

ECOLOGICAL ASSESSMENT

THE SWAN BASINGSTOKE ROAD THREE MILE CROSS RG7 1AT

Client: Nick Fraser - Fraser's Retail Ltd

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1.0 Introduction

Survey and reporting

- 1.1 This report details the results of a Preliminary Ecological Assessment (comprising an Extended Phase 1 Habitat & Protected Species Scoping Survey and Preliminary Bat Roost Assessment of a proposed development at The Swan, Basingstoke Road, Three Mile Cross, RG7 1AT.
- 1.2 The survey to inform the assessment was undertaken on 27 June 2024.

The application site

- 1.3 The application site comprises The Swan, a listed public house and its curtilage (adjoined and other associated outbuildings, back garden, driveway and car parking area). It is approximately 0.24 hectares in area.
- 1.4 It is located towards the northern end of Basingstoke Road (B3349), a part rural, part residential road running between Reading and Basingstoke (Grid reference SU 7151 6787, Figure 1).

The proposed scheme

- 1.5 It is proposed to demolish the existing rear extension and erect a new single-storey rear extension (see Figures 2 and 3).
- 1.6 The double garage will also be demolished to facilitate the development.

Figure 1 – Site location plan



Figure 2 – Existing site layout

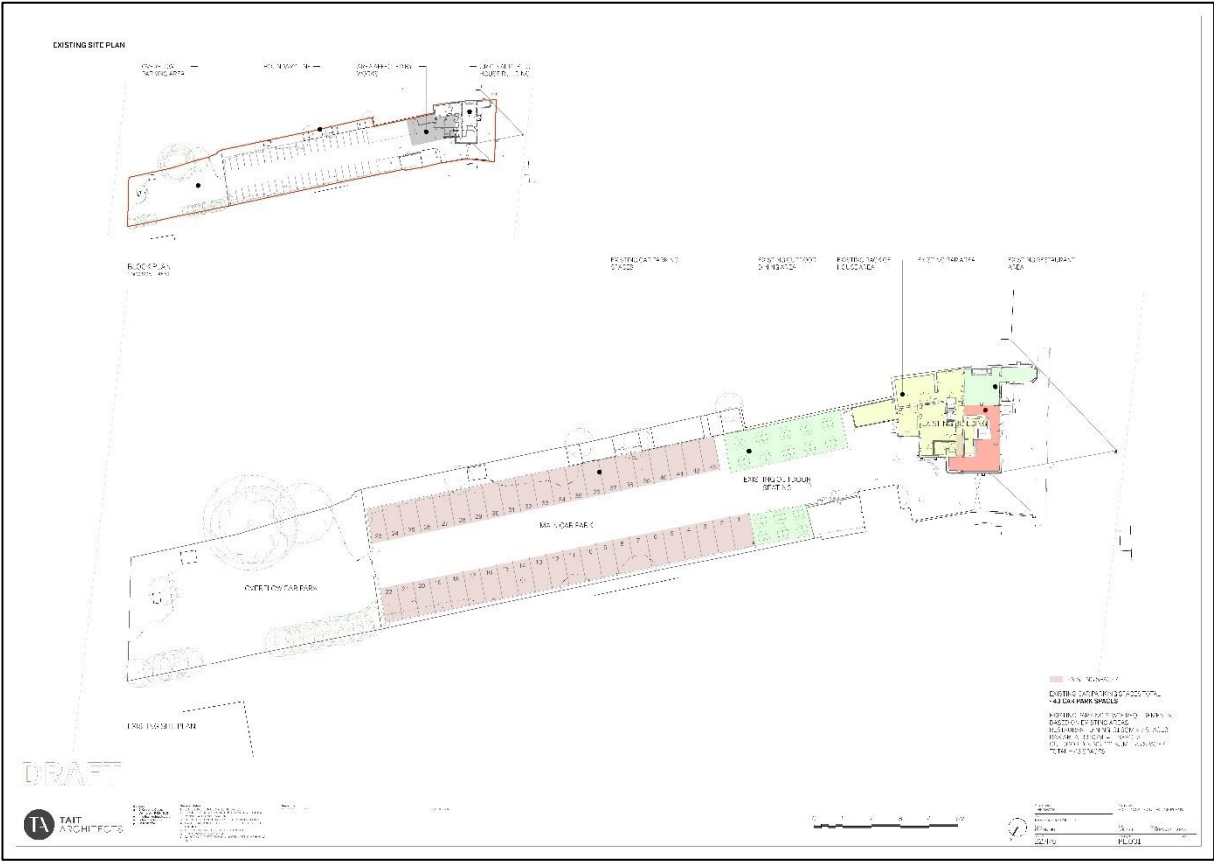
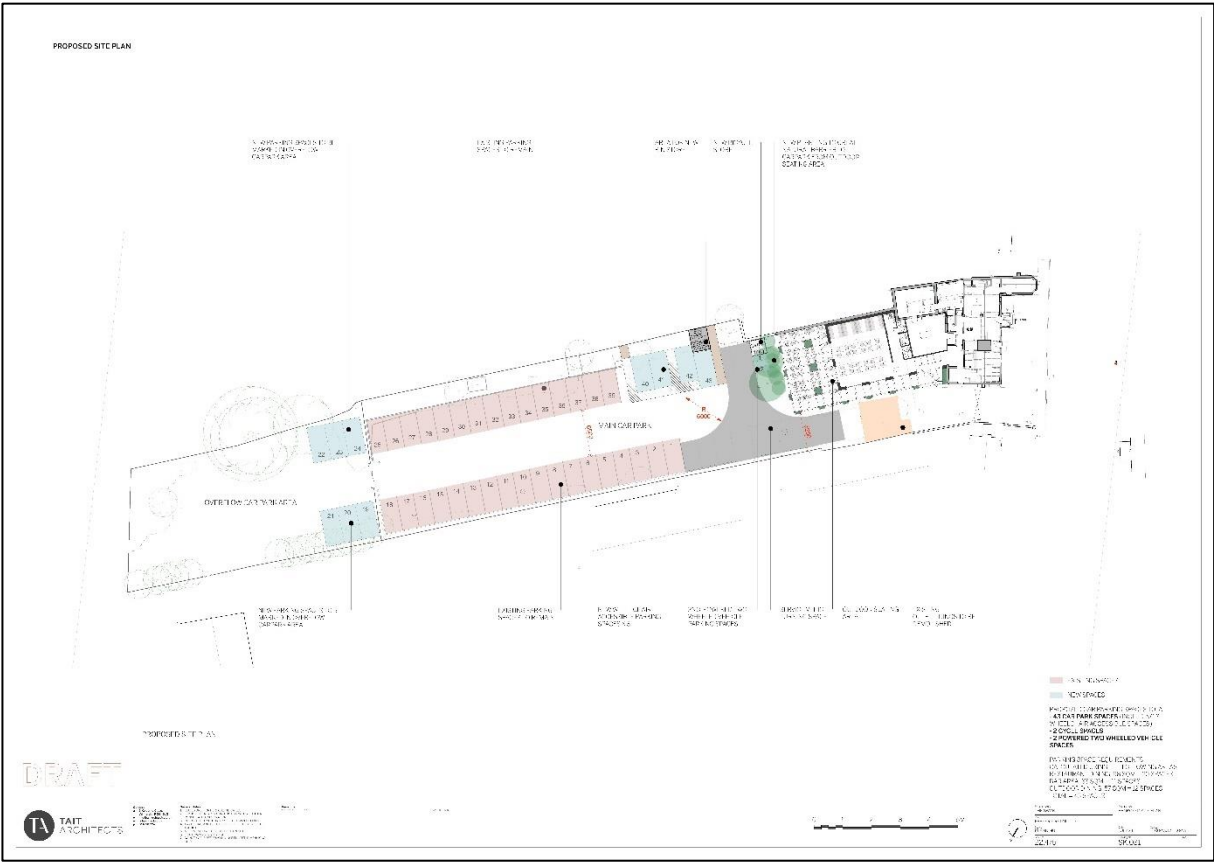


Figure 3 – Proposed site layout



2.0 Methodology

Desk study

- 2.1 A desk study data search was undertaken. This involved reviewing publicly available datasets and citations of statutory designated sites of importance for nature conservation, Natural England's Priority Habitat Inventory GIS dataset for England, and Natural England's Ancient Woodland Inventory for sites within the zone of influence of the survey area (considered to be a maximum of 1km in this case).
- 2.2 In addition, species records (on Natural England's MAGIC website¹) were accessed, and aerial photographs and Ordnance Survey maps were studied for features of interest.

Extended Phase 1 Habitat and Protected Species Scoping Survey

- 2.3 An Extended Phase 1 Habitat and Protected Species Scoping Survey was undertaken. This comprised a walkover survey of the application site and the classification of habitats following the descriptions provided within the Joint Nature Conservancy Council 'Handbook for Phase 1 Habitat Survey' (NCC 1990, JNCC 1993). An assessment of the site in terms of its suitability for notable or protected species was carried out and any features of note were described.

Bat survey

- 2.4 A bat survey was undertaken. This comprised:

Daytime Bat Walkover (DBW)

- 2.5 A survey to assess the suitability of habitats for bats to roost, commute and forage within and adjacent to the site (where accessible). Habitat suitability was assessed as per Table 1 below.

Preliminary Roost Assessment (PRA)

- 2.6 This survey consisted of a detailed search of the interior and exterior of the buildings looking for bats and/or evidence of bats including droppings (on walls and windowsills and in roof and loft spaces), rub or scratch marks, staining at potential roosts and exit holes, live or dead bats and features, such as raised or missing tiles, potentially suitable for use by roosting bats. Binoculars, an endoscope, a ladder and a high-powered torch were used as required.
- 2.7 The buildings were classified in terms of their suitability for use by roosting bats (see Table 2) and in accordance with the Bat Conservation Trust's Bat Survey Guidelines².
- 2.8 Classification was dependent on a number of factors including:
 - Bats and/or signs of bats
 - External and internal features potentially suitable for use by roosting bats (e.g. raised or missing tiles, gaps behind fascia boards)
 - Setting
 - Night time light levels
 - Disturbance levels
 - Proximity of suitable foraging habitat and flight-paths
 - (e.g. ponds, streams, woodland, large gardens, hedgerows)

¹ <https://magic.defra.gov.uk/>

² Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Bat Conservation Trust

Ground Level Tree Assessment (GLTA)

- 2.9 This survey was carried out from ground level, using binoculars, a high-powered torch and an endoscope (where features were accessible), looking for potential roost features (PRFs).
- 2.10 Trees were categorised as per the Bat Conservation Trust's Bat Survey Guidelines (See Table 3 below).
- 2.11 Where features were observed and could be inspected, they were categorised as described in Table 4.

Table 1 – Habitat suitability scale for potential flight-paths and foraging bats

	Potential Suitability	Description
Potential Suitability of potential flight-paths and foraging habitats	High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
	Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
	Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
	Negligible ³	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
	None [Not suitable]	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).

³Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant.' This category may be used where are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute)

Table 2 – Description of the categories used to assess a building’s bat roost potential and the survey effort required to determine the likely presence or absence of bats

	Roost status	Description	Survey effort required to determine the likely presence or absence of bats
Bat Roost Potential Status	Confirmed	Bats or evidence of bats found.	Surveys would be required to establish the status of the roost. Generally, three dusk emergence surveys between May and September. Optimum period May – August (two surveys should be undertaken during the optimal period). Surveys should be carried out at least three weeks apart.
	High	A structure 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 (For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Three dusk emergence surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period. Surveys should be carried out at least three weeks apart.
	Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Two dusk emergence surveys, between May and September (one of the surveys needs to be carried out between May and the end of August). Surveys should be carried out at least three weeks apart.
	Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions 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 and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).	One dusk emergence survey between May and the end of August (but only if features will be affected by the proposals).
	Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No further surveys required.
	None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No further surveys required.

Table 3 – Categorisation of the bat roost potential of trees

<i>Suitability</i>	<i>Description</i>
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRFA	Tree with at least one PRF present

Table 4 - Categorisation of the potential roost features on trees

<i>Suitability</i>	<i>Description</i>
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Surveyor details

- 2.12 The survey was undertaken by Ryan Davies ACIEEM (senior ecologist) and Cherry Leung (assistant ecologist) of GS Ecology Ltd. Ryan is an associate member of the Chartered Institute of Ecology and Environmental Management and holds a Natural England great crested newt survey licence (WML-CLo8) and a Natural England WML A34 Level 2 bat survey licence.

Constraints

- 2.13 There were no constraints to the survey.

Protected and notable species records

- 3.5 Within 2km of the site there are 12 records of licenses issued by Natural England for works affecting protected species on The MAGIC website (see Table 5).

Table 5 – Summary of Natural England licence records within 2km of the application site

Distance and direction from the application site	Species affected	Breeding site	Year(s) licence was issued
0.4km Southwest	Brown long-eared, soprano pipistrelle	No	2012
0.4km Northeast	Brown long-eared, common pipistrelle	No	2009
0.5km Northeast	Brown long-eared, common pipistrelle	No	2015
0.8km Southeast	Brown long-eared	No	2017
0.8km Southeast	Brown long-eared	No	2017, 2018
1.2km South	Common pipistrelle	No	2013
1.4km Southeast	Brown long-eared	No	2015
1.4km East	Common pipistrelle, soprano pipistrelle	No	2016
1.5km Southeast	Brown long-eared, common pipistrelle	Yes	2018, 2019
1.7km Southeast	Brown long-eared	No	2009
1.7km Southeast	Brown long-eared	No	2010
1.9km Southwest	Brown long-eared, common pipistrelle	No	2016

Surrounding land use

- 3.6 The application site is located towards the northern end of Basingstoke Road (B3349), in Three Mile Cross. Directly to the north are a number of commercial properties and the Three Mile Cross Church and to the south and east, residential properties and their associated gardens with trees. Across Church Lane to the south is an allotment area. Across Basingstoke Road to the west is a petrol station and beyond residential properties and their associated gardens with trees.
- 3.7 Further to the west lies the A33 with strips of woodland abutting the west and east in places. Beyond the A33 to the west, and further to the south and east of the application site are large agricultural fields bound by hedgerows in places.
- 3.8 The motorway, M4 lies approximately 750m north of the application site.
- 3.9 The habitats surrounding the site are of generally ‘low’ suitability for commuting and foraging bats, with the wider landscape of ‘moderate’ suitability for commuting and foraging bats.

Habitats within the application site

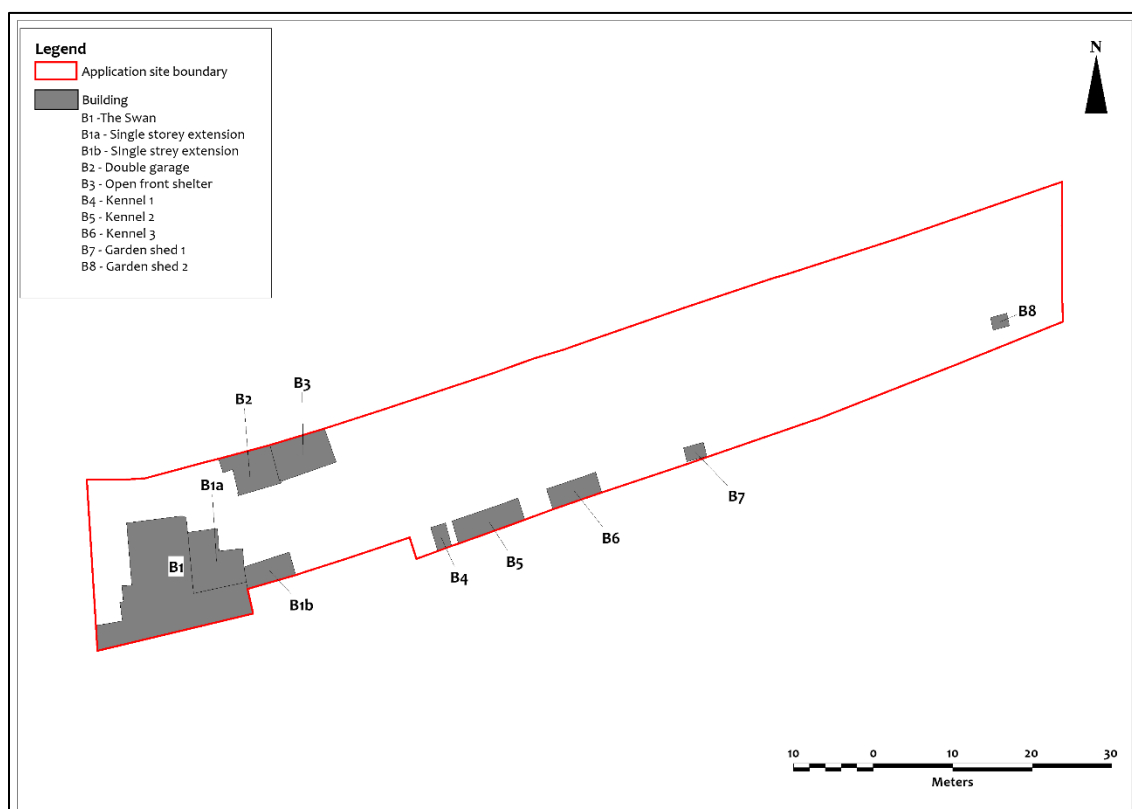
- 3.10 The application site comprises a listed public house and its curtilage (adjoined and other associated outbuildings, back garden, driveway and car parking area).
- 3.11 The back garden comprises an amenity lawn with some scattered trees.
- 3.12 A Phase 1 habitat map and associated target notes are provided in Appendix 1, and photographs provided in Appendix 2.
- 3.13 A brief description of each habitat is given below.
- 3.14 **Buildings** – See preliminary bat roost assessment section below.
- 3.15 **Hardstanding** – Surrounding the public house and to the east of it is the concrete access and car parking area.
- 3.16 **Amenity grassland with scattered scrub**– To the east of the application site is an area of short cut lawn. There are eight small broadleaved trees along the northern boundary of the lawn and some scattered scrub at the southwestern corner.

- 3.17 **Introduced shrub** – Along the northern and southern periphery of the car parking area are some ornamental shrub borders.
- 3.18 **Broadleaved and coniferous trees** – There are eight small broadleaved trees along the northern boundary of the lawn.
- 3.19 Along the southern boundary are two small coniferous trees.

Bat survey - Preliminary Roost Assessment

- 3.20 There are eight buildings and structure within the application site: the public house (The Swan), double garage, open front shelter, three kennels and two garden sheds – see Figure 4.
- 3.21 A description of each and their bat roost potential is given below.

Figure 4 – Building locations



B1 - The Swan

- 3.22 ‘The Swan’ (formerly, The Swan Inn cottage) public house is a listed one- and two-storey building with exposed timber frame and the walls are partly framed with painted brick infill and partly with rendered. The main roof is pitched and gabled and is clad with clay tiles. The rear roof has a pitched and gabled dormer window, and a flat lead-covered dormer window. There is a single-storey extension on the front elevation with a pitched and gabled roof clad with clay tiles and painted rendered walls. The front porch has a painted timber frame with a pitched and gabled roof clad with clay tiles.
- 3.23 The main building has painted corbelling at eaves on the western elevation and no barge boards or fascias at the gable ends.
- 3.24 To the rear of the public house is another single-storey extension with a pitched and hipped roof clad with clay tiles, and cavity brick walls.

- 3.25 The building has numerous features potentially suitable for use by roosting bats, including:
- Numerous gaps under the clay roof tiles
 - Gaps between purlin and batten at the northern gable end
 - Gap between barge boards and end wall at the open eaves at the southern gable end
- 3.26 Internally the building has two separate loft spaces – an attic on the eastern extension and a roof void beneath the main ridge (part of the roof is vaulted and converted to a habitable room).
- The eastern attic has oak beams and exposed rafters and is partly unlined and partly lined with bitumen felt on the north facing roof. There is a mezzanine in the attic, where the water tank is placed. The attic is boarded out and is covered with dust and debris. No bats or signs of bats were found inside the attic.
 - The main roof void has oak beams, timber queen post and queen strut trusses, and exposed ridge board. The roof is unlined and the roof void is insulated with vermiculite. Access to the northern end wall is restricted due to the presence of a partition wall. No bats or signs of bats were found inside the roof void.
- 3.27 The Swan has numerous features potentially suitable for use by roosting bats, and no bats or signs of bats were found inside or outside the building. It is therefore assessed as having ‘high’ potential to host a bat roost (see Table 2).

B1a and 1b -Single-storey extension

- 3.28 Adjoining the rear of the building by UPVC canopy are sections of single-storey extensions – B1a has cavity brick walls and a flat felt clad roof and B1b has timber clad walls with corrugated fiberboard roof. No bats or signs of bats were found inside or outside the extensions.
- 3.29 The single-storey extensions have no features potentially suitable for use by roosting bats and is therefore assessed as having ‘negligible’ potential to host a bat roost (see Table 2).

B2 – Double garage

- 3.30 There is a double garage to the northeast of the public house with rendered single-skinned wall and a single pitched corrugated fibreboard roof. There is a lean-to porch with clay tiled roof on the western elevation.
- 3.31 Internally the roof is lined with timber panels and the walls are unlined. No bats or signs of bats were found inside the garage.
- 3.32 The double garage has no features potentially suitable for use by roosting bats and is therefore assessed as having ‘negligible’ potential to host a bat roost (see Table 2).

B3 – Open front shelter

- 3.33 There is a timber-framed open front shelter on a stone base adjoined to the double garage. It has a flat uPVC roof. No bats or signs of bats were found inside or outside the structure.
- 3.34 The open front shelter has no features potentially suitable for use by roosting bats and has ‘negligible’ potential to host a bat roost (see Table 2).

B4, B5 and B6 – Kennel 1, 2 and 3

- 3.35 There are three metal mesh kennels (Kennel 1, 2 and 3) along the southern boundary.

- 3.36 Kennel 1 has a corrugated fibreboard roof and a lean-to timber-panelled shed with a felt-clad roof. Internally it is unlined.
- 3.37 Kennel 2 has a corrugated UPVC canopy and has a lean-to timber-panelled shed with a felt-clad roof. Internally it is unlined.
- 3.38 Kennel 3 has a corrugated UPVC canopy, and an adjoined wooden garden shed. The adjoined garden shed has timber clad walls and a shallow pitched felt-clad roof. Internally it is unlined.
- 3.39 No bats or signs of bats were found inside or outside these buildings.
- 3.40 Kennels 1, 2 and 3 have no features potentially suitable for use by roosting bats and are therefore assessed as having 'negligible' potential to host a bat roost (see Table 2).

B7 -Garden shed 1

- 3.41 There is a wooden garden shed with shallow pitched, felt clad roof to the rear of the car park. Internally it is unlined. No bats or signs of bats were found inside or outside the building.
- 3.42 It is therefore assessed as having 'negligible' potential to host a bat roost (see Table 2).

B8 – Garden shed 2

- 3.43 There is a lean-to wooden garden shed with a felt-clad roof to the east of the application site. Internally it is unlined. No bats or signs of bats were found inside or outside the building.
- 3.44 It is therefore assessed as having 'negligible' potential to host a bat roost (see Table 2).

Bat survey – Ground level tree assessment

- 3.45 None of the trees within the site have any features suitable for use by roosting bats and are assessed as having 'NONE' suitability to host a bat roost (see Table 3).

4.0 Assessment and recommendations (excluding bats)

Statutory sites of importance for nature conservation and ancient woodland

- 4.1 Within 1km of the application site, there are no statutory sites of importance of nature conservation or areas of woodland listed on Natural England's Ancient Woodland (AWI) Inventory. The nearest of which are Peaman's Copse Local Nature Reserve (LNR), situated approximately 2km northeast, and Nores Hill, situated approximately 1.6km northeast of the application site.
- 4.2 These sites and ancient woodlands will not be encroached upon, overshadowed, or otherwise affected by the proposed development.

Priority Habitats

- 4.3 The Secretary of State periodically publishes a list of habitats that are of principal importance for the conservation of biodiversity in England under Section 41 (S41) of the 2006 Natural Environment and Rural Communities (NERC) Act. The list currently comprises 56 habitats, referred to as "priority habitats" in the National Planning Policy Framework (NPPF).
- 4.4 Paragraph 185 of the NPPF reads:

"To protect and enhance biodiversity and geodiversity, plans should [...] promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity"
- 4.5 As such where priority habitats are found they should be protected from the adverse impacts of development.
- 4.6 The habitats within the application site – buildings, amenity grassland, hardstanding, introduced shrubs and scattered scrub– are not 'Priority Habitats' and there should be no Priority Habitat-related constraints to the current proposals.

Great crested newts

Legislation and ecology

- 4.7 Great crested newts (GCN) receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations) to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or harm them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).

GCN spend most of their lives on land, within up to 500m of a breeding pond. The most important terrestrial habitat is within 100m, where most of the population are likely to be located foraging, resting, sheltering and hibernating relatively close to their breeding site. However, a proportion of the population is also likely to forage for food and shelter in suitable habitats up to 250m from a breeding pond and juvenile animals have been known to disperse up to 500m from it in a single season.

- 4.8 GCN are likely to be disturbed by any work that involves altering their breeding pond (e.g. by introducing fish or deepening or altering its size) or works that involve clearing land up to 500m around ponds, where such land has been managed and maintained in such a way that it is likely to

support GCN. In such cases a licence for derogation from the provisions of the habitat regulations may need to be obtained.

- 4.9 In addition, GCN are a species of principal importance for the conservation of biodiversity in England under Section 41 (S41) of the 2006 Natural Environment and Rural Communities (NERC) Act (these are the “priority species” as per the NPPF).

Site status

- 4.10 The NatureSpace “Impact Risk Map”⁵ shows the site as within the “Amber zone” (defined as “suitable habitat – great crested newts are likely to be present”).
- 4.11 In addition, there are four ponds shown on ordnance survey maps (1:25,000 scale) within 500m of the application site. All these ponds are situated over 100m from the application site. These ponds were not visited during the survey, and no assessment of their suitability for great crested newts was made.
- 4.12 However, if these ponds were to host GCN it is highly unlikely that they would occupy the application site or be affected by the proposals because the habitats to be affected by the proposed works – predominantly hardstanding and a small area of amenity grassland – are sub-optimal for use by great crested newts.
- 4.13 This is confirmed using Natural England’s risk assessment (as given in their GCN licence method statement template⁶). This shows that an offence under the 2017 Habitat Regulations as a result of the proposals is “highly unlikely” if GCN were to be present in this pond – see Table 6.

Table 6 – Risk assessment for great crested newts as per Natural England’s Great Crested Newt method statement in the event that any of the nearby ponds were to be a great crested newt breeding pond

Component	Likely effect	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.001 - 0.01 ha lost or damaged	0.005
Land >250m from any breeding pond(s)	0.001 - 0.01 ha lost or damaged	0.0005
Individual great crested newts	No effect	0
	Maximum:	0.1
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Nesting birds

- 4.14 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Section 1 of this Act makes it an offence to kill, injure or take any wild bird, or intentionally to take, damage or destroy the nest of any wild bird while that nest is in use or being built.
- 4.15 Common bird species may nest in the buildings. As such works should ideally commence outside of the bird nesting season (March – August inclusive depending on weather conditions). If this is not

⁵ The “Impact Risk Map” is the accepted statutory guidance that Local Planning Authorities must take into account when considering the risk of development for great crested newts. naturespaceuk.com/the-scheme/impact-map/

⁶ See http://www.naturalengland.org.uk/Images/GCN%20WML-14-2_tcm6-4103.xls [sheet - Licence risk assmt(2)]

practicable then areas to be cleared will first need to be checked for nesting birds (This can be done by the contractors carrying out the works) and, if any nests are found, works that would disturb the nest could not continue all young have fledged the nest and it is no longer in use.

Other protected species

- 4.16 It is considered highly unlikely that the proposals will have any adverse effects on other protected species such as dormouse, reptiles or badgers because the habitats on-site are sub-optimal or unsuitable for use by these species. For the case of badgers, no signs of badgers were observed within or adjacent to the application site during the survey.

5.0 Assessment and recommendations (Bats)

- 5.1 All species of bats receive special protection under UK law and it is a criminal offence under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations), deliberately or recklessly to destroy or damage their roosts, or to disturb, kill or injure them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).
- 5.2 In addition, many bat species are “priority species” as defined in the NPPF (see Paragraph 185 of the NPPF above). As such where priority species are found they should be protected from the adverse impacts of development

Site status

The Swan

- 5.3 The Swan has numerous features potentially suitable for use by roosting bats and is therefore assessed as having ‘high’ potential to host a bat roost.
- 5.4 However, if these potential features were to host roosting bats, the proposed works – demolition of the existing single-storey rear extension and erection of a new single storey rear extension – will only require the removal of approximately two to three courses of roof tiles in the northeastern corner of the rear elevation (see Figures 5 and 6). As such, it is deemed that the risk of these works affecting bats is minimal and it would be disproportionate to carry out three dusk surveys to determine the presence or absence of bats (this was discussed and agreed with Tina Cuss, Wokingham Council’s ecologist in August 2024).

Figure 5 – Location where the new extension joins the main building (highlighted in red)

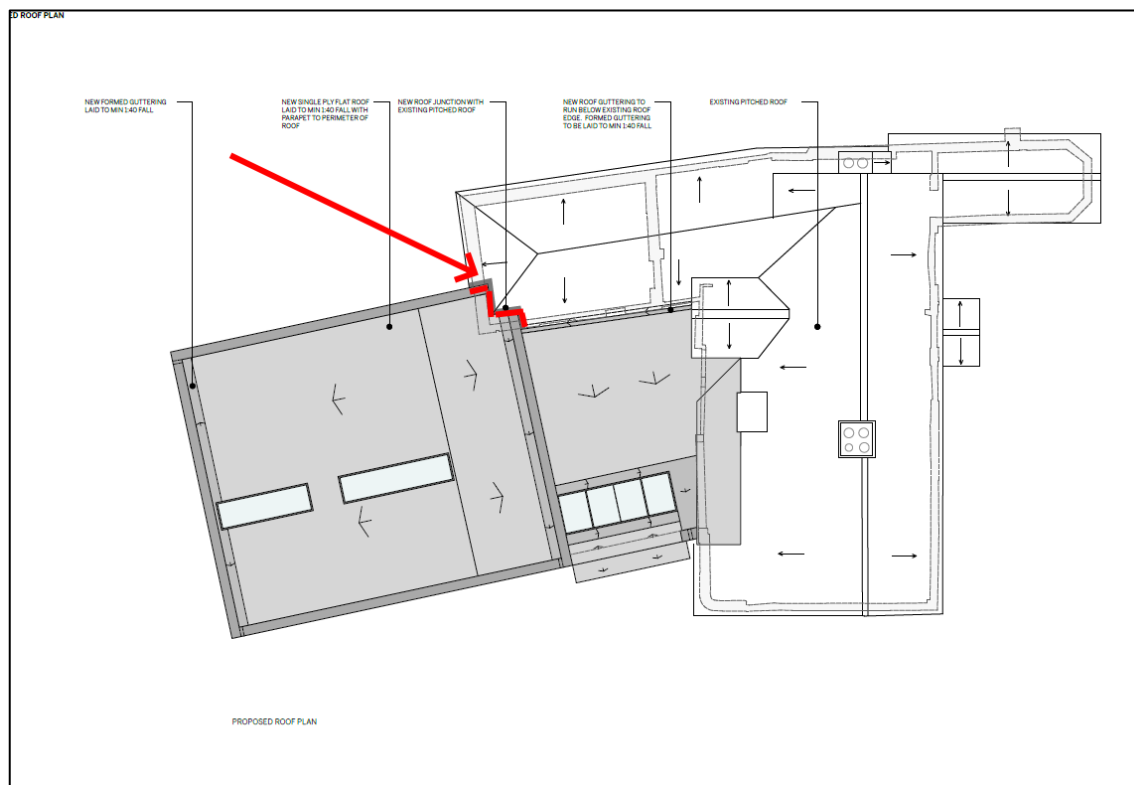


Figure 6 – Area of the roof to be affected by the proposals (highlighted in red)



- 5.5 It is therefore recommended that the following method precautionary and non-licensed method statement is followed:

Non licensed method statement

- (1) Works are to be undertaken between the months of September and April (inclusive). If works cannot be carried out during this period, a dusk emergence survey of the building will be undertaken to confirm that the roost is not being used as a maternity roost (which would be more vulnerable to disturbance).
 - (2) A licensed bat ecologist will check all crevice features on the development areas with an endoscope to ensure that bats are not present. In the unlikely event that a bat is found, where works will affect them, works will stop until the requisite license has been obtained from Natural England.
 - (3) Heras fencing will be set up at the north-eastern corner of the building to protect the hanging tiles from the building works and segregate the construction zone from the bat roost. This area will not be used to store materials or operate machinery in.
 - (4) Contractors will be given a toolbox talk by the licensed bat ecologist. This will state that:
 - that bats are present;
 - a summary of the relevant legislation relating to bats;
 - the measures that will be used to protect bats;
 - good working practices;
 - what to do should bats be found during the works.
- 5.6 The existing single storey extensions (B1a and 1b) have no features potentially suitable for use by roosting bats and are therefore assessed as having ‘negligible’ potential to host a bat roost (see Table 2) and can be demolished with minimal risk of harm to bats.

Other outbuildings and structures

- 5.7 The other outbuildings and structure (B2 to B8) have no features potentially suitable for use by roosting bats and can be demolished with minimal risk of harm to bats.

Trees

- 5.8 None of the trees within the application site are suitable for use by roosting bats and can be removed with minimal risk of harming bats.

6.0 Summary

- 6.1 The application comprises a detached one- and two- storey public house and its curtilage (car park, seven outbuildings and structure, lawn and shrub beds).

Habitats

- 6.2 The habitats within the application site are not 'Priority Habitats' and there should be no Priority Habitat-related constraints to the current proposals.

Bats

- 6.3 The Swan has numerous features potentially suitable for use by roosting bats and is assessed as having 'high' potential to host a bat roost.
- 6.4 However as the proposals will require only two to three courses of roof tiles in a corner of the building to be removed there is a small risk that contractors could disturb bats and the non-licensed method statement in this report is followed to minimise this risk.
- 6.5 The other outbuildings, structures and trees have no features potentially suitable for use by roosting bats and can be removed with minimal risk of harm to bats.

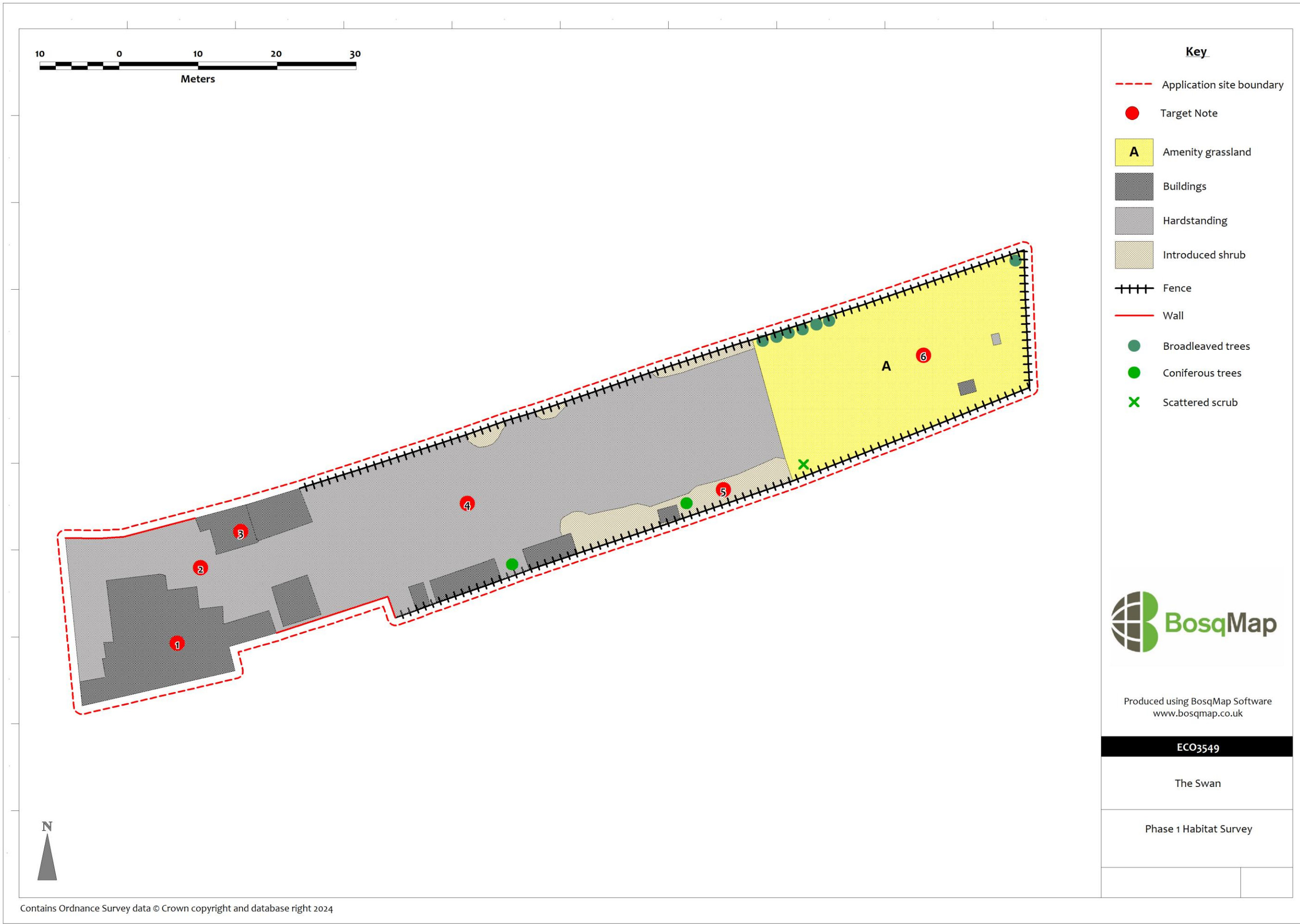
Other protected species

- 6.6 If the recommendations given in this report are adhered to - regarding precautionary measures to protect nesting birds - there should be no other ecological constraints to the proposals.
- 6.7 It is unlikely that the other protected species such as dormouse, badgers or great crested newts will be affected by the proposals.

Appendix 1 - Extended Phase 1 Habitat Map and Target Notes

Target Notes

- (1) The Swan public house. Detached one- and two-storey listed building assessed as having 'high' potential to host a bat roost.
- (2) Hardstanding access to the rear car parking area.
- (3) Double garage with adjoined timber-framed canopy. Assessed as having 'negligible' potential to host a bat roost.
- (4) Concrete car parking area with introduced shrub beds along the northern boundary.
- (5) Overgrown introduced shrub borders. Species present include *Cotoneaster* sp., elder (*Sambucus nigra*), *Viburnum* sp., *Mahonia* sp. and hazel (*Corylus avellana*).
- (6) Short-cut amenity grassland with scattered trees. Tree species present include willow (*Salix* sp.) and walnut (*Juglans regia*).



Appendix 2 – Photographs

Photos 1 and 2 – The Swan viewed from the front and rear



Photos 3 and 4 – Gaps under the roof tiles of the main building

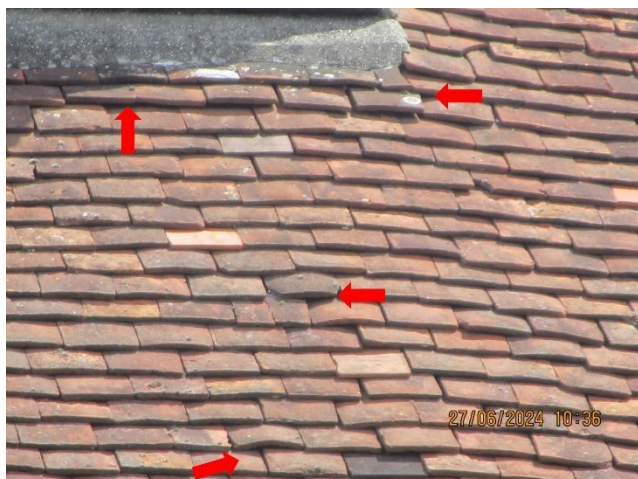


Photo 5 – Gap between the purling and the batten, and Photo 6 – Gaps at wooden overhang



Photos 7 and 8 – Inside the eastern attic



Photos 9 and 10 – Inside the main loft



Photo 11 - The existing rear single-storey extension, and Photo 12 – Existing hardstanding access to the car parking area



Photos 13 and 14 - The double garage and the adjoined wooden shelter



Photo 15 – Inside the lean-to of the double garage, and Photo 16 – Inside the double garage



Photo 17 – Kennel 1, and Photo 18 – Kennel 2



Photo 19 – Kennel 3, and Photo 20 – Garden shed 1



Photo 21 – Existing car parking area, and Photo 22 – Introduced shrub boarder along the northern boundary



Photos 23 and 24 – The rear garden of the pub and garden shed 2



Appendix 3 – Legislation and planning policy

Planning Authorities have a legal duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning application might affect important protected sites, species or habitats, information on the species, habitat or site likely to be affected, together with an assessment of the impacts of the proposals, will almost certainly be required.

The legal duty for Planning Authorities to have regard to the conservation of biodiversity was introduced in the 2006 Natural Environment and Rural Communities Act (The NERC Act). This act clarified existing commitments with regard to biodiversity, raised the profile of biodiversity and aimed to make the consideration of biodiversity a natural and integral part of policy and decision making.

In addition to the NERC Act there is also national and international biodiversity legislation. This includes legislation in relation to protected species and sites which operates outside of the planning system. Local Authorities and developers have a duty to comply with this legislation.

National planning policy

Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System (this document has not been revoked by the recently published National Planning Policy Framework) states that:

'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.'

As such, in line with national planning policy, most planning authorities will ask for this information to be provided before a planning decision is made and in many cases before it is registered.

Local planning policy

In addition to national planning policy, most councils have planning policies to protect biodiversity, and to enhance it where practicable within and adjacent to development sites.

European protected species

The United Kingdom hosts a number of European Protected Species (EPS) of animals (table 1) and plants (table 2). These species receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2017, to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or injure the species without first having obtained the relevant licence from Natural England.

Planning Authorities have a statutory duty under these regulations to have regard to the requirements of the Habitats Directive and need to be satisfied that the development is likely to receive a licence from Natural England, and therefore comply with the Habitats Directive, before granting planning permission.

Table 2 – European Protected Species of Animal found in the UK

Common name	Scientific name
Bats, Horseshoe (all species)	<i>Rhinolophidae</i>
Bats, Typical (all species)	<i>Vespertilionidae</i>
Butterfly, Large Blue	<i>Maculinea arion</i>
Cat, Wild	<i>Felis silvestris</i>
Dolphins, porpoises and whales (all species)	<i>Cetacea</i>
Dormouse	<i>Muscardinus avellanarius</i>
Frog, Pool	<i>Rana lessonae</i>
Lizard, Sand	<i>Lacerta agilis</i>
Moth, Fisher's Estuarine	<i>Gortyna borelii lunata</i>
Newt, Great Crested (or Warty)	<i>Triturus cristatus</i>
Otter, Common	<i>Lutra lutra</i>
Snail, Lesser Whirlpool Ram's-horn	<i>Anisus vorticulus</i>
Snake, Smooth	<i>Coronella austriaca</i>
Sturgeon	<i>Acipenser sturio</i>
Toad, Natterjack	<i>Bufo calamita</i>
Turtles, Marine	<i>Caretta caretta</i> <i>Chelonia mydas</i> <i>Lepidochelys kempii</i> <i>Eretmochelys imbricata</i> <i>Dermochelys coriacea</i>

Table 3 – European Protected Species of Plant found in the UK

Common name	Scientific name
Dock, Shore	<i>Rumex rupestris</i>
Fern, Killarney	<i>Trichomanes speciosum</i>
Gentian, Early	<i>Gentianella anglica</i>
Lady's-slipper	<i>Cypripedium calceolus</i>
Marshwort, Creeping	<i>Apium repens</i>
Naiad, Slender	<i>Najas flexilis</i>
Orchid, Fen	<i>Liparis loeselii</i>
Plantain, Floating-leaved water	<i>Luronium natans</i>
Saxifrage, Yellow Marsh	<i>Saxifraga hirculus</i>

Nationally protected species

Many species of animal are protected under the 1981 Wildlife and Countryside Act (as amended). 'Full protection' applies to EPS and some non EPS species such as the water vole. This prohibits the intentional killing, injuring or taking (capture. etc); possession; intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or to buy. Many species, such as common species of reptile and amphibian, are protected from intentional killing and injuring and trading.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), whilst they are actively nesting or roosting. Section 1 of this Act makes it an offence to kill, injure or take any wild bird,

and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

In addition, bird species listed under Schedule 1 of the Act receive extra protection. The Act states that 'it is an offence to intentionally or recklessly disturb any wild bird listed in Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird'.

In practice this means that in areas where birds are likely to be nesting works should not be undertaken during the nesting season, which is generally considered to be March to September, although this very much depends on weather conditions, habitats and the species involved. If works cannot be avoided then areas should first be checked for nesting birds. Habitats likely to host nesting birds include trees, hedgerows and dense scrub, buildings, reedbeds and riverine habitats and open areas with tussocky vegetation.

Appendix 4 – Bat ecology and conservation status

Background

Bats are the only true flying mammals and belong to their own taxonomic group, the *Chiroptera*. Worldwide there are almost 1,000 species, with 16 in the UK. All species in the UK are insectivorous. They have a highly sophisticated echolocation system that allows them to avoid obstacles and catch invertebrates, either in flight or by picking them off water, the ground or foliage.

Bat species in the UK

There are 16 species of bat that are known to exist in the UK mainland, with a further two - the greater mouse eared bat *Myotis myotis*, and the parti-coloured bat *Vespertilio murinus* - that are thought to occur as rare migrants or to have small populations in the UK. Bats in the UK belong to one of two taxonomic families, the Rhinolophidae (horseshoe bats) and the Vespertilionidae (all other UK bats).

Bat Conservation Status

Bat populations have undergone a significant decline in the past sixty years. For example, estimates from the National Bat Colony Survey suggest that the UK pipistrelle population (one of our commonest bat species), declined by approximately 70% between 1978 and 1993. Factors contributing to this decline include:

- Loss of, and damage to, roosting sites, including buildings, trees, and underground structures (mines, tunnels, ice-houses, cellars, etc).
- Loss and fragmentation of suitable insect-rich feeding habitats such as wetlands and deciduous woodland.
- Reduction in the abundance and diversity of insect prey due to intensive agriculture, particularly over-grazing and the use of pesticides.
- Loss of linear features such as tree-lines and hedgerows, depriving bats of commuting routes between roosts and feeding areas.
- Loss of winter roosting sites in buildings and old trees.
- Disturbance and destruction of roosts, including the loss of maternity roosts due to the use of toxic timber treatment chemicals.

Roosts

Bats use a variety of roosts of different types including trees, buildings, caves, mines and other structures. Most species are colonial and roost in groups. This can make populations particularly vulnerable to loss of roosts as the loss of a single roost may affect the whole population. Some species hang in obvious locations, such as the timbers near to the apex of a roof, others roost in cracks and crevices, such as the gaps under tiles, and as such can be very difficult to locate.

During the winter (November to February), when there is a reduction in insect numbers, bats hibernate to conserve energy. They prefer sites with a constant low temperature and a high relative humidity. On mild winter's nights, bats may wake up and feed. However, bats are particularly vulnerable to disturbance at this time of year, as flying in winter uses up large quantities of energy that cannot easily be replaced.

In the spring, after emerging from hibernation, bats often move from site to site and may congregate in small groups. Female bats gather together in the summer (approximately May to August dependant on

species) in maternity roosts. Once the young have stopped suckling, and the baby is independent, bats tend to disperse and use other roosts. Maternity roosts are particularly vulnerable to disturbance, as bats may have come from a wide geographical area, and have a strong tradition of returning to the same roost year after year.

During the late summer and early autumn males occupy mating roosts which are visited by several females. After mating some species gather together at swarming sites to fatten up prior to hibernation.

Habitat associations

In addition to roosts, bats also need foraging habitats to find suitable food resources, and commuting routes to get to these areas. As would be expected, the highest numbers of bats are found in areas with abundant invertebrates. Some species specialise in catching small invertebrates in flight, whilst others specialise in catching larger invertebrates such as moths and beetles. The distances that bats travel to foraging areas varies between species; records have shown some greater horseshoe bats travel up to 22km to forage, although many species will typically feed within 1km of a roost.

Bats, especially the smaller species, tend to follow linear features (such as hedgerows and tree lines) to their foraging habitats and will often not cross open spaces. A gap of 10m in a linear feature will often not be crossed by bats, and it is important that developments do not create such gaps if linear features are used by bats.

Appendix 5 - Great crested newt: ecology and legislation

The great crested newt (*Triturus cristatus*) can grow up to 18cm in size. It is Britain's largest newt. The body can have a warty appearance and the skin is normally dark brown or black, the belly is predominantly bright orange with black markings. During the breeding season the males develop a crest on their back and tail which they use to attract a mate.

The species is widely distributed in Britain but is absent from Cornwall, Devon, and parts of Wales. It is uncommon but locally abundant. The population has undergone a severe decline in the last 50 years due to the loss of breeding ponds and a decline in the quality of foraging habitat.

The species can be found in northern Europe part of West Siberia. The edge of the northern range extends from northern France, Great Britain, southern Scandinavia to the north of Russia, and the southern edge from central France to south-western Romania into central European Russia. Britain is one of the last strongholds for the species.

Great crested newts spend the majority of their lives on land, returning within up to 500m, but more usually 250m, of their breeding ponds. The mainstay of their diet is invertebrates.

They return to waterbodies, usually ponds, in the spring to breed. Adults enter the ponds from February onwards with the courtship and egg-laying period being from mid-March to mid-June. Eggs are laid in the folds of debris or the leaves of submerged aquatic plants. A female lays up to 200 eggs per season.

Eggs take 3 weeks to hatch and the larvae take 2 to 3 months to develop. Adults begin to leave breeding ponds gradually from late May. However they can over-winter in ponds and also sometimes return to feed. Young start to emerge from the pond in August and will not normally return until they have reached sexual maturity 2 – 4 years later.

Great crested newts receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2010 (The Habitat Regulations) to deliberately or recklessly, to destroy or damage their habitat, or to disturb, kill or them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).

In order to obtain such a licence the SNCO must apply the requirements of Regulation 535 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b)6. These are as follows:

- (1) Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.
- (2) Regulation 53(9)(a) states: the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”.
- (3) Regulation 53(9)(b) states: the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.”

Newts are likely to be disturbed by any work that involves altering their breeding ponds (e.g. by introducing fish, deepening or altering its size) or works that involve clearing land up to 500m around

ponds, and in such cases a licence for derogation from the provisions of the habitat regulations may need to be obtained.

Appendix 6 – About GS Ecology

Established in 2009, GS Ecology is an independent. We carry-out surveys and ecological consultancy services for public and private sector clients including in Berkshire, Oxfordshire and Hampshire, London and the south of England. We can advise you on cost effective sustainable solutions for your project, whether it be a bat survey to inform a planning application, the ecology chapter of an Environmental Statement or a Woodland Management Plan.

Our work is undertaken by experienced and qualified ecologists, who are members of the Chartered Institute of Ecology and Environmental Managers. Our services include:

- Ecology surveying and reporting to inform planning applications, e.g.
 - Preliminary Ecological Appraisal
 - Extended Phase 1 Habitat Survey
 - Protected species surveys, e.g. badgers, dormouse, great crested newts
 - Bat surveys in Oxfordshire, Berkshire, Hampshire, London and Southern England
- BREEAM ecology assessments – to demonstrate the sustainability of a new building
- Protected species licensing such as bat and great crested newt licences for development sites after planning permission has been obtained
- Providing advice to land managers and writing ecological management plans, such as woodland management plans and farm environmental plans for England woodland Grant Scheme and Environmental Stewardship applications
- Providing ecology advice to Local Authorities and Local Planning Authorities