure that wildlife and important ecological features are protected during the course of works. Recommendations also set out mitigation measures to minimise harm where this cannot be avoided and provide compensation measures to allow the proposals to meet current legislative and planning policy objectives.

4.2. The Natural Environment and Rural Communities (NERC) Act (2006) states that a public authority must 'in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity; Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.

4.3. Under the Government's National Planning Policy Framework (NPPF) opportunities to incorporate biodiversity in and around developments should be encouraged.

4.4. Paragraph 174b) of the NPPF (2018) states 'Plans should ...identify and pursue opportunities for securing measurable net gains for biodiversity' and Paragraph 175d) states that '…opportunities to incorporate biodiversity improvements in and around developments should be encouraged especially where this can secure measurable net gains for biodiversity'.

## Species recommendations

*Bats*

4.5. In the UK all species of bats are fully protected under the Wildlife and Countryside Act (1981) As Amended and the Conservation of Habitats and Species Regulations 2010, which makes it a strict liability offence to damage or destroy the resting place (roost) of a bat.

205 Henley Road

4.6. A small number of old bat droppings were recorded in the loft and three subsequent bat activity surveys, sufficient to provide likely presence/absence of roosting bats did not record any bats; it is therefore considered likely that the building is not currently functioning as a bat roost.

4.7. It is recommended that an additional precautionary emergence or dawn re-entry survey is undertaken prior to demolition. The survey should be undertaken between May and August of any given year.

4.8. Due to the transitory nature of bats, there is a small possibility that bats could be encountered during demolition works; therefore, all works must proceed under a cautionary approach. Tiles and roof panels will be removed in a vertical rather than horizontal sliding motion. Soffits and masonry will be dismantled using a 'soft' approach taking care with cavity walls where present. All site workers will be vigilant at all times and in the very unlikely event that a bat is found then works must stop immediately and advice should be sought from Crossman Associates or Natural England (telephone number 0300 0603900).

207, 209, 211 and 213 Henley Road

4.9. Due to the lack of evidence of roosting bats within any aspect of the building and the buildings lack of any significant bat PRF's is not considered necessary or beneficial to undertake any further survey work.

4.10. Due to the transitory nature of bats, there is a small possibility that bats could be encountered during demolition works; therefore, all works must proceed under a cautionary approach. Tiles and roof panels will be removed in a vertical rather than horizontal sliding motion. Soffits and masonry will be dismantled using a 'soft' approach taking care with cavity walls where present. All site workers will be vigilant at all times and in the very unlikely event that a bat is found then works

must stop immediately and advice should be sought from Crossman Associates or Natural England (telephone number 0300 0603900).

Willow tree

4.11. A willow tree in garden of 209 Henley Road (Target Note 1) has been assessed as having moderate suitability for roosting bats. According to the tree report, this tree is being retained within the proposals. If the proposals change and the tree required felling or pruning, then two activity surveys will be required. The surveys should be undertaken between 1 May – 31 September, with a two-week interval between the surveys.

Lighting

4.12. Exterior lighting should consider the presence of bats and other nocturnal wildlife as the gardens are currently unlit. New exterior lighting should consist of a modern LED-type and should be directional and or cowled. Lighting should aim to avoid light spill along adjacent habitat features. It is also recommended that exterior lighting plans should be implemented during the construction phase to avoid the possibility of new home owners retro fitting less desirable lighting schemes.

4.13. The choice of lighting is important to minimising light spill and it is recommended that the following factors are considered to reduce the impact as much as possible;

- Narrow spectrum lights with no UV content
- Low pressure sodium and/or warm white LED
- Directional downlighting, illuminating downwards and below the horizontal plane to avoid light trespass

4.14. An information sheet on lighting can be found in Appendix III; information sheets.

*Birds*

4.15. In the UK all species of bird are partially protected under the Wildlife and Countryside Act (1981) As Amended, which makes it an offence to damage or destroy a nest when it's being built or in use.

4.16. Legislation involving birds has implications on the timing of tree removal or building demolition works (where nesting birds are present). Any vegetation removal works occurring within the bird nesting period (March-September) should be undertaken sensitively following a thorough inspection for active bird's nests. Should any active bird's nests be present, works should take reasonable precautions to avoid disturbing them until all birds have fully fledged.

4.17. Artificial nesting boxes are recommended and can be inexpensively incorporated within the supporting walls of the new properties; with a particular emphasis on house sparrows *Passer domesticus*. Sparrow terraces are supplied by Habibat (website: www.habibat.co.uk). It is recommended that 8 sparrow terraces are installed on the new development.

4.18. New provision for nesting birds will also take the form of new open and closed-fronted bird boxes to be installed on retained trees. It is recommended that two Schwegler 2H and two Schwegler 1B bird boxes are installed at a minimum height of 3 m within boundary trees. Bird boxes are available from www.nhbs.com. It is recommended that 10 bird boxes are installed.

4.19. The siting of bird boxes should be completed in consultation with an ecologist.

*Hedgehog*

4.20. In the UK hedgehogs are listed on schedule 6 of the Wildlife and Countryside Act (1981) as Amended which makes it illegal to kill or capture wild hedgehogs. Hedgehogs are also listed as a species of 'principal importance' under the Natural Environmental and Rural Communities Act 2006, which is meant to confer a 'duty of responsibility' to public bodies.

4.21. Excavated holes and trenches on building sites have the potential to trap wildlife including hedgehogs leading to the potential suffering and death of the animal (s) particularly if they become filled with water.

4.22. If during the development excavated holes / trenches are likely to be left open, then timber builders' planks should be fitted as ramps to enable any wildlife including hedgehogs a means of escape.

Compost heaps

4.23. Compost heaps are present in the rear gardens of 209 and 213. Such piles provide habitat for hedgehogs to shelter and hibernate in. Prior to removal, they should be first gently dismantled by hand and spread out and checked thoroughly for the presence of hedgehogs. To avoid the possibility of impacting hibernating hedgehogs this work should avoid the colder months of the year.

*Reptiles*

4.24. In the UK all species of reptiles are partially protected under the Wildlife and Countryside Act (1981) As Amended, which makes it an offence to intentionally or recklessly injure or destroy a reptile.

4.25. The reptile survey has confirmed the presence of reptiles on site. Prior to any ground disturbance, a reptile and hedgehog relocation exercise will be undertaken. The objective of this exercise is to relocate reptiles and hedgehogs from the proposed development area to suitable receptor sites outside of the development site and away from harm.

4.26. The reptile relocation exercise will include sensitive removal of vegetation in relation to nesting birds, which is detailed in paragraph 13.

Mitigation strategy

*Receptor site for reptiles*

4.27. Due to the small population of reptiles on site and the possible unsuitability of surrounding habitats around the site to support reptiles, it is recommended that reptiles are moved away from the development site and will be moved to a receptor (relocation) site.

4.28. The receptor site being proposed is an area of land at our offices at Fire Engine House, Benter, Oakhill Radstock, BA3 5BJ.

4.29. The receptor site is a semi-improved pasture field of approximately 3 acres with woodland and scrub habitat that has been specially managed over the last 10 years to provide optimal reptile habitat; management work has included relaxation of grassland and scrub management and introduction of rock piles and wood piles (refer to Figure 1). The site was surveyed for existing reptile population in 2021 and was found to currently support a small population of slow worm and grass snake and is capable of supporting additional animals.

4.30. To increase basking opportunities, 5 tins will be placed on site.

*Initial works*

4.31. All dense and woody vegetation capable of supporting nesting birds, particularly bramble scrub, will be removed between the months of October and March in order to avoid the bird nesting season. Vegetation will be cut to approximately 300 mm above ground level and arisings will be removed from site. This work will be undertaken by an ecological clerk or works or supervised by an ecologist.

4.32. Any features such as rubble piles, rubbish piles or wood piles which potentially afford resting places for reptiles and hedgehogs will be dismantled by hand by a suitably qualified and licensed ecologist between April and October and any individuals found translocated to an appropriate location prior to works commencing on site.

*Reptile relocation*

4.33. The site does not require temporary reptile fencing due to boundary features which will reduce the chances of recolonisation of reptiles; the site is bounded to the south by a main road and to the west by an access track to the north is a building and to the east is a well-maintained garden.

4.34. Reptile refuges will be laid out across the site in order to increase the potential for reptile captures; to maximize capture a maximum density of 1000 refuges per hectare will be laid out in a grid in suitable habitat across the site. The mats will be laid out in April, which is at the beginning of the reptile active season. The refuges will be allowed to settle and establish two weeks.

4.35. The site is moderate in size and supports a small population of reptiles, so an according level of trapping effort will be employed. A minimum of 15 trapping days will be undertaken during optimal conditions (see below). The translocation will continue until five consecutive days with no captures are made up until a maximum of 30 days.

4.36. Refuges will be checked during optimum weather conditions i.e., when the temperature is neither too hot nor too cold, usually between 08.30 and 11.00 hours or between 16.00 and 18.30 hours and during periods of cloud with sunny spells and little wind.

4.37. When walking between refuges, the ground 2 to 3 m in front of the surveyor and existing natural basking sites will be carefully checked for reptiles basking in the open.

4.38. Reptiles will be carefully collected by hand and surveyors will wear gloves at all times. Reptiles will be placed in a bucket and transported to the translocation site.

4.39. The size, sex and age of each slow worm will be noted so that a summary report can be issued at the completion of the translocation exercise.

4.40. All records will be submitted to Somerset Environmental Records Centre.

*Vegetation clearance and destructive search*

4.41. Once the reptile relocation is completed, the remaining vegetation and topsoil will be removed from within the construction site. This clearance will be carried out under the supervision of an Ecological Clerk of Works, which will enable a fingertip search and destructive search of the site, and any reptiles found will be relocated to the receptor site. Any hedgehogs or small mammals will be relocated locally.

4.42. This destructive search will be undertaken between the end of the capture period and September when reptiles are most active.

4.43. On completion of works, a confirmation letter with findings will be sent to the Council.

## Landscape recommendations

4.44. The southern boundary of the site is defined by Berry Brook, which is a small watercourse and associated vegetation. This watercourse has the potential to provide a commuting and foraging corridor for wildlife, including bats. The new development has the potential to impact on this feature due to lighting and disturbance. This will be mitigated by leaving a minimum distance of 15 m or the appropriate root protection distance (whichever is widest) between the new built development and the southern boundary. A landscape plan has been designed for the site and includes a planting specification for this area (Enplan, drawing number: 06-999-301).

4.45. Any new landscape proposals should include new tree and shrub planting, including a range of native and non-native species. Where possible, plots and shared areas e.g. parking and bin areas, should be divided or screened using native hedgerows rather than close board fencing allowing the free passage of wildlife, particularly hedgehogs.

4.46. If any solid fences are necessary around the boundary of the development, then this should be combined with a hedgerow. In the case of solid fences small holes measuring approximately 150 mmx 150 mm should be created at the bases to allow the passage of wildlife, including hedgehogs, between plots.

# 5. Limitations

5.1. This report records wildlife found during the survey and anecdotal evidence of sightings. It does not record any plants or animals that may appear at other times of the year and were therefore not evident at the time of visit.

5.2. This report represents a preliminary assessment only. Recommendations and conclusions are subject to change should further findings significantly differ from those collected from the survey efforts to date.

5.3. The advice contained in this report relate primarily to factual survey results and general guidance only. On all legal matters you are advised to take legal advice.

# 6. References

**Bat Conservation Trust (BCT)** *Bats and Lighting in the UK.* BCT

**Collins, J. (ed.) (2016)** *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition)* The Bat Conservation Trust, London.

**English Nature (2001)** *Great Crested Newt Mitigation Guidelines.* English Nature

**HMSO (1981)** *Wildlife and Countryside Act 1981 (and subsequent amendments).* HMSO

**HMSO (1995)** *Biodiversity.* The UK Steering Group Report

**Joint Nature Conservation Committee (JNCC)** *Common Standards Monitoring Guidance for Reptiles and Amphibians* (2004) JNCC

**Langton, T., Beckett, C. and Foster, J. (2001)** *Great Crested Newt Conservation Handbook.* Froglife

**Mitchell-Jones, A.J (2004)** *Bat Mitigation Guidelines* English Nature

**Multi-Agency Geographical Information for the Countryside (MAGIC) Website** at www.magic.gov.uk

**Stace, C. (1997)** *New Flora of the British Isles 2nd Edition.* Cambridge University Press

**TSO (2012)** *National Planning Policy Framework*

**TSO (2006)** *Natural Environment and Rural Communities Act* TSO

# Appendix I – Site Figures

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Site Location

| | |
|---|---|
| Client | A Lloyd |
| Title | Site Location |
| Site | No 209, 211 & 213 Henley Road |
| Figure | 1 |
| Date | 14 October 2020 |
| Scale | Indicative |

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- Site boundary
- Amenity grassland
- Introduced shrub
- Trees
- Hedgerows
- Pond
- Ruderals/scrub
- Hardstanding
- Buildings
- Target note

| | |
|---|---|
| Client | L Anthony |
| Title | Habitat plan |
| Site | 205-219 Henley Road |
| Figure | 2 |
| Date | 5 December 2021 |
| Scale | Indicative |

# Appendix II – Site Photographs

# Photographs 1- 3

## Photograph 1:

No 213; front northern elevation

## Photograph 2:

No 213: rear; southern elevation

## Photograph 3:

No 213: the dwelling has eaves crawl spaces.

# Photographs 7 - 9

## Photograph 7:

Rear (main) garden occupying the rear; southern side.

## Photograph 8:

Front garden; occupying the north side

## Photograph 9:

No 211; front; northern elevation and front garden

# Photographs 7 - 9

## Photograph 7:

Rear (main) garden occupying the rear; southern side.

## Photograph 8:

Front garden; occupying the north side

## Photograph 9:

No 211; front; northern elevation and front garden

# Photographs 10 - 12

## Photograph 10:

No 213; rear; southern elevation

## Photograph 11:

Loose lead flashing around chimney base

## Photograph 12:

Garage of No 213

# Photographs 13 - 15

## Photograph 13:

No 213; rear and main garden occupying the southern side.

## Photograph 14:

No 213; the extreme southern end consists of bare ground bounded by lines of conifer trees

## Photograph 15:

No 209: Front; northern elevation.

# Photographs 16 - 18

## Photograph 16:

No 209; rear; southern elevation

## Photograph 17:

No 209; rear garden; top side adjacent to house

## Photograph 18:

No 209; rear and main garden occupying the  southern side.

# Photographs 19 - 21

## Photograph 19:

No 209; exteme southern end of the rear; main garden; this provides a mainly un-managed area with hazel trees and an old willow tree.

## Photograph 20:

Detail showing old willow tree; the tree has sections of hollowed out boughs and trunk. The tree is situated on the bank of the stream that flows past the southern boundary of all 3 properties; refer to photogaph 22.

## Photograph 21:

No 209; Front garden occupying the north side.

# Photograph 22

## Photograph 22:

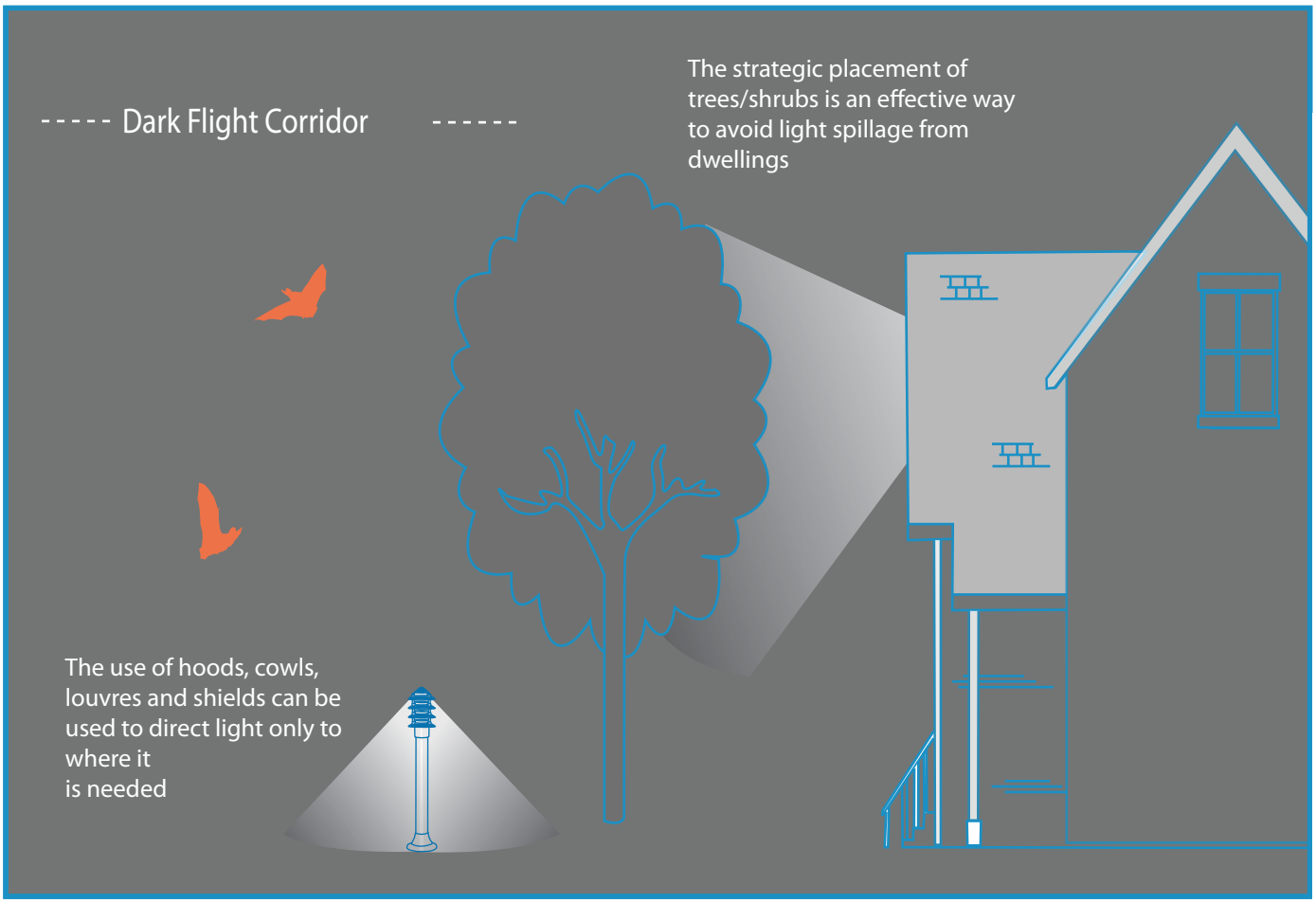
Detail; showing the stream that flows past the southern boundary of all 3 properties. The stream is approximately 2 m wide with 1.2 m high banks. A depth of approximately 150 mm was recorded and no aquatic vegetation was present.

A very slight flow was recorded with the direction indicated by the arrow.

# Appendix III– Information Sheets

# Sensitive Lighting for Bats

MITIGATION GUIDELINE Nº 001




### Lamp Type

The impact of light on bats can be minimised by the use of low/high pressure sodium lamps.

### Lighting Column

The height of lighting columns should be kept as low as possible to reduce the impact of light spill. For example, when designing lighting for pedestrian walkways, use short bollard lights that produce a low level light (as low as 3 lux) directed downwards.

### Light Mapping

Mapping the light spill of a lighting scheme using computer software can prove essential in designing schemes that are fit for purpose, that minimise energy costs and create dark flight corridors and foraging areas for bats.

### Light Levels

Proposed light levels within landscape plans should be as low as possible. If lighting is not needed, don't light.

### Timing of Lighting

The times at when lighting is left on should be limited where possible. The use of movement sensors and timers for lights is useful for saving energy and reducing the amount of time a light is left on.

### Impacts of Light on Bats

As nocturnal mammals, light causes disturbance to bats and many species will actively avoid lit areas. The illumination of bat roosts can delay bats emerging and thus shorten their foraging time and may eventually lead to bats abandoning their roost. The illumination of foraging or commuting areas may also lead to an increase in the rate of predation of bats by predators.

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# Information sheet  Artificial bird nesting boxes for Buildings: Swifts, house martins and house sparrows

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Habibat house sparrow nest box

Vivara woodstone sparrow nest box; suitable for both integral fitment or surface mounting

Ibstock Swift boxes are also suitable for house sparrows. Can be customised to suit any exterior finish.Site boxes under eaves, away from windows  and direct sunlight.

Ibstock Box

Sparrow boxes  should be grouped together and be at least 2 m of the ground. The boxes can be also be sited on gable walls. At least 3 per averaged size house.

Swifts boxes should be at least 5 m above the ground with an clear un-obstructed flight path.

Schwegler model 9b

Schwegler house martin box model 9 b double is a suitable box for house martins and can be used to encourage the uptakeof a building by this species. The boxes can be attached to the exterior walls in a sheltered position; ideally beneath the eaves. At least two sets should be placed on an averaged size house.