

**Preliminary Ecological Appraisal
Clay Lane Cottage, The Street
Edingthorpe, Norfolk NR28 9SU**

**for
Luke Butler**

Iceni Ecology Ltd.



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Drusilla Hall is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and is a Chartered Environmentalist (CEnv). The code of professional conduct is subscribed to for all work.


Project	Author	Status	Date
Edingthorpe Ref: 23 0063	Drusilla Hall BSc (Hons) MCIEEM CEnv  Bat Licence: 2015-10742-CLS-CLS (Level 2). Dormouse Licence: 2016-20740-CLS-CLS. Great Crested Newt Licence: 2015-18908-CLS-CLS (Level 2). Low Impact Class Licence Registered for GCN.	Final V2.0	December 2023

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INTRODUCTION

Instruction and background

Iceni Ecology Ltd. was instructed by Luke Butler, 'the Client', to undertake a Preliminary Ecological Appraisal (PEA) at Clay Lane Cottage, The Street, Edingthorpe, Norfolk, NR28 9SU ('the site'). The PEA is to support a planning application to North Norfolk District Council (NNDC) and to satisfy local planning policy.

The planning application is for 'Demolition of existing buildings relating to previously demolished dwelling and erection of a two-storey replacement dwelling and open sided cart shed along with associated works'; Reference: IS2/23/1684.

The report's objectives are to:

- Identify any features of ecological significance within the footprint of the proposed development and surrounding area.
- Broadly categorise the habitats within the site, and surrounding area if deemed necessary.
- Assess the potential for the presence or likely absence of protected species, including bats; and species or habitats of principal importance, within the footprint of the proposed development and surrounding area.
- Assess the likely impacts of the proposed development on key receptors.
- Recommend if further surveys are required.
- Provide an early indication of any likely mitigation or compensation requirements.

Location and description of the site

The site is a 0.11ha parcel of land located off The Street, Edingthorpe and comprises a former plot of a detached residential dwelling (Clay Lane Cottage) which was demolished circ. 2021 due to its poor state of repair. Currently the site still supports some derelict outbuildings and overgrown garden landscape.

The site lies three miles north-east of North Walsham; centred on approximate Ordnance Survey (OS) National Grid Reference (NGR) TG 31359 32241 (Figure 1). It is in a rural position surrounded by arable and scattered rural residential housing and farms. The site is bounded by The Street to the west and Clay Lane to the north.

The redline boundary of the site is shown as Figure 2.

Figure 1: Location of site – red marker.

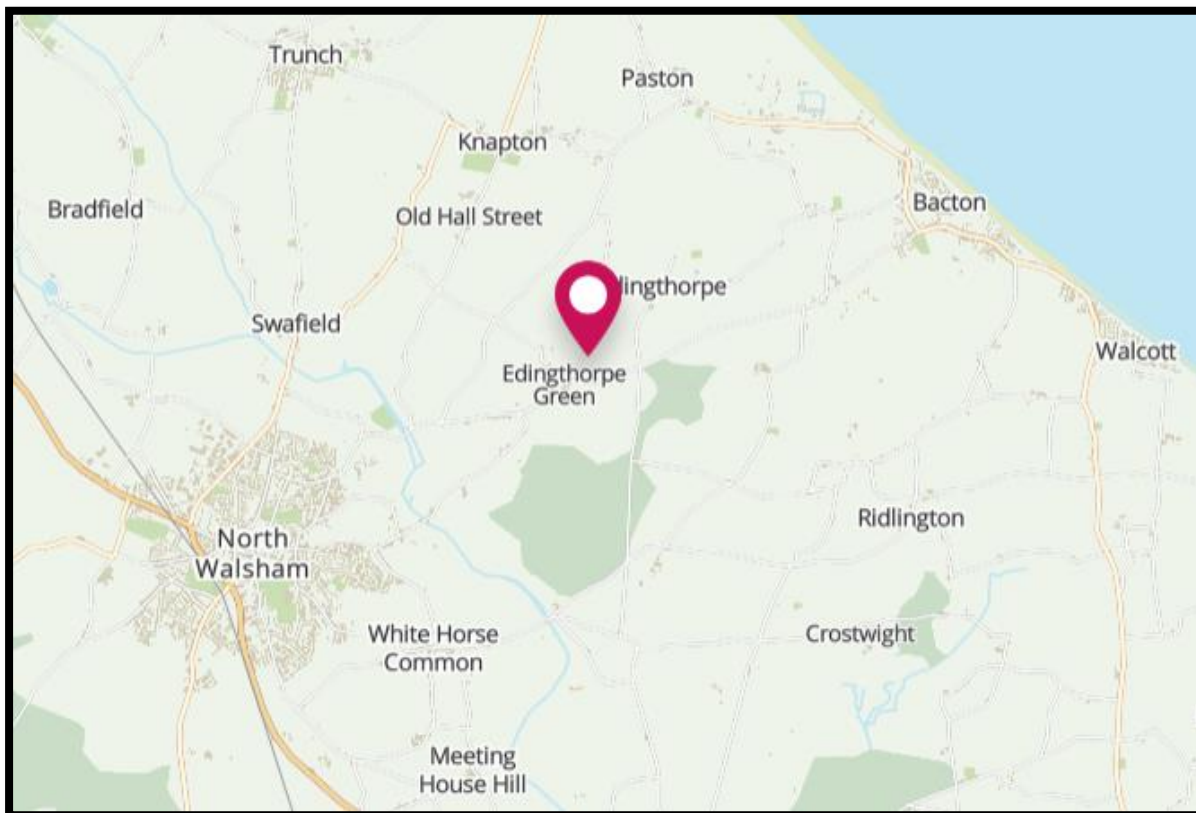
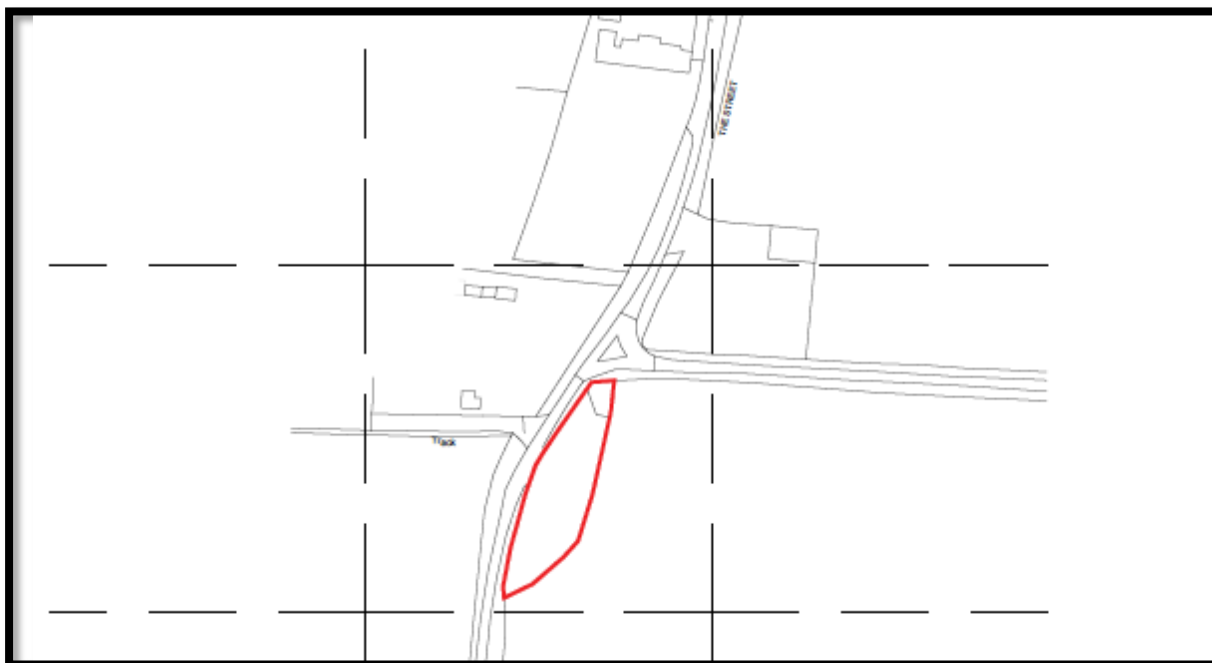
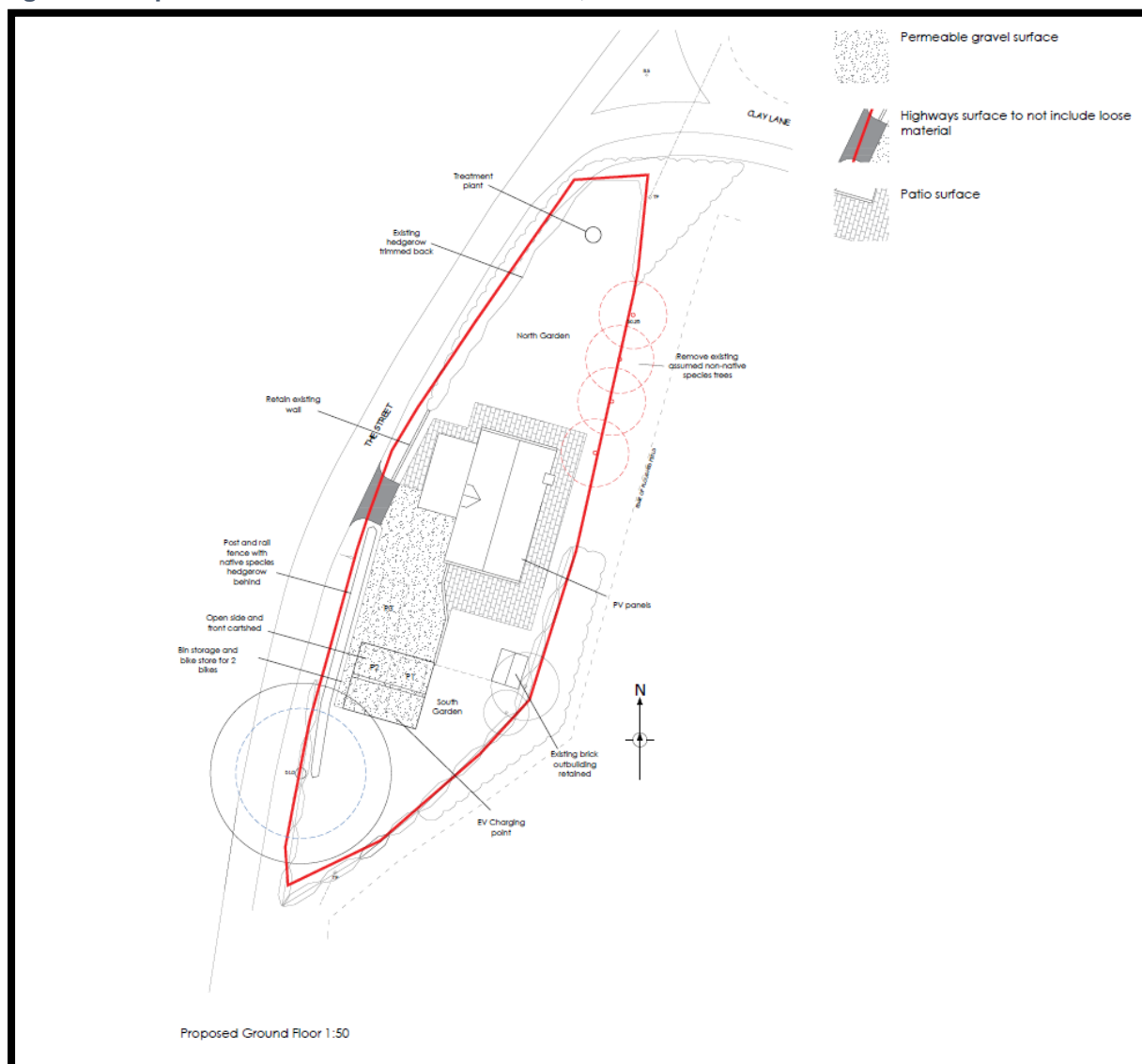


Figure 2: Redline boundary of site. Source: Vertex Architecture, June 2023.



Proposals

The proposals are to demolish the outbuildings and erect a two-storey replacement dwelling and open sided cart shed along with associated works and landscaping. See Figure 3.

Figure 3: Proposals. Source: Vertex Architecture, December 2023.

Relevant wildlife legislation

Certain habitats and species are protected under legislation. The principal legislation relevant to the proposed development is as follows:

- The Conservation of Habitats and Species Regulations 2017 (as amended) ['The Habitats Regulations']. The Habitats Regulations implement The Habitats Directive 1992 [92/43/EEC] into English Law.
- European Union (Withdrawal Agreement) Act 2018 (as amended).
- Wildlife & Countryside Act 1981 (as amended) (WCA).
- The Natural Environment & Rural Communities Act 2006 (NERC).
- The Countryside & Rights of Way Act (2000) (CRoW).
- The Protection of Badgers Act 1992 (The Badgers Act).
- The Wild Mammals (Protection) Act 1996.
- The Hedgerows Regulations 2007.

Planning context

The National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2019 (amended 2021) – which applies only to England – was first published in 2012. It provides the framework for producing local plans for housing and other development, which in turn provide the background against which applications for planning permission are decided.

The NPPF must be taken into account in preparing the development plan and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.

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

- 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;
- Development on land within or outside a Site of Special Scientific Interest (SSSI), 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 SSSIs;
- 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
- 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. While opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Of particular significance in the 2021 amendments, the NPPF now requires opportunities to incorporate biodiversity improvements in and around development; this demonstrates further steps taken by the government towards achieving the 25 Year Environment Plan (2018).

Species and Habitats of Principal Importance

Under NERC, 56 habitats and 943 species respectively, of Principal Importance are listed in Section 41 (S41) of the Act. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of NERC, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Impact Risk Zones

Impact Risk Zones (IRZs) are a tool developed by Natural England to make a rapid initial assessment of the potential risks to Sites of Special Scientific Interest (SSSIs) and other statutory designed wildlife sites, posed by development proposals. They define zones around each designated site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and 'Compensation Sites', which have been secured as compensation for impacts on Natura 2000/Ramsar sites.

Local planning authorities (LPAs) have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI. The SSSI IRZs can be used by LPAs to consider whether a proposed development is likely to affect a SSSI and determine whether they will need to consult Natural England to seek advice on the nature of any potential SSSI impacts and how they might be avoided or mitigated. The SSSI IRZs are also used by developers and consultants to help them to consider whether a proposed development is likely to affect a SSSI and choose whether to seek pre-application advice from Natural England. This will allow any potential impacts to be taken into account within the planning application and so minimise the risk of delays at the formal planning stage.

There are a number of 'Development Categories' which are covered by the SSSI IRZs.

Norfolk Green Infrastructure and Recreational impact Avoidance and Mitigation Strategy (GIRAMS)

The Conservation of Habitats and Species Regulations 2017 requires an HRA to be undertaken prior to the determination of planning applications, to establish whether a proposal will have a likely significant effect on the integrity of Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites (Habitats Sites, also known as European Sites and Natura 2000 Sites).

This strategy has been produced to support Local Planning Authorities (LPAs) in Norfolk in their statutory requirement to produce 'sound' i.e. legally compliant Local Plans for their administrative or Plan making areas.

The potential for recreational activities to disrupt the protection objectives of Habitats Sites in and around Norfolk is related to the level of growth in each Local Plan 'in combination'; specifically an increase in population resulting from identified new housing requirements across the county that will in turn ensure more people visit Habitats Sites for recreation. This residential growth, combined with an increase in tourism accommodation, will result in more people visiting and possibly harming Habitats Sites.

There is an opportunity to address mitigation strategically, in this instance at the County level. The provision of green infrastructure (GI) at both a development site and at the plan making level will be key to diverting and deflecting new residents from visiting Habitats Sites on a daily basis. As it is not possible to rule out residual effects, strategic mitigation is proposed in the form of a Recreational impact Avoidance and Mitigation Strategy (RAMS). This is to ensure that Local Plans can be adopted and to enable planned growth through the implementation of measures to avoid adverse effects on the integrity of Habitats Sites.

The GIRAMS is a large-scale strategic project involving all of the Norfolk authorities working together, to help mitigate the recreational effects likely to arise as a result of increased housing over the respective Local Plan periods on sensitive designated sites. It delivers Natural England's advice that provision of enhanced Green Infrastructure (GI) is needed within all new residential developments with year-round connections to the local countryside.

This Strategy will form part of the evidence base for Local Plans to ensure that residential planning applications which have the potential to impact on Habitats Sites are compliant with the Habitats Regulations. Its delivery aims to support growth and meet the GI & nature need for residents and visitors to Norfolk.

New developments are required to mitigate the potential for recreational activities to disrupt the protection objectives of Habitats Sites in and around Norfolk and must demonstrate compliance with the Habitats Regulations. Permission cannot be granted unless there is demonstrable evidence that any potential impacts have been satisfactorily assessed and mitigated.

It is the responsibility of the applicant to provide all relevant information necessary for completion and conclusion of the HRA. Local Planning Authorities (LPAs) typically have prepared a shadow HRA and guidance note for use, with some LPAs providing an interactive map to identify the Zones of Influence in relation to the planning application to include in the HRA. Note: The template Shadow HRAs are intended to enable applicants to ensure they provide all required information, however is only suitable for developments where no potential for direct effects on

protected wildlife sites have been identified (in such instances, a bespoke HRA will be required).

A Zone of Influence (ZOI) is a designated distance that establishes where development is likely to have a significant effect on a Habitats Site. It is an area emanating outwards from a Habitats Site within which development can be expected to have a negative effect on the integrity of the Habitats Site in question. Relevant to this Strategy, this means that residential development occurring within a ZOI can be expected to generate additional recreational visits to Habitats Sites.

The GIRAMs is a costed per unit (dwelling/unit of holiday accommodation) tariff based strategy. The recommended per dwelling tariff has been calculated based on the costed package of measures relevant to the impacts and the total number of houses/development still to come forward over the Local Plan(s) period. As such the approach seeks to mitigate the additional recreational pressure in a way that ensures that those responsible for it, pay to mitigate it, at a level consistent with the level of potential harm and consequently allows the emerging Plans that plan for growth to be HRA compliant.

Currently the tariff is £185.93 per dwelling, which is index linked; this will be secured either by a Unilateral agreement or a Section 106 Agreement.

SURVEY METHODOLOGY

Desk study

Designated areas

Web based resources¹ were used to identify statutory and non-statutory designated wildlife areas within 2km and 1km of the site, respectively. Biological records were not sought from the Norfolk Biodiversity Information Service (NBIS) due to the small size of the site and more relevant ecological information with respect to protected species being assessed by an onsite ecologist during the walkover survey.

Location of waterbodies

Web based resources² were also used to assess the site's proximity to waterbodies with respect to amphibians, particularly great crested newt *Triturus cristatus* (GCN).

GCN utilise both aquatic and terrestrial habitat. Adults breed in waterbodies or 'ponds' during the spring and then emerge onto land, spending the summer resting, foraging and dispersing before hibernating through the winter. ***Under wildlife legislation, both suitable aquatic and suitable terrestrial habitat is protected.***

GCN have been found to move over considerable distances from their breeding ponds, however, the vast majority will inhabit an area much closer, and the exact distribution and migration patterns of newts on land depend on a variety of factors. The quality of terrestrial habitat near to breeding ponds is important, as are the lack of barriers to dispersal (such as fast-flowing rivers, or very busy roads). Several studies have been conducted which reveal a great deal of variation, but GCN commonly move between ponds that are within **250m** of each other³.

Biological records – European protected species

Online records were searched using MAGIC with respect to European Protected Species Mitigation Licences (EPSML) and licence returns within a 2km radius of the site.

¹ MAGIC: www.magic.defra.gov.uk.

² Ordnance Survey Online Mapping and MAGIC.

³ English Nature, 2001: Great Crested Newt Mitigation Guidelines. Version: August 2001.

Walkover survey

A walkover survey was undertaken on 29th September, 2023 by Dru Hall BSc (Hons) MCIEEM, CEnv of Icen Ecology Ltd.

General habitats and protected species

The survey methodology followed the standard Phase 1 methodology (JNCC, 2010⁴). An extension of this basic methodology was also undertaken to provide further details in relation to notable or protected habitats present within the survey area, or in relation to habitats present that have the potential to support notable or protected species (CIEEM, 2017⁵).

Bats (Preliminary Roost Assessment)

An assessment for bat roost potential was undertaken within the site during the walkover survey in accordance with the Bat Conservation Trust's (BCT's) Good Practice Guidelines⁶.

Buildings and trees are categorised in terms of their 'suitability' to support a roost or provide suitable habitat, as per 'Table 4.1' from the Guidelines (see below).

The assessment entails a detailed inspection of a structure to look for features that bats could use for entry/exit and roosting and to search for bats and signs of current and previous use by bats. The assessment determines if further surveys will be required.

⁴ JNCC (2010). *Handbook for Phase 1 habitat survey: a technique for environmental audit (revised reprint)*. Joint Nature Conservation Committee, Peterborough.

⁵ Chartered Institute of Ecology and Environmental Management, December 2017. Guidelines for preliminary ecological appraisal. 2nd Edition.

⁶ Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London.

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation^b).</p> <p>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.^c</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>

^a For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

^b Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2015). This phenomenon requires some research in the UK but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in large buildings in highly urbanised environments.

^c This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

Limitations

The far south of the site was difficult to access due to dense bramble growth.

RESULTS AND DISCUSSION

Desk study

Statutory designated wildlife areas

Statutory designated wildlife areas within 2km of the site are listed in Table 1 below.

Table 1: Statutory designated wildlife areas within 2km of the site.

Designated Area	Distance from Site (shortest)	Designation
Knapton Cutting Local Nature Reserve (LNR)	1.5km north-west	Knapton Cutting Butterfly Reserve is a 0.9-hectare LNR south of Knapton in Norfolk. It is owned and managed by North Norfolk District Council. Knapton Cutting is a footpath from Knapton to North Walsham along the former North Walsham to Mundesley railway line.
Pigney's Wood LNR	1.6km south-west	<p>Pigneys Wood was purchased in 1993 by the North Norfolk Community Woodland Trust (NNCWT, a community based conservation charity) and it has been managed by them for the past 24 years.</p> <p>NNCWT successfully reverted the site from arable land to mixed woodland by planting over 20,000 trees of 40 different species during this time as well as restoring important wetland areas and improving the access and interpretation of the site for local people by providing guided trails.</p> <p>The site has a number of special wildlife features including an impressive 450-year-old ancient oak tree 'the Old Oak'. Pigneys Wood provides an important wildlife refuge for many species of birds, invertebrates and mammals.</p> <p>In September 2017, Pigneys Wood was entrusted to Norfolk Wildlife Trust to continue the conservation management of this wildlife-rich nature reserve. NWT aims to build on NNCWT's work by further enhancing the range of habitats present as well as improving the visitor experience to encourage more people to enjoy the wildlife on this site.</p>

Just outside the 2km radius (2.4km north-east) of the site lies the Paston Great Barn Special Area of Conservation (SAC), Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR). The Barn is renowned for being the only known maternity roost of barbastelle *Barbastella barbastellus* bats in a building. These bats forage large distances (up to 10km) from their roost during the active season and rely on dark corridors for navigation.

Lighting at the site must ensure that dark corridors are maintained.

Impact Risk Zones

The site falls within the IRZ for the Paston Barn SSSI for the following Development Categories:

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)	
1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?	2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:
All Planning Applications	All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures.
Infrastructure	Airports, helipads and other aviation proposals.
Wind & Solar Energy	
Minerals, Oil & Gas	Oil & gas exploration/extraction.
Rural Non Residential	
Residential	Residential development of 50 units or more.
Rural Residential	Any residential development of 50 or more houses outside existing settlements/urban areas.
Air Pollution	Livestock & poultry units with floorspace > 500m ² , slurry lagoons & digestate stores > 750m ² , manure stores > 3500t.
Combustion	General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.
Waste	
Composting	
Discharges	
Water Supply	
Notes 1	Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements.

The proposals are not listed under any of the Development Categories to trigger consultation with Natural England, however it does state that 'strategic solutions for recreational impacts are in place'. This refers to the GIRAMs scheme for additional overnight accommodation, however the proposals do not introduce 'new' overnight accommodation, thus payment into the scheme is not anticipated to be requested.

Nutrient Neutrality

The site is not located within Nutrient Impact Area for Norfolk thus compliance with the Nutrient Neutrality scheme is not anticipated to be requested.

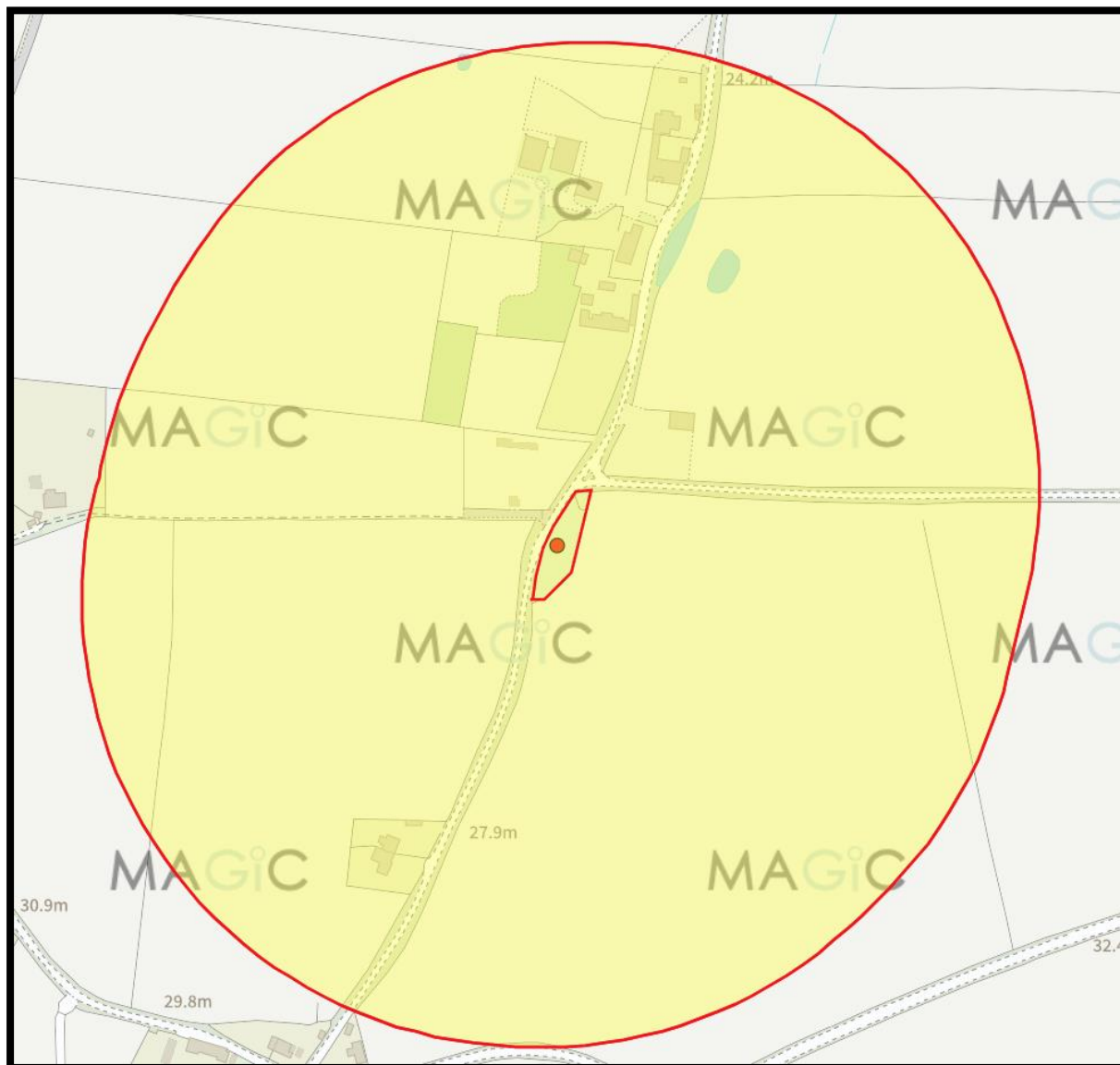
Non-statutory designated wildlife areas

Bacton Woods Ancient Replanted Woodland is located approximately 900m south of the site.

Waterbodies within the vicinity of the site

Based upon online mapping there were three ponds identified within 250m of the site (Figure 4); at 120m and 130m north-east, and 245m north-west.

Figure 4: Waterbodies within 250m of the site.



Biological records – GCN and Bats

Within 2km there were no EPSML identified from the desk study, nor licence returns or positive pond surveys.

Walkover survey

Habitats

The survey area comprises a number of dominant 'habitat types', adapted from those listed in the Handbook for Phase 1 Habitat Survey⁴: Defunct species-poor hedgerow; Tall ruderal with introduced shrub and garden planting; Scattered trees; Dense continuous scrub; Bracken and Buildings.

These habitat types are described below and are shown schematically (for indicative purposes only) on Figure 5.

The site has remained unmanaged for some time since it was a former garden; the majority of the site habitat therefore comprises tall ruderal species with introduced shrub and garden planting which cannot be separated out on drawing. A list of species is shown in Table 2 below.

Table 2: Tall ruderal species, introduced shrub and garden planting.

Scientific name	Common name
<i>Achillea millefolium</i>	Yarrow
<i>Aegopodium podagraria</i>	Ground elder
<i>Bellis perennis</i>	Daisy
<i>Berberis sp.</i>	Berberis
<i>Buddleja sp.</i>	Buddleia
<i>Chamerion angustifolium</i>	Rosebay willowherb
<i>Choisya sp.</i>	Choisya
<i>Cirsium arvense</i>	Creeping thistle
<i>Cirsium vulgare</i>	Spear thistle
<i>Clematis montana</i>	Climbing clematis
<i>Colocasia</i>	Elephant's ears
<i>Cyclamen sp.</i>	Cyclamen
<i>Digitalis purpurea</i>	Foxglove
<i>Dipsacus</i>	Teasel
<i>Reynoutria japonica syn. Fallopia japonica.</i>	Japanese knotweed
<i>Foeniculum vulgare</i>	Fennel
<i>Galium aparine</i>	Cleavers
<i>Geranium robertianum</i>	Herb Robert
<i>Helminthotheca echioides</i>	Bristly ox-tongue
<i>Jacobaea vulgaris</i>	Ragwort
<i>Leontoden sp.</i>	Hawkbit
<i>Leucanthemum</i>	Ox-eye daisy
<i>Medicago lupulina</i>	Black medic
<i>Mentha sp.</i>	Mint
<i>Oenothera biennis</i>	Evening primrose
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Prunella vulgaris</i>	Selfheal
<i>Ranunculus repens</i>	Creeping buttercup
<i>Rosa sp.</i>	Rose
<i>Rumex crispus</i>	Curled dock
<i>Rumex obtusifolius</i>	Broadleaved dock
<i>Senecio vulgaris</i>	Groundsel
<i>Senecio cineraria</i>	Senecio
<i>Sonchus arvensis</i>	Perennial sow-thistle

Scientific name	Common name
<i>Taraxacum officinale</i>	Dandelion
<i>Trifolium repens</i>	White clover
<i>Urtica dioica</i>	Common nettle (dominant)
<i>Verbascum thapsus</i>	Great mullein
<i>Viburnum sp.</i>	Viburnum

Interspersed grasses include creeping bent *Agrostis stolonifera*, Yorkshire fog *Holcus lanatus* and *Agrostis*.

The hedgerows on the site (Figure 5) comprise the following species:

- H1: Elm *Ulmus sp.* (dominant), bramble, common hawthorn *Crataegus monogyna*, field maple *Acer campestre* and apple *Malus sp.*
- H2: Common hawthorn (dominant), ivy *Hedera helix*, elder *Sambucus nigra*; hazel *Corylus avellana* and plum *Prunus sp.*
- H3: Elm (dominant), bramble, ivy, privet *Ligustrum sp.* and common hawthorn.

The largest scattered trees on the site comprise the following species: *Please refer to the Arboricultural Impact Assessment⁷ for full details of tree species on the site.*

- North-east of the site on boundary: 4 x Norway spruce *Picea abies*. Ranging from 9 to 13m.
- South-west of the site on boundary: Ash *Fraxinus excelsior* (14m).

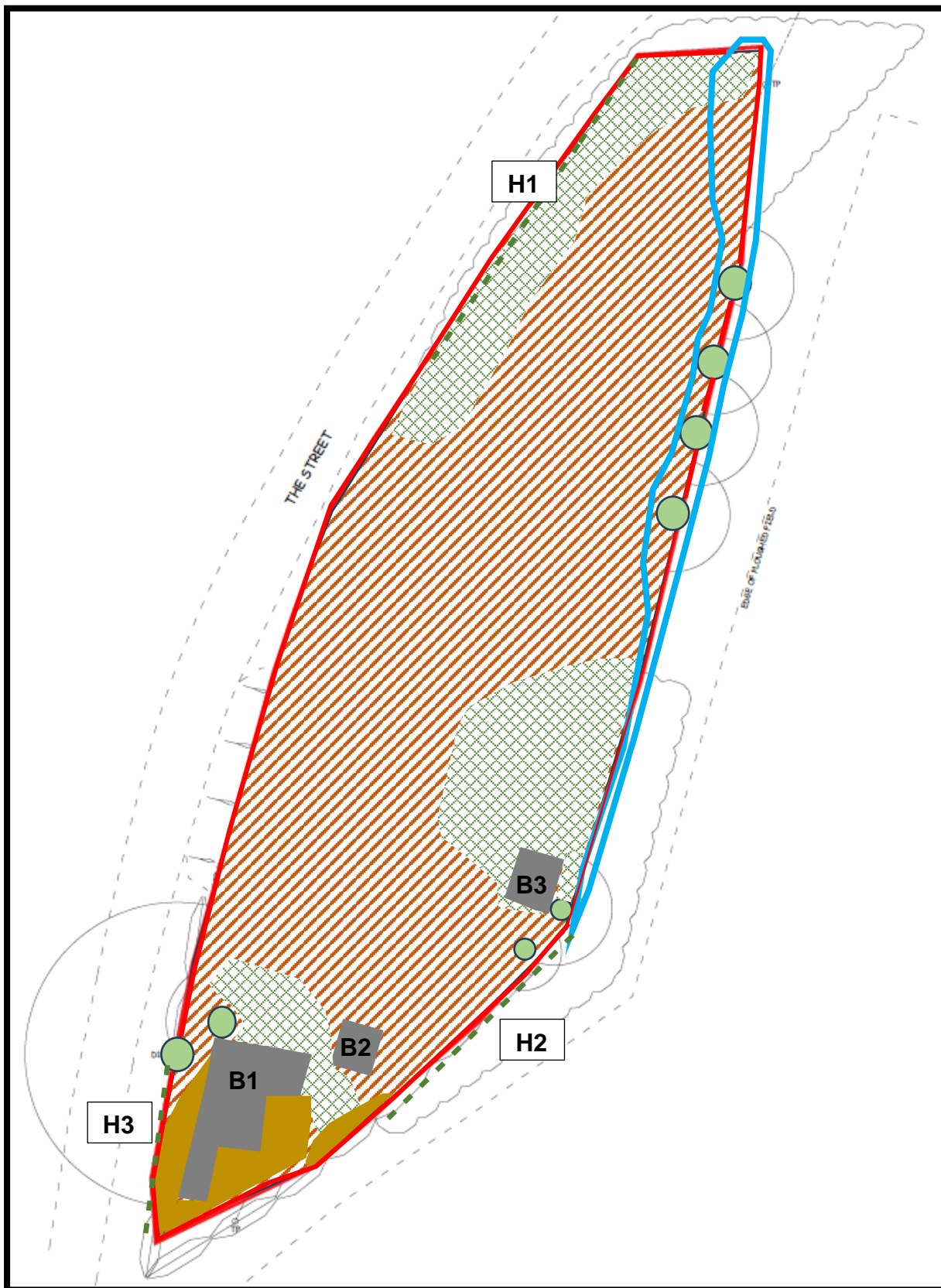
To the north-east of the site and along much of the eastern boundary exists a large amount of Japanese knotweed which is also present in the neighbouring arable field to the east of the site.

Bracken is located to the south of the site and along the road verge (south-west) and field boundary (south-east).









Three derelict outbuildings exist on the site; these will be described in detail under 'bats'.

⁷ Talking Elm Tree Services (August, 2023) Arboricultural Impact Assessment. Clay Lane Cottage, The Street, Edingthorpe, Norfolk, NR28 9SU. TE-308.1.

Figure 5: Indicative Phase 1 habitat map.



Legend of dominant habitats

	Redline boundary		Tall ruderal with introduced shrub / garden planting
	Defunct species-poor hedgerow H1, H2, H3		Scattered trees
	Dense continuous scrub		Bracken
	Buildings: B1: Corrugated tin (former garage) B2: Small wooden shed B3: Brick small outbuilding		Area of Japanese knotweed

Site photographs are shown in Table 3 below.

Table 3: Site photographs.



Site overview. Photographer facing north.



Site overview. Photographer facing north. The Street to the left of the photograph.



Large ash tree on south-west boundary around H3. Photographer facing south-east.



Southern end of the site with B2 shown, bramble and bracken. Photographer facing south-west.



Japanese knotweed shown along the north-eastern field boundary. Photographer facing north from inside arable field.



Norway spruce – north-east of site. Photographer facing east.

Habitat evaluation

Under NERC 2006, 56 habitats are listed under Section 41 as being 'Habitats of Principal Importance in England' and consequently require conservation priority and planning consideration.

None of the habitats on site are listed as a Habitat of Principal Importance under Section 41.

Protected species

The habitats and site were considered with respect to their potential to support protected species.

Mammals - badger

There were no signs of badger *Meles meles* activity on the site. Signs typically include setts, hair, latrines, footprints, mammal runs and snuffle holes. Note, however that the southern section of the site was difficult to access due to bramble scrub.

On the opposite side of The Street there were snuffle holes on the grass verge.

Precautionary measures recommended.

Mammals - bats

The PBRA was undertaken at B1 (dilapidated corrugated tin garage), B2 (derelict shed) and B3 (small brick outbuilding). Photographs are shown in Table 4, locations on Figure 4.

Dilapidated corrugated tin garage (B1): This structure is dilapidated / rusting away and has no areas suitable for roosting bats, nor thermal stability. There were no signs of current or of previous use by bats. B1 is assessed as having 'Negligible' bat roost potential. No further surveys recommended.

Derelict shed (B2): This is a small wooden 'A' shaped shed with corrugated tin pitched roof. There were no suitable areas for roosting bats and no signs of current or of previous use by bats. B2 is assessed as having 'Negligible' bat roost potential. No further surveys recommended.

Small brick outbuilding (B3): A small derelict brick outbuilding with pantiled pitched room with ridge tiles and some ivy cover. All areas of the structure were thoroughly inspected with a torch and endoscope, including some lifted tiles. There were no signs of current or of previous use by bats. B3 is assessed as having 'Negligible' bat roost potential, however due the ivy cover, precautionary measures are recommended if it is ever dismantled.

Table 4: Preliminary Bat Roost Assessment – Photographs.

 A photograph showing a dense thicket of green foliage and trees. In the background, a structure with a corrugated metal roof is partially visible, heavily overgrown with vegetation.	 A photograph of a small, green-painted wooden shed with a white corrugated metal roof. The shed is surrounded by dense, overgrown vegetation and appears to be in a state of disrepair.
<p>B1. Dilapidated corrugated tin former garage.</p>	<p>B2. Derelict shed.</p>
 A photograph of a small, dark wooden outbuilding with a red-tiled roof. The building is almost completely obscured by thick, overgrown green bushes and trees.	 An interior photograph of a stone-walled outbuilding. The structure is supported by wooden posts. The walls are made of rough-hewn stone, and the floor is dirt. There is some debris and a wooden plank leaning against the wall.
<p>B3. Outbuilding.</p>	<p>B2. Interior of outbuilding.</p>

For foraging and commuting, the site has some potential, however foraging and commuting bats are unlikely to be impacted by the proposals, provided precautionary measures are followed in terms of lighting.

Mammals – European hedgehog

The site has potential to support European hedgehog due to its unmanaged habitat.

Precautionary measures recommended.

Birds

All of the scattered tree, scrub, shrub and hedgerow habitats have breeding bird potential.

Precautionary measures recommended.

Reptiles

The site has some potential for common reptile species such as grass snake *Natrix helvetica*, common lizard *Zootaca vivipara* and slow-worm *Anguis fragilis*.

Precautionary measures recommended.

Amphibians

Within 250m of the site, the desk study identified three ponds within 250m of the site at 120m and 130m north-east, and 245m north-west. These ponds are surrounded by good terrestrial habitat.

There are no onsite ponds. The terrestrial habitat on the site has some potential for GCN, however is not located within the 'core' 100m radius area of any of the ponds, nor is it positioned in a location whereby GCN (if breeding in the ponds to the north) would be crossing in order to access ponds close to the site in other directions.

Based upon the above information, the likelihood of GCN utilising terrestrial habitat within the site is assessed as negligible-low and impacts might include individual newts seeking refuge in or under materials stored on the ground or within footings / fence post holes, and thus disturbed during the development. It is therefore recommended that Reasonable Avoidance Measures (RAMs) are undertaken at the site. If RAMs are implemented, then these risks can be removed and the effect on GCN is predicted to be no effect-negligible.

Invertebrates

The limited habitats on the site are unlikely to support a diverse assemblage of invertebrate species.

No further surveys recommended.

Flora

No rare or protected flora was identified during the walkover survey.

A large amount of Japanese knotweed was identified along the eastern boundary and to the north of the site. This non-native invasive species is listed on Schedule 9 of the WCA.

No further surveys recommended, however treatment by a specialist is recommended to prevent further spread of the Japanese knotweed.

EVALUATION AND RECOMMENDATIONS

Table 5 below includes an evaluation of the desk study and walkover survey, together with recommendations for further survey.

Table 5: Survey evaluation and recommendations

Ecological Receptor	Evaluation	Recommendations / Comments
Designated wildlife areas	<p>Within 2km of the site, the desk study identified the following statutory designated wildlife areas: Knapton Cutting LNR (1.5km north-west) and Pigney's Wood LNR (1.6km south-west).</p> <p>Just outside the 2km radius (2.4km north-east) of the site lies the Paston Great Barn SAC, SSSI and NNR. The site falls within the IRZ for the Paston Barn SSSI, however the proposals are not listed under any Development Categories that would trigger consultation between the Local Planning Authority and Natural England.</p> <p>Due to the small-scale nature of the proposals and distance from Paston Barn, adverse impacts are not anticipated provided lighting is considered with respect to dark corridors and bats.</p> <p>The site is not located within a Nutrient Neutrality area.</p> <p>Additional recreational activities that could potentially impact the SAC are not expected, thus an HRA or payment into the GIRAMS scheme is not anticipated to be requested.</p> <p>For non-statutory designated wildlife sites within 1km, Bacton Woods Ancient Replanted Woodland is located approximately 900m south of the site.</p> <p>Due to the small-scale nature of the proposals, and distance, adverse impacts on Bacton Woods is not anticipated.</p> <p><u>Legislation/Policy</u></p> <ul style="list-style-type: none"> • RAMSARs: Convention on Wetlands of International Importance 1971. • SACs: EC Habitats Directive 1992. • SPAs: EC Birds Directive 2009. • SSSIs: WCA, CRoW Act (Schedule 9). 	<p>A lighting strategy at the site must comply with the Institute of Lighting Professional's (ILP) 'Bats and Artificial Lighting at Night' ILP Guidance Note 08/23. This can be found at: https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released.</p> <p>This is recommended as a Planning Condition.</p>

Ecological Receptor	Evaluation	Recommendations / Comments
Habitats	<p>On-site habitats comprise: Defunct species-poor hedgerow; Tall ruderal with introduced shrub and garden planting; Scattered trees; Dense continuous scrub; Bracken and Buildings.</p> <p>None of these habitats are classed as a Habitat of Principal Importance under Section 41 (S41) of NERC.</p> <p><u>Legislation/Policy</u></p> <ul style="list-style-type: none"> • NERC. Section 41 Habitats of Principal Importance. <p>The S41 list is used to guide decision-makers in implementing their duty under Section 40 of NERC, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.</p>	No further assessment.
Mammals - badger	<p>There were no signs of badger on the site, however the area to the far south was difficult to completely access. There were 'snuffle' holes on the verge on the opposite side of the road (west).</p> <p><u>Legislation / Policy</u></p> <ul style="list-style-type: none"> • Badgers and their setts are protected under the Protection of Badgers Act 1992. Protection also extends to include disturbance. • Schedule 6 WCA: illegal to capture badgers with certain methods listed. • IUCN Red Data Book List: Least Concern. 	<p>No further surveys recommended.</p> <p>Precautionary measures recommended: Prior to works, the scrub should be cleared by hand tools to the south of the site (outside the bird nesting season – see below). A check for setts should be undertaken in this area and again across the site and within 20m of the site.</p> <p>The Badger Trust considers the following activities may require a licence:</p> <ul style="list-style-type: none"> • Use of heavy machinery within 30 metres of any sett entrance. • Use of lighter machinery (particularly for digging) within 20 metres of any sett entrance. • Use of hand tools such as hand digging or scrub clearance within 10 metres of any sett entrance.
Mammals – bats	<p>Three buildings on the site were assessed for bat roost potential (BRP), B1 (dilapidated tin garage), B2 (derelict shed) and B3 (small brick outbuilding).</p> <p>B1 and B2 had no conducive bat roosting features; B3 had lifted tiles and some ivy cover, but the structure was inspected by high powered torch and endoscope, with no evidence of current or previous use by bats.</p>	<p>No further surveys recommended.</p> <p>Precautionary measures recommended for B3 if this should be dismantled in the future:</p> <ol style="list-style-type: none"> 1. The building should be dismantled under the supervision of a bat licensed ecologist from October to March (inclusive).

Ecological Receptor	Evaluation	Recommendations / Comments
	<p>The desk study did not identify any bat EPSML or returns within 2km of the site.</p> <p>The site has potential for foraging and commuting bats.</p> <p>Legislation / Policy</p> <ul style="list-style-type: none"> • All bats: Schedule 2 Habitats Regulations 2017. • All bats: Schedule 5 WCA (full protection). • All bats: Section 41 NERC (species of Principal Importance). • All bats: Wild Mammals (Protection) Act, 1996. • All bats: EUROBATS Agreement. • Habitats Directive Annex II: Horseshoe bats (Rhinolophidae), Barbastelle <i>Barbastella barbastellus</i> and Bechstein's bat <i>Myotis bechsteinii</i> • IUCN Red Data Book List: Varies. Bechstein's bat: Near Threatened. <p>Bats are classed as 'European Protected Species' (EPS) and mitigation will typically be undertaken under the auspices of an EPS licence from Natural England.</p>	<p>2. If any bats are discovered, then works must cease until a licence has been sought.</p> <p>3. Bat boxes are recommended to be installed at the proposed new property. See 'Biodiversity Gain'.</p> <p>A lighting strategy at the site must comply with the Institute of Lighting Professional's (ILP) 'Bats and Artificial Lighting at Night' ILP Guidance Note 08/23. This can be found at: https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released.</p> <p>This is recommended as a Planning Condition.</p>
European hedgehog	<p>The site has suitable habitat for European hedgehog.</p> <p>Legislation / Policy</p> <ul style="list-style-type: none"> • Wild Mammals (Protection) Act, 1996. • Schedule 6 WCA (prohibits killing and trapping by certain methods). • Appendix III of the 'Bern' Convention. • NERC Priority Species. 	<p>Precautionary measures recommended.</p> <p>During site clearance, care should be taken when removing vegetation. Hedgehogs found should be carefully moved into safe, similar habitat away from works.</p> <p>Alternatively, if this is not possible, or the animal is injured or does not look well, the nearest animal rescue is Hallswood Animal Sanctuary (north of Norwich) – call 07549991920.</p> <p>The following steps are recommended if a hedgehog is found:</p> <p>(1) Put the hedgehog in something secure as they are great climbers. Unless taking it directly to a rescue place, ensure it has enough room to move around and the box is covered</p>

Ecological Receptor	Evaluation	Recommendations / Comments
		<p>so flies can't get to it, and it has air holes.</p> <p>(2) Provide a heat source. If you don't have a hot water bottle, a jam jar or a bottle half-filled with hot water and wrapped in a towel is enough. Make sure that the hedgehog can move away from the heat source if it gets too hot. <i>If the hedgehog has flies on it, do not give a heat source.</i></p> <p>(3). Contact the rescue centre.</p> <p><i>NEVER feed hedgehogs milk or bread.</i></p> <p>In late autumn and winter, any hedgehog smaller than a grapefruit (<500g) should be brought to a rescue centre as they will be too small to hibernate.</p> <p>See 'Biodiversity Gain'.</p>
Birds	<p>The scattered tree, scrub, and hedgerow habitats have potential for nesting birds.</p> <p>All wild birds, whilst actively nesting, are afforded legal protection under the WCA.</p> <p>Special protection is also afforded to birds listed on Schedule 1 of the WCA which makes it an offence to disturb these species at nest or the dependent young.</p> <p>Legislation / Policy</p> <ul style="list-style-type: none"> • The Birds Directive 2009. • WCA (all species, with exceptions). • Section 41 NERC (some species are of Principal Importance). • BoCC. • IUCN Red Data Book: Varies. <p>Combined legislation means that all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to:</p> <p>a) intentionally kill, injure or take any wild bird;</p> <p>b) intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;</p>	<p>It is recommended that tree / scrub / hedgerow removal is undertaken outside of the nesting season.</p> <p>The nesting season is deemed to be from March to mid-August, although these times can be temperature and species dependent.</p> <p>If this timing is not possible for tree removal, then a nesting bird check must be carried out by a suitably experienced person, no more than 48 hours between the check and the removal. If the 'all clear' is given, then removal can commence. If birds are found to be nesting, then no works should be undertaken within at least 7m of the nest until the chicks have fledged.</p> <p>See 'Biodiversity Gain'.</p>

Ecological Receptor	Evaluation	Recommendations / Comments
	<p>c) intentionally take or destroy the egg of any wild bird;</p> <p>d) have in one's possession or control any wild bird (dead or alive), part of a wild bird or egg of a wild bird;</p> <p>e) intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird</p> <p>f) have in one's possession or control any birds of a species listed on Schedule 4 of the Act unless registered in accordance with the Secretary of State's regulations.</p>	
Reptiles	<p>The garden area has some potential for common reptile species.</p> <p>Legislation / Policy</p> <ul style="list-style-type: none"> • Schedule 2 Habitats Regulations 2017 (smooth snake <i>Acipenser sturio</i> and sand lizard <i>Lacerta agilis</i>, only). • Schedule 5 WCA (intentional killing and injuring; and trade) – all native reptile species. • Section 41 NERC (species of Principal Importance) - all native reptile species. • IUCN Red Data Book: Least Concern. 	<p>Due to the small-scale nature of the garden and proposals, precautionary measures are recommended.</p> <p>It is recommended to clear vegetation and debris by hand / using hand tools within the 'active' season, i.e. from March to October by first cutting at around knee height, leaving for at least 5 days, and then strimming down to ground level.</p> <p>Dismantling debris should be undertaken by hand to enable any reptiles to escape into adjacent habitat.</p>
Amphibians, particularly GCN	<p>Within 250m of the site, the desk study identified three ponds at 120m and 130m north-east, and 245m north-west. These ponds are surrounded by good terrestrial habitat.</p> <p>There are no onsite ponds. The terrestrial habitat onsite has some potential for GCN, however is not located within 'core habitat' of 100m from of any of the ponds, nor is it positioned in a location whereby GCN (if breeding in the ponds to the north) would be crossing in order to access ponds close to the site in other directions.</p> <p>Based upon the above information, the likelihood of GCN utilising terrestrial habitat within the site is assessed as negligible-low and impacts might include individual newts seeking refuge in or under materials stored on the ground or</p>	<p>No further surveys recommended.</p> <p>It is recommended that Reasonable Avoidance Measures (RAMs) are undertaken at the site. If RAMs are implemented, then these risks can be removed and the effect on GCN is predicted to be no effect-negligible.</p> <p>RAMs are recommended as a Planning Condition.</p> <p>In the unlikely event that a GCN is found during the RAMS, a Low Impact Class Licence (LiCL) can be applied for.</p>

Ecological Receptor	Evaluation	Recommendations / Comments
	<p>within footings / fence post holes, and thus disturbed during the development.</p> <p>Within 2km of the site there were no EPSML or returns identified from the desk study.</p> <p><u>Legislation / Policy</u></p> <ul style="list-style-type: none"> • Schedule 2 Habitats Regulations 2017. • Schedule 5 WCA (full protection) • Section 41 NERC (species of Principal Importance). • IUCN Red Data Book: Least Concern. <p>GCN is classed as 'European Protected Species' (EPS) and mitigation will typically be undertaken under the auspices of an EPS licence from Natural England.</p>	
Invertebrates	<p>The limited habitats on the site are unlikely to support a diverse assemblage of invertebrate species.</p> <p><u>Legislation/Policy</u></p> <ul style="list-style-type: none"> • Schedule 2 Habitats Regulations 2017 (large blue butterfly <i>Maculinea arlon</i>, Fisher's Estuarine moth <i>Gortyna borelii lunata</i>, and lesser whirlpool ram's-horn snail <i>Anisus vorticulus</i>). • Schedule 5 WCA (varying protection). • Section 41 NERC (species of Principal Importance) – some species. • IUCN Red Data Book: Varies. 	No further surveys recommended.
Flora	<p>No rare or protected flora were identified during the walkover survey.</p> <p>A large amount of Japanese knotweed was identified along the eastern boundary and to the north of the site. This non-native invasive species is listed on Schedule 9 of the WCA.</p> <p><u>Legislation/Policy – native species</u></p> <ul style="list-style-type: none"> • Schedule 5 Habitats Regulations 2017 (9 species). • Schedule 8 WCA. Prohibits unauthorised uprooting or destruction of plants listed on Schedule 8; also prohibits 	<p>No further surveys recommend.</p> <p>It is recommended that the Japanese knotweed is removed by a specialist contractor to avoid further spreading.</p>

Ecological Receptor	Evaluation	Recommendations / Comments
	<p>sale/possession etc. of any plant listed on Schedule 8 or parts or derivatives of these plants.</p> <ul style="list-style-type: none"> • Section 41 NERC (species of Principal Importance) – some species. • IUCN Red Data Book: Varies. <p><u>Non-native plant species</u></p> <p>Section 14 WCA, Schedule 9.</p> <ul style="list-style-type: none"> • Section 33 Environmental Protection Act, 1990. <p>Section 14 prohibits the release to the wild of animals and plants listed in Part II of Schedule 9 or otherwise causing them to grow there. Negligent or reckless behaviour such as inappropriate disposal, resulting in the plant becoming established in the wild also constitutes an offence.</p> <p>Depositing unauthorised 'controlled waste' is also likely to be a breach of Section 33 of the Environmental Protection Act, 1990.</p> <p>In the recent Court of Appeal decision in the case of <i>Network Rail Infrastructure Limited v Williams and Another</i> [2018], a landowner/occupier can be liable for failing to act reasonably to remove any Japanese knotweed after becoming aware of it and where it is foreseeable that it would damage neighbouring land.</p>	

BIODIVERSITY GAIN

Biodiversity gain is required under the NPPF and local planning policy; the following is recommended.

Stockists include:

- www.nhbs.com (general supplier)
- www.manthorpebp.co.uk/environmental/swift-nesting-brick (swift bricks)
- www.vivara.co.uk (bird boxes)
- www.ibstock.co.uk/products/ecohabitats (integral brick products)

Bat boxes

It is recommended that two bat boxes/tubes are installed within the brickwork of the proposed newbuild; alternatives are given below, similar boxes can also be used.

Bat boxes/tubes should be placed at a minimum of 2-3m high, preferably south/south-east/south-west facing and not over windows or doors, or where cats can access them. Security lighting should not be shone directly into bat boxes.

Ibstock Bat Box B or C

Each Bat Box replaces three to four bricks in stackbond in cavity wall construction and creates several roosting zones inside the box⁸.

The base entrance means that no maintenance is required. The Bat Box B comes in different sizes and does not have a bat motive on the front, making its purpose concealed from the general public.



Small Red
215 x 215 mm



Large 215 x 290mm



Large Bespoke
215 x 290 mm

⁸ Williams, C. (2010). Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build. RIBA Publishing :London.

The Bat Box C has a bat motif.



Smooth Red Small
215 x 215 mm



Smooth Gold Large
215 x 290 mm



The Istock Bat Box C is available in two sizes (small and large) and three colours: smooth red, smooth blue or smooth gold. The box is both durable and fully frost resistant. Dimensions: Small Box - 215 x 215mm, Large Box - 215 x 290mm.

As an alternative to Istock products, 1RF Schwegler bat tubes could also be used. The 1FR Bat Tube is designed to be installed on the external walls of buildings, either flush or beneath a rendered surface. This makes it ideal for situations where the box needs to be discrete, as only the entrance hole will be visible. It can also be painted to match the building with an air permeable paint if desired.

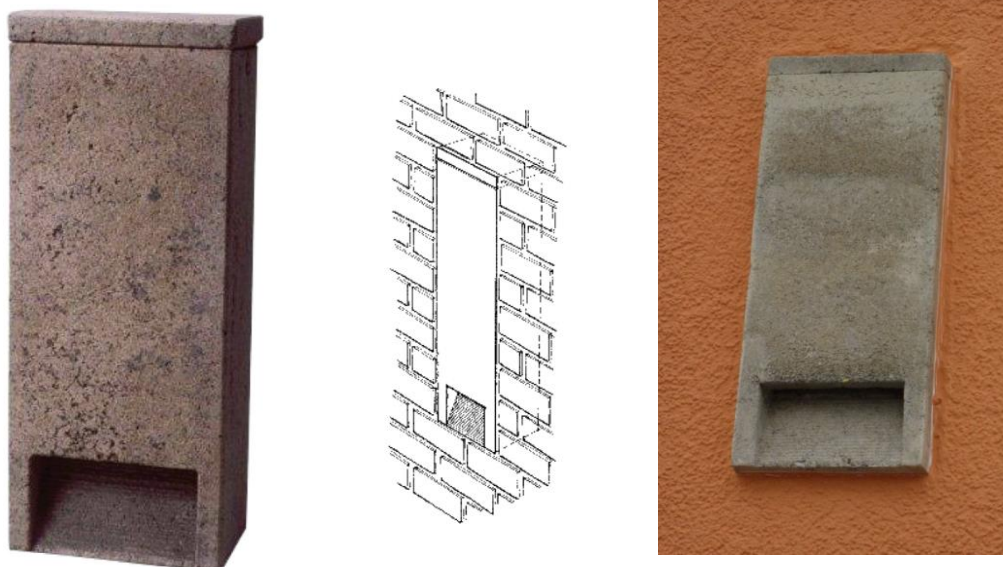
The 1FR is specifically designed to meet the characteristic behavioural requirements of the types of bats that inhabit buildings. It has an integrated wooden panel onto which bats can cling and a ridged entrance slope which makes it easy for them to enter and leave the box safely. The design maintains excellent climatic conditions inside providing bats with a safe and stable environment in which to roost and it requires no maintenance because droppings fall out of the entrance ramp.

Specification:

* Material: Woodcrete with integrated wooden panel * Height: 47.5cm

* Width: 20cm * Depth: 12.5cm * Entrance dimensions: 15 x 9 x 2cm * Weight: 9.8kg

1FR Schwegler Bat Tube



Vivara Pro Build-in Woodstone Bat Tube

Designed to be built into the masonry of external walls or beneath a rendered surface, the Vivara Pro Woodstone Bat Tube provides an unintrusive, tailored habitat for a variety of bat species. It is designed to provide the maximum internal space across two cavities, allowing space for larger groups. The cavities can be reached via the crawl-in entry slot in the front facing. It is manufactured from hard-wearing WoodStone and plywood with removable side panels so that several boxes can be placed side by side.

WoodStone is a mixture of sawdust from FSC wood sources and concrete, and it is designed to last for years. It is breathable so there will be no problems with condensation and Woodstone maintains a consistent temperature inside, providing excellent insulation for roosting bats. This tube requires no maintenance as droppings fall out of the entrance ramp.

**Specification:**

- * External dimensions: 21cm (W) x 50cm (H) x 7.7cm (D)
- * Internal dimensions: 16cm (W) x 40cm (H) x 2.2cm (D) (x2 cavities)
- * Weight: 6kg
- * Material: WoodStone

Hedgehog***General hedgehog enhancements***

The following enhancements should be undertaken at the site:

- Areas of unkempt leaf litter, dead wood and scrub to provide shelter for hedgehogs will be retained. Scrub patches (particularly brambles) that provide suitable hibernation nesting habitat are important for hedgehogs and small patches of this habitat may be used by many animals.
- Log piles should be created around the perimeter of the site (sized between 0.5m and 3m) from any deadwood or tree felling activities.
- Chemical use of soft landscapes will be avoided at the site and organic management encouraged because toxicity levels can build up in animals like hedgehogs, and vital food sources are removed from the ecosystem.
- To ensure that hedgehogs are not damaged during hibernation within compost heaps, leaf litter and hedgerow bases, bonfires of leaves / wood will be avoided unless they have been thoroughly checked beforehand.
- Close board boundary fencing should be avoided as this fragments habitat which restricts their survival.

Hedgehog box

A single hedgehog nest box should be sited along the perimeter of the site (east) such as the one below:



The box should be cleaned annually in March / April when hedgehogs have finished hibernating and will have left the house or in October when the hoglets have been weaned and before hedgehogs settle for winter hibernation. The box can be moved during these times too. No chemicals should be used.

Birds

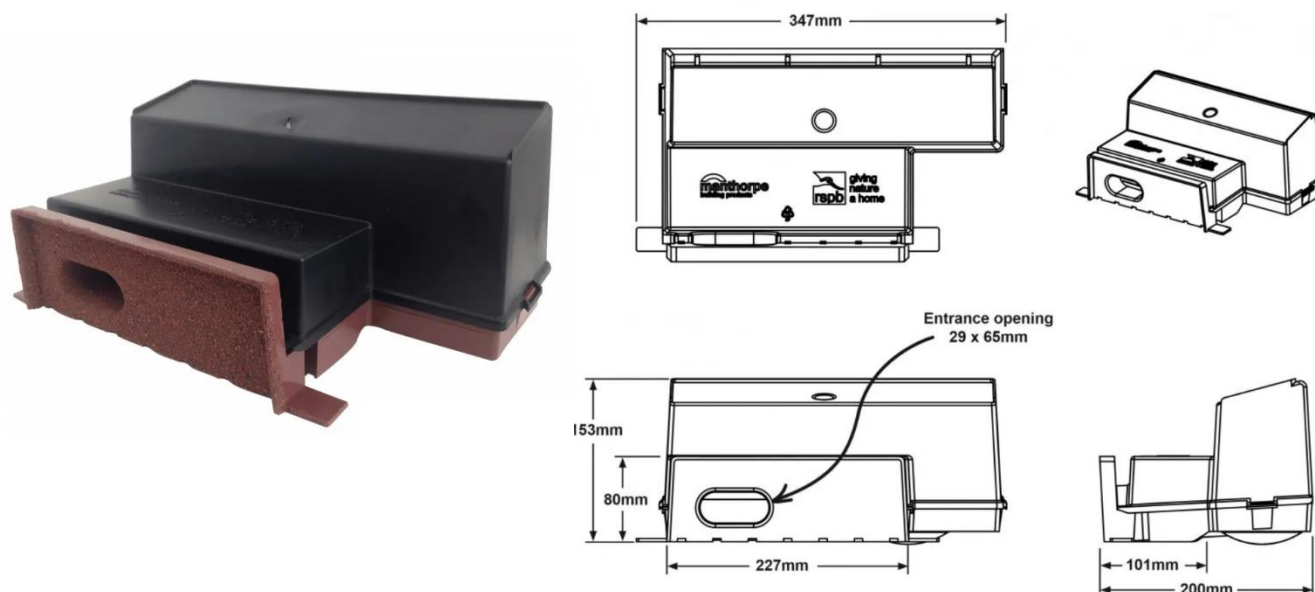
Swift bricks

Two swift bricks are recommended to be installed within the brickwork to the eastern elevation of the newbuild.

Swifts visit the UK between April and August, during which time they breed and raise their chicks before leaving again for warmer places to spend the winter months. Unlike swallows and house martins, swifts prefer to use existing holes, cracks and crevices for their nests such as those in old buildings. As modern building practices have improved the quality of homes in the UK, these nest sites are becoming more and more scarce and swifts are becoming much more dependent on nest boxes.

The Swift Bricks should be sited high, ideally above 5 metres. If possible, avoid locations which receive long periods of direct sunlight throughout the day. An ideal place is below the overhang of the verge and barge board.

The Manthorpe Swift Brick

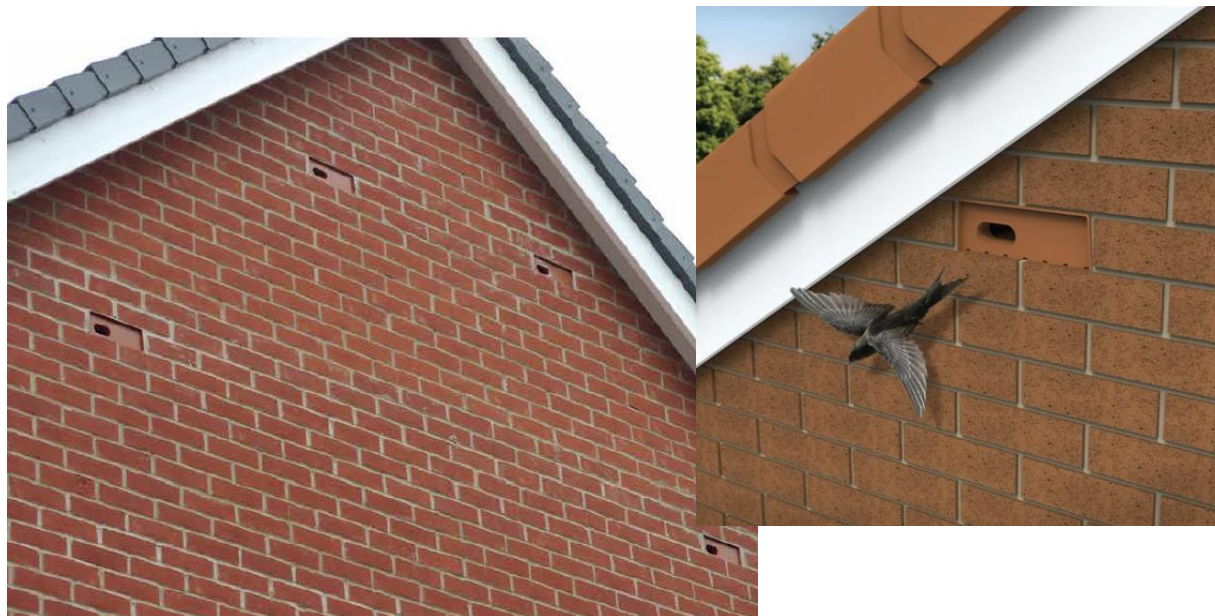


The Manthorpe Swift Brick has been developed with the help of conservation experts and is designed to provide a safe and spacious area for swifts to nest within the modern home. Available in six different colours, the box is designed to blend into the brickwork and so provides an aesthetically pleasing addition to any new build or development. Manufactured from PVC and Polypropylene, this nest box is designed to last for an extremely long time and will not rot or degrade.

Key features:

- * The visible part of the nest box takes the space of a single brick and is designed to blend into the surrounding masonry
- * Simple to install, it can be fitted quickly and easily during the bricklaying process
- * The nest box at the rear features a pre-made nest concave which provides a useful starting point for nest building
- * The entrance hole is obround in shape and measures 29 x 65mm; the ideal size for swifts.
- * The size of the nest box has been specifically designed to provide the maximum amount of living space possible within the wall

* A built-in cavity tray in the roof of the bricks prevents water from getting into the nest box



Specification:

- * Width: 347mm
- * Depth: 200mm
- * Height: 153mm
- * Dimensions of protruding “brick” section: 80 x 227mm
- * Entrance hole: Oblong; 29 x 65mm
- * Weight: 0.71kg
- * Materials: PVC (base); Polypropylene (top)
- * Available colours: Terracotta, Slate Gray, Antique Red, Buff, White, Black
- * Manufacturing: Injection moulded

Vivara Pro Cambridge Brick Faced Swift Nest Box

The Cambridge Swift Nest Box provides a low-cost and long-term nesting solution for swifts. There are two parts, a concrete nesting chamber that is designed to go into a cavity and a half brick facing to blend into an external wall with a choice of either red or buff facing bricks.

Specification:

Nesting Block:

- * Height: 21.5cm
- * Width: 44cm
- * Depth: 25cm



Facing Brick:

* Height: 6.5cm

* Width: 21.5cm

* Depth: 5.5cm

* Entrance hole: 6.5 x 2.9cm

Combined weight: 12.6kg



Ibstock also supply swift bricks.

Landscaping

The proposed landscaped areas should ensure the site is enhanced for invertebrates, birds and bats:

- Ornamental shrubs should not include any genera or species listed on Schedule 9 of the WCA. Plants on the Royal Horticultural Society's (RHS) Perfect for Pollinators lists can provide increased resource availability (Appendix A).
- For new lawned areas, it is recommended that a species rich amenity grass mix is used.
- New planting of shrubs and trees should comprise native species and / or be of benefit to wildlife.

APPENDIX A – RHS Perfect for Pollinators



Get your garden buzzing

- ▶ Plant flowers that are on the **RHS Perfect for Pollinators** plant lists
- ▶ Grow a range of plants for year-round flowering
- ▶ Avoid plants with double or multi-petalled flowers
- ▶ Never use pesticides on plants in flower
- ▶ Provide nest sites for solitary bees

Subspecies and cultivars of plants listed here are also Perfect for Pollinators. Plants with double or multi-petalled flowers are excluded.

Winter

Nov – Feb

<i>Clematis cirrhosa</i> Spanish traveller's joy	C
<i>Crocus</i> species crocus (winter-flowering)	B
<i>Eranthis hyemalis</i> winter aconite	B
× <i>Fatsyhedera lizei</i> tree ivy	S
<i>Galanthus nivalis</i> common snowdrop	B
<i>Helleborus</i> species and hybrids hellebore (winter-flowering)	H
<i>Lonicera</i> × <i>purpusii</i> Purpus honeysuckle	S
<i>Mahonia</i> species Oregon grape	S

Photo: RHS / Carol Sheppard (bumblebee on *Salvia farinacea* 'Victoria').



<i>Salix aegyptiaca</i> musk willow	S
<i>Sarcococca confusa</i> sweet box	S
<i>Sarcococca hookeriana</i> sweet box	S
<i>Viburnum tinus</i> laurustinus	S

Spring

Mar – May

<i>Acer campestre</i> Native plant; field maple	S or T
<i>Acer platanoides</i> Norway maple	T
<i>Acer pseudoplatanus</i> sycamore	T
<i>Acer saccharum</i> sugar maple	T
<i>Aesculus hippocastanum</i> horse chestnut	T
<i>Ajuga reptans</i> Native plant; bugle	H
<i>Arabis alpina</i> subsp. <i>caucasica</i> alpine rock cress	H
<i>Armeria juniperifolia</i> juniper-leaved thrift	H
<i>Aubrieta species</i> aubretia	H
<i>Aurinia saxatilis</i> gold dust	H
<i>Berberis darwinii</i> Darwin's barberry	S
<i>Berberis thunbergii</i> Japanese barberry	S
<i>Bergenia species</i> elephant ear	H
<i>Buxus sempervirens</i> Native plant; common box	S
<i>Caltha palustris</i> Native plant; marsh marigold	H
<i>Cercis siliquastrum</i> Judas tree	T
<i>Chaenomeles species</i> Japanese quince	S
<i>Cornus mas</i> Cornelian cherry	S
<i>Cotoneaster conspicuus</i> Tibetan cotoneaster	S
<i>Crataegus monogyna</i> Native plant; common hawthorn	S or T
<i>Crocus species</i> crocus (spring-flowering)	B
<i>Doronicum × excelsum</i> leopard's bane	H
<i>Enkianthus campanulatus</i> redvein enkianthus	S
<i>Erysimum species</i> wallflower	Bi
<i>Erica carnea</i> alpine heath	S
<i>Erica × darleyensis</i> Darley Dale heath	S
<i>Erysimum 'Bredon'</i> wallflower 'Bredon'	H
<i>Euphorbia amygdaloides</i> Native plant; wood spurge	H
<i>Euphorbia characias</i> Mediterranean spurge	H
<i>Euphorbia cyparissias</i> cypress spurge	H
<i>Euphorbia nicaeensis</i> Nice spurge	H
<i>Euphorbia epithymoides</i> cushion spurge	H
<i>Geranium species</i> cranesbill	H
<i>Geum rivale</i> Native plant; water avens	H
<i>Hebe species</i> hebe	S

<i>Helleborus species & hybrids</i> hellebore (spring-flowering)	H
<i>Iberis saxatilis</i> alpine candytuft	H
<i>Iberis sempervirens</i> perennial candytuft	H
<i>Ilex aquifolium</i> Native plant; common holly	T
<i>Lamium maculatum</i> spotted dead nettle	H
<i>Lunaria annua</i> honesty	Bi
<i>Mahonia species</i> Oregon grape (spring-flowering)	S
<i>Malus baccata</i> Siberian crab	T
<i>Malus domestica</i> edible apple	T
<i>Malus floribunda</i> Japanese crab	T
<i>Malus hupehensis</i> Hupeh crab	T
<i>Malus sargentii</i> Sargent's crab apple	T
<i>Mespilus germanica</i> common medlar	T
<i>Muscari armeniacum</i> Armenian grape hyacinth	B
<i>Ornithogalum umbellatum</i> common star of Bethlehem	B
<i>Pieris formosa</i> lily-of-the-valley bush	S
<i>Pieris japonica</i> lily-of-the-valley bush	S
<i>Primula veris</i> common cowslip	H
<i>Primula vulgaris</i> Native plant; primrose	H
<i>Prunus avium</i> Native plant; wild & edible cherries	T
<i>Prunus domestica</i> wild & edible plums	T
<i>Prunus dulcis</i> almond	T
<i>Prunus incisa</i> 'Kojo-no-mai' cherry 'Kojo-no-mai'	S
<i>Prunus insititia</i> damson	T
<i>Prunus laurocerasus</i> cherry laurel	S
<i>Prunus mume</i> Japanese apricot	T
<i>Prunus padus</i> Native plant; bird cherry	T
<i>Prunus pendula</i> f. <i>ascendens</i> 'Rosea' flowering cherry	T
<i>Prunus persica</i> peach	T
<i>Prunus spinosa</i> Native plant; blackthorn	S
<i>Prunus tenella</i> dwarf Russian almond	S
<i>Prunus × yedoensis</i> flowering cherry	T
<i>Pulmonaria species</i> lungwort	H
<i>Pyrus communis</i> pear	T
<i>Ribes nigrum</i> blackcurrant	S
<i>Ribes rubrum</i> Native plant; common redcurrant	S
<i>Ribes sanguineum</i> flowering currant	S
<i>Salix caprea</i> Native plant; goat willow (male form only)	S or T
<i>Salix hastata</i> 'Wehrhahnii' halberd willow 'Wehrhahnii'	S
<i>Salix lanata</i> Native plant; woolly willow (male form only)	S
<i>Skimmia japonica</i> skimmia	S
<i>Smyrniolus satrum</i> Native plant; alexanders †	Bi
<i>Stachyurus chinensis</i> stachyurus	S
<i>Stachyurus praecox</i> stachyurus	S
<i>Vaccinium corymbosum</i> blueberry	S

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Summer

June – Aug

<i>Achillea</i> species	yarrow	H
<i>Actaea japonica</i>	baneberry	H
<i>Aesculus indica</i>	Indian horse chestnut (resistant to leaf-mining moth)	T
<i>Aesculus parviflora</i>	bottlebrush buckeye	S
<i>Agastache</i> species	giant hyssop	H
<i>Ageratum houstonianum</i>	flossflower	A
<i>Alcea rosea</i>	hollyhock	Bi
<i>Allium</i> species	ornamental and edibles (when allowed to flower)	B
<i>Amberboa moschata</i>	sweet sultan	A
<i>Amsonia tabernaemontana</i>	eastern bluestar	H
<i>Anchusa azurea</i>	large blue alkanet	A
<i>Anchusa capensis</i>	Cape alkanet	A
<i>Angelica archangelica</i>	angelica	Bi
<i>Angelica gigas</i>	purple angelica	Bi
<i>Angelica sylvestris</i>	Native plant; wild angelica	Bi
<i>Anthemis tinctoria</i>	dyer's chamomile	H
<i>Antirrhinum majus</i>	snapdragon	A or H
<i>Aquilegia</i> species	columbine	H
<i>Argemone platyceras</i>	crested poppy	A or H
<i>Armeria maritima</i>	Native plant; thrift	H
<i>Aruncus dioicus</i>	goat's beard (male form only)	H
<i>Asparagus officinalis</i>	common asparagus	H
<i>Astrantia major</i>	greater masterwort	H
<i>Borago officinalis</i>	borage	A
<i>Brachyglottis</i> (Dunedin Group) 'Sunshine'	brachyglottis 'Sunshine'	S
<i>Brachyglottis monroi</i>	Monro's ragwort	S
<i>Buddleja davidii</i>	butterfly bush	S
<i>Buddleja globosa</i>	orange ball tree	S
<i>Bupthalmum salicifolium</i>	yellow ox-eye	H
<i>Bupleurum fruticosum</i>	shrubby hare's ear	S
<i>Calamintha nepeta</i>	Native plant; lesser calamint	H
<i>Calendula officinalis</i>	common marigold	A
<i>Callicarpa bodinieri</i> var. <i>giraldii</i>	beautyberry	S
<i>Callistephus chinensis</i>	China aster	A
<i>Calluna vulgaris</i>	Native plant; heather	S
<i>Campanula carpatica</i>	tussock bellflower	H
<i>Campanula glomerata</i>	Native plant; clustered bellflower	H
<i>Campanula lactiflora</i>	milky bellflower	H
<i>Campanula latifolia</i>	Native plant; giant bellflower	H



Photo: RHS / Helen Bostock (six-spot burnet moth on *Verbena bonariensis*).

<i>Campanula medium</i>	Canterbury bells	Bi
<i>Campanula persicifolia</i>	peach-leaved bellflower	H
<i>Campsis radicans</i>	trumpet honeysuckle	C
<i>Caryopteris</i> × <i>clandonensis</i>	caryopteris	S
<i>Catalpa bignonioides</i>	Indian bean tree	T
<i>Catananche caerulea</i>	blue cupidone	H
<i>Centaurea atropurpurea</i>	purple knapweed	H
<i>Centaurea cyanus</i>	Native plant; cornflower †	A
<i>Centaurea dealbata</i>	mealy centaury	H
<i>Centaurea macrocephala</i>	giant knapweed	H
<i>Centaurea montana</i>	perennial cornflower	H
<i>Centaurea nigra</i>	Native plant; common knapweed	H
<i>Centaurea scabiosa</i>	Native plant; greater knapweed	H
<i>Centranthus ruber</i>	red valerian	H
<i>Centratherum punctatum</i>	Manaos beauty	A
<i>Cerinthe major</i> 'Purpurascens'	honeywort 'Purpurascens'	A
<i>Cirsium rivulare</i> 'Atropurpureum'	purple plume thistle	H
<i>Clarkia unguiculata</i>	butterfly flower	A
<i>Clematis vitalba</i>	Native plant; old man's beard, travellers' joy	C
<i>Cleome hassleriana</i>	spider flower	A
<i>Consolida ajacis</i>	giant larkspur	A
<i>Convolvulus tricolor</i>	dwarf morning glory	C/A
<i>Coreopsis</i> species	tickseed	H or A
<i>Cornus alba</i>	red-barked dogwood	S
<i>Cosmos bipinnatus</i>	cosmea	A

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<i>Cosmos sulphureus</i> yellow cosmos	A	<i>Gilia capitata</i> blue thimble flower	A
<i>Crambe cordifolia</i> greater sea kale	H	<i>Glebionis segetum</i> Native plant; corn marigold †	A
<i>Crataegus monogyna</i> Native plant; common hawthorn	S or T	<i>Gypsophila elegans</i> annual baby's breath	A
<i>Cucurbita pepo</i> marrow, courgette	A	<i>Hebe species</i> hebe	S
<i>Cuphea ignea</i> cigar flower	A	<i>Helenium species</i> Helen's flower	H
<i>Cynara cardunculus</i> including Scolymus Group globe artichoke and cardoon	H	<i>Helianthus annuus</i> common sunflower (avoid pollen-free cultivars)	A
<i>Cynoglossum amabile</i> Chinese forget-me-knot	H	<i>Helianthus debilis</i> cucumberleaf sunflower	A
<i>Dahlia species</i> dahlia	H	<i>Heliopsis helianthoides</i> smooth ox-eye	H
<i>Delosperma floribundum</i> ice plant	H	<i>Heliotropium arborescens</i> common heliotrope	A
<i>Delphinium elatum</i> candle larkspur	H	<i>Heracleum sphondylium</i> Native plant; hogweed	Bi
<i>Dianthus barbatus</i> sweet william	Bi	<i>Hesperis matronalis</i> dame's violet	H
<i>Dictamnus albus</i> dittany	H	<i>Hydrangea anomala</i> subsp. petiolaris climbing hydrangea	C
<i>Digitalis species</i> foxglove	Bi	<i>Hydrangea paniculata</i> paniculate hydrangea (cultivars with many fertile flowers e.g. 'Kyushu', 'Big Ben', 'Floribunda', 'Brussels Lace')	S
<i>Dipsacus fullonum</i> Native plant; common teasel	Bi	<i>Hyssopus officinalis</i> hyssop	S
<i>Echinacea purpurea</i> purple coneflower	H	<i>Iberis amara</i> Native plant; wild candytuft	A
<i>Echinops species</i> globe thistle	H	<i>Ilex aquifolium</i> Native plant; common holly	T
<i>Echium vulgare</i> Native plant; viper's bugloss	A	<i>Inula species</i> harvest daisy	H
<i>Elaeagnus angustifolia</i> oleaster	S	<i>Jasminum officinale</i> common jasmine	C
<i>Erica cinerea</i> Native plant; bell heather	S	<i>Kalmia latifolia</i> mountain laurel	S
<i>Erica erigena</i> Irish heath	S	<i>Knautia arvensis</i> Native plant; field scabious	H
<i>Erica vagans</i> Native plant; Cornish heath	S	<i>Knautia macedonica</i> Macedonian scabious	H
<i>Erigeron species</i> fleabane	H	<i>Koelreuteria paniculata</i> pride of India	T
<i>Eriophyllum lanatum</i> golden yarrow	H	<i>Lathyrus latifolius</i> broad-leaved everlasting pea	H
<i>Eryngium × tripartitum</i> eryngo	H	<i>Laurus nobilis</i> bay tree	S
<i>Eryngium alpinum</i> alpine eryngo	H	<i>Lavandula angustifolia</i> English lavender	S
<i>Eryngium giganteum</i> Miss Willmott's ghost	Bi	<i>Lavandula × intermedia</i> lavandin	S
<i>Eryngium planum</i> blue eryngo	H	<i>Lavandula stoechas</i> French lavender	S
<i>Erysimum × allionii</i> Siberian wallflower	H	<i>Lavatera olbia</i> tree lavatera	S
<i>Erysimum 'Bowles's Mauve'</i> wallflower 'Bowles's Mauve'	S	<i>Lavatera trimestris</i> annual lavatera	A
<i>Escallonia species</i> escallonia	S	<i>Leucanthemum × superbum</i> Shasta daisy	H
<i>Eschscholzia californica</i> California poppy	A	<i>Leucanthemum vulgare</i> Native plant; ox-eye daisy	H
<i>Eupatorium cannabinum</i> Native plant; hemp agrimony	H	<i>Liatris spicata</i> button snakeroot	H
<i>Eupatorium maculatum</i> Joe Pye weed	H	<i>Ligustrum ovalifolium</i> garden privet	S
<i>Euphorbia cornigera</i> horned spurge	H	<i>Ligustrum sinense</i> Chinese privet	S
<i>Euphorbia sarawshchanica</i> Zeravshan spurge	H	<i>Limnanthes douglasii</i> poached egg flower	A
<i>Ferula communis</i> giant fennel	H	<i>Limonium platyphyllum</i> broad-leaved statice	H
<i>Foeniculum vulgare</i> Native plant; common fennel †	H	<i>Linaria maroccana</i> annual toadflax	A
<i>Fragaria × ananassa</i> garden strawberry	H	<i>Linaria purpurea</i> purple toadflax	H
<i>Fuchsia species</i> fuchsia – hardy types	S	<i>Lobularia maritima</i> sweet alyssum	A
<i>Gaillardia × grandiflora</i> blanket flower	H	<i>Lonicera periclymenum</i> Native plant; common honeysuckle	C
<i>Gaura lindheimeri</i> white gaura	H	<i>Lychnis coronaria</i> rose campion	Bi or H
<i>Geranium pratense</i> Native plant; meadow cranesbill	H	<i>Lychnis flos-cuculi</i> Native plant; ragged robin	H
<i>Geranium species</i> cranesbill (summer-flowering)	H		
<i>Geum species</i> avens (summer-flowering)	H		

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<i>Lysimachia vulgaris</i>	Native plant; yellow loosestrife	H
<i>Lythrum salicaria</i>	Native plant; purple loosestrife	H
<i>Lythrum virgatum</i>	wand loosestrife	H
<i>Malope trifida</i>	large-flowered mallow wort	A
<i>Malva moschata</i>	Native plant; musk mallow	H
<i>Matthiola incana</i>	hoary stock	Bi
<i>Mentha aquatica</i>	Native plant; water mint	H
<i>Mentha spicata</i>	spearmint	H
<i>Monarda didyma</i>	bergamot	H
<i>Myosotis species</i>	forget-me-not	Bi
<i>Nemophila menziesii</i>	baby blue eyes	A
<i>Nepeta</i> × <i>faassenii</i>	garden catmint	H
<i>Nicotiana alata</i>	flowering tobacco	A
<i>Nicotiana langsdorffii</i>	Langsdorff's tobacco	A
<i>Nigella damascena</i>	love-in-a-mist	A
<i>Nigella hispanica</i>	Spanish fennel flower	A
<i>Oenothera species</i>	evening primrose	Bi
<i>Olearia species</i>	daisy bush	S
<i>Onopordum acanthium</i>	cotton thistle	Bi
<i>Origanum 'Rosenkuppel'</i>	marjoram 'Rosenkuppel'	H
<i>Origanum vulgare</i>	Native plant; oregano, wild marjoram	H
<i>Paeonia species</i>	peony	H
<i>Papaver orientale</i>	oriental poppy	H
<i>Papaver rhoeas</i>	Native plant; common poppy †	A
<i>Parthenocissus tricuspidata</i>	Boston ivy	C
<i>Penstemon species</i>	beard-tongue	T
<i>Perovskia atriplicifolia</i>	Russian sage	S
<i>Persicaria amplexicaulis</i>	red bistort	H
<i>Persicaria bistorta</i>	Native plant; common bistort	H
<i>Phacelia campanularia</i>	Californian bluebell	A
<i>Phacelia tanacetifolia</i>	fiddleneck	A
<i>Phaseolus coccineus</i>	scarlet runner bean	A
<i>Phlomis species</i>	sage	S
<i>Phlox paniculata</i>	perennial phlox	H
<i>Photinia davidiana</i>	stranvaesia	S
<i>Phuopsis stylosa</i>	Caucasian crosswort	H
<i>Pileostegia viburnoides</i>	climbing hydrangea	C
<i>Polemonium caeruleum</i>	Native plant; Jacob's ladder	H
<i>Potentilla species</i>	cinquefoil	H or S
<i>Prostanthera cuneata</i>	alpine mint bush	S
<i>Ptelea trifoliata</i>	hop tree	S
<i>Pyracantha species</i>	firethorn	S
<i>Reseda odorata</i>	garden mignonette	A
<i>Ridolfia segetum</i>	false fennel	A
<i>Robinia pseudoacacia</i>	false acacia	T



Photo: RHS / Carol Sheppard (hoverfly on field scabious, *Knautia arvensis*).

<i>Rosa canina</i>	Native plant; dog rose	S
<i>Rosa rubiginosa</i>	Native plant; sweet briar	S
<i>Rosa rugosa</i>	Japanese rose	S
<i>Rosmarinus officinalis</i>	rosemary	S
<i>Rubus fruticosus</i> agg.	Native plant; blackberry	S
<i>Rubus idaeus</i>	Native plant; common raspberry	S
<i>Rudbeckia species</i>	coneflower	H or A
<i>Salvia species</i>	sage	A or H
<i>Sanvitalia procumbens</i>	creeping zinnia	A
<i>Scabiosa atropurpurea</i>	sweet scabious	A
<i>Scabiosa caucasica</i>	garden scabious	H
<i>Scabiosa columbaria</i>	Native plant; small scabious	H
<i>Sedum spectabile</i>	& hybrids ice plant	H
<i>Sedum telephium</i>	Native plant; orpine	H
<i>Sidalcea malviflora</i>	checkerbloom	H
<i>Solidago species</i>	goldenrod	H

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<i>Sorbus aria</i> Native plant; common whitebeam	T
<i>Sorbus aucuparia</i> Native plant; mountain ash, rowan	T
<i>Spiraea japonica</i> Japanese spiraea	S
<i>Stachys byzantina</i> lamb's ear	H
<i>Stachys macrantha</i> big sage	H
<i>Stokesia laevis</i> Stokes' aster	H
<i>Symphoricarpos albus</i> snowberry	S
<i>Tagetes patula</i> French marigold	A
<i>Tamarix ramosissima</i> tamarisk	S
<i>Tanacetum coccineum</i> pyrethrum	H
<i>Tanacetum vulgare</i> Native plant; tansy †	H
<i>Telekia speciosa</i> yellow ox-eye	H
<i>Tetradium daniellii</i> bee-bee tree	T
<i>Teucrium chamaedrys</i> Native plant; wall germander	H
<i>Thymus species</i> thyme	S
<i>Tilia × europaea</i> common lime	T
<i>Tilia maximowicziana</i> lime	T
<i>Tilia oliveri</i> lime	T
<i>Tilia platyphyllos</i> Native plant; broad-leaved lime	T
<i>Tithonia rotundifolia</i> Mexican sunflower	A
<i>Trachymene coerulea</i> blue lace flower	A
<i>Tropaeolum majus</i> garden nasturtium	A
<i>Verbascum species</i> mullein	Bi
<i>Verbena × hybrida</i> garden verbena	A
<i>Verbena bonariensis</i> purple top	H
<i>Verbena rigida</i> slender vervain	A
<i>Veronica longifolia</i> garden speedwell	H
<i>Veronicastrum virginicum</i> Culver's root	H
<i>Viburnum lantana</i> Native plant; common wayfaring tree	S
<i>Viburnum opulus</i> Native plant; guelder rose	S
<i>Vicia faba</i> broad bean	A
<i>Weigela florida</i> weigelia	S

<i>Zauschneria californica</i> Californian fuchsia	S
<i>Zinnia elegans</i> youth and old age	A

Autumn

Sept – Oct

<i>Aconitum carmichaelii</i> Carmichael's monk's hood	H
<i>Actaea simplex</i> simple-stemmed bugbane	H
<i>Anemone hupehensis</i> Chinese anemone	H
<i>Anemone × hybrida</i> Japanese anemone	H
<i>Arbutus unedo</i> strawberry tree	S or T
<i>Aster species and hybrids</i> Michaelmas daisy	H
<i>Campanula poscharskyana</i> trailing bellflower	H
<i>Cerastigma plumbaginoides</i> hardy blue-flowered leadwort	H
<i>Chrysanthemum species & hybrids</i> chrysanthemum	H
<i>Clematis heracleifolia</i> tube clematis	C
<i>Colchicum species</i> autumn crocus	B
<i>Crocus species</i> crocus (autumn-flowering types)	B
<i>Dahlia species & hybrids</i> dahlia	H
<i>Elaeagnus pungens</i> silverthorn	S
<i>Elaeagnus × ebbingei</i> Ebbinge's silverberry	S
<i>Fatsia japonica</i> Japanese aralia	S
<i>Hedera colchica</i> Persian ivy	C
<i>Hedera helix</i> Native plant; common ivy	C
<i>Helianthus × laetiflorus</i> perennial sunflower	H
<i>Leucanthemella serotina</i> autumn ox-eye	H
<i>Machaeranthera tanacetifolia</i> tansy-leaf aster	A
<i>Salvia species</i> sage (autumn-flowering types)	H
<i>Tilia henryana</i> Henry's lime (one of the last to flower)	T

Natural England states: You can legally collect small quantities of wildflower seed for your own use, but you must get permission from the land's owner, tenant or other authority, as necessary. Although seed-collecting is allowed, you should not dig up native plants – many rare species are protected by law. You can collect seed of even rare plants, but cannot sell / trade seed or progeny.

Key to codes: T tree S shrub C climber B bulb / corm A annual Bi biennial H herbaceous perennial † denotes an archaeophyte (a naturalised plant introduced before 1500)