temple

Creating sustainable futures

Stairfoot Roundabout, Barnsley

Preliminary Roost Assessment, Ground Level Tree Assessment and Habitat Suitability Index Report

Report for Barnsley Metropolitan Borough Council

Job Number	T10024			
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1 Introduction

BACKGROUND TO COMMISSION

1.1 Temple was commissioned by Barnsley Metropolitan Borough Council in September 2023 to undertake a Preliminary Roost Assessment (PRA) for bats on outbuildings associated with the Keel Inn, Stairfoot, Barnsley; a Ground Level Tree Assessment (GLTA) for bats of all trees surrounding Stairfoot roundabout; and Habitat Suitability Index (HSI) assessments of two nearby ponds to determine suitability for great crested newts. These surveys were required to inform plans for a road widening scheme and are in line with recommendations set out within the Preliminary Ecological Appraisal (PEA) report (Brooks, 2023).

SCOPE OF THE REPORT

1.2 This report provides an assessment of the likelihood that the Site supports roosting bats and provides a preliminary assessment of the importance of the Site for foraging and commuting bats. The report also assesses the likelihood that the Site supports great crested newts, based on an assessment of two nearby ponds and the terrestrial habitat within the Site. Recommendations for further survey are outlined where required. Where possible, the report also outlines any avoidance, mitigation, compensation and enhancement measures as may be required to comply with legislation and policy.

1.3 This appraisal is based on the following information sources, including that obtained from third parties and the results of surveys:

- Preliminary Ecological Appraisal report for the Site completed by Brooks ecological (2023)
- MAGIC - the Government's on-line mapping service including the location and status of any nearby historic or extant European protected species licenses citing bats or great crested newts within a 2km radius of the site; and
- Ordnance Survey mapping and publicly available aerial photography.

1.4 This appraisal has been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2017) and The Bat Conservation Trusts *Bat Surveys for Professional Ecologists Good Practice Guidelines* (Collins, 2023) and as detailed in British Standard 42020:2013 *Biodiversity - Code of Practice for Biodiversity and Development* (BSI, 2013).

1.5 The survey, assessment and report were conducted and written by Ashley Royston, an experienced ecologist with four years' experience who is trained and competent in carrying out protected species assessment.

1.6 Map(s) of the Site are presented in Appendix 1 with the building locations (Figure 1, Brook, 2023) and Tree location (Figure 2, Brook, 2023) and Pond location plan (Figure 3, Brook, 2023). Photographs supporting the assessment for buildings are provided in Appendix 2.

SITE CONTEXT AND STATUS

1.7 The proposed scheme, hereafter referred to as 'the Site', is centred on Ordnance Survey National Grid Reference SE 37289 05508 encompasses Stairfoot roundabout and the areas of green space within and around it; the Keel Inn and associated curtilage; and, short sections of Grange Lane, Doncaster Road, Wombwell Lane, Bleachcroft Way, Hunningley Lane and part of the Trans Pennine Trail, where it crosses the Site on an old rail bridge.

DEVELOPMENT PROPOSALS

1.8 The development proposals for the Site ae for a road widening scheme and junction improvements to alleviate traffic.

RELEVANT LEGISLATION AND PLANNING POLICY

1.9 The following key pieces of nature conservation legislation are relevant to this appraisal. A more detailed description of legislation is provided in Appendix 3:

- The Conservation of Habitats and Species Regulations 2017 (as amended) (commonly referred to as the Habitats Regulations);

- Wildlife and Countryside Act 1981 (as amended);
- Natural Environment and Rural Communities Act 2006; and
- The Environment Act 2021.

1.10 The National Planning Policy Framework (Department for Levelling Up, Housing & Communities, 2023) requires public authorities to contribute to and enhance the natural and local environment including by minimising impacts on and providing net gains for biodiversity when taking planning decisions. The Environment Act, 2021 has strengthened the duty to conserve biodiversity within the Natural Environment and Rural Communities Act 2006, such that all public authorities are required to conserve and enhance biodiversity.

1.11 Other planning policies at the local level of relevance to this development include the Barnsley Local plan (2019) and Biodiversity Action Plan (2009) which provide local strategies including plans for bats and great crested newts. Further information is provided in Appendix 3.

NOMENCLATURE

1.12 Common names of species, in accordance with the Natural History Museum Species Dictionary (Natural History Museum (2022), are used throughout this report with scientific names given at first mention only for fauna.

2 Methodology

GREAT CRESTED NEWTS

HABITAT SUITABILITY INDEX ASSESSMENT

2.8 Two waterbodies, Pond 2, located 90m west of the Site and Pond 3, located 225m east of the Site, were assessed for their suitability to support great crested newts using the Habitat Suitability Index (HSI) (Oldham *et al.* 2000). The HSI is based on the assumption that habitat quality determines likely presence of great crested newts, and uses ten key habitat criteria (Oldham *et al*., 2000), as follows:

- Geographic location
- Pond area
- Pond permanence
- Water quality
- Pond shading
- Number of waterfowl
- Occurrence of fish
- Pond density
- Proportion of 'newt friendly' terrestrial habitat; and
- Macrophyte (aquatic plant) content.

2.9 The results of the HSI calculation were compared to categorised HSI scores used by the National Amphibian and Reptile Recording Scheme to identify the suitability of a pond for great crested newt. The five categories are summarised in Table 2.1 below.

Table 2.1 - HSI categories

Pond Suitability for GCN	HSI Score
Poor	Below 0.5
Below average	0.5-0.59
Average	0.6-0.69
Good	0.7-0.79
Excellent	Above 0.8

2.10 The rapid risk assessment tool (Natural England, 2008) from Natural England was then used to indicate the impacts of the proposed development based on previous mitigation works.

BATS

2.13 The aim of the surveys outlined below is to establish the suitability of the buildings and trees within the site to support bat roosts. The suitability of structures and trees to support roosting bats, ranging from negligible to the presence of a confirmed roost, is assessed using the findings of the survey and the desk study. The following criteria were used to determine the suitability of the buildings and trees for roosting bats (taken from Collins, 2023):

- Negligible – While presence cannot be absolutely discounted there were no significant visible features that could be used by bats for roosting.

- Low/PRF-I – A structure with one or more potential roost sites that could be used by individual bats opportunistically; however, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain Potential Roost Features (PRFs) but with none seen from the ground or features seen with only very limited roosting potential.

- Moderate – A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).

- High/PRF-M – A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

- Confirmed roost[1] – Evidence indicates a building or other structure is used by bats, for example:

    - bats seen roosting or observed flying from a roost or freely in the habitat;

    - droppings, carcasses and feeding remains indicative of a roost; and

    - bats heard 'chattering' inside on a warm day or at dusk.

2.14 The gathered information has been used to inform whether further survey is required in the form of dusk emergence and/or dawn re-entry surveys to fully understand how bats are using the site and the potential impacts of the proposals on bats, or whether an assessment can be made on the basis of the [building] inspection alone.

PRELIMINARY ROOST ASSESSMENT – BUILDINGS

2.15 The PRA was carried out on the 25 September 2023 in weather conditions of 17°C, 4/12 Beaufort scale wind, 3/8 okta cloud cover.

[1] Adapted from Cowan, A. (2006) Trees and Bats. Guidance Notes 1. Arboricultural Association, Cheltenham

2.16 The survey comprised an external inspection of the four buildings on land behind the Keel Inn public house within the site, involving a detailed search of all accessible architectural features for bat droppings, urine staining, scratch marks, staining around suitable crevices and feeding remains. Windowpanes and other external surfaces were checked for droppings or other secondary evidence. This included external features, such as soffits and fascias, roof lining, brickwork and window casements. Any features that could potentially provide access into internal areas (such as cavity walls) were noted.

2.17 The survey methodology followed best practice guidelines (Collins, 2023). Equipment used during the building inspection included close-focusing binoculars, a hand-held LED torch and a high-powered torch.

2.18 Finally, all buildings/structures were inspected for evidence of/potential for breeding and/or roosting birds.

GROUND LEVEL TREE ROOST ASSESSMENT

2.19 The GLTA consisted of a comprehensive inspection of all accessible (from ground level) features present on all trees within the Site boundary. The inspection identified any PRFs such as rot holes, woodpecker holes, knot holes, tear outs, hazard beams and ivy Hedera helix. Any evidence of use by bats, past or present, such as live or dead bats, bat droppings, fur/oil staining or other signs, were also recorded.

DATA VALIDITY AND LIMITATIONS

2.21 Every effort has been made to provide a comprehensive description of the Site; however, the following limitations apply to this assessment.

- The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the Site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if on the basis of the preliminary assessment or during

subsequent surveys it is considered reasonably likely that protected species may be present and potentially affected by the proposed development.

- [The ecological evaluation is preliminary and may change subject to the findings of further ecological surveys (should these be required)].
- Even where data for a particular species group are provided in the desk study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest, the area may simply be under-recorded.
- Where only four figure grid references are provided for protected species by third parties, the precise location of species records can be difficult to determine and they could potentially be present anywhere within the given 1km x 1km square. Equally, six figure grid references are accurate to the nearest 100m only.
- Ecological survey data are typically valid for 12-18 months unless otherwise specified (CIEEM, 2019). Data used to support a bat mitigation licence application to Natural England must be from the most recent survey season; depending on the timing of the application, this may mean from the same or previous year.

2.22 Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity importance and the potential of the Site to support protected and otherwise notable species.

3 Results and Evaluation

PREVIOUS REPORTS

2.23 The previous PEA report conducted by Brooks Ecological (Brooks, 2023) concluded the Site to be of low value to bat species likely only used for commuting and/or foraging by light tolerant species such as common pipistrelle due to the noise, light and vibration pollution present. The report contained PRAs of four of buildings within the Site, including the Keel Inn, a bus stop, shipping container and section of Max Shine hand car wash's building, rating all with negligible suitability for roosting bats. The data search included in the PEA found there are 52 records of bats within the survey area, including nine roosts of common and soprano pipistrelle, noctule, and Daubenton's and Natterer's bats. The closest of these, 975m southeast, was a common pipistrelle roost found at Low Laithes Cottages in 2004. No bat records were directly associated with the Site.

GREAT CRESTED NEWT

Site character

3.1 No records of great crested newts were returned within the data search reported in the PEA (Brooks, 2023), Three ponds (shown in Figure 3), are present within 250m of the Site. Pond 1 was declared unsuitable in the PEA report, no further information was provided (Brooks, 2023). Ponds 2 and 3 were subject to HSI assessment:

- Pond 2 scored 0.64, which corresponds to an average suitability; and
- Pond 3 scored 0.46, which corresponds to poor suitability.

3.2 Natural England's rapid risk assessment tool (Natural England, 2008) was used to give an indication of the likely impact of the proposed works to great crested newts, it should be noted that this is a tool to support decision making and not a definitive assessment which is robust alone in decisions regarding further survey or licence. A total of 0.12ha of suitable habitat, comprising woodland adjacent to Grange Lane and Wombwell Road, located between 100m-250m from Ponds 2 and 3, will be lost as a result of the proposed works. Based on the rapid risk assessment, proposed works therefore fall into the category of "Green: offence highly unlikely" indicating

that the proposals are of such a type, scale and location that it is highly unlikely any offence would be committed should the works proceed, therefore, no licence would be required. The rapid risk assessment tool can be used to aid in the determination of the requirement for further survey, in combination with all other information for the three ponds, a lack of great crested newt records returned in the data search (Brook, 2023), Pond 1 being considered unsuitable to support great crested newt (Brook, 2023), the low HIS score for Pond 2 and the small scale and temporary nature of the works, it is considered that no further survey is required and a Precautionary Working Method Statement can be produced to manage any residual risk to great crested newt.

3.3 As the rapid risk assessment tool is a generic assessment and does not take into account specific site features, it is considered that all ponds (1, 2 and 3) will be subject to eDNA survey to further assess the ponds and their suitability to support great crested newts.

Bats – PRA Buildings

3.4 A PRA was carried out on four additional buildings located near the Keel Inn, south of the centre of the Site, which were not accessible during the initial PEA survey by Brooks Ecological (Brooks, 2023). Descriptions of each of these buildings is provided in Table 2 below. While the buildings had some minor roosting features such as gaps under ridge tiles and loose bricks, the location of all buildings lowered the suitability, with light pollution from the nearby streetlights and public house and noise from the roads. Two buildings, building 1 and building 2 seen in Appendix 2 pictures 1 and 2 were rated as low suitability with potential roost feature – individual suitability to support roosting bats and two buildings, building 3 and building 4 seen in picture 3 and 4 in Appendix 1, were rated as negligible suitability, external checks of all four buildings were carried out around without limitation. Further information on the PRA can be found in Table 3.5 below. Building locations can be seen below in Appendix 1 Figure 1.

Bats - GLTA

3.5 All trees on Site were assessed from ground level, with the majority having negligible suitability to support roosting bats due to the size and age of the trees. Thirteen trees were assessed as being suitable for roosting bats; 10 of these were had dense ivy cover and two had loose bark, which may support individual bats during the warmer months; a single tree had a dead branch with some small cavities however was located next to a busy road and would be affected by resulting noise and light, which may result in limited suitability to support roosts of species which are less light tolerant. The 13 trees were all rated as being suitable for individual bats, or very small numbers of bats due to size of the features and lack of suitable close nearby habitat, whereby more suitable habitat consisting of farmland and disused green space is present to the north, southeast and south. Further information on the trees found to have suitability for bats can be found in Table 3.4 below. Tree locations can be seen below in Appendix 1 Figure 2

Table 3.3 Preliminary Bat Roost Assessment - Buildings

Building / Structure reference	Description	Potential Roost Features (PRFs)	Factors influencing suitability for bats	Building suitability	Recommendations
Building 1	A single-storey wooden outbuilding with tiled roof and sections of wire mesh sides which is currently used for housing pigeons, *Columba livia* domestica.	• Ventilation gaps in ridge tiles, Picture 1 • Gaps between facias and walls	Well maintained structure used for housing birds. The roosting features present could be suitable for a small number of roosting bats. The location of the building within a small garden adjacent to a public house and between two busy roads in a well-lit area results in the wider habitat being less suitable to species which are not light tolerant due to noise and light pollution.	PRF-I	As the building is not directly affected by the proposed development no further surveys are recommended.
Building 2	Single-storey brick-built outhouse with tiled, half pitched sloping roof. The building is annexed by a wire meshed aviary used to home pigeons.	• Loose brickwork was present approx. 2m high on the northwestern Picture 2 • Small gaps between the roof tiles, may be suitable for individual bats.	The loose bricks on the outbuilding provide access to the internal structure and may support roosting bats however the location of the building within a small garden adjacent to a public house and between two busy roads in a well-lit area results in the wider habitat being less suitable to species which are not light tolerant due to noise and light pollution.	PRF–I	As the building is not directly affected by the proposed development no further surveys are recommended.
Building 3	A single-storey brick-built outhouse connected to the	No potential roost features were visible at the time of the survey.	No roost features are present	Negligible	As the building is not directly affected by the proposed development and

Table 3.3 Preliminary Bat Roost Assessment - Buildings

Building / Structure reference	Description	Potential Roost Features (PRFs)	Factors influencing suitability for bats	Building suitability	Recommendations
	main public house. The structure has a flat roof of resin, as seen in picture 3.				the lack of potential roost features identified no further surveys are recommended.
Building 4	Wooden built shed with apex felt roof as seen in picture 4.	• Gaps found in roofing felt. • Broken wooden cladding may provide opportunistic bats a roost	The features present offer little protection against the cold and would likely only be suitable within the summer months, however the location of the building within a small garden adjacent to a public house and between two busy roads in a well-lit area results in the wider habitat being less suitable for species which are not light tolerant due to noise and light pollution.	Negligible	As the building is not directly affected by the proposed development no further surveys are recommended.

Table 3.4 Ground Level Tree Assessment

Tree Species	Location (eastings and northings)	Feature type	Feature description	Roosting potential	Recommendations
Alder *Alnus glutinosa*	437344, 405586	Ivy cover	Dense ivy *Hedera helix* foliage covers the tree, especially around the trunk and lower branches, may hide further features.	PRF – I	Supervised felling over winter, between Oct and Feb
Alder	437344, 405595	Ivy cover	Dense ivy foliage covers the tree, especially around the trunk, may hide further features.	PRF – I	Supervised felling over winter, between Oct and Feb
Alder	437294, 405606	Ivy cover	Dense ivy foliage covers three small trees all in close proximity to each other, especially around the trunk, may hide further features.	PRF – I	Supervised felling over winter, between Oct and Feb
Alder	437313, 405615	Ivy cover	Dense ivy foliage covers the tree, especially around the trunk and lower branches, may hide further features.	PRF - I	Supervised felling over winter, between Oct and Feb
Norway Maple *Acer platanoides*	437241, 405560	Ivy cover	Dense ivy foliage covers the tree, especially around the trunk and lower branches, may hide further features.	PRF - I	Supervised felling over winter, between Oct and Feb
Norway Maple	437247, 405566	Ivy cover	Dense ivy foliage covers the tree, especially around the trunk, may hide further features.	PRF - I	Supervised felling over winter, between Oct and Feb
Whitebeam *Sorbus aria*	437253, 405565	Ivy cover	Dense ivy foliage covers the tree, especially around the trunk and lower branches, may hide further features.	PRF - I	Supervised felling over winter, between Oct and Feb
Rowan *Sorbus aucuparia*	437256, 405559	Loose bark	Loose bark is present on much of the trunk of this dead tree which could be viewed from ground level, no sign of bats was present although some small clean and dry cavities were seen that provide suitable shelter during the summer months.	PRF - I	Climbed assessment, where possible using ladders immediately prior to soft felling
Alder	437224, 405420	Ivy cover	Dense ivy foliage covers the tree, especially around the trunk and lower branches, may hide further features.	PRF - I	Supervised felling over winter, between Oct and Feb

Alder	437225, 405428	Ivy cover	Dense ivy foliage covers two small trees in close proximity to each other, especially around the trunk, may hide further features.	PRF – I	Supervised felling over winter, between Oct and Feb
Hawthorn *Crataegus monogyna*	437338, 405463	Ivy cover	Dense ivy foliage covers the tree, especially around the trunk and lower branches, may hide further features.	PRF – I	Supervised felling over winter, between Oct and Feb
Sweet chestnut *Castanea sativa*	437559, 405308	Dead branch	Dead branch on south side of tree with loose bark and potential small cavities. Dense vegetation surrounding the tree meant the feature could not be inspected further.	PRF – I	Climbed assessment, where possible using ladders immediately prior to soft felling
Sweet chestnut	437585, 405279	Loose bark	Loose bark is present on a lower branch to the eastern aspect of the tree. Dense vegetation surrounding the tree meant the feature could not be inspected further.	PRF – I	Climbed assessment, where possible using ladders immediately prior to soft felling

4 Conclusions and Recommendations

4.1 The assessments undertaken have determined that there is very little potential for either bats or great crested newt to be affected by the proposed work and any remaining risk can be managed to be minimised further. It is recommended that works should proceed under a precautionary working method statement (PWMS) in regard to bats and great crested newt. The PWMS should include precautions such a watching brief when working in or adjacent to habitats with potential to support great crested newt, soft felling of trees which have been rated PRF – I for roosting bats, where the features are dense ivy, under supervision from an ecological clerk of works, all other features (e.g. loose bark) should be inspected further through climbed assessment where possible, if climbed assessment is not possible, it may be necessary to carry out presence / absence surveys. Conscientious working practices should be incorporated including sensitive lighting around trees or buildings with bat roost suitability and storing materials in such a way that does not act as potential refugia for great crested newts. If the development plans change to remove further trees from the Site or any bat species or great crested newts are unexpectedly discovered, all works should cease, and a suitably qualified ecologist sought for advice on how to proceed.

References

Brooks (2023) Stairfoot Roundabout, Barnsley, Preliminary Ecological Appraisal Report [issued June 2023].

Department for Levelling Up, Housing and Communities (2023). National Planning Policy Framework. Department for Levelling Up, Housing and Communities. [Available online]: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

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

Oldham, R.S., Brady, L.D., Sewell, D.L. and Baker, J.M.R. (2008) ARG UJ Advice Note 5: Great Crested Newt Habitat Suitability Index. Amphibian and Reptile Groups of the United Kingdom. R

Natural England (2008) Great Crested Newt Rapid Risk Assessment Tool, Method Statement to support an application for licence under regulations 55 (2)(e) in respect of great crested newts Triturus cristatus. Natural England 2008.

Appendix 1: Maps

Figure 1: Building Locations, Four buildings at The Keel Inn – Taken from Preliminary Ecological Appraisal (Brook, 2023)

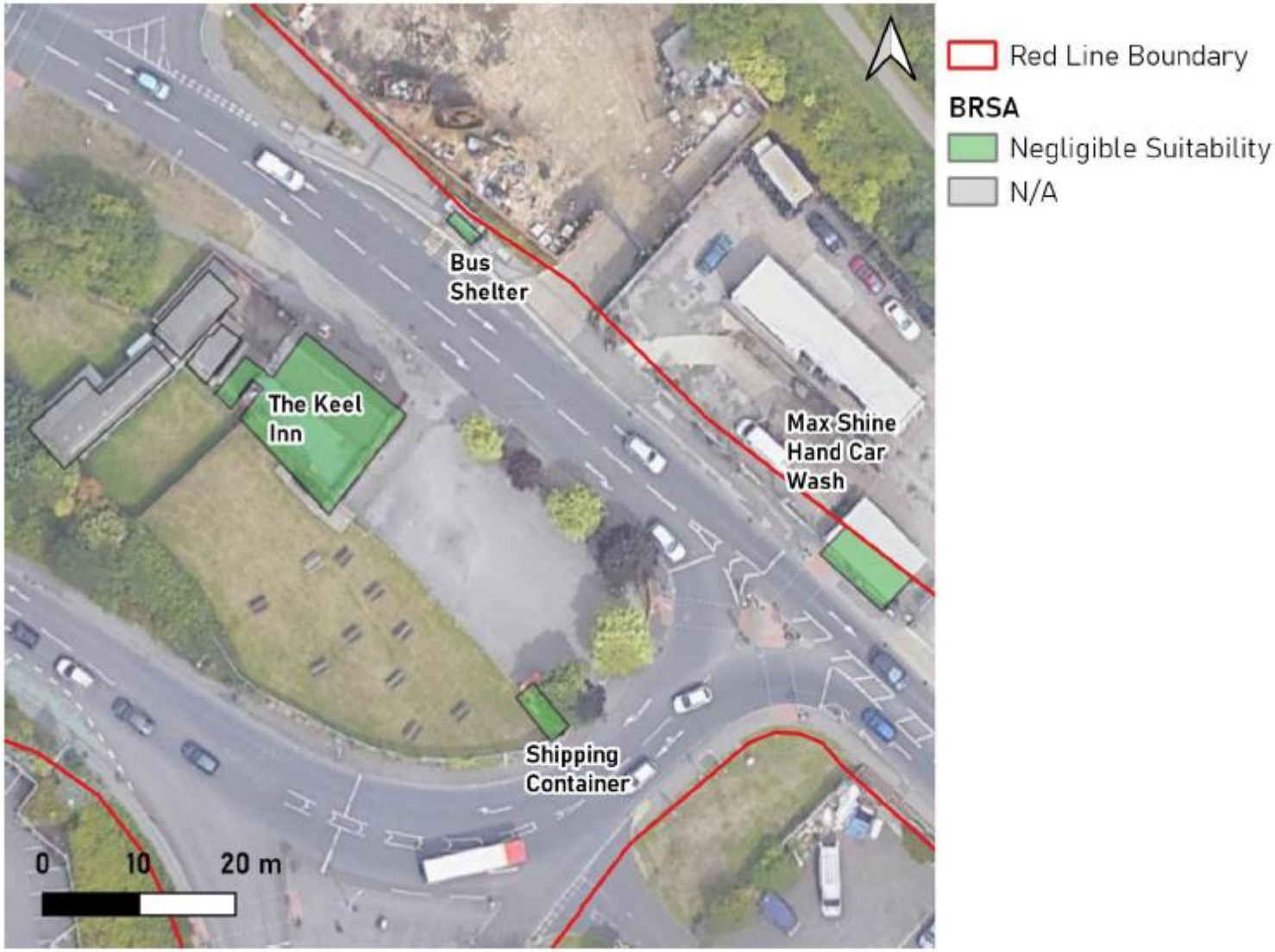
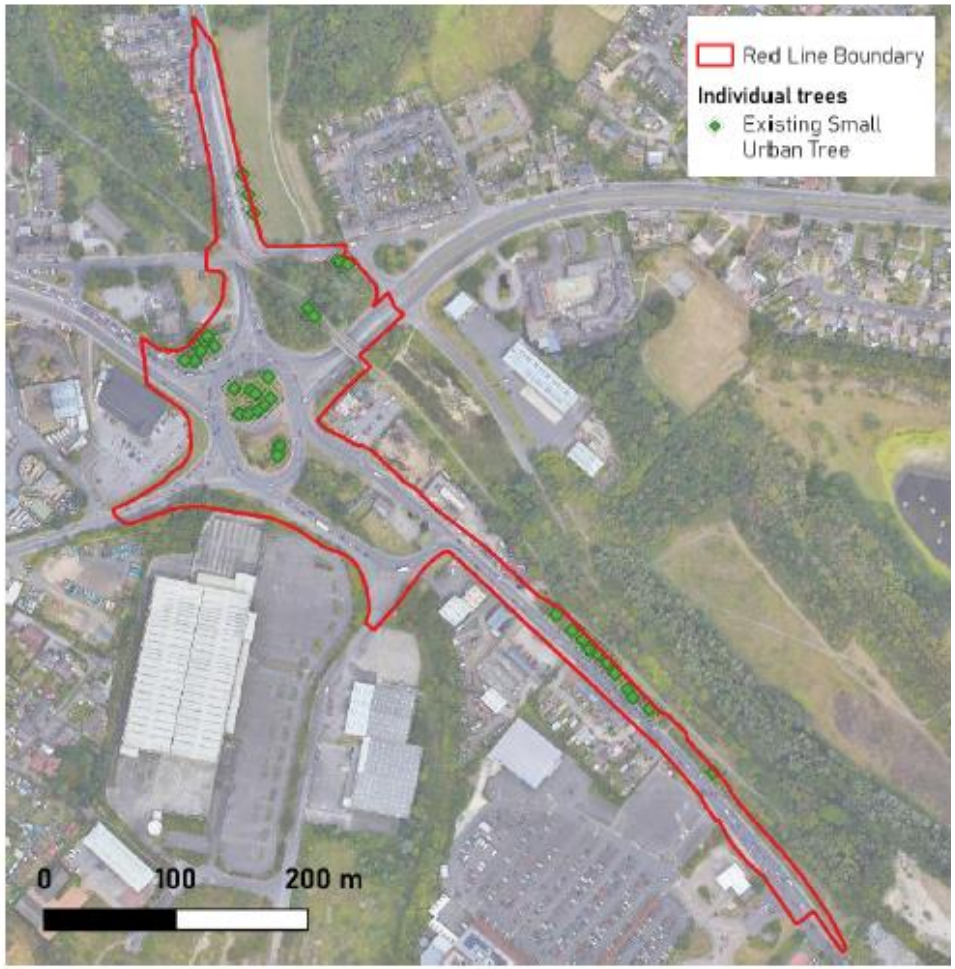


Figure 2: Tree Location Plan – Taken from Preliminary Ecological Appraisal (Brook, 2023)



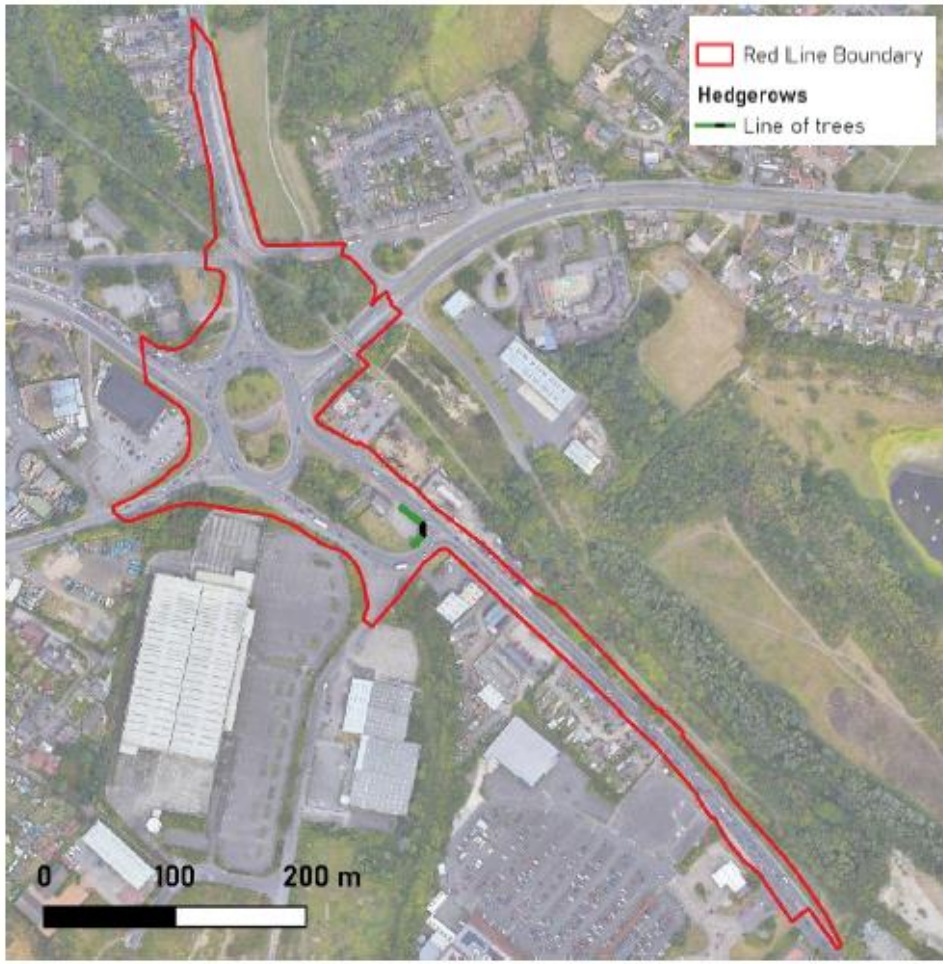
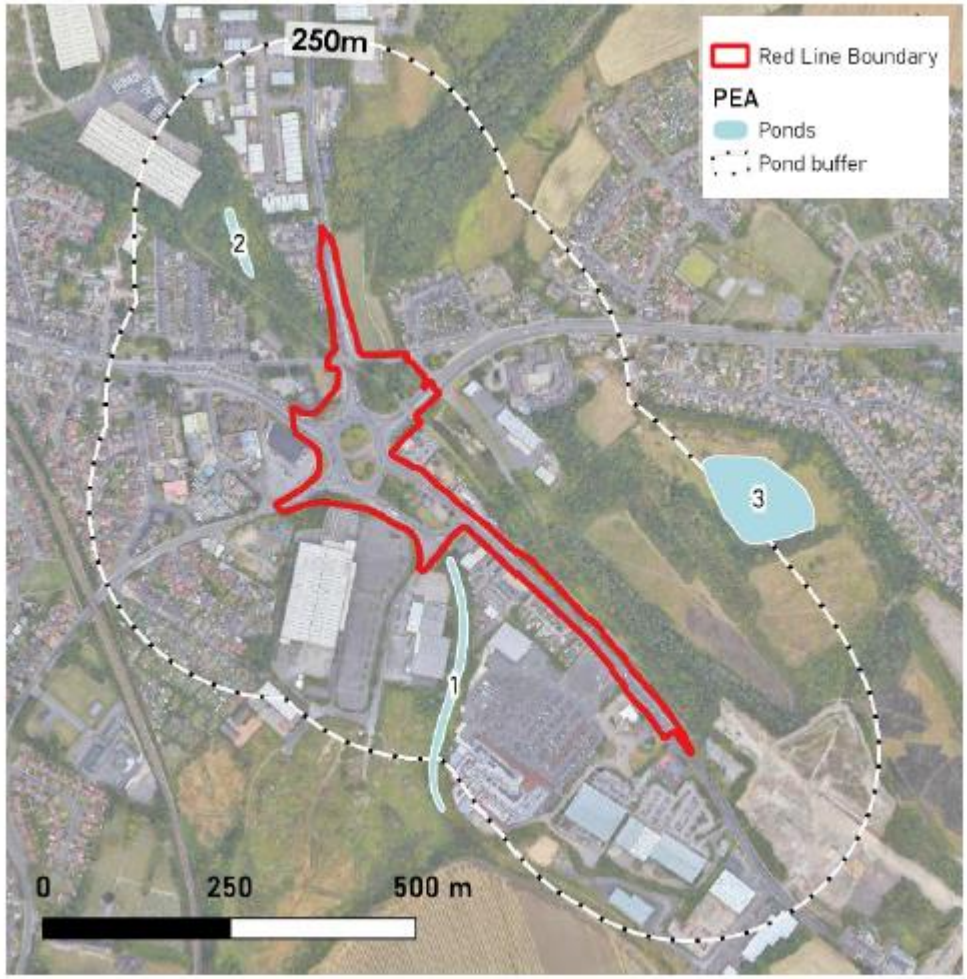


Figure 3: Pond Location Plan – Taken from Preliminary Ecological Appraisal (Brook, 2023)



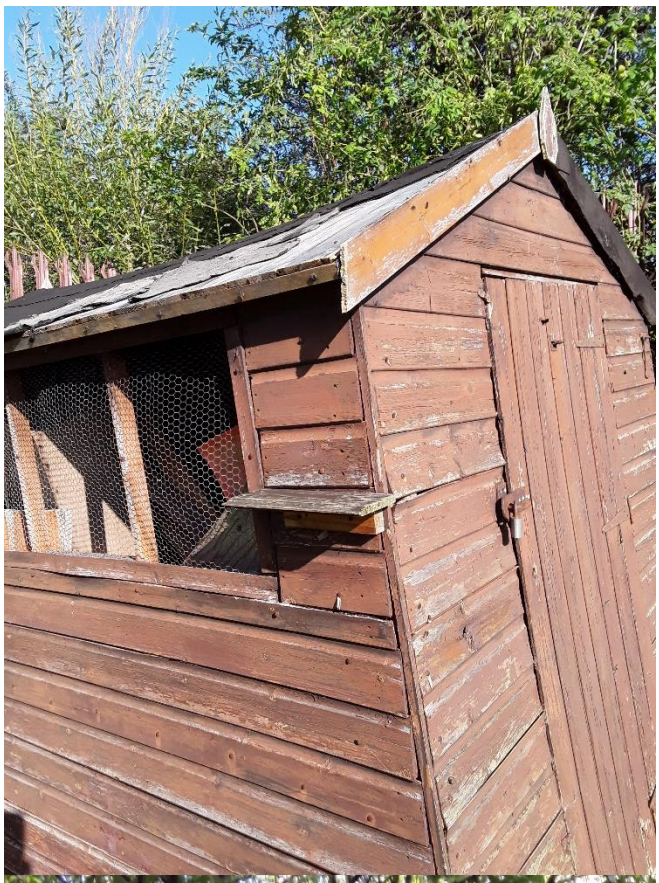
Appendix 2: Photographs

Photograph 1: Potential roost features on Building 1, gaps in tiles and ridge tiles.

Photograph 2: Loose brick work that may be used as a roost entry point on Building 2

Photograph 3 Building 3, which had no visible roosting features.

Photograph 4: Torn felt on the roof of Building 4.



Photograph 5: An example of the Ivy covering trees around Site, these two alder trees are located next to the Trans Pennine trail.

Appendix 3: Legislation and Planning Policy

Important Notice: This section contains details of legislation applicable in England and Wales only (i.e. not including Scotland, the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to represent the current (at the time of writing) situation with respect to the UK's position outside of the EU and to ensure accuracy throughout, this section should not be relied upon as a definitive statement of the law.

Over the past few years, three important bills have been published which are intended to shape how growing pressures on the environment post-Brexit (post-transition period) are tackled. Both the Agriculture Bill and Fisheries Bill gained Royal Assent in November 2020 and are now the Agriculture Act 2020 and Fisheries Act 2020 respectively; and, more recently, the Environment Bill was passed into law in November 2021, becoming the Environment Act 2021. *N.B. as environment policy is a devolved matter, most of this Act applies to England only.*

A LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive[2] is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by **The Conservation of Habitats and Species Regulations 2017 (as amended)** and **The 'Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)**.

Various amendments to the 2017 Regulations in England and Wales have been made through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These changes came into effect on the 1 January 2021 following the UK's departure from the EU and the end of the Transition Period. The changes are largely limited to 'operability changes' that will ensure the Regulations can continue to have the same working effect as before.

[2] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000).

As well as delivering long-term targets to reduce waste and improve resource efficiency and improve air and water quality targets, the **Environment Act 2021** aims to halt the decline of nature by 2030, mandates Biodiversity Net Gain for developments in England and amends the Wildlife and Countryside Act 1981 (as amended) to introduce an additional purpose for granting a protected species licence in relation to development which is 'for reasons of overriding public interest'. The Act also introduces the Office for Environmental Protection (OEP), which will be a new public body intended to hold government and public authorities to account, although the government will be able to issue guidance to the OEP on how it enforces policies and legislation.

Some of the key biodiversity elements in the Act that will have a bearing on species protection in the UK include:

- A strengthened biodiversity duty on Local Planning Authorities;
- Biodiversity net gain to ensure developments, including Nationally Significant Infrastructure Projects (NSIP), deliver at least 10% increase in biodiversity;
- Local Nature Recovery Strategies to support a Nature Recovery Network;
- Duty upon Local Authorities to consult on street tree felling;
- Strengthen woodland protection enforcement measures;
- Conservation Covenants;
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature;

- Introduces the power for the Habitats Regulations to be amended or 'refocused' to 'to deliver creative public policy thinking that delivers results'.

This section does not provide further detail on the Environment Act 2021 as, at the time of writing (November 2021), the Act, in its final form, has not been published and it remains to be seen how and when the various elements will be enacted at a national and local level.

Other legislative Acts affording protection to wildlife and their habitats include:

- Salmon and Freshwater Fisheries Act 1975;
- Deer Act 1991;
- Protection of Badgers Act 1992;
- Wild Mammals (Protection) Act 1996;
- Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment & Rural Communities (NERC) Act 2006;
- The Eels (England and Wales) Regulations 2009; and
- Environment (Wales) Act 2016.

Species and species groups that are protected or otherwise regulated under the aforementioned legislation, and that are most likely to be affected by development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2017 (as amended), which includes smooth snake, sand lizard, great crested newt, natterjack toad, all bat species, otter, dormouse and some plant, invertebrate and fish species, are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Habitats Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.

- The Conservation of Habitats and Species Regulations 2017 (as amended) does not define the act of 'migration' and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered where relevant.
- In order to obtain a mitigation licence for species protected under the Conservation of Habitats and Species Regulations 2017 (as amended), the application must demonstrate that it meets all of the following three 'tests': i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.
- Intentionally or recklessly cause a dog to enter a badger sett; and
- Sell or offers for sale, possesses or has under his control, a live badger.

BATS

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 43 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats);
- Deliberate disturbance of bat species as:

  a) to impair their ability:
    - to survive, breed, or reproduce, or to rear or nurture young; or
    - to hibernate or migrate.

  b) to affect significantly the local distribution or abundance of the species.
- Damage or destruction of a breeding site or resting place; and
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) in respect to sub-sections 9 (4) (b) and (c) and 9 (5) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance while in their place of shelter (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

The appropriate licence issued by the relevant countryside agency (e.g. Natural England, Natural Resources Wales) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost[3].

HERPETOFAUNA (AMPHIBIANS AND REPTILES)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, great crested newt *Triturus cristatus* and pool frog *Pelophylax lessonae* receive full protection under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 43 prohibits:

- Deliberate killing, injuring or capturing of species listed on Schedule 2;
- Deliberate disturbance of any Schedule 2 species as:

[3] Garland and Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. **150**. The Mammal Society, Southampton.

- to impair their ability:
  - to survive, breed, or reproduce, or to rear or nurture young; and
  - in the case of animals of a hibernating or migratory species, to hibernate or migrate.
- to affect significantly the local distribution or abundance of the species.

- Deliberate taking or destroying of the eggs of a Schedule 2 species;
- Damage or destruction of a breeding site or resting place; and
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) in respect to sub-sections 9 (4) (b) and (c) and 9 (5). The pool frog is afforded protection in respect of sub-sections 9(4) (b) and (c) for England only. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance while in their place of shelter (at any level);
- Intentional or reckless obstruction of access to any place of shelter or protection; and
- Selling, offering or exposing for sale, possession or transporting for purpose of sale (excluding pool frog).

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to sub-section 9 (1) & (5). For these species, it is prohibited to:

- Intentionally kill or injure these species; and
- Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to sub-section 9 (5) only which affords

them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

The appropriate licence issued by the relevant countryside agency (e.g. Natural England, Natural Resources Wales) will be required for works liable to affect the breeding sites or resting places of those amphibian and reptile species protected under The Conservation of Habitats and Species Regulations 2017 (as amended). A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

C PLANNING POLICY

NATIONAL PLANNING POLICY FRAMEWORK

The National Planning Policy Framework replaced PPS9 and emphasises the need for sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species (see Section D below). An emphasis is also made for the need for ecological networks via preservation, restoration and re-creation. The protection and recovery of priority species is also listed as a requirement of planning policy. In determining planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; planning permission is refused for development resulting in the loss or

deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006 AND THE BIODIVERSITY DUTY

Section 40 of The Natural Environment and Rural Communities (NERC) Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

LOCAL PLANS

The Barnsley Local Plan was adopted in 2019 and provides local planning policy for future development up to the year 2033.

The Local Plan sets out the key elements of the planning framework for Barnsley and the approach to its long-term physical development to achieve the Council's vision of what sort of place Barnsley wants to become.

The Local Plan objectives seek to improve the economic prosperity and quality of life for all its residents and those who work here. The Local Plan will have three key roles in accordance with the Government's Framework (NPPF) namely economic, social and environmental, and will deliver sustainable development. In order to support Barnsley's ambitions and vision the Local Plan objectives are:

- Provide opportunities for the creation of new jobs and protection of existing jobs;
- Improve the conditions in which people live, work, travel and take leisure;
- Widen the choice of high quality homes;
- Improve the design of development; and

- Protect and enhance Barnsleys environmental assets and achieve net gains in biodiversity.

In particular it will:-

- Allocate sites for employment land to support our economic needs and aspirations;
- Allocate housing sites to support the economy and to provide an appropriate land supply to meet our needs;
- Set the planning context for Barnsley Town Centre
- Protect and enhance green spaces and green infrastructure that contribute towards improving quality of life; and,
- Contain policies to secure appropriate high quality development and to protect and enhance what is special about Barnsley and its environment

Local planning polices relating to biodiversity include:

Policy GI1 Green Infrastructure

"We will protect, maintain, enhance and create an integrated network of connected and multi functional Green Infrastructure assets that:

.....

Enhances biodiversity and landscape character....."

Policy GS1Green Space

"We will work with partners to improve existing green space to meet the standards in our Green Space Strategy.

Green Spaces are green open areas which are valuable for amenity, recreation, wildlife or biodiversity and include types such as village greens, local open spaces, country parks, formal gardens, cemeteries, allotments, woodlands, recreation grounds, sports pitches and parks. Proposals that result in the loss of green space, or land that was last used as green space, will not normally be allowed unless....."

Policy BIO1 Biodiversity and Geodiversity

"development will be expected to conserve and enhance the biodiversity and geological features of the borough by:

.....

Maximising biodiversity and geodiversity opportunities in and around new developments.

.....

Proposals will be expected to have followed the national mitigation hierarchy (avoid, mitigate, compensate) which is used to evaluate the impacts of a development on biodiversity interest……

Encouraging the provision of biodiversity enhancements……

Development which may harm a biodiversity or geological feature or habitat, including ancient woodland and aged or veteran trees found inside ancient woodland, will not be permitted, unless effective mitigation and/or compensatory measures can be ensured….”

Policy CC1 Climate Change

“We will seek to reduce the causes of and adapt to the future impacts of climate change by:

…….

Promoting the investment in Green Infrastructure to promote and encourage biodiversity gain.”

D BIODIVERSITY ACTION PLANS (BAPs)

Since the publication of the UK BAP in 1994, new strategies and frameworks have resulted in the development of biodiversity issues and changes in the terminology used to describe these habitats and species in England. This has been brought about through the replacement of the previous England Biodiversity Strategy with *Biodiversity 2020: A Strategy For England's Wildlife and Ecosystem Services* (2011) and the replacement of the UK BAP itself with the *UK Post-2010 Biodiversity Framework* (2012). All previous UK BAP species and habitats are still of material consideration in the planning process but are now referred to as Habitats and Species of Principal Importance (as described under the NERC Act 2006 above).

The distribution of BAP/priority habitats has been used to identify Biodiversity Opportunity Areas at a regional scale through Biodiversity Strategies/Partnerships. They represent a strategic landscape scale approach to habitat creation, restoration or expansion. They represent regional priority areas of opportunity to restore and create key habitats. They are therefore a spatial representation of targets for Habitats of Principal Importance and are areas of opportunity, not constraint.

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