

**Preliminary Ecological Appraisal**  
**for**  
**2-4 St Thomas Road**  
**Newquay**  
**Cornwall**  
**TR7 IRS**

02 March 2020

**Prepared for:**  
S. Thatcher

**Prepared by:**  
Cornwall Environmental Consultants (CEC Ltd)  
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Ref: CEC3439



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## Document Control

Revision	Prepared by	Checked by	Approved by
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## Disclosure

The information, opinion and advice which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct and the British Standard for Biodiversity – Code of practice for planning and development (2013). We confirm that the opinions expressed are our true and professional bona fide opinions.

## ISO Accreditations



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# Summary

## Site and methods

<b>Purpose of report</b>	To identify the ecological constraints and opportunities associated with the site and proposed development and to provide sufficient information on these to enable the Local Planning Authority to determine the planning application.
<b>Site assessed</b>	2-4 St Thomas Road, Newquay Cornwall TR7 IRS
<b>Area (ha)</b>	c.0.15
<b>Grid reference</b>	SW 8148 6144
<b>Planning Authority involved</b>	Cornwall Council Central 2
<b>Survey methods</b>	Extended Phase I habitat survey Visual bat and nesting bird survey
<b>Surveyor's name</b>	Steve Adams BA(Hons), MSc, MCIEEM, CEnv
<b>Date of assessment</b>	20 <sup>th</sup> February 2020
<b>Weather on date of assessment</b>	Cold, wet and windy
<b>Proposed work</b>	Demolition of two existing bungalows and replacement with a new residential development of up to eight properties.

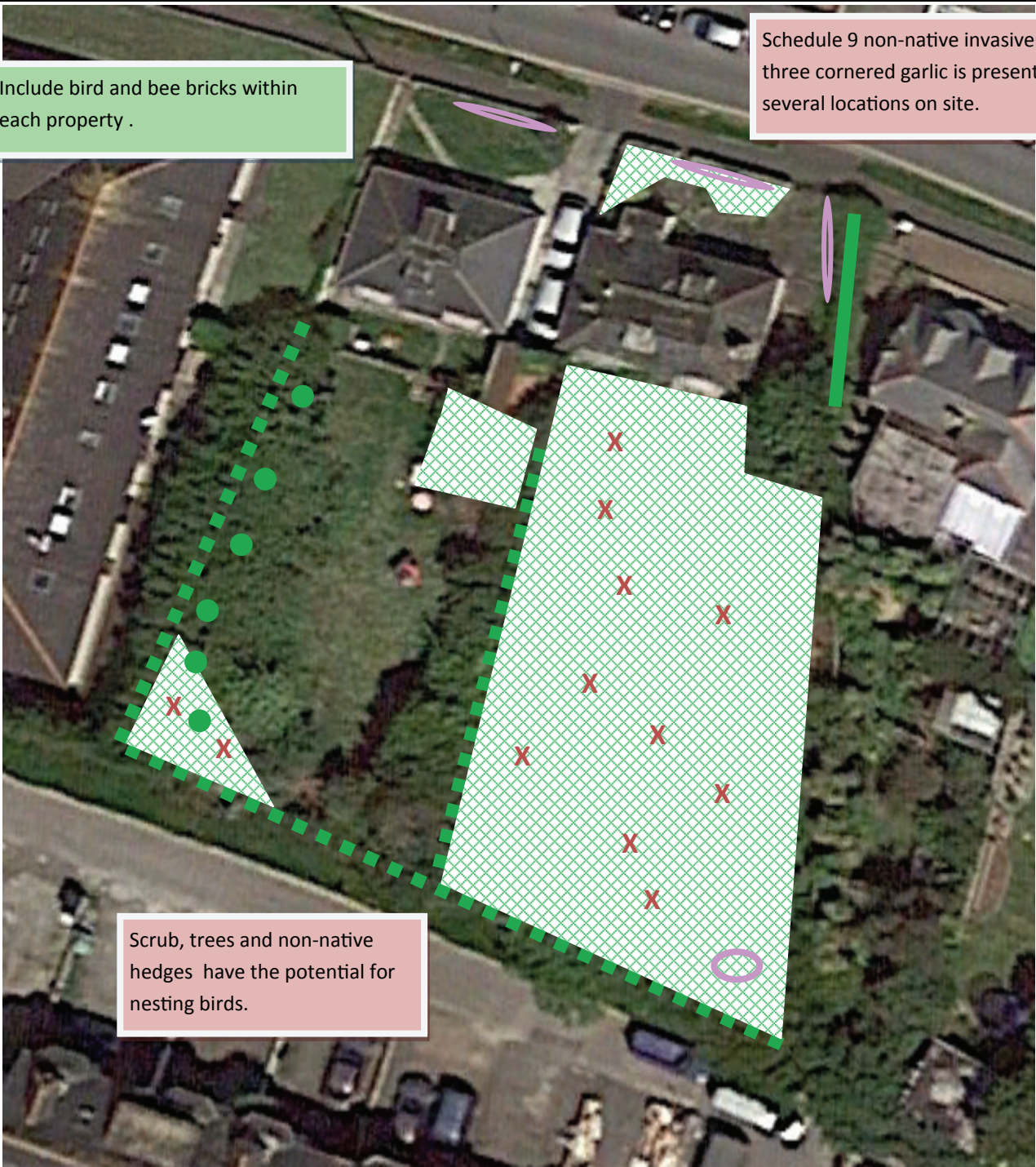
## Results

<b>Designated sites</b>	Zone of Influence for Penhale Dunes Special Area of Conservation The Gannel County Wildlife Site
<b>Important habitats present</b>	No
<b>Non-native invasive species present</b>	Three cornered garlic
<b>Protected species present</b>	No
<b>Potential for protected species</b>	Nesting birds
<b>Further survey recommendations</b>	None
<b>Mitigation recommendations</b>	Financial contribution to mitigation of recreational

	<p>impacts within the SAC (through Cornwall Council).</p> <p>Undertake vegetation removal when birds are not nesting, or to be undertaken under ecological watching brief.</p> <p>Prepare and follow a management plan for the control of three cornered garlic.</p> <p>Provide new nest sites for birds – at least one per property.</p>
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Include bird and bee bricks within each property .

Schedule 9 non-native invasive three cornered garlic is present in several locations on site.



Scrub, trees and non-native hedges have the potential for nesting birds.

**Key**

Green boxes denote opportunities

Red boxes denote constraints



Scrub



Introduced shrub



Non-native hedge



Scattered introduced shrub



Scattered apple trees



Cornish hedge



Three cornered garlic

CEC3439 -01 2-4 St Thomas Road, Newquay PEA

**Ecological Constraints and Opportunities Plan**

Drawn by: SA

Date: 27/02/2020

Revision No.





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# 1. Introduction

## 1.1. Background

Cornwall Environmental Consultants (CEC) Ltd was commissioned by S. Thatcher in February 2020 to undertake an ecological assessment, including a visual bat survey of 2-4 St Thomas Road, Newquay. The location of the site, and its boundaries are shown on *Figure 1*. The site lies in the centre of Newquay, in a residential area. Most of the surrounding properties have only small gardens or yards, although the properties immediately to the east have larger gardens. Trenance park and boating lake is c. 250m away to the south-east at its closest point. Only the proposal site was surveyed as access was not available to neighbouring properties. However roads run along the front and back of the properties so these were both surveyed along.

This report has been prepared by Steve Adams, who has over twenty years' experience of undertaking Phase I surveys and has been a licensed bat and dormouse ecologist for 12 years.

S. Thatcher proposes to development the site as a new small residential development of up to eight houses. The current proposal for eight houses is set out on the plans included in *Appendix C* to this report.



**Figure 1: Location of site (red) and survey area (blue)**



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The purpose of this report is:

- To identify key ecological constraints to the proposed development
- To inform master-planning to allow significant ecological effects to be avoided or minimised wherever possible
- To allow the further ecological surveys needed to inform an ecological impact assessment to be identified and appropriately designed
- To allow likely mitigation or compensation measures to be developed

This report is suitable for submission as part of a planning application, however if site layout changes then this report will need to be updated.

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## 2. Planning Policy and Legislation

### 2.1. Planning Policy

#### 2.1.1. National Planning Policy Framework

National planning policy is set out in the National Planning Policy Framework (NPPF) (2018). Chapter 15 relates to conserving and enhancing the natural environment.

The most relevant policies relating to planning decisions are (summarised):

- Recognising the wider benefits of natural capital and ecosystem services
- Minimising impacts to and providing net gains in biodiversity
- If significant harm resulting from a development cannot be avoided, adequately mitigated or compensated for, then planning permission should be refused
- Proposed development on land within or outside a SSSI likely to have an adverse effect on a SSSI should not normally be permitted
- Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted
- Planning permission should be refused for development resulting in the loss of deterioration of irreplaceable habitats
- By ensuring that new development is appropriate for its location, and that the potential sensitivity of the site is taken into account, planning decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

#### 2.1.2. Cornwall Planning Policy

The Cornwall Local Plan (2016) sets out policies relating to the natural environment.

Policy 22 sets out the mitigation requirements for developments which may result in increased recreational impacts from development.

Policy 23 relates to all aspects of the natural environment, section 3 of this policy relates specifically to biodiversity and geodiversity. The policy sets out that developments should conserve, protect, and where possible, enhance biodiversity and geodiversity, giving appropriate weight to their level of importance.

Opportunities should be sought within developments, to create networks of wildlife corridors linking County Wildlife Sites and other areas of biodiversity importance, helping to deliver the Cornwall Biodiversity Action Plan's actions.

Proposals should avoid impacts to designated sites, protected species or species/ habitats of principal

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importance, and any proposals where such impacts cannot be avoided will only be permitted where suitable mitigation/ compensation can be provided, and if the tests of the relevant legislation are met.

The mitigation hierarchy should be applied, such that attempts are first made to avoid impacts, and to enable net gains. Where impacts are unavoidable, they must be adequately and proportionately mitigated. Compensation would be required, as a final resort, if full mitigation cannot be provided.

## 2.2. Legislation

The Wildlife and Countryside Act (HM Government, 1981, as amended) is the main piece of legislation relating to nature conservation in Great Britain. It transposes into British law the Berne, Bonn and RAMSAR Conventions, and the European 'Birds Directive' (CEC, 1979). This legislation covers protection of wildlife (birds, other animals and plants), Sites of Special Scientific Interest (SSSI's) (with some SSSI's also designated as Special Protection Areas, SPA's), National Nature Reserves (NNR's) and RAMSAR sites.

The Conservation of Habitats and Species Regulations (HM Government, 2010) transposes into British law the European 'Habitats Directive' (CEC, 1992), and covers Special Areas of Conservation (SAC's) and European Protected Species (EPS) (see below). It also provides further protection for SPA's and RAMSAR sites.

The Countryside and Rights of Way (CRoW) Act (HM Government, 2000) increases protection for SSSIs and threatened species. It specifies the duty of Local Authorities to further the conservation of listed (UK BAP priority) habitats and species.

The Natural Environment and Rural Communities (NERC) Act (HM Government, 2006) confers a legal duty on every public authority to conserve biodiversity under Section 40(1). Section 41 required the publication of lists of habitats and species of principal importance for the conservation of biodiversity in England. This list contains the habitats and species previously known as UK BAP priorities for conservation, and the terminology of habitats and species of principal importance supercedes the UK BAP terminology. Such features will be referred to as Habitats of Principal Importance (HPIs) and Species of Principal Importance (SPIs), throughout this report.

The Protection of Badgers Act 1992 provides specific protection for badgers.

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## 3. Methodology

### 3.1. Desk Study

The desk study consisted of checking for designated sites of nature conservation interest within 1km of the proposal site using [magic.gov.uk](http://magic.gov.uk) and Cornwall Council interactive mapping websites. In addition a search for issued European Protected Species licences was undertaken using [magic.gov.uk](http://magic.gov.uk) on 26<sup>th</sup> February 2020.

### 3.2. Field Survey

A walkover site survey was undertaken to identify plant species and map habitats present. Signs of faunal species were also searched for; including tracks, prints, droppings, hairs, feeding remains, nests and burrows.

The survey was carried out by Steve Adams on 20<sup>th</sup> February 2020. The study area included the proposed development site, and the streets along the front and rear of the properties as shown on *Figure 1*.

The weather conditions at the time of survey were cold, wet and windy, however this did not prevent all areas of the site being accessed.

The survey work was carried out in accordance with the following documents:

- Phase I Habitat Classification (JNCC, 2010)
- CIEEM Guidelines for Preliminary Ecological Appraisal (2013)
- BS42020:2013 Biodiversity – Code of practice for planning and development (BSI, 2013).

### 3.3. Bat and Nesting Bird Assessment of the Buildings

An assessment as to the suitability of the building and surrounding habitat for bats and nesting birds was made. The buildings were surveyed using a high powered lamp to illuminate all areas thought suitable for roosting bats and nesting birds. This included searching for bats and bird nests *in situ*, droppings, staining, liming, feathers and feeding remains. Any cracks and crevices thought suitable for use by bats were inspected using an endoscope. The floor spaces, walls, lintels and timbers were checked. A search around the perimeter of the buildings was then conducted and any gaps and crevices which had the potential for roosting bats checked.

### 3.4. Limitations

Although evidence of roosting bats may not be found during the survey, if there is a significant delay between the time of survey and the time of construction (more than one year), then it cannot be assumed that bats are absent when works commence. Ecological features can change over time, particularly if site management/ use changes; as a guide it is recommended that this report is valid until February 2021.

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## 4. Baseline Ecological Conditions

### 4.1. Site Description

The site comprises two neighbouring properties on St Thomas Road. Both are dormer bungalows of a similar age, design and construction, both with large back gardens. However No. 2 is still occupied while No. 4 has been vacant for a number of years. Therefore they support different habitats, No.2 is mainly lawn with some apple trees, introduced shrubs and hedges comprising largely non-native shrubs. While No. 4 is overgrown with bramble scrub and introduced shrubs. At the front of No. 4 there is a short section of Cornish hedge. See Figure 2 & 3 below, showing the overall character of the two properties.



**Figure 2: Site Overview of No. 2**



**Figure 3: Site Overview of No. 4**



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Phase I habitat distribution is shown on Map 2, *Appendix A*, while a species list for each habitat is included in *Appendix B* of this report.

## 4.2. Designated Sites

### 4.2.1. *Statutory Designated Sites*

There are no designated sites within 1km of the proposed development site however the proposal site does lie within the Zone of Influence for Penhale Dunes Special Area of Conservation (SAC). Zones of influence have been designated to protect SACs from indirect impacts such as those from an increase of recreational users.

### 4.2.2. *Non-statutory Designated Sites*

There is one county wildlife site (CWS) within 1km of the site, The Gannel CWS (R2.2) lies c.700m to the south of the site. This CWS has been designated for its intertidal and buffering terrestrial habitats either side of the estuary. Due to the scale and nature and the distance between the proposal site and this CWS, it is considered that there will be no significant impacts to this CWS.

## 4.3. Habitats

### **Scrub**

The back garden of No.4 has become overgrown with bramble, with frequent non-native buddleia and occasional other non-natives such as *Echium* sp. Ivy is the main ground flora. There are several small areas of scrub in the back garden of No. 2, these are both dominated by bramble.

### **Amenity grassland**

The main part of No.2s back garden is lawn dominated by Yorkshire fog and red fescue grasses with herbs such as daisy, dandelion, cat's ear and cut-leaved geranium. There are bluebells starting to appear but these are assumed to be the non-native Spanish bluebell, as there are no woodlands or old native hedges near-by.

### **Cornish hedge**

There is a short section of Cornish hedge, which comprises a stone faced earth bank which is covered in bramble. Due to its short length, condition and connecting habitats this would not qualify as a Cornwall BAP habitat.

### **Non-native hedge**

There are hedges along the rear of both properties, the dividing hedge between the two properties and the western hedge of No.2. these are all dominated by non-native species, with the rear hedge being almost only garden privet, while the other hedges also have *griselinia*, Japanese laurel, hydrangea, rose, bramble and apple trees.

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## 4.4. Species

### 4.4.1. Flora

#### **Vascular Plants**

A total of 23 vascular plant species were recorded during the February 2020 site visit. This is a low species count but to be expected on a site which is garden and abandoned garden with non-native hedges. No species of conservation importance were recorded during the survey which is to be expected from the habitats present.

#### **Non-native Invasive Plants**

The invasive weed three cornered garlic is present in both front gardens and in the south-eastern corner of the back garden of No.4. Three cornered garlic is a scheduled weed under Schedule 9 of the Wildlife and Countryside Act 1981 making it an offence to 'cause it to spread'.

#### **Lower Plants**

A specialised survey for non-vascular plants, bryophytes and lichens, was outside the scope of this study. The habitats on site are likely to support a suite of common species associated with gardens.

### 4.4.2. Bats

The site is in a residential area, with most properties only having small gardens or yards, so there is very limited foraging habitat for bats. In addition there are streets along the front and rear of the property with street lights, so only light tolerant species would potentially be present. The magic.gov.uk website showed no European Protected Species licences for bats have been issued within 1km of the site, the nearest licences are all on the outskirts of Newquay c1.5km distant. Due to the location of these properties, in a town centre, it is considered that they have low potential to support a bat roost.

Both properties are dormer bungalows with roof voids round the sides of the first floor rooms. There is no apex roof void as there is a small section of flat roof on both properties, above the rooms. No. 2 has a composite slate roof underlined with bitumen, while No.4 is a slate roof underlined with bitumen felt. Both roof voids are insulated with rock wool. There are holes in the roof of No.4. No evidence of bats was recorded in either roof void. The roof of No.2 appears in good repair with no obvious gaps that would permit access by bats. As already mentioned No.4 does have holes in the roof and slipped slates.

Both properties have garages of single brick walls and rendered with a tile roof which is plastered beneath. There are some hanging tiles on the gable wall at the apex. The roof of the garage of No.4 has largely collapsed, while the garage of No. 2 is well sealed with no potential access points for bats. No evidence of bats was recorded in either garage.

At the end of the garden of No.4 is an old shed with corrugated fibre-cement board and roof. This has partially collapsed walls. No evidence of bats was recorded in this building.

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All UK bat species and their roosts are legally protected under the Conservation Regulations 2017 (HM Government, 2017).

#### 4.4.3. *Other mammals*

Being in a residential area with few gardens there is very low potential for species such as badger or dormice. The mammal most likely to be recorded here is hedgehog, although the small number and size of gardens greatly limits the potential for hedgehogs.

#### 4.4.4. *Birds*

No birds were recorded during the site visit but this was probably because of the bad weather. The hedges and scrub on site will provide suitable nesting and foraging for common garden birds such as blue tit, wren, house sparrow and blackbird.

All birds are legally protected whilst nesting under the Wildlife & Countryside Act 1981, as amended.

#### 4.4.5. *Reptiles & Amphibians*

The site offers limited potential for reptiles with habitats either short cut grassland or scrub so that there is little structural variation. It is also not well connected to other areas of potential reptile habitat.

All British amphibian species require standing water to reproduce and there is no standing water on site and OS maps and aerials do not reveal any standing water on neighbouring land. It is likely that there are a small number of adults using the site for foraging.

#### 4.4.6. *Invertebrates*

A specialist invertebrate survey was beyond the scope of this survey. The habitats on site are likely to support a suite of common species associated with gardens, but is highly unlikely to host any rare species.

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## 5. Ecological Constraints and Opportunities, including mitigation requirements

### 5.1. Ecological Constraints

This is a small site with features of relatively low ecological value, there are however still several ecological constraints.

#### 5.1.1. Designated sites

The site lies within the Zone of Influence for one internationally important site, Penhale Dunes SAC. As there will be an increase in the number of residential properties (as part of this project and in combination with other proposed developments in the area), Cornwall Council recognise that there is a potential impact to these sites through an increase in the recreational pressure on these sites.

The site is too distant from any designated sites to cause direct impacts to them.

#### 5.1.2. Nesting Birds

It is assumed that the rear privet hedge and the short section of Cornish hedge will be retained as external boundaries however the other two hedges and the scrub and apple trees will be lost. These have the potential to support nesting birds in spring and summer.

#### 5.1.3. Invasive species

Three cornered garlic is present in four different locations. This is an invasive non-native species under Schedule 9 of the Wildlife and Countryside Act 1981, Construction activities may cause this plant to spread within the site and potentially off site as well.

### 5.2. Impact Avoidance and Mitigation

#### 5.2.1. Designated sites

Increasing housing numbers within a 12km radius of the Penhale Dunes SAC has the potential to result in increased recreational pressure on this designated site. Impacts on SACs need to be assessed in the context of cumulative effects represented by overall housing increases in the area. Cornwall Council operate a standard mechanism for mitigation of this impact, requiring a payment to be made for each new dwelling, which will pay for work to be carried out within the SAC and SPA to reduce the impact to acceptable levels. There is a standard payment for each SAC/ SPA, which will need to be confirmed with Cornwall Council, and is usually secured through a S106 agreement, or as part of other legal obligations, if a S106 is not appropriate for the site. For Penhale Dunes SAC this payment is in the region of £330 per property.

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### 5.2.2. *Nesting Birds*

The removal of the hedges and scrub will cause the loss of potential bird nesting sites. It will be necessary to undertake all vegetation clearance during the winter months (1st October – end February) to avoid the bird nesting season. If this is not possible then an ecologist must carry out a search of the vegetation immediately before clearance. If nesting birds are found, work within 5m of the active nest must stop until the young have fledged. Peak nesting season is usually April to July, and works are most likely to be delayed during these months.

As there will be a loss of nesting habitat, new potential nest sites will need to be provided. This can take the form of a variety of nest bricks being built into the walls of the new houses. Suitable bricks would be for swifts, house sparrows and robins, see Appendix D for examples.

### 5.2.3. *Invasive species*

There is one species of non-native invasive (Schedule 9) plant, three cornered garlic present on site, therefore a management plan needs to be prepared prior to commencement of site clearance and to be followed to prevent the spread of this plant. This will need to include measures to prevent the spread of this plant during construction and ongoing treatment or for the careful removal and disposal before construction starts.

## 5.3. Further Surveys

No further surveys are required.

## 5.4. Ecological Enhancement Opportunities

Enhancement measures are recommended under NPPF Chapter 11, Cornwall Local Plan Policy 23 (see Section 2.1.2) and the Cornwall Planning for Biodiversity Guide 2018. This planning document recommends that at least one bird/ bat box should be installed per 'unit'. Due to its urban location this site has low potential for bats, however one or two bat bricks could be included within the development. Bird bricks are already included above as mitigation for nesting habitat loss, however additional bird bricks could be built into the walls.

For developments of two or more houses the Cornwall Planning for Biodiversity Guide recommends that a bee brick is included in every other unit. Bee bricks need to be in a sunny location at least 1m above the ground. Therefore they should be built into the south facing walls. Bee bricks are available from a local company called Green and Blue: <https://greenandblue.co.uk/>.



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## 6. Conclusions

The site comprises two residential properties with large gardens. One property is currently occupied, while the other has been vacant for some time. The habitats are mainly lawn, scrub and non-native hedges plus buildings and hard standing. These are all habitats of low ecological value.

A visual bat and nesting bird survey was undertaken and no evidence of bats was recorded and the location is considered to have low potential for bats due to its urban location.

There is good potential for nesting songbirds during the summer in the scrub and hedges. There is also one non-native invasive Schedule 9 species, three cornered garlic, present in three locations on site.

Vegetation clearance will need to take place outside the bird nesting season (March to September inclusive), otherwise an ecological watching brief will need to be in place while the clearance takes place.

A management plan should be prepared and followed to control and prevent the spread of the Schedule 9 species during construction.

A variety of bird bricks should be built into all the houses to compensate for the loss of nesting habitat.

Bee bricks could be built into south facing walls to provide some ecological enhancement.

If the mitigation is undertaken it is considered that there will be no significant negative ecological impact from this proposal.

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## 7. References

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## 8. List of Appendices

A. Phase I Habitat Map

B. Phase I Habitat Survey Vascular Plant List

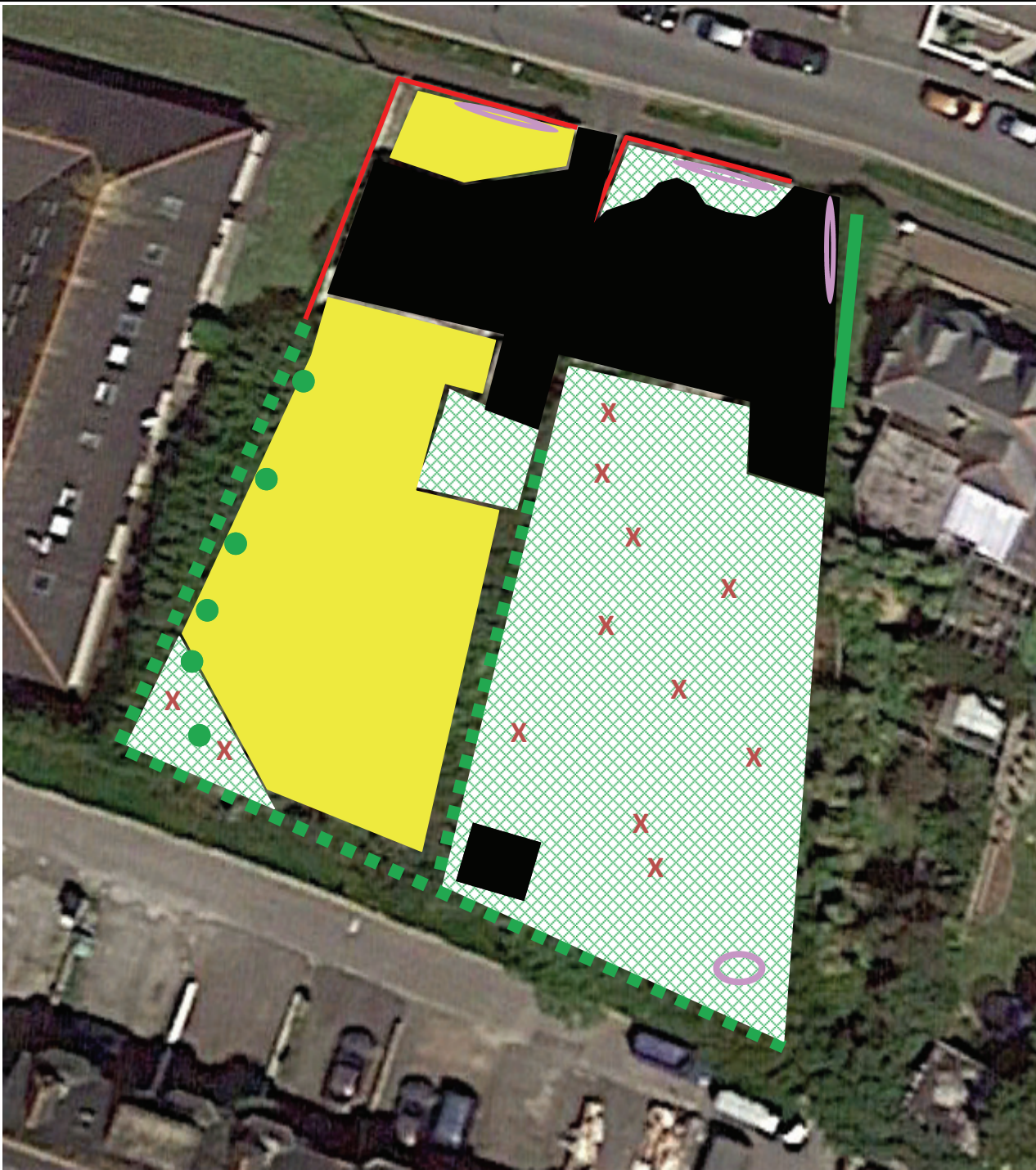
C. Site Proposals

D. Recommended Bat, Bird and Bee Bricks

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## A. Phase I Habitat Map





**Key**



Scrub



Amenity grassland



Scattered introduced shrub



Buildings and hard standing



Scattered apple trees



Cornish hedge



Non-native hedge



Wall



Three cornered garlic

CEC3439 -01 2-4 St Thomas Road,  
Newquay PEA

**Phase 1 Habitat Survey**

Drawn by: SA

Date: 27/02/2020

Revision No.





## B. Phase I Habitat Survey Vascular Plant List

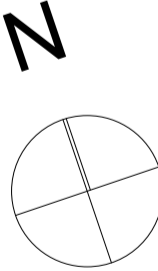
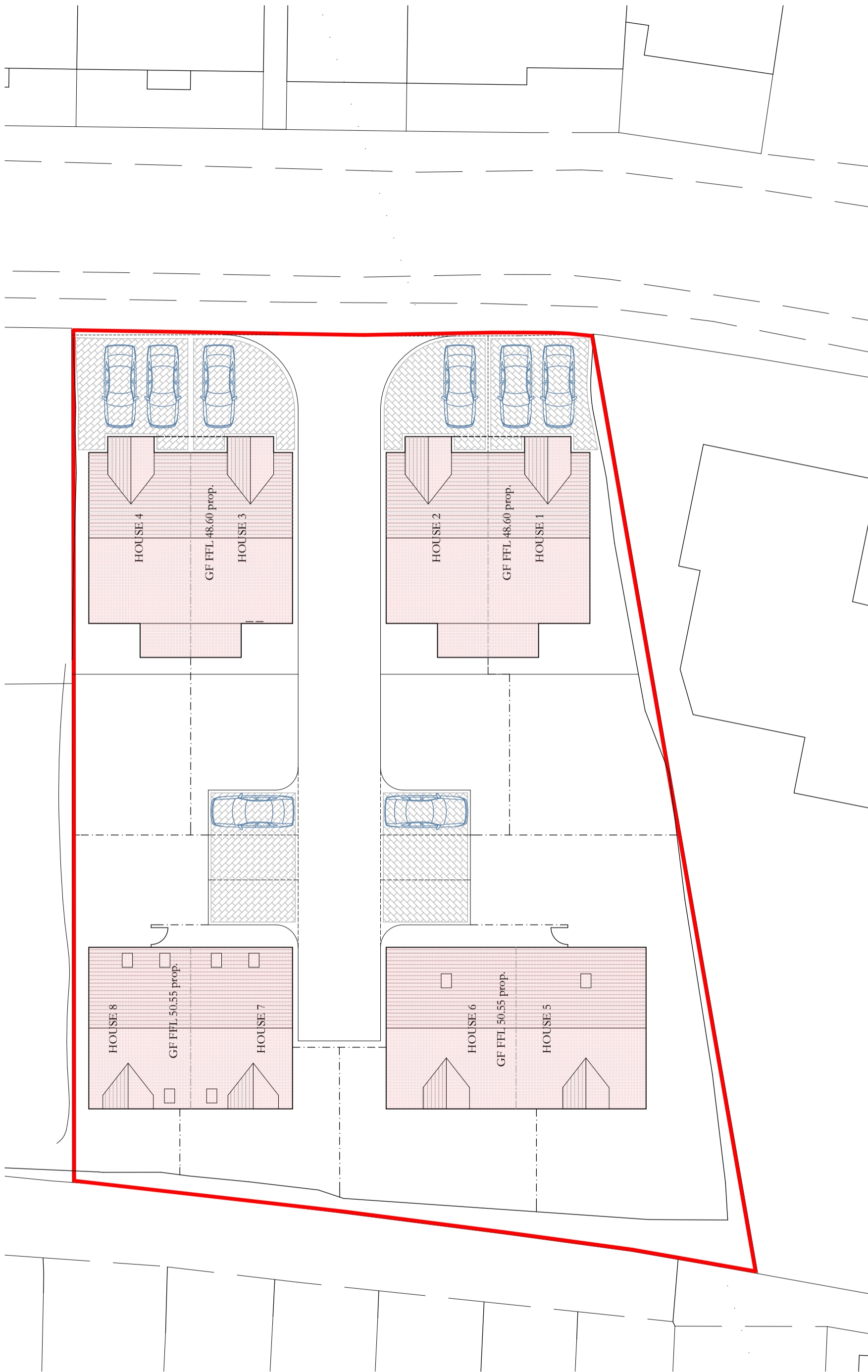
DAFOR is a nominative scale where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare. L = Locally

Scientific Name	Common Name	Bare ground	Amenity grassland	Scrub	Non-native hedge
<i>Allium triquetrum</i>	Three-cornered garlic	R		R	
<i>Arum maculatum</i>	Lords-and-Ladies			R	
<i>Aucuba japonica</i>	Japanese laurel				R
<i>Bellis perennis</i>	Daisy		F		
<i>Buddleja davidii</i>	Buddleia			F	O
<i>Cochlearia officinalis</i>	Common scurvy-grass	R			
<i>Coprosma repens</i>	Tree bedstraw				R
<i>Festuca rubra</i>	Red fescue		D		
<i>Galium aparine</i>	Cleavers			R	
<i>Geranium dissectum</i>	Cut leaved crane's-bill		R		
<i>Griselinia littoralis</i>	Griselinia				O
<i>Holcus lanatus</i>	Yorkshire fog		A		
<i>Hyacinthoides hispanica</i>	Spanish bluebell		R		R
<i>Hydrangea sp.</i>	Hydrangea			R	R
<i>Hypochaeris radicata</i>	Common cat's ear		O		
<i>Ligustrum ovalifolium</i>	Garden privet				D
<i>Malus domestica agg.</i>	Cultivated apple		R		R
<i>Plantago lanceolata</i>	Ribwort plantain		O		
<i>Rosa sp.</i>	Rose				R
<i>Rubus fruticosus agg.</i>	Blackberry/bramble			D	O
<i>Sedum anglicum</i>	English stonecrop	R			
<i>Taraxacum officinale agg.</i>	Dandelion		R		
<i>Veronica persica</i>	Common field speedwell		R		

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## C. Site Proposals





**A3**

job  
Proposed Residential Development

2-4, St. Thomas Rd., Newquay,  
Cornwall, TR7 1RS

drawing  
**BLOCK PLAN - PROPOSED**

drawing no. rev. scale paper size date  
1020.23 1 : 200 A3 Sep. 2019

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drawing no.  
**1020.23**

1. Do not scale off this drawing for construction purposes.
2. All dimensions and levels to be checked on site by the contractor before commencement of work and discrepancies reported to the architect.
3. No responsibility can be accepted for errors arising on site due to unauthorised variations from the architect's drawing.
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## D. Recommended Bat, Bird and Bee bricks

# Examples of integrated bat boxes within external walls of buildings

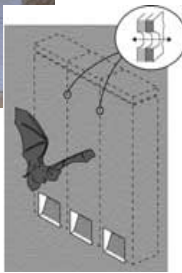
Seek advice from a specialist bat worker for installation and placement of all boxes

## Green&Blue Bat Block

- Suitable for all crevice-dwelling bat species found in the UK.
- Maintenance-free and designed to exclude light and draughts.
- Entrance ideal for bats but deters birds.
- Tiered entrance to allow easy access for bats.
- Simple and safe to erect.
- **Material:** Cast Concrete. CEM1 cement, up to 75% waste material from the Cornish china clay industry, cast with waterproofing agent
- **Dimensions:** height 44cm x width 21.5cm x depth 12cm.
- Build into course work using mortar mix as main build components in place of a standard brick or block.
- Can also be wall mounted. Can be turned into a colony by knocking out section on the side and installing blocks next to each other.



Schwegler 2FR



Three tubes placed next to each other with connecting holes

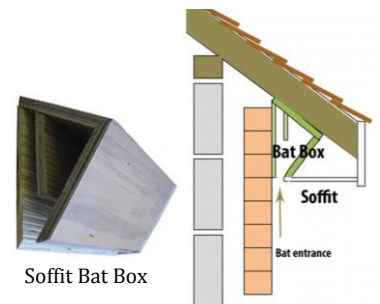
## Bat Tube 2FR

- Suitable for all crevice-dwelling bat species found in the UK.
- Maintenance-free and designed to exclude light and draughts.
- **Material:** Schwegler wood-concrete.
- **Dimensions:** height 47cm x width 20cm x depth 12.5cm.
- At least **three tubes** should be installed together to provide a larger space for roosting bats. There are **capped holes** on the side panels that can be knocked through to create connecting holes between each unit.
- There is a capped hole on the rear panel, which can be knocked through with a hole provided through to a wall cavity, creating a much larger and warmer space deep within the wall, suitable for use during the spring and summer.

## Wildcare Soffit Bat Box

Nationwide Ecology Supplies

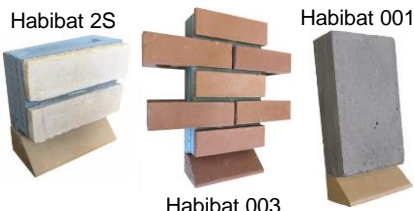
- Utilises the wasted space **above the soffit** on a standard roof structure.
- The entrance is formed by cutting away a 20mm slot in the back of the soffit board against the external wall, and a specially designed plate is then screwed through into the bat box to secure it and to make it a tidy finish.
- The box is designed to exclude light and draughts.
- **Material:** 12-18mm FSC hardwood exterior plywood.
- **Dimensions:** height 14-25cm x width 33cm (entrance slot: 20mm).



Soffit Bat Box

Habibat 2S

Habibat 001



Habibat 003

## Bat Conservation Trust & EcoSurv Bat Boxes

- A range of products suitable for all crevice-dwelling bat species found in the UK.
- Maintenance-free.
- **Material:** Insulating concrete.
- **Dimensions:** Range of sizes from height 22.5 x width 21.5cm x depth 10.2cm. (Habibat 2S), to height 44cm x width 21.5cm x depth 10.2cm (Habibat 003).

## Summer & Winter Batbox 1WI

- Designed for **hibernation** of bats in winter as well as for roosting during summer.
- Flush-mounted and often rendered over so only the entrance remains visible.
- Maintenance-free and designed to exclude light and draughts.
- **Material:** Schwegler wood-concrete.
- **Dimensions:** height 55cm x width 35cm x depth 9.5cm.



Schwegler 1WI

Bat Box B

Bat Box C



## Enclosed Bat Box B and C

- Designed with pipistrelle bats in mind, with several roosting zones
- Maintenance-free.
- **Material:** Available in all brick types.
- **Dimensions:** height 21.5-29cm x width 21.5cm.

## Examples of species-specific bird nest boxes

Seek advice from a specialist ecologist for installation and placement of all boxes

### Schwegler 1SP House Sparrow Terrace

- Integral design ideal for external walls of buildings, at least 4m above ground.
- Can also be attached externally.
- Also attracts tit species, redstarts and flycatchers.
- **Materials:** Schwegler wood-concrete.
- **Dimensions:** height 24.5cm x width 43cm x depth 20cm (15kg).



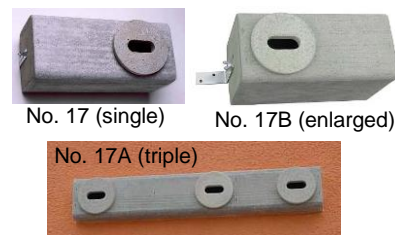
### CJ Wildlife WoodStone Swift nest box



- Designed for fixing to an external wall of a building.
- If possible, boxes should be sited under the shelter of eaves or overhanging roofs.
- **Materials:** FSC certified Woodstone (mixture of concrete and wood fibres).
- **Dimensions:** height 24.5cm x width 38cm x depth 26.5cm (5.4kg).

### Schwegler Swift boxes (17, 17A, 17B)

- Suitable for installation on trees, between 5m and 7m above ground.
- Available in a range of sizes.
- **Material:** Schwegler wood-concrete and galvanised fixing bracket.
- **Dimensions:** 17: h 15cm x l 34cm x d 15cm; and 17A: h 15cm x l 98cm x d 15cm.



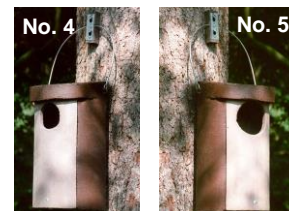
### Schwegler Nuthatch box 5KL



- Suitable for installation on trees, at least 3m above ground.
- Predator-proof design.
- Supplied with a bracket and the required nails.
- **Material:** Schwegler wood-concrete with galvanised steel hanger.
- **Dimensions:** height 30cm x width 25cm (8.4kg).

### Schwegler Owl and Stock Dove nest boxes 4 and 5

- Suitable for installation on trees, between 4m and 6m above ground.
- For larger birds: No 4: stock dove and hoopoe; No 5: tawny owl.
- **Material:** Schwegler wood-concrete with galvanised steel hanger.
- **Dimensions:** height 44cm x width 25cm (9.3kg).



### RSPB Swallow nest

- Suitable for installation in outbuildings and garages.
- Supplied with a bracket.
- **Material:** FSC certified timber and high-fired terracotta nest cup.
- **Dimensions:** height 12cm x width 21cm.

### CJ Wildlife House Martin nests (left, right and double entrances)

- Suitable for installation on walls, between 2m and 3m above ground.
- Supplied with a fixing bracket.
- **Material:** FSC certified Woodstone and plywood back plate.
- **Dimensions:** Single: h 16cm x w 20cm x d 11cm; Double: h 16.5cm x w 38cm x d 12cm.



### CJ Wildlife WoodStone Kingfisher tunnel



- Suitable for installation in riverbanks, at least 1m above maximum water level.
- Designed to be completely buried, with only the entrance visible.
- The tunnel should be angling up to the nest box between 10° to 20°.
- **Material:** WoodStone.





- There are 224 native solitary bees in the UK.
- Our native solitary bees have experienced a massive population decline since 1990.
- Solitary bees are completely safe to have around children and pets, as they are not aggressive, have no queen or honey to protect.
- The houses all contain cavities, where solitary bees lay their eggs; the bees then seal the entrances with mud or chewed vegetation, depending on species, and the offspring emerge the following spring to repeat the cycle.
- **Materials:** These bee houses are constructed from cast concrete, using up to 70% waste materials from the Cornish china clay industry.
- **Positioning:** These should be installed in a sunny spot, south facing, with no plants in front of the holes. Placed at least 0.75m from the ground with no upward limit.

**Bee Brick**

- The bee brick provides a stylish nesting site for red mason bees and leafcutter bees, amongst others, and makes a real design statement in any garden, allotment or within the external walls of building.
- Available in a range of colours.
- **Measurements:** 215 x 105 x 65mm; 2.9kg.



**Bee Block**



- Designed for fixing to be used within the construction of walls, or alternatively it can be installed in a garden.
- **Measurements:** 215 x 215 x 102.5mm (half the size of a breeze block); 7kg.

**Large Bee Block & Small Bee Brick**

- A freestanding bee nest which can be placed in your garden or which can also be built into walls to provide additional habitat for solitary bees.
- Available in two sizes and in a range of colours.
- **Measurements: Large:** 105 x 105 x 105mm; 2.8kg & **Small:** 65 x 70 x 105mm; 1.1kg.



**Bee Post**



- A freestanding architectural bee tower, perfect for use in urban landscapes and redevelopment, or to make a strong style statement in any garden.
- These can be either natural concrete or charcoal, in colour
- **Measurements:** 2.3m x 120mm x 120mm

**BeePot Concrete Planter & Bee House**

- The Beepot is a stylish concrete planter combining a safe nesting site for solitary bees with a space for perfect pollinator planting, meaning a food source for the bees is never far away.
- **Measurements:** 225 x 150 x 152mm; 8kg.

