

**PRELIMINARY ECOLOGICAL APPRAISAL
with PRELIMINARY ROOST ASSESSMENT
(inc. THIRD-PARTY DATA SEARCH)**

LAND AT HIGH STREET, SAUL,
GLOUCESTER, GL2 7JB

for

AQUA CONSTRUCTION

Focus Environmental Consultants

Unit 2

Ball Mill Top Business Park

Worcester

WR2 6PD

Email: quotes@focus-enviro.com

Tel. 01905 780700

CONTROL SHEET

Aqua Construction

Land at High Street, Saul, Gloucester, GL2 7JB

Preliminary Ecological Appraisal with Preliminary Roost Assessment

	Name	Position
Surveyors	[REDACTED]	Assistant Ecologist Senior Ecologist
Authors	[REDACTED]	Assistant Ecologist Senior Ecologist

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TABLE OF CONTENTS

CONTROL SHEET	1
1. RECOMMENDATIONS	3
2. SUMMARY OF RESULTS	6
2.1 Overview	6
2.2 Designated Sites	6
2.3 Protected / Notable Habitats	7
2.4 Protected / Notable Species	7
3. DISCUSSION & CONCLUSIONS	9
3.1 Designated Sites	9
3.2 Protected / Notable Habitats	9
3.3 Protected / Notable Species	10
3.4 Opportunities	11
4. ANNEXES	12
4.1 Photographs	13
4.2 Plans	13
4.3 Survey & Third-party Data	17
4.4 Survey Objectives	21
4.5 Limitations	21
4.6 Methods	21
4.7 References & Bibliography	24
4.8 Legislation & Best Practice	28
5. QUALIFICATIONS & EXPERIENCE	35

1. RECOMMENDATIONS

1. Unless a delay of more than 12 months is anticipated before development, no further specialist survey work is recommended at this juncture.
2. Existing mature trees should be retained within the development scheme wherever feasible¹. All retained trees should be afforded adequate protection in line with '*BS5837: 2012 Trees in relation to design, demolition and construction*'.
3. Logs and deadwood should be retained for use by saproxylic invertebrates and as habitat for reptiles and amphibians, but may be relocated by hand to more discrete locations as directed by the ecologist.
4. Where required to facilitate permitted development, removal of potential bird nesting habitat, should be undertaken outside the bird nesting season (March – August inclusive) or otherwise under the direct supervision of a suitably qualified ecologist who will be able to identify nesting birds and advise of appropriate safe working distances.
5. Strict control over the use of artificial night-lighting is required to prevent unnecessary illumination of wildlife habitats (e.g. trees). Lighting must be low level (e.g. light bollards) and of the minimum wattage, as recommended by the Bat Conservation Trust & Institute of Lighting Professionals (2018).
6. Unnecessary soil disruption must be minimised and soil erosion measures implemented during any site excavation works to prevent unwanted run-off of sediment and nutrients into the ditch. A detailed scheme is beyond the scope and expertise of this report. However, suggested suitable measures (see Environment Agency, 2009) may include:

¹ Development plans seen by Focus Environmental Consultants show all four on site trees being retained.

- Temporary sediment trap(s) and/or cut-off trenches to collect any run-off during periods of heavy rainfall.
 - Contour bunding around the edge of excavated/cultivated areas.
7. Once the development proposals are confirmed, the following recommendations are made to provide biodiversity enhancements within the post-developed site and ensure compliance with local and national government policies (e.g. NPPF) and the 'biodiversity duty' enshrined within The Natural Environment & Rural Communities Act, 2006.
- Two sparrow terraces (such as the 1SP Schwegler Sparrow Terrace) should be included within the development scheme. Boxes should be installed at the eaves height and not directly over windows and doors.
 - Two wall-mounted or integrated bat boxes (e.g. Beaumaris Woodstone Bat Box or Istock Enclosed Bat Box 'C') should be installed on the south/south-west elevations of the properties and above 4m high.
 - One hedgehog box should be placed within a sheltered area within the new development scheme. Gaps should be incorporated at the base of existing and new fencing (e.g. hedgehog-friendly gravel boards) within the developed site to facilitate the passage of animals across site and to off-site habitats. Gaps should be at least 130mm x 130mm, which is sufficient to allow the passage of hedgehogs and other small mammals.
 - Any trees to be removed should be replaced with an equal or larger number of native trees or hedgerows. New hedgerows and trees will enhance connectivity and ensure a continuous flight-line for bats, and provide further nesting opportunities for birds.
 - Any new planting and landscaping designs should provide foraging and nesting opportunities for a range of wildlife, including mammals, herpetofauna, birds and invertebrates. Native species of local origin and

ornamental species with a known benefit to wildlife should be incorporated into planting schemes.

8. The above mitigation and enhancement recommendations should be demonstrated via a short letter report with photographic record completed by an appropriately experienced ecologist to 'sign off' the works, which can be sent to and approved by the Local Planning Authority.

2. SUMMARY OF RESULTS

2.1 Overview

1. Focus Environmental Consultants was commissioned by Aqua Construction to undertake a Preliminary Ecological Appraisal and Preliminary Roost Assessment (bats) of a parcel of land to the west of the High Street in Saul, Gloucestershire (centred on Ordnance Survey grid reference SO 7471 0929). This was accompanied by a third-party data search (1km search radius) from Gloucestershire Centre for Environmental Records (GCER).
2. The site was surveyed by an ecological consultant from Focus Environmental Consultants on 5 August 2020. It is understood that the development proposals are for the construction of two residential buildings with associated hard surfaces and landscaping.
3. The site is approximately 0.11ha in size and comprises;
 - Amenity grassland
 - Bare-ground
 - Dry ditch
 - Trees
 - Fencing
 - Brick wall

2.2 Designated Sites

1. The third-party data search has identified three Local Wildlife Sites (LWSs) within the 1km search area. The closest is Saul Gravel Pits LWS, which is located approximately 145m to the south of the development footprint.
2. Approximately 1250m (at the closest point) to the west of the site is Upper Severn Estuary SSSI, Severn Estuary Ramsar site, Severn Estuary SAC and Severn Estuary SPA.

2.3 Protected / Notable Habitats

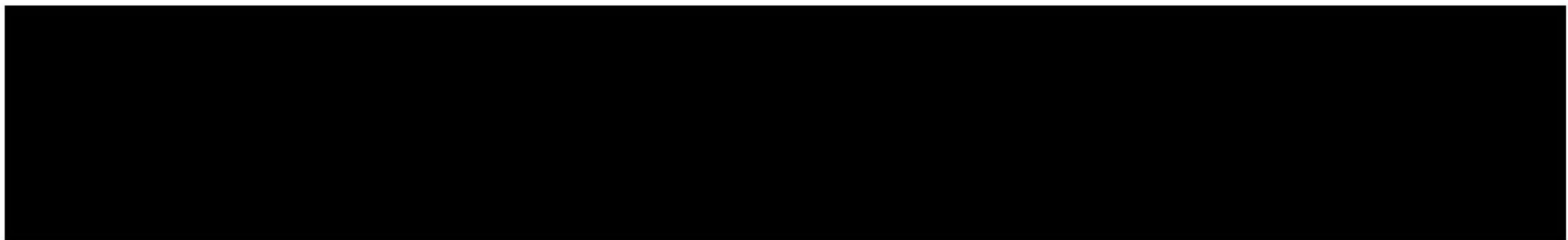
1. **Trees:** There are four mature deciduous trees located within the survey area.
2. There are no '*habitats of principal importance for the purpose of conserving biodiversity in England*' as listed under Section 41 (S.41) of the Natural Environmental and Rural Communities (NERC) Act 2006) within the survey boundary.

2.4 Protected / Notable Species

1. **Bats:** There are no buildings on site. None of the trees are considered to have high potential for roosting bats. T2 and T4 are considered to have **low-moderate** potential and T1 and T3 are considered to have **low** potential for roosting bats in reference to Collins (2016). Sixteen bat records were returned from within the 1km search area, including common pipistrelle, soprano pipistrelle, long-eared bat, noctule, serotine and lesser horseshoe bat. None of these records were returned from within the site itself.
2. The site itself is considered to provide moderate suitability for foraging and commuting bats due to the presence of trees and its rural location. There are also two lakes, woodland and the Gloucester and Sharpness Canal located within 600m of the site.
3. **Birds:** A number of common species were heard and/or seen during the site visit; carrion crow, kestrel, rook, and woodpigeon. Due to the nearby Severn Estuary SPA, a large number of listed bird species were returned from within the 1km data search. These include species such as house martin, tawny owl, swift, dunnock, and the red-listed song thrush, cuckoo, starling and yellowhammer. The majority of these records were returned from one area approximately 785m to the south-west of the site. The on-site trees provide nesting and foraging habitat for birds.
4. **Reptiles:** The site is considered unfavourable for reptiles due to the vast majority of the site comprising bare-ground and short grassland. Three slow-

worm records were returned from within the 1km search area, the closest of which is located approximately 185m north of the site.

- 5. Amphibians:** There are no ponds located within the survey area and the ditch was dry on the day of the survey. According to the Ordnance Survey map the closest body of water is Saul Gravel Pits LWS, which is located approximately 145m to the south of the site. It should be noted that garden ponds are not always shown on Ordnance Survey maps. The site itself is considered to have poor suitability for amphibians due to the extent of the bare ground and short grassland. There were eighteen records of great crested newt returned from within the 1km search area, the closest of which was approximately 305m north of the site.



- 7. Other mammals:** Eight hedgehog records were returned from within the 1km search area, the closest of which was approximately 215m to the east of the site. The site is considered unsuitable for riparian mammals, such as water-vole and otter due to the lack of water-bodies within the site.
- 8. Invertebrates:** A full assessment of the invertebrate assemblage at this site is beyond the scope of this survey. However, no triggers were identified to indicate that the site supports an interesting or notable assemblage of terrestrial invertebrates. Records for blood-vein, buff ermine, dot moth and white-letter hairstreak and the nationally notable banded general, black colonel and dotted bee-fly were returned from within the 1km search area.
- 9. Invasives:** No notifiable invasive plant species (e.g. Japanese knotweed) listed under schedule 9 (part II) of the Wildlife and Countryside Act 1981 (as amended) were observed during the survey. Records for Indian balsam and orange balsam were returned from an area on the canal approximately 425m to the south of the site.

3. DISCUSSION & CONCLUSIONS

The client is currently seeking planning permission for the construction of two residential dwellings with detached garages and associated hard surfaces and landscaping. This discussion has been based on the proposed plan 5904-F-10_Saul_Site_Plan_Option_1 produced by Quattro Design Architects. The following have been identified which may represent constraints or opportunities (e.g. for biodiversity enhancement and green infrastructure) within a future development at this site.

3.1 Designated Sites

The closest SSSI, SAC, SPA and Ramsar site is located approximately 1250m from the site. The Natural England SSSI Impact Risk Zones used to assess planning applications for likely impacts on SSSIs/SACs/SPAs and Ramsar sites was consulted via the government's multi-agency website (MAGIC). The site falls within the risk zone. Therefore, the local planning authority are likely to consult Natural England on the likely risks of the proposed development to designated sites (particularly Upper Severn Estuary SSSI). Due to the proximity of the Severn Estuary SAC and SPA, a Habitats Regulations Assessment (HRA) Screening Opinion may also be required to assess the likelihood of the proposals impacting these sites.

Due to the small-scale of the development and distance of the development footprint between the proposed works and the designated sites, it is considered highly unlikely that the proposals will impact on the functionality or integrity of any of these designated sites or affect their conservation status, provided standard construction procedures are followed.

3.2 Protected / Notable Habitats

Trees: There are four trees within the survey area (T1-T4). However, the plans for the site show the accommodation of the development alongside the trees, allowing the trees to remain as they are.

3.3 Protected / Notable Species

Bats: The proposals will retain the four on-site trees, allowing their potential continued use by roosting bats. A small amount of amenity grassland is to be lost, but this is considered unlikely to have a significant impact on foraging bats. Mitigation will need to be provided in the form of restricted artificial lighting.

Birds: The trees on site offer nesting and foraging potential for a variety of species. However, these are to be retained as part of the development proposals. A small amount of amenity grassland is to be lost, but this is considered unlikely to have a significant impact on foraging birds.

Great crested newts: The risk assessment below shows that the likelihood of an offence being committed is ‘**highly unlikely**’ if great crested newts are present within the pond/lake closest to the site (*i.e.* 145m to the south of the site). The vast majority of the site also provides unfavourable habitat for great crested newts. Therefore, the potential of the proposals to negatively impact great crested newts is considered to be negligible.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	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)	0.1 - 0.5 ha lost or damaged	0.1
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.1
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Other mammals: Hedgehogs are listed as a ‘*species of principal importance for the purpose of conserving biodiversity*’ under S.41 of the Natural Environment and Rural Communities Act 2006. The incorporation of new hibernating features and access points will provide mitigation and compensation for the loss of hedgehog habitat.

3.4 Opportunities

A sensitive scheme of landscaping would ensure protection and enhancement (where feasible) of existing habitats on site and creation of new habitats for wildlife. Specific opportunities appropriate to this scheme include:

- Any new planting and landscaping designs should provide foraging and nesting opportunities for a range of wildlife, including mammals, herpetofauna, birds and invertebrates. Native species of local origin and ornamental species with a known benefit to wildlife should be incorporated into planting schemes.
- Creation of native species-rich hedgerows along the boundaries of the site and/or to divide the plots. Hedgerows will provide opportunities for shelter, foraging and connectivity within the site.
- Tree planting within the development scheme will provide enhanced foraging and nesting habitat for species such as birds and bats.
- Inclusion of wildlife boxes to benefit declining sub-urban species (e.g. bat, hedgehogs and birds).

Implementation of these opportunities will contribute to meeting the biodiversity requirements of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy – Policy SD9 (adopted November 2017²). Specifically, Policy SD9 – Biodiversity and geodiversity.

² Gloucester, Cheltenham and Tewkesbury Joint Core Strategy- Adoption Version November 2017. Available at: <https://democracy.gloucester.gov.uk/documents/s40802/Appendix%201%20-%20JCS%20Adoption%20Version%20November%202017.pdf>

4. ANNEXES

4.1 Photographs

4.2 Plans

4.3 Survey & Third-Party Data

4.4 Survey Objectives

4.5 Limitations

4.6 Methods

4.7 References & Bibliography

4.8 Legislation & Best Practice

4.1 Photographs

All photographs taken on 5 August 2020.



Plate 1: Showing a typical view of the site and T4. Photograph looking south-west.



Plate 2: Showing a typical view of the site. Photograph looking south-east.



Plate 3: Showing a typical view of the site. Photograph looking north-east.



Plate 4: Showing a typical view of the site and T1, T2 and T3. Photograph looking north-west.



Plate 5: Showing the southern boundary of the site with the felled area and compost heap. Photograph looking east.



Plate 6: Showing the eastern boundary with Grade II listed brick wall and ditch. Photograph looking north.

Plans:

4.2.1 Location Plan

4.2.2 Habitat Survey Plan

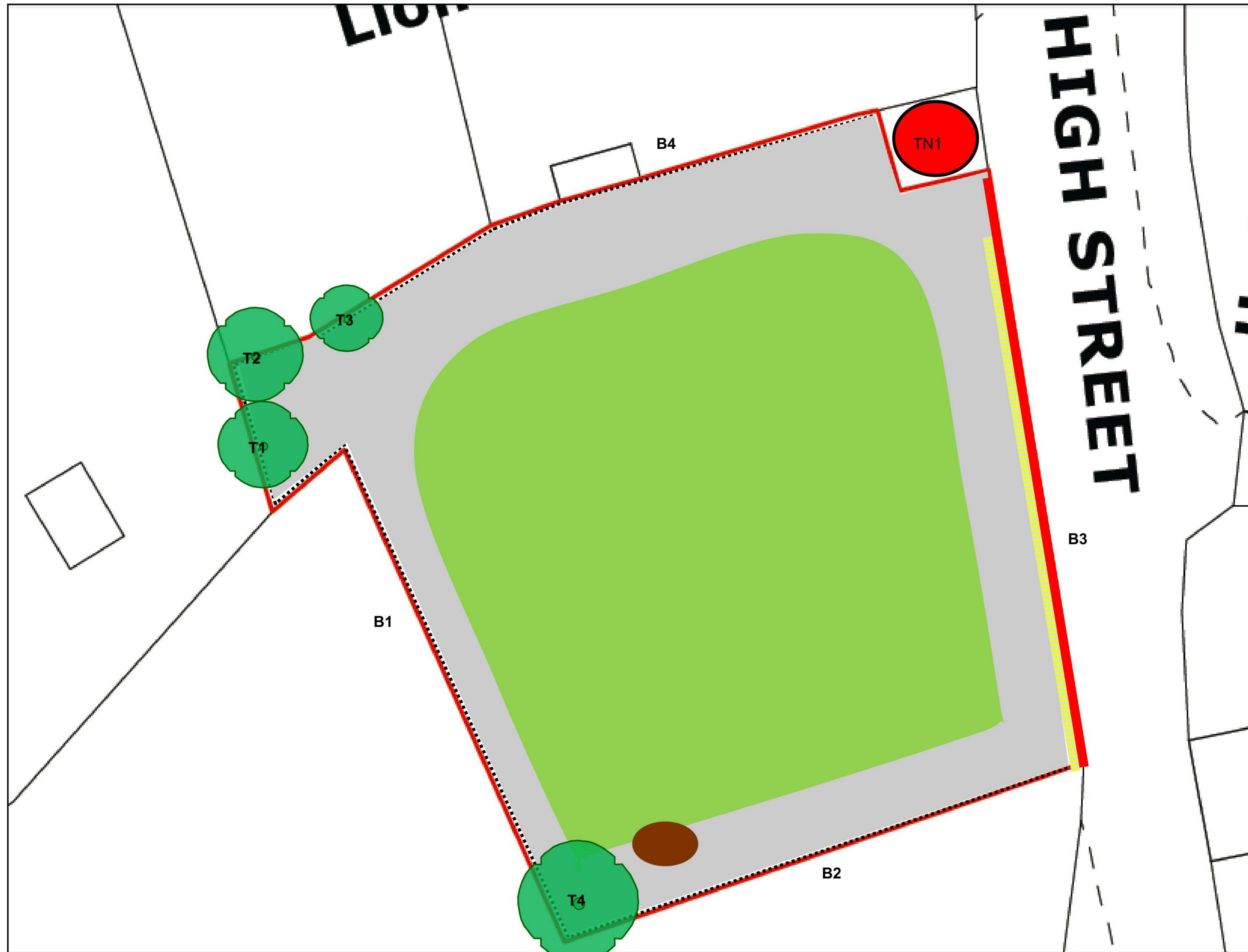
4.2.1. Location Plan



Client: Aqua Construction
Site: Land at High Street, Saul, Gloucester, GL2 7JB
Title: Location Plan
Contract: 2029
Date: August 2020

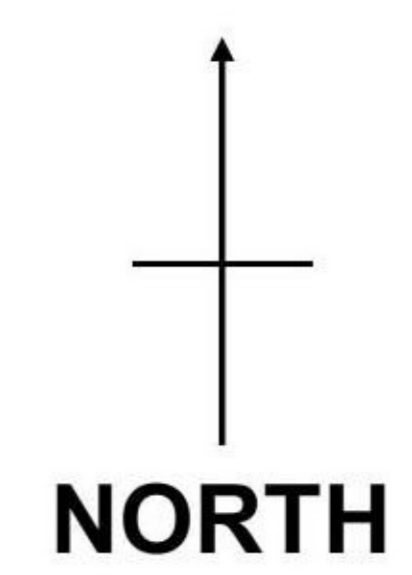
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4.2.2. Habitat Survey Plan



KEY:

- Grassland (amenity grassland) (g)
- Sparsely vegetated land (s)
- Brick wall (68)
- Dry ditch (r1e)
- Fence (69)
- Compost heap
- Tree
- T1 No. of tree (refer to text)
- B1 No. of boundary (refer to text)
- TN1 Brick pile
- Site boundary



Client: Aqua Construction
Site: Site at High Street, Saul, Gloucester
Title: Habitat Survey Plan
Contract: 2029
Date: 05 August 2020

Please note: this plan has been provided by Quattro Design Architects and is intended only to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan

4.3 Survey & Third-party Data

All surveys have been completed by appropriately qualified and experienced ecologists from Focus Environmental Consultants. Third-party data has been obtained from Gloucestershire Centre for Environmental Records (GCER). Copies of raw data are available on request. Please contact the Project Contact at Focus Environmental Consultants for more details.

Table 1: Summary of Habitat Features

UK Habitat Classification Habitat Type & Code	Phase 1 Code	Size / Extent	Condition	Qualifies as S.41 Habitat	Qualifies as EC Habitats of Community Interest (Annex I)
69 - Wooden post and chain link fencing	J2.4	103m	Boundary 1 is a wooden post and chain link fence located along the western boundary of the site. A few individual shrubs and trees such as laurel, walnut, and ash are located adjacent to the boundary. Boundary 2 is a wooden post and chain link fence located along the southern boundary of the site. Boundary 3 comprises a Grade II listed brick wall with associated dry ditch.	No	No
68 - Brick wall	J2.5	31m			

			Boundary 4 comprises a mixture of wooden and chain link fencing. A few young trees e.g. ornamental holly, overhang the site.		
r1e- Canal or ditch	J2.6	28m ²	A dry ditch is located along the western boundary of the site. The ditch is approximately 1m wide and has become overgrown with various species, such as mind-your-own-business, hoary willowherb, smooth sow-thistle, common nettle, redshank, great willowherb and fool's-water-cress.	No	No
73- Bare-ground	J4	605m ²	<p>Surrounding the amenity grassland is an area of bare-ground with occasional ruderal species, such as hedge bindweed, redshank, common nettle, smooth sow-thistle, cleavers, petty spurge, groundsel, shepherd's-purse, yellow corydalis, common speedwell, red dead-nettle and fat-hen.</p> <p>To the south of the site is an area containing several large ash tree stumps. The majority of the area comprises bare-ground. Species recorded in this area include common nettle, smooth sow-thistle, creeping thistle, shepherd's-purse, field maple sapling, beech sapling, laurel sp., ornamental holly and colt's-foot.</p>	No	No
g - Grassland 66 - frequently mown	J1.2	450m ²	The vast majority of the grassland is short (less than 50mm high). Species recorded within the sward include red fescue, perennial rye-grass, false oat-grass, cock's-foot, dandelion, white clover, creeping thistle, ribwort	No	No

			plantain, selfheal, poppy sp., creeping buttercup and fool's parsley.		
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Table 2: Summary of Preliminary Roost Assessment

Tree	Potential Roost Features	Evidence of Bats	Category (Collins 2016)
T1	Semi-mature walnut tree with a split in a couple of narrow branches. No obvious potential roost features present.	No.	Low
T2	Mature ash with a few cut, narrow branches, although no obvious potential roost features were observed.	No.	Low-moderate
T3	Mature ash that has been previously pollarded.	No.	Low
T4	Large mature ash with ivy growth. No obvious cavities were observed from the ground, although the view was restricted.	No.	Low-moderate

4.4 Survey Objectives

The objectives of the survey were:

1. to carry out a Preliminary Ecological Appraisal of the site to identify any habitats, species or features of nature conservation significance;
2. to undertake a “third-party data” search to acquire details of any protected species records held by third-parties and information on nature conservation designations relevant to the site. To collate and comment upon the responses;
3. to produce a concise report identifying known and likely ecological constraints associated with a project. The report will identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA). It will also indicate mitigation measures that may be required, applying the ‘mitigation hierarchy’, to ensure compliance with wildlife law and recognised best practice. Intrinsic opportunities offered by a project to deliver ecological enhancement will be identified within the report.

4.5 Limitations

The Preliminary Ecological Appraisal was carried out by a suitably experienced ecologist and survey assistant from Focus Environmental Consultants. The month of survey (August) is within the optimal survey period for most habitats and species in England.

The reader is reminded that an ecological survey that is based on a single site visit will typically under-represent the biological diversity of a site, owing to seasonal variations in animal activity and plant growth form in particular. However, a Preliminary Ecological Appraisal such as this can be completed by an experienced ecologist at any time of year subject to suitable weather conditions.

No significant survey limitations were encountered.

4.6 Methods

4.6.1 Third-Party Data Trawl

A third-party data trawl was conducted in August 2020, to collect any existing site records and protected/notable species data records for within the site boundary and a 1km area around the site. The following third-party consultees were contacted: Gloucestershire Centre for Environmental Records (GCER). The government's multi-agency website 'magic' was also consulted (www.magic.gov.uk).

4.6.2 Preliminary Ecological Appraisal

An experienced ecological consultant undertook a field survey in accordance with the Preliminary Ecological Appraisal (CIEEM, 2017 2nd Edition), the UK Habitat Classification system (UK Habitat Classification Working Group (2018a, 2018b & 2018c), and the Handbook for Phase 1 Habitat Survey (JNCC, 2010). The extent of each habitat type was mapped and details of relative plant species abundance within homogenous areas were recorded. Species abundance was measured on the DAFOR scale (Dominant, Abundant, Frequent, Occasional and Rare), with the addition of the term 'Local' to describe variation on a small-scale.

Higher plant nomenclature follows Stace (4th Edition), 2019 with common (English) names being used for ease of reading and accessibility. Bryophyte nomenclature follows Atherton *et al.* (Eds), 2010, with English names being used in line with this publication. Scientific names are used for fungal identification, with authorities referenced in the text, for reasons of clarity.

The survey method was extended to include a search for fauna of ecological importance, including those that are afforded legal protection.

Target Note descriptions were recorded for features of ecological importance, these may include areas of species-rich vegetation and field signs of protected and/or notable species.

4.6.3 Preliminary Roost Assessment

A daytime preliminary roost assessment (PRA) was undertaken at the site by an experienced and appropriately licensed ecologist (Cassie Needham: Natural England licence number: 2016-23451-CLS-CLS). A ground-based tree assessment was undertaken of mature and semi-mature trees within the site boundary. Survey

methods followed the guidelines and techniques recommended in Mitchell-Jones (2004), Collins (2016), BTHK (2018), Cowan, (2003). Binoculars were used as required to obtain better views of potential roost features in trees. Features that can provide roosting sites for bats in trees include:

- woodpecker holes;
- cracks, splits and fissures in trunk and limbs;
- rot holes;
- trunk cavities;
- loose bark;
- dense ivy growth.

Trees were assessed as having either ‘high’, ‘moderate’, ‘low’ or ‘negligible’ potential to support roosting bats, and categorised using definitions in Collins (2016) (see Table 3, below).

Table 3: Guidelines for Assessing the Potential Suitability for Roosting Bats of Trees within a Development Site³

Suitability	Description: Structure
Negligible	Negligible features on the tree that are likely to be used by roosting bats.
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features with only very limited roosting potential.
Moderate	A tree with one or more potential roost features that could be used by bats due to their appropriate condition (<i>i.e.</i> size, shelter, protection) and surrounding habitat. However, it is unlikely to support a roost of high conservation value (with respect to roost type only).
High	A tree with one or more potential roost features 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 condition (<i>i.e.</i> size, protection, shelter) and surrounding habitat.
Confirmed Roost	Tree with confirmed bat roost.

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

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4.8 Legislation & Best Practice

4.8.1 The Conservation of Habitats and Species Regulations 2017

<http://www.legislation.gov.uk/ukxi/2010/490/contents/made>

These regulations, referred hereafter as “the Habitats Regulations”, represent the primary method by which Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the “Habitats Directive”) is transposed for England and Wales and their territorial seas. The Habitats Directive, in conjunction with the Birds Directive (Council Directive 2009/147/EEC) forms the basis for implementation of Europe’s nature conservation policy through both habitat and species level protection. The Habitats Directive requires the designation of strictly protected European sites known as Special Areas of Conservation (SACs). Together with the Special Protection Areas (SPAs) established by the Birds Directive, these collectively form the Natura 2000 Network of protected sites. The Habitats Directive also requires the strict protection of animals and plants of Community Interest listed under Annex IV. Habitat types requiring strict protection as SACs are listed under Annex I. The conservation of animals and plants listed under Annex II requires the designation of SACs.

The Habitats Regulations require that public bodies must exercise their nature conservation responsibilities to ensure compliance with the Habitats Directive. These regulations also require the conservation of natural habitats and habitats of species through the selection, designation and notification of marine and terrestrial ‘European Sites’ to be afforded protection under the Habitats Directive. The habitats and species of European Importance are listed under Annexes I and II of the Habitats Directive. The regulations also contain provision for the appropriate management of these European Sites including the control of damaging operations, special nature conservation orders and restoration orders, for example. The Habitats Regulations afford strict protection to European Protected Species of animals under Schedule 2 and plants under Schedule 5. Offences (subject to certain exceptions) include the deliberate capture, killing, disturbance or trade in these animals. Similarly plants listed under Schedule 5 are protected (subject to exceptions) from picking, collection, cutting, destruction or trade.

4.8.2 The Wildlife and Countryside Act 1981 (as amended)

While the Habitats Regulations provide the basis for nature conservation policy in Europe, the Wildlife and Countryside Act 1981 (as amended) (WCA) is still a major mechanism for the legislative protection of wildlife and countryside/national parks in the UK. The WCA, and its various amendments, draw on from pre-existing legislation and support the Habitats Regulations in implementing the Bern Convention (1979) and Directive 2009/147/EC on the conservation of wild birds. Schedules within the WCA provide a list of protected species and habitats, in addition to prohibited actions. Further details are provided below for specific species relevant to the report. The WCA also contains measures for controlling invasive non-native species and amendments to a number of laws, including in relation to public rights of way.

4.8.3 *The Countryside and Rights of Way (CROW) Act 2000*

The CROW Act amends existing WCA legislation in accordance with the 1992 Convention on Biological Diversity (Rio Earth Summit). The Act applies to England and Wales only and encompasses public access, rights of way, nature conservation and Areas of Outstanding Natural Beauty (AONBs). Schedule 9 of the Act provides increased powers for the protection and management of SSSIs while Schedule 12 strengthens the legal protection for protected species via arrestable offences and heavier penalties.

4.8.4 *The Natural Environment and Rural Communities (NERC) Act 2006*

The Natural Environment and Rural Communities Act imposes a *Biodiversity Duty* (S.40) on all public bodies to conserve biodiversity at both species and habitat levels (S40). *“Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.”*

S.41 of the Act requires the publication of a list of *“living organisms and types of habitat which in the Secretary of State’s opinion are of principal importance for the purpose of conserving biodiversity.”* The list generated under S.41 of the Act contains a number of types of habitats and species of animal and plant that have the potential to be affected by development projects of a range of sizes and impacts.

S.47 of the Act establishes special protection for the nest sites of certain birds that are known to re-use their nests and creates an additional Schedule containing these birds, namely golden eagle, white-tailed eagle and osprey. It is an offence to take, damage or destroy the nest of these three birds at any time.

The Act also establishes Natural England as the independent body “to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development”. 943 species and 56 habitats of principal importance are included on the S41 list as guidance for public bodies on decisions that affect biodiversity.

4.8.5 *The Hedgerow Regulations 1997*

On 1 June 1997, the Hedgerow Regulations came into force under section 97 of the Environment Act 1995 to address the dramatic decline in UK hedgerows. The regulations protect important hedgerows by limiting removal through a system of notification via local planning authorities.

The regulations are aimed at countryside hedgerows in England and Wales “on or adjoining, common land, village greens, Site of Special Scientific Interest (which include National Nature Reserves, Special Protection Areas under the Birds Directive and Special Areas of Conservation under the Habitats Directive), Local Nature Reserves, or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys” (Section 3.6).

Written permission is required from the local planning authority before the removal of any hedgerow over 20 metres and more than 30 years old. Hedgerows less than 20 metres long may also be considered if they form part of a continuous network of hedges. Garden hedges, however, are not protected. Once the LPA has received a written request they will issue either a Hedgerow Retention or Hedgerow Removal Notice within 42 days depending on whether they define the hedgerow as *important* or not. This is determined by the following;

- “They have been in existence 30 years or more; and”
- “They satisfy at least one of the criteria set out in Part II of Schedule 1 of the Regulations.”

Exemptions to the Regulations fall into three categories:

- “small scale works;”
- “works approved under other procedures which ensure careful assessment and consideration of the impact on the local environment; and”
- “works authorised under other legislation which justify the removal of a hedgerow without first establishing its importance.”

It is an offence to remove a hedgerow subject to a retention notice, or to remove a hedgerow protected under the Hedgerow Regulations without first obtaining the required removal notice.

4.8.6 The UK Post-2010 Biodiversity Framework

As of 17 July 2012, the UK Post-2012 Biodiversity Framework replaced the UK level Biodiversity Action Plan to deliver the outcomes of the Government’s Biodiversity 2020 Strategy. This was in response to the 2011 EU Biodiversity Strategy (EUBS) and the 2010 United Nations Convention on Biological Diversity (CBD) whereby five “*Aichi*’ strategic goals and supporting targets” have been internationally agreed.

The UK Framework is a collaborative effort between Defra and JNCC on behalf of the Four Countries’ Biodiversity Group to achieve the ‘*Aichi*’ strategic goals through focused supporting targets and follows on from policies contained within the Natural Environment White Paper (2011).

4.8.7 National Planning Policy Framework

The National Planning Policy Framework (NPPF) was first published on 27 March 2012, and has since been replaced by the revised National Planning Policy Framework, published on 24 July 2018. This framework acts as guidance for planning authorities (LPAs) in England to form Local Plan policies in favour of sustainable development as part of the government’s reforms to increase the accessibility of the planning system and promote long term sustainable growth. Along with the Circular 06/205, the NPPF consolidates the Planning Policy Statements and Guidance Notes, many of which are now obsolete, including *Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9)*.

The framework states that “*planning policies and decisions should contribute to and enhance the local environment*” (paragraph 170).

Chapter 15 of the framework focusses on habitats and biodiversity. Specifically, paragraph 175 states: “*...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, and which is likely to have an adverse effect on it (either individually or in combination with other developments) should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Scientific Interest;*
- *development proposals whose primary objective is to conserve or enhance biodiversity should be supported;*
- *opportunities to incorporate biodiversity improvements in and around developments should be encouraged;*
- *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;*

4.8.8 Circular 06/2005: Biodiversity and Geological Conservation

The Circular 06/2005 complements the NPPF by advising on how the law relates to planning and nature conservation in England, with particular reference to designated sites and protected species;

“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” (Paragraph 99).

However, “developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development.”

Part IV also reminds LPAs and developers that licences and mitigation measures may be required in addition to planning permissions if protected species are to be affected by the development. “*The breach of protected species legislation can often give rise to a criminal offence*” (Paragraph 101).

4.8.9 BS42020:2013 Biodiversity. Code of Practice for Planning and Development

BS 42020 was developed by BSI with input from a variety of organisations (in all sectors) and experts in the field of biodiversity. It is fundamentally engaged with the incorporation of biodiversity into all stages of the planning process. The standard identifies a suite of recommendations and advice to ensure that decision-making and activities undertaken from inception to fruition of planning applications are adequately informed by appropriate and robust ecological knowledge. BS42020 aims to:

- give decision-makers (and specifically planning authorities and other regulatory bodies) more confidence that the ecological audits and assessment of impact on biodiversity provided in support of development proposals is fit for purpose;
- encourage greater consistency and transparency in the quality, scientific robustness and transparency of ecological reports that are submitted with planning applications and other forms of regulatory approval; and
- foster an approach that is proportionate and retains and positive environmental legacy following development.

4.8.10 Bats

All British bats are “European Protected Species” (EPS) and listed on Annex II and Annex IV of the EC Habitats Directive. The Directive is transposed into UK law through the Conservation of Habitats and Species Regulations 2017. The following actions affecting bats are prohibited under the legislation:

- deliberate capture, injury or killing of a bat;
- deliberate disturbance of a bat and in particular disturbance which is likely to impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 - or to affect significantly the local distribution or abundance of the species to which they belong.
- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange, any bat or any part of a bat or anything derived from one.

Bats are also afforded protection from intentional or reckless ‘disturbance’ by the Wildlife and Countryside Act 1981 (as amended). The deliberate or reckless obstruction of access to a structure or place used by bats for shelter and protection is also an offence under the Act.

4.8.11 Badgers

Badgers and their setts are protected by the Protection of Badgers Act 1992 (as amended). This makes it an offence to wilfully kill, injure or take a badger or interfere with a badger sett through damaging the sett, destroying the sett, obstructing access to a sett, causing a dog to enter the sett or disturbing a badger occupying a sett.

4.8.12 Birds

All wild birds in the UK are afforded protection under the Wildlife and Countryside Act 1981 (as amended). This protection includes killing, injuring or taking wild birds as well as taking, damaging or destroying bird nests in use or being built, and taking or destroying eggs. Birds listed under Schedule 1 of the Act are afforded additional protection from disturbance during nesting and offences relating to these birds are subject to special penalties. The nest sites of birds listed under Schedule ZA1 of the act (golden eagle, white-tailed eagle and osprey) are afforded strict, year-round protection even when the nests are not in active use.

A small number of derogated bird species, principally members of the genus *Corvus* (crows), *Larus* (gulls) and *Columba* (pigeons), may be killed by authorised persons (landowner/occupier or otherwise authorised by the landowner or relevant conservation body or fisheries board) under a 'general licence'. The general licence is issued by Natural England (in the case of English usage). The general licence can only be exercised for reasons of preserving public health or public safety and cannot be lawfully used in the case of damage to property or nuisance.

4.8.13 Great Crested Newts

The great crested newt (*Triturus cristatus*) (Laurenti, 1758), is a "European Protected Species" (EPS) and listed on Annex II and Annex IV of the EC Habitats Directive. The Directive is transposed into UK law through the Conservation of Habitats and Species Regulations 2017. The following actions affecting great crested newts are prohibited under the legislation:

- deliberate capture, injury or killing of a great crested newt;
- deliberate disturbance of a great crested newt and in particular disturbance which is likely to impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 - or to affect significantly the local distribution or abundance of the species to which they belong.
- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange, any great crested newt, any part of a great crested newt or anything derived from one.

Great crested newts are also afforded protection from intentional or reckless 'disturbance' by the Wildlife and Countryside Act 1981 (as amended). The deliberate or reckless obstruction of access to a structure

or place used by great crested newts for shelter and protection is also an offence under the Act. This applies to both aquatic and terrestrial habitat.

4.8.14 Reptiles

All common reptile species (grass snake, adder, common lizard and slow-worm) native to Britain are protected by Schedule 5 the Wildlife & Countryside Act, 1981 (as amended). It is illegal to:

- deliberately kill, injure a reptile or
- sale, barter, exchange, transport for sale and advertising to sell or to buy a reptile.
- In Northern Ireland they are fully protected against killing, injuring, capturing, disturbance, possession or trade.

In addition sand lizard and smooth snake are protected under Conservation of Habitats and Species Regulations 2017. The following actions affecting these reptiles are prohibited under the legislation:

- deliberate capture, injury or killing;
- deliberate disturbance and in particular disturbance which is likely to impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 - or to affect significantly the local distribution or abundance of the species to which they belong.
- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange, these reptiles or anything derived from them.

Sand lizards and smooth snakes are also afforded protection from intentional or reckless 'disturbance' by the Wildlife and Countryside Act 1981 (as amended). The deliberate or reckless obstruction of access to a structure or place used by these reptiles for shelter and protection is also an offence under the Act.

5. QUALIFICATIONS & EXPERIENCE

Focus Environmental Consultants® has the expertise to provide sure-fire environmental solutions to a wide range of projects. The company ethos forges the highest standards of professional scientific practice with a best value approach for our clients. Our core area of expertise is in the production of specialist ecological and arboricultural reports and advice to support planning applications. We are also building an enviable reputation for innovative habitat creation and management solutions. Our flexible approach, range of skills and broad project experience from major infrastructure contracts to smaller projects allows us to adapt to your individual requirements. Focus Environmental Consultants is situated in Worcestershire, providing a convenient and central UK location.

██████████ BSc (Hons) MSc MCIEEM

██████████ is a Senior Ecologist with over eight years of experience in the ecological consultancy field and joined Focus Environmental Consultants in 2012. Prior to joining the company, she assisted on a number of large projects nationwide with two leading ecological consultancies. She holds a BSc (Hons) degree in Geography with Ecology from the University of Sussex and an MSc in Conservation from University College London. ██████████ is experienced in conducting Preliminary Ecological Appraisals as well as surveys for protected species; great crested newts, reptiles, white-clawed crayfish, bats, hazel dormice and water voles. She also holds Natural England survey licences for bats (Class 2), great crested newts, hazel dormice and white-clawed crayfish and is a Certificated Surveyor in Japanese Knotweed. ██████████ is a Full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

██████████ BSc (Hons)

██████████ joined Focus Environmental Consultants in 2020 as an Assistant Ecologist to support the ecology team with protected species surveys, translocations and supervision. She holds a BSc (Hons) in Conservation Biology and Ecology from the University of Exeter and has been volunteering with wildlife since 2013. ██████████ is experienced at working with bats having been a bat carer and freelance surveyor since 2016.