

Hedge next to Bishopstoke Memorial Hall, Riverside, Bishopstoke, Eastleigh, SO50 6LQ

Ecological Appraisal Report

May 2024

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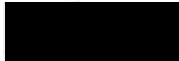
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Ecological Appraisal Report

Hedge next to Bishopstoke Memorial Hall, Riverside, Bishopstoke, Eastleigh, SO50 6LQ
for
Swayers

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This report represents sound industry practice; reports and recommends correctly, truthfully and objectively; is appropriate given the local site conditions; scope of works proposed and resources allocated to us by the client; and avoids invalid, biased, and exaggerated statements.

The author disclaims any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and the author accepts no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

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EXECUTIVE SUMMARY

1. This report provides information from an ecological appraisal carried out by Hampshire Ecological Services Ltd for Swayers in connection with a proposal to remove the hedge adjacent to Bishopstoke Memorial Hall, Riverside, Bishopstoke, Eastleigh, SO50 6LQ (approximate Ordnance Survey Grid Reference SU465193). The site location is shown in *Figures 1 and 2*; and a plan showing the location of the hedge is given in *Figure 3* (see *Section 6*).
2. An ecological appraisal was carried out during the daytime on the 30th April 2024 by Victoria Russell MCIEEM who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and multi-species licence holder.
3. The site consists of an overgrown hedge with *Acer pseudoplatanus* (Sycamore) trees near the road and in the middle of the hedge. Woody species present within the hedge include *Corylus avellana* (Hazel), *Crataegus monogyna* (Hawthorn), *Ilex aquifolium* (Holly), *Prunus laurocerasus* (Cherry Laurel), *Rubus fruticosus* agg. (Bramble), *Sambucus nigra* (Elder) and *Ulmus* species (Elm). The field-layer contains a lot of leaf litter and is otherwise dominated by the evergreen creeper *Hedera helix* (Ivy), which is also growing up the fence associated with the hedge and the trunks of the trees and shrubs. There are also large areas with the shade-tolerant, tall semi-ruderal *Urtica dioica* (Common Nettle).
4. No plant species listed on *Schedules 8 or 9* of the *Wildlife and Countryside Act 1981* (as amended) were recorded on the site. Vascular plant species recorded from the hedge (along with relative abundance) are given in *Appendix B*.
5. The plant species observed on site are widespread and common and as such have no conservation importance from a botanical point of view.
6. Due to the close proximity of the Itchen Navigation Canal, the measures below will be implemented in order to avoid any direct impacts on the watercourse during works. The use of machinery and vehicles can pose a risk to the ecology of the watercourse if not regulated.
 - All arisings (both when on site and when being removed from site), will be covered securely.
 - If chipped material cannot immediately be removed from site, it will be damped down and/or covered to prevent it getting blown across the road and into the River Itchen.
 - Spill kits will be available on site at all times to contain any spillages as close to the source as possible.
 - Any vehicles leaving the site will have their wheels hosed down prior to leaving to prevent muddy track-out.
 - Low sulphur diesel oil will be used in all vehicle and equipment engines, along with up-to-date particulate filters and catalytic converters (where appropriate).
 - No material or arisings will be burnt on site.
 - No vehicles or machinery will be refuelled on on-site.

- Noise pollution will be minimised. This will be through using quiet power tools and equipment.
7. The trees within the hedge are classed as having no suitability to be used by roosting bats, following the criteria in *Table 3.1.5.1*.
 8. The hedge provides good, sheltered foraging habitat for bats. It also links to other hedges and tree-lines that provide links into and from the wider landscape. Therefore, it is classed as having moderate suitability to be used by commuting and foraging bats, following the criteria in *Table 3.1.5.2*. In addition, is across the road from the River Itchen, which is a high-quality foraging habitat for many species of bat. Therefore, it is likely that bats are using the hedge for foraging and/ or commuting.
 9. As the hedge is to be removed a replacement hedge will need to be planted in order to retaining connectivity and minimise any potential impact to bat populations in the local area. This could be adjacent to the fence around the children's play area or along the path through the park. Some of the tree species should be allowed to grow into large trees to replace those lost from the hedge. Details are given in *Section 5.4.2*.
 10. Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto retained vegetation (particularly the nearby trees, hedges, and bramble scrub).
 11. The hedge contains a variety of woody species and as such could provide suitable habitat for dormice. It is also connected to another hedge along Riverside and Church Road, which connects to trees and bramble scrub. However, it is otherwise isolated in an urban environment. It is also immediately adjacent to a children's play area within Glebe Meadow and Skate Park and Bishopstoke Memorial Hall. There is also a path through the park that runs immediately adjacent to the hedge. Therefore, even if dormice were present in the area, the hedge is unlikely to support even foraging dormice due to isolation, the high levels of disturbance, and light levels. Therefore, no impacts are anticipated on dormice and no further surveys are currently proposed.
 12. The base of the hedge is suitable foraging great crested newts. However, the habitat immediately adjacent to the hedge is unsuitable: on the north and west side is short, mown amenity grassland; on the east side is Bishopstoke Memorial Hall and an associated path; and on the south side is a road (Riverside) and associated path. This is generally unsuitable terrestrial habitat for great crested newt due to the lack of cover, although they could use it for foraging. In addition, the hedge is only a small area within otherwise sub-optimal habitat, and the great crested newts record is for the opposite side of the road. However, the following precautions will be undertaken to minimise the risk that amphibians (and reptiles) would be harmed during works (if present). The hedge will initially be cut to a height of approximately 30cm and the arising removed from site. This is likely to deter any amphibians (and reptiles) in the vicinity, but the stumps will be left for at least 24 hours before the rootballs are carefully dug up (and removed from site). A fingertip search of the remaining vegetation will be carried out before the stumps are removed.

The stumps will be removed during suitable weather and when amphibians (and reptiles) are active, which is March to September (inclusive). In the unlikely event that great crested newts are present, work will stop immediately and a European Protected Species (EPS) licence from Natural England will be applied for. If any amphibians other than great crested newts are found, they will be moved to the base of the bramble scrub on the northern boundary of the park.

13. The River Itchen SAC and SSSI is on the opposite side of the road (c.20m to the south). Otter and water vole are known to use the river, but the area closest the side is heavily canalised with a concrete bank on the Riverside side. It is unlikely that otters or water voles would cross the road to the hedge.
14. Areas within 30m of development activities are usually searched for setts (where access is possible) as former guidelines suggest badgers and their setts could be disturbed by work using heavy machinery within 30m of a badger sett, light machinery within 20m, and light work (such as digging) within 10m. As no badger setts were found on site, development works are free to proceed without further regard to this species.
15. The hedge provides suitable habitat for nesting birds and nests were recorded within the hedge. The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). Therefore, the hedge should be cut to near ground level (approximately 30cm) outside the bird breeding season (which is late February to August inclusive). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation. If there are active nests then they should be retained and work must be delayed until the young have fledged and left the nest. If any active nests are found prior to or during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use).
16. The base of the hedge is suitable foraging and hibernation habitat for widespread species of reptile such as slow-worms. However, the habitat immediately adjacent to the hedge is unsuitable: on the north and west side is short, mown amenity grassland; on the east side is Bishopstoke Memorial Hall and an associated path; and on the south side is a road (Riverside) and associated path. These are unsuitable for reptiles due to the lack of cover and risk of predation. Although it is unlikely that reptiles will be present, because it cannot be completely ruled out the following precautions will be undertaken to minimise the risk that reptiles (and amphibians) would be harmed during works (if present). The hedge will initially be cut to a height of approximately 30cm and the arising removed from site. This is likely to deter any reptiles (and amphibians) in the vicinity, but the stumps will be left for at least 24 hours before the rootballs are carefully dug up (and removed from site). A fingertip search of the remaining vegetation will be carried out before the stumps are removed. The stumps will be removed during suitable weather and when reptiles (and amphibians) are active, which is March to September (inclusive).

17. National Planning Policy Framework (NPPF 2021) states "*opportunities to incorporate biodiversity in and around developments should be encouraged*" as part of the consideration for "*presumption in favour of sustainable development*". Therefore, the following outline enhancements are proposed:

- One woodstone bat box (e.g. Vivara Pro WoodStone Bat Box, Beaumaris Woodstone or similar) will be mounted on a mature tree within the park, to provide suitable roosting opportunities for bats on the site.
- One 32mm hole bird box suitable for blue tits and great tits (such as a Vivara Pro Seville 32mm Woodstone Nest Box or similar) will be attached to a suitable tree within the park.
- One open bird box suitable for robins and wrens (such as a Vivara Pro Barcelona WoodStone Open Nest Box or similar) will be attached to a suitable tree or large shrub (concealed amongst the foliage) within the park.

18. The proposed bird boxes are summarised in *Table 5.6.4.1*.

19. This survey data is valid for a maximum of 12 months. If more than 12 months elapse after completion of all surveys, it may be advisable to conduct further survey work to obtain up-to-date information prior to commencement of construction to ensure protected species compliance.

INTRODUCTION

2.1 Purpose of this report

This report provides information from an ecological appraisal carried out by Hampshire Ecological Services Ltd for Swayers in connection with a proposal to remove the hedge adjacent to Bishopstoke Memorial Hall, Riverside, Bishopstoke, Eastleigh, SO50 6LQ (approximate Ordnance Survey Grid Reference SU465193). The location of the site is shown in *Figures 1 and 2 in Section 6*.

Bat surveys have been carried out on the Memorial Hall and the results of these, together with a desk-study of nearby designated sites and granted European Protected Species (EPS) licences, are provided in *Bishopstoke Memorial Hall, Riverside, Bishopstoke, Eastleigh, SO50 6LQ: Bat Surveys and Ecological Update Report* (Hampshire Ecological Services Ltd, 2023).

2.2 Site description

The site consists of a hedge along the boundary of Bishopstoke Memorial Hall and Glebe Meadow and Skate Park, to the north of Riverside in Bishopstoke. The hedge location is given in *Figure 3 in Section 6*. The River Itchen is on the opposite side of the road.

2.3 Proposed activities

This survey was carried out in connection with a proposal to remove the hedge to facilitate the demolish of Bishopstoke Memorial Hall and its associated outbuildings.

2.4 Current planning status

Planning permission is not required.

2.5 *Structure of this report*

This report is structured as follows:

- *Section 1* contains the executive summary;
- *Section 2* contains an introduction;
- *Section 3* describes the survey methods;
- *Section 4* describes the results;
- *Section 5* evaluates the findings;
- *Section 6* contains the figures including:
 - *Figure 1* gives aerial photographs showing the location of the hedge;
 - *Figure 2* gives an Ordnance Survey map showing the location of the hedge; and
 - *Figure 3* gives an aerial photo showing the location of the hedge surveyed.
- *Section 7* gives photographs of the hedge and nearby habitat;
- *Section 8* lists the references;
- *Appendix A* lists key legislation and regulations; and
- *Appendix C* lists vascular plant species recorded on site.

METHODS**3.1 Field survey****3.1.1 General**

An ecological appraisal was carried out on this site. This type of survey is not designed to prove presence or absence of significant or protected species; it is used to highlight habitat that is suitable and to identify where further work to show presence or absence is required. However, in some circumstances species can be ruled out because there is unsuitable habitat or barriers to inward migration.

Significant species were defined as follows:

- European Protected Species (listed on *Schedules 2 and 5 of the Conservation of Habitats & Species Regulations 2017*);
- nationally protected species under *Schedules 1, 5 and 8 of the Wildlife & Countryside Act 1981*, the *Protection of Badgers Act 1992* (as amended) and the *Deer Act 1991*;
- non-native pest species listed on *Schedule 9 of the Wildlife & Countryside Act 1981* (as amended);
- species listed as Critically Endangered, Endangered or Vulnerable on the *IUCN Red List*;
- all species listed on the *RSPB Birds of Conservation Concern 2015* as Red or Amber; and
- Nationally Rare or Nationally Scarce species.

3.1.2 Date(s), times and weather

An ecological appraisal was carried out during the daytime on the 30th April 2024. The weather was 18°C, dry and sunny with 10% cloud cover and a slight air (Beaufort scale 1).

3.1.3 Personnel

The survey was carried out by Victoria Russell MCIEEM who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and multi-species licence holder. She has over 25 years of experience in ecological consultancy and is a highly competent ecologist trained in Phase 1 Habitat Survey and National Vegetation Classification techniques and protected species surveys (including botanical expertise in *Schedule 9* species)

This report was reviewed by John Poland CEnv MCIEEM CBiol MSB, who is a full member of the CIEEM, a Chartered Environmentalist (CEnv), a Chartered Biologist (CBiol) and multi-species licence holder with 23 years of experience in ecological consultancy.

All staff adhere to the Chartered Institute of Ecology and Environmental Management's (CIEEM) *Code of Professional Conduct*.

3.1.4 *Botanical surveys*

The botanical surveys in this report are based on the Phase 1 Habitat Survey methodology (Joint Nature Conservation Committee 2003) and involve the following elements: habitat mapping using a set of standard colour codes to indicate habitat types on a Phase 1 Habitat Survey map; and descriptions of habitats and features of ecological or nature conservation interest relating to locations on the Phase 1 Habitat Survey map.

Basic Phase 1 Habitat Survey methods are described in detail in Joint Nature Conservation Committee (JNCC, 2003). Limits to the method are discussed in Cherrill & McClean (1999).

Plant species lists were compiled. Subjective estimates of the relative abundance of species were added to the plant species list using a DAFOR scale. The DAFOR scale ranks species according to their relative abundance in a given parcel of land as follows: d – dominant, a – abundant, f – frequent, o – occasional, r – rare. The terms ‘abundant’ and ‘rare’ are used by convention and apply only to relative-abundance within the recorded area. It does not mean that species are ‘rare’ in the general sense.

Plant nomenclature in this report follows Poland & Clement (2009) for native, naturalised and garden species of vascular plant. Plant names in the text are given with scientific names first, followed by the English name in brackets.

3.1.5 *Animal surveys*

General

The habitat was assessed to determine whether or not it is suitable for those protected vertebrates that occur in the region. Initial surveys do not usually confirm species presence or absence, but obvious signs and incidental sightings of protected species would have been noted had they been encountered.

An assessment was made of the likelihood of protected vertebrates using the site. Taking into consideration the geographical region and habitat type, species and groups that might be encountered are:

- bats;
- dormice;
- great crested newts;
- badger;
- otter;
- water vole;
- nesting birds; and
- reptiles.

Details of initial survey methods for each of the relevant species that might have been encountered are given below and an overview of the legal protection of the species and groups is provided in *Appendix A*.

Bats

General

The survey for bats concentrated on identifying foraging opportunities and potential roost locations or hibernation sites.

Tree assessment

Detailed surveys of individual trees were not carried out. However, features such as holes and crevices that could be used by roosting bats were noted (where present) and their overall bat roost suitability was assessed from ground level. If any mature trees are subsequently to be removed or if tree surgery (*e.g.* crown-lifting) is required, then a bat survey at an appropriate time of year may be required.

Following the visual inspections, the trees are assigned a level of suitability for being used by roosting bats, depending on the presence of potential roost features (PRFs). This is based on the criteria in *Table 3.1.5.1* (Collins, 2023).

Table 3.1.5.1. Suitability of trees to be used by roosting bats.

Suitability	Description
None	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF1	A tree with at least one PRF present where the PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat
PRP2	A tree with at least one PRF present where the PRF is suitable for multiple bats and may therefore be used by a maternity colony.
PRF = potential roost feature	

Assessment of commuting and foraging habitat

Bats use a variety of habitats for foraging, in particular hedgerows, woods and water bodies, and roost in a range of structures including buildings, trees, bridges and caves. Areas that could be used for foraging were noted and assigned a level of suitability for being used by roosting bats. This is based on the criteria in *Table 3.1.5.2* (Collins, 2023).

Table 3.1.5.2. Bat habitat suitability.

Suitability	Description of commuting and foraging habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats).
Negligible*	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths, such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
*Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).	

Dormice

The site was assessed for habitat with the potential to support dormice. Habitats typically suitable for dormice include:

- deciduous woodland, with a dense understory, species-rich shrub-layer and thick ground cover;
- continuous, thick, wide hedgerows over 4m high with connections to nearby suitable woodland;
- hazel or sweet chestnut coppice; or
- thick continuous areas of scrub, particularly bramble, close to hedgerows or woodlands.

Great crested newt

The following comments were made internally by an EBC ecologist on the 11th September 2023 in response to an expanded redline area to the initial scope on the survey for Bishopstoke Memorial Hall:

“The site is across the road (approximately 20 m) from the River Itchen SAC and SSSI. It is in a red great crested newt impact risk zone with a record of great crested newts across the road approximately 150 m from the site. The tree line/hedge line on the western boundary of the site and the buildings are proposed to be removed. Although it is not likely that great crested newts would cross Church Road/Riverside, the impact of this work on great crested newt terrestrial habitat must be assessed before determination.”

Therefore, the presence of great crested newts was addressed in the *Bishopstoke Memorial Hall, Riverside, Bishopstoke, Eastleigh, SO50 6LQ: Bat Surveys and Ecological Update Report* (Hampshire Ecological Services Ltd, 2023). It is also addressed within this report.

Otter and water vole

Initial surveys centre on identifying suitable habitat. Most watercourses and standing water could support either otter or water vole. Other areas where there is surface water for the majority of the year (including wet heath, marshland, rush-pasture, wetland, bogs, mires, ponds and other water bodies) has some potential to support water vole.

Badger

An initial assessment was carried out to identify areas that might be used by badger for commuting, foraging and sett-building within at least 30m of all areas potentially affected by the works (where access was possible). Evidence of badgers including setts, latrines, feeding signs and paths were searched for.

Birds

Habitat that might be used by nesting birds was identified. Different bird species use buildings, trees and shrubs, undergrowth or even open fields to nest. The suitability of the site for use by a range of bird species was assessed, giving consideration to factors such as cover, food, disturbance and other habitat requirements.

Widespread species of reptile

The site was assessed for widespread species of reptile, with particular attention paid to those features that could be used as basking areas (e.g. south-facing slopes), hibernation sites (e.g. banks, walls, piles of hardcore) and opportunities for foraging (rough grassland and scrub). The site was assessed for its suitability for each of the four widespread reptile species which have broadly similar habitat requirements. However, more specific requirements include the following (Beebee & Griffiths 2000):

- common lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to walls and pastures, although one of their favoured habitats is rough grassland;
- slow-worms (*Anguis fragilis*) use similar habitats to common lizards, and are often found in rank grassland, gardens and derelict land;
- grass snakes (*Natrix natrix*) have broadly similar requirements to common lizards with a greater reliance on ponds and wetlands, where they prey on common frogs; and

- adders (*Vipera berus*) use a range of fairly open habitats with some cover, but are most often found in dry heath.

Reptile activity is highly seasonal; they hibernate over the winter (October to March) and are active over the summer months. They become increasingly active as temperatures increase in spring, and in most years they are fully active by mid-April. Reproduction varies between species, but generally peaks in mid-summer when reptiles are at their most active. In late September/ October, activity begins to decrease as reptiles seek frost-free refuges for hibernation.

RESULTS**4.1 Habitats and plant species****4.1.1 Habitats**

An overgrown hedge with *Acer pseudoplatanus* (Sycamore) trees near the road and in the middle of the hedge. Woody species present within the hedge include *Corylus avellana* (Hazel), *Crataegus monogyna* (Hawthorn), *Ilex aquifolium* (Holly), *Prunus laurocerasus* (Cherry Laurel), *Rubus fruticosus* agg. (Bramble), *Sambucus nigra* (Elder) and *Ulmus* species (Elm). The field-layer contains a lot of leaf litter and is otherwise dominated by the evergreen creeper *Hedera helix* (Ivy), which is also growing up the fence associated with the hedge and the trunks of the trees and shrubs. There are also large areas with the shade-tolerant, tall semi-ruderal *Urtica dioica* (Common Nettle). There are also small amounts of other shade-tolerant herbs including *Galium aparine* (Cleavers) *Geum urbanum* (Wood Avens) and *Ranunculus ficaria* (Lesser Celandine), as well as small amounts of species that have colonised from the adjacent amenity grassland including *Lolium perenne* (Perennial Rye-grass) and *Taraxacum officinale* agg. (Dandelion).

4.1.2 Plant species

No plant species listed on Schedules 8 or 9 of the *Wildlife and Countryside Act 1981* (as amended) were recorded on the site.

Vascular plant species recorded from the hedge (along with relative abundance) are given in Appendix B.

4.2 Protected vertebrates**4.2.1 Bats***Bat roost suitability of trees*

The trees within the hedge are classed as having no suitability to be used by roosting bats, following the criteria in Table 3.1.5.1.

Commuting and foraging habitat

The hedge provides good, sheltered foraging habitat for bats. It also links to other hedges and tree-lines that provide links into and from the wider landscape. Therefore, it is classed as having moderate suitability to be used by commuting and foraging bats, following the criteria in Table 3.1.5.2. In addition, is across the road from the River Itchen, which is a high-quality foraging habitat for many species of bat.

Bats follow linear landscape features such as lines of trees, hedges, buildings and waterways in order to commute from their roost sites to their feeding grounds. Likewise they use these features to navigate between feeding areas and alternative roosts.

4.2.2 *Dormice*

The hedge contains a variety of woody species and as such could provide suitable habitat for dormice. It is also connected to another hedge along Riverside and Church Road, which connects to trees and bramble scrub. However, it is otherwise isolated in an urban environment.

4.2.3 *Great crested newt*

The hedge is in a red great crested newt impact risk zone with a record of great crested newts across the road approximately 150m from the site.

4.2.4 *Otter and water vole*

According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps, the River Itchen SAC and SSSI is on the opposite side of the road (c.20m to the south). Otter and water vole are known to use the river, but the area closest the side is heavily canalised with a concrete bank on the Riverside side. It is unlikely that otters or water voles would cross the road to the hedge.

4.2.5 *Badger*

No evidence of badger was found during the survey.

4.2.6 *Birds*

The hedge has the potential to support nesting birds during the breeding season. Three (apparently disused) nests were seen within the hedge during the survey.

There are bird species on the UK and Local BAP (or in the RSPB *Birds of Conservation Concern*) that could be using this site for nesting and foraging.

4.2.7 *Widespread species of reptile*

The base of the hedge is suitable foraging and hibernation habitat for widespread species of reptile such as slow-worms. However, the habitat immediately adjacent to the hedge is unsuitable: on the north and west side is short, mown amenity grassland; on the east side is Bishopstoke Memorial Hall and an associated path; and on the south side is a road (Riverside) and associated path. These are unsuitable for reptiles due to the lack of cover and risk of predation.

5 ***INTERPRETATION AND EVALUATION***

5.1 ***Constraints on the survey***

5.1.1 *Constraints on survey data*

It was not possible to access part of one side of the hedge where overhanging bramble between the hedge and the Memorial Hall building made it difficult to get. However, it is not anticipated that it affects the findings as it was possible to access the whole of the hedge on the park (west) side.

5.1.2 *Constraints on the mitigation, compensation and enhancement measures*

No information has been provided as to whether the hedge will be completely removed or just cut down to stumps. Therefore, it is assumed that it will be completely removed.

5.2 ***Survey report expiry***

This survey data is valid for a maximum of 12 months. Therefore, if more than 12 months elapse it may be advisable to conduct further survey work to obtain up-to-date information to advise work, thereby ensuring protected species compliance.

5.3 ***Legal context***

Habitat has been identified on site that is suitable for protected species. Different species are afforded different levels of protection; as detailed in *Appendix A*.

The site is not designated for its wildlife interest at an international, national or local scale.

5.4 ***Potential impacts of the proposed development***

5.4.1 *Habitats and plants*

The plant species observed on site are widespread and common and as such have no conservation importance from a botanical point of view.

No plant species listed on *Schedules 8 or 9 of the Wildlife and Countryside Act 1981* (as amended) were recorded on the site.

Due to the close proximity of the Itchen Navigation Canal, the measures below will be implemented in order to avoid any direct impacts on the watercourse during works. The use of machinery and vehicles can pose a risk to the ecology of the watercourse if not regulated.

- All arisings (both when on site and when being removed from site), will be covered securely.
- If chipped material cannot immediately be removed from site, it will be damped down and/ or covered to prevent it getting blown across the road and into the River Itchen.

- Spill kits will be available on site at all times to contain any spillages as close to the source as possible.
- Any vehicles leaving the site will have their wheels hosed down prior to leaving to prevent muddy track-out.
- Low sulphur diesel oil will be used in all vehicle and equipment engines, along with up-to-date particulate filters and catalytic converters (where appropriate).
- No material or arisings will be burnt on site.
- No vehicles or machinery will be refuelled on on-site.
- Noise pollution will be minimised. This will be through using quiet power tools and equipment.

5.4.2 Bats

Bat roost suitability of trees

The trees within the hedge are classed as having no suitability to be used by roosting bats, following the criteria in *Table 3.1.5.1*.

Should any trees be retained, they should be protected (where appropriate) during works using Heras fencing or similar. The guidance provided in BS 5837 *Trees in relation to Construction* provides further advice on minimising the impact to retained trees.

Foraging and commuting habitat

The hedge provides good, sheltered foraging habitat for bats. It also links to other hedges and tree-lines that provide links into and from the wider landscape. Therefore, it is classed as having moderate suitability to be used by commuting and foraging bats, following the criteria in *Table 3.1.5.2*. In addition, is across the road from the River Itchen, which is a high-quality foraging habitat for many species of bat. Therefore, it is likely that bats are using the hedge for foraging and/ or commuting.

As the hedge is to be removed a replacement hedge will need to be planted in order to retaining connectivity and minimise any potential impact to bat populations in the local area. This could be adjacent to the fence around the children's play area or along the path through the park. Some of the tree species should be allowed to grow into large trees to replace those lost from the hedge.

The new hedge should consist of a mixture of native species such as *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam), *Cornus sanguinea* (Dogwood), *Corylus avellana* (Hazel), *Crataegus monogyna* (Hawthorn), *Fagus sylvatica* (Beech), *Fraxinus excelsior* (Ash), *Prunus spinosa* (Blackthorn), *Quercus robur* (Pedunculate Oak), *Viburnum lantana* (Wayfaring-tree) and *Viburnum opulus* (Guelder-rose). These species will provide a mixture of leaf shapes and colours through the seasons. In addition, the hedges should contain *Ilex aquifolium* (Holly) and *Taxus baccata* (Yew) to provide an evergreen component for the winter months, and to provide a contrast to the colours of the other plants during the spring, summer and autumn.

The new hedge should be undersown with Emorsgate seed mix EH1 Hedgerow mixture (or equivalent) to provides cover for wildlife such as hedgehogs, as well as providing an attractive feature while the new hedges become established. Seed mixes suitable for shade are given in *Table 5.4.2.1*.

Table 5.4.2.1. Seed mixes suitable for shaded areas.

EH1	
Species	Common Name
Wild Flowers	
<i>Alliaria petiolate</i>	Garlic Mustard
<i>Arctium minus</i>	Lesser Burdock
<i>Centaurea nigra</i>	Common Knapweed
<i>Chaerophyllum temulum</i>	Rough Chervil
<i>Galium album</i>	Hedge Bedstraw
<i>Geum urbanum</i>	Wood Avens
<i>Lathyrus sylvestris</i>	Narrow-leaved Everlasting-pea
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Primula veris</i>	Cowslip
<i>Prunella vulgaris</i>	Selfheal
<i>Saponaria officinalis</i>	Soapwort
<i>Silene dioica</i>	Red Campion
<i>Silene latifolia</i>	White Campion
<i>Silene vulgaris</i>	Bladder Campion
<i>Torilis japonica</i>	Upright Hedge-parsley
Grasses	
<i>Agrostis capillaris</i>	Common Bent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
<i>Brachypodium sylvaticum</i>	False Brome
<i>Cynosurus cristatus</i>	Crested Dogtail
<i>Deschampsia cespitosa</i>	Tufted Hair-grass
<i>Festuca rubra</i>	Slender-creeping Red-fescue
<i>Poa nemoralis</i>	Wood Meadow-grass
EW1	
Species	Common name
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Allium ursinum</i>	Ramsons
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Arctium minus</i>	Lesser Burdock
<i>Arum maculatum</i>	Lords-and-Ladies
<i>Chaerophyllum temulum</i>	Rough Chervil
<i>Cruciata laevipes</i>	Crosswort
<i>Digitalis purpurea</i>	Foxglove
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Geum urbanum</i>	Wood Avens

<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Iris foetidissima</i>	Gladdon
<i>Prunella vulgaris</i>	Selfheal
<i>Silene dioica</i>	Red Campion
<i>Teucrium scorodonia</i>	Wood Sage
<i>Torilis japonica</i>	Upright Hedge-parsley
Grasses	
<i>Agrostis capillaris</i>	Common Bent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
<i>Brachypodium sylvaticum</i>	False Brome
<i>Cynosurus cristatus</i>	Crested Dogstail
<i>Deschampsia cespitosa</i>	Tufted Hair-grass
<i>Festuca rubra</i>	Red Fescue
<i>Poa nemoralis</i>	Wood Meadow-grass

Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto retained vegetation (particularly the nearby trees, hedges, and bramble scrub).

5.4.3 Dormice

The hedge contains a variety of woody species and as such could provide suitable habitat for dormice. It is also connected to another hedge along Riverside and Church Road, which connects to trees and bramble scrub. However, it is otherwise isolated in an urban environment. It is also immediately adjacent to a children's play area within Glebe Meadow and Skate Park and Bishopstoke Memorial Hall. There is also a path through the park that runs immediately adjacent to the hedge. Therefore, even if dormice were present in the area, the hedge is unlikely to support even foraging dormice due to isolation, the high levels of disturbance, and light levels. Therefore, no impacts are anticipated on dormice and no further surveys are currently proposed.

5.4.4 Great crested newt

The base of the hedge is suitable foraging great crested newts. However, the habitat immediately adjacent to the hedge is unsuitable: on the north and west side is short, mown amenity grassland; on the east side is Bishopstoke Memorial Hall and an associated path; and on the south side is a road (Riverside) and associated path. This is generally unsuitable terrestrial habitat for great crested newt due to the lack of cover, although they could use it for foraging. In addition, the hedge is only a small area within otherwise sub-optimal habitat, and the great crested newts record is for the opposite side of the road. However, the following precautions will be undertaken to minimise the risk that amphibians (and reptiles) would be harmed during works (if present). The hedge will initially be cut to a height of approximately 30cm and the arising removed from site. This is likely to deter any amphibians (and reptiles) in the vicinity, but the stumps will be left for at least 24 hours before the rootballs are carefully dug up (and removed from site). A fingertip search of the remaining vegetation will be carried out before the stumps are removed. The stumps will be removed during suitable weather and when amphibians (and reptiles) are active, which is March to September (inclusive).

In the unlikely event that great crested newts are present, work will stop immediately and a European Protected Species (EPS) licence from Natural England will be applied for.

If any amphibians other than great crested newts are found, they will be moved to the base of the bramble scrub on the northern boundary of the park.

5.4.5 *Otter and water vole*

The River Itchen SAC and SSSI is on the opposite side of the road (c.20m to the south). Otter and water vole are known to use the river, but the area closest the side is heavily canalised with a concrete bank on the Riverside side. It is unlikely that otters or water voles would cross the road to the hedge.

5.4.6 *Badger*

Areas within 30m of development activities are usually searched for setts (where access is possible) as former guidelines suggest badgers and their setts could be disturbed by work using heavy machinery within 30m of a badger sett, light machinery within 20m, and light work (such as digging) within 10m.

As no badger setts were found on site, development works are free to proceed without further regard to this species, although if a badger sett is subsequently discovered within 30m of the proposed works then it may require a licence from Natural England to proceed. Guidance to what may be classed as disturbance to a badger (when occupying a sett) can be found at:

<https://www.gov.uk/guidance/badgers-protection-surveys-and-licences>.

5.4.7 *Birds*

The hedge provides suitable habitat for nesting birds and nests were recorded within the hedge. The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). Therefore, the hedge should be cut to near ground level (approximately 30cm) outside the bird breeding season (which is late February to August inclusive). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation. If there are active nests then they should be retained and work must be delayed until the young have fledged and left the nest.

If any active nests are found prior to or during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use).

5.4.8 *Widespread species of reptile*

The base of the hedge is suitable foraging and hibernation habitat for widespread species of reptile such as slow-worms. However, the habitat immediately adjacent to the hedge is unsuitable: on the north and west side is short, mown amenity grassland; on the east side is Bishopstoke Memorial Hall and an associated path; and on the south side is a road (Riverside) and associated path. These are

unsuitable for reptiles due to the lack of cover and risk of predation. Although it is unlikely that reptiles will be present, because it cannot be completely ruled out the following precautions will be undertaken to minimise the risk that reptiles (and amphibians) would be harmed during works (if present). The hedge will initially be cut to a height of approximately 30cm and the arising removed from site. This is likely to deter any reptiles (and amphibians) in the vicinity, but the stumps will be left for at least 24 hours before the rootballs are carefully dug up (and removed from site). A fingertip search of the remaining vegetation will be carried out before the stumps are removed. The stumps will be removed during suitable weather and when reptiles (and amphibians) are active, which is March to September (inclusive).

5.5 **Further survey**

No further surveys are proposed.

5.6 **Enhancement measures**

5.6.1 *General*

Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) have to deliver at least 10% biodiversity net gain (BNG) (required since January 2024 and since April 2024 for small sites). BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. This sits alongside:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity,
- new biodiversity reporting requirements for local authorities, and mandatory spatial strategies for nature: Local Nature Recovery Strategies or 'LNRS'.

From July 2021, the Government published the revised National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2021). The document sets out the government's planning policies for England and how these are expected to be applied. This replaces a previous version which was published in 2019. It states: *"at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11)."*

It also states *"opportunities to incorporate biodiversity in and around developments should be encouraged"* as part of the consideration for *"presumption in favour of sustainable development"*.

The updated National Planning Policy Framework (NPPF) also states (paragraph 170) that: *"Planning Policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures."*

The updated Planning Policy Guidance (PPG) for the Natural Environment, updated in July 2019 states (paragraph 020) that:

"Net gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand."

The updated PPG provides examples of how biodiversity net gain can be achieved. Measures suggested include “creating new habitats” and “enhancing existing habitats”.

It is proposed that the enhancements to provide biodiversity net gain will also be in the form of the following:

- new bat roost provision,
- lighting restrictions (for both bats and other wildlife), and
- new bird nesting provision;

These enhancements are detailed in the following sections.

5.6.2 *Bat box*

Due to the location of the site adjacent to the River Itchen at least one woodstone style bat box (*e.g.* Vivara Pro WoodStone Bat Box, Beaumaris Woodstone or similar) should be erected on a suitable mature tree within the park boundary. This bat box will be erected between 2.5m and 5m, facing south or south-east with a clear exit path. This bat box will remain on site permanently (and shall be repaired or replaced as necessary).

5.6.3 *Lighting*

Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting.

As otter are known to cross terrestrial habitat to reach ponds and other waterways, the lighting restrictions for bats are also applicable to otters.

5.6.4 *Bird boxes*

The park will be enhanced for nesting birds. To maximise the number of species of bird attracted, two different types of bird boxes will be placed in different locations within the park. It is not advisable to place many boxes with identical dimensions, because individuals of the same species would not tolerate each other’s presence, especially in built-up areas with limited food resources. The proposed bird boxes are summarised in *Table 5.6.4.1*.

Table.5.6.4.1. Bird boxes to be erected within the park with additional details on positioning to increase chances of occupancy.

Type (example)	Typical species	No.	Height	Additional information
Vivara Pro Seville 32mm Woodstone Nest Box 	Blue tits, great tits	1	2-4m	- Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. - Chances of occupation can be increased by positioning boxes near vegetation.
Vivara Pro Barcelona WoodStone Open Nest Box 	Robins, wrens	1	≤ 2m	- Mount on a tree or large shrub - Conceal amongst foliage to keep well-hidden from predators.

5.7 Requirement for Natural England licences

5.7.1 European Protected Species (EPS) licences

A European Protected Species (EPS) licence from Natural England is not necessary before work commences. In the unlikely event that bats or great crested newst are found, work will stop immediately and a licence will be applied for.

A licence from Natural England permits activities that may otherwise be offences under the *Conservation of Habitats & Species Regulations 2017*. Survey data supporting licence applications must be up-to-date *i.e.* have been conducted within the current or most recent optimal survey season.

Natural England takes a minimum of 30-60 working days to process licence applications following receipt of all the relevant documentation. This includes an application form, a Reasoned Statement (where necessary) and a Method Statement. The latter includes a detailed mitigation strategy to eliminate or reduce impacts.

It is not possible to apply for a licence until full planning permission has been granted and any conditions relating to wildlife fulfilled, although Local Planning Authorities usually request the information prior to determining a planning application request. Additional time will be required where any revisions to a proposed mitigation strategy are necessary to obtain the licence.

5.7.2 Protection of Badgers Act (1992) licences

As no setts have been identified within (or close to) the site boundary, a licence is currently not required.

A licence permits activities that may otherwise be offences under the *Protection of Badgers Act 1992*.

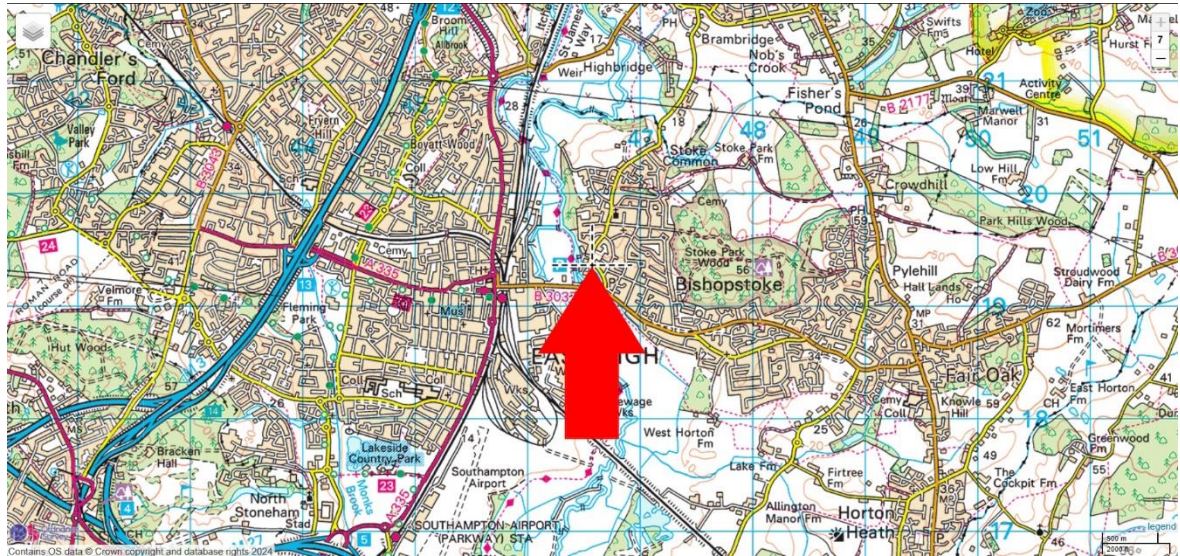
Natural England takes a minimum of 30 working days to process licence applications following receipt of all the relevant documentation.

It is not possible to apply for a licence until full planning permission has been granted and any conditions relating to wildlife fulfilled, although Local Planning Authorities usually request the information prior to determining a planning application request. Additional time will be required where any revisions to a proposed mitigation strategy are necessary to obtain the licence.

Figure 1. Aerial photographs showing the location of the hedge.



Figure 2. Ordnance Survey map showing the location of the hedge (as indicated by the red arrow).



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Figure 3. Plan showing the hedge surveyed outlined in red.



Photo 1. North end of affected hedge, showing tree in the middle.



Photo 2. South end of hedge, showing trees.



Photo 3. Northern end of hedge and the Memorial Hall building.



Photo 4. Southern end of hedge where it intersects a hedge along Riverside (and Church Road).



Photo 5. Trees at the southern end of the hedge.



Photo 6. Tree in the middle of the hedge



Photo 7. Hedge and trees to the north of the Memorial Hall.



Photo 8. Hedge and Memorial Hall viewed from across Glebe Meadow and Skate Park.



Photo 9. Trees and bramble scrub on the boundary of Glebe Meadow and Skate Park.



Photo 10. Trees and bramble scrub on the boundary of Glebe Meadow and Skate Park.



Beebee, T. and Griffiths, R. (2000). *Amphibians and Reptiles*. New Naturalist Series 87. Harper Collins, London.

Cherrill, A. & McClean, C. (1999). *Between-observer variation in the application of a standard method of habitat mapping by environmental consultants in the UK*. Journal of Applied Ecology, **36**, 989-1000.

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

Hampshire Ecological Services Ltd (2023) *Bishopstoke Memorial Hall, Riverside, Bishopstoke, Eastleigh, SO50 6LQ: Bat Surveys and Ecological Update Report*. Hampshire Ecological Services Ltd, unpublished.

HMSO (1981). *Wildlife and Countryside Act 1981*. HMSO, London.

HMSO (1992). *The Protection of Badgers Act*. HMSO, London.

HMSO (2000). *Countryside and Rights of Way Act*. HMSO, London.

HMSO (2017). *The Conservation of Habitats and Species Regulations 2017*. HMSO, London.

Institute of Lighting Professionals (2023). *Bats and artificial lighting in the UK*. Institute of Lighting Professionals, Warwickshire.

Joint Nature Conservation Committee (2003). *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit* (revised reprint). Joint Nature Conservation Committee, Peterborough.

Ministry of Housing, Communities & Local Government (2021). *National Planning Policy Framework*. Ministry of Housing, Communities & Local Government, London.

Natural England (2011). *Standing Advice for Protected Species*. Natural England, Peterborough. <http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/advice.aspx>

Oldham R.S., et al (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10(4), 143-155.

Poland, J. and Clement, E. J. (2009). *The Vegetative Key to the British Flora*. John Poland in association with the Botanical Society of the British Isles, Southampton.

9 APPENDIX A: PROTECTED SPECIES LEGISLATION

9.1 General

This section briefly describes the legal protection afforded to the protected species identified in this report. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation, but summarises the salient points.

9.2 Bats

All species of British bat are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRoW Act). This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European protected species listed on *Schedule 2* of the *Conservation of Habitats & Species Regulations 2017* which gives them full protection under *Regulation 43*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat (in such a way as to be likely to significantly affect: (i) the ability of a significant group of bats to survive, breed or rear/nurture their young; or (ii) the local distribution or abundance of the species concerned);
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present (bats tend to reuse the same roost).

Several species of bat are included as a Priority Species in the UK Biodiversity Action Plan (UKBAP - JNCC (2003)) and also as species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRoW Act.

All species of British bat are also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

9.3 Dormice

Dormouse (*Muscardinus avellanarius*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. This species is also listed as a European Protected Species on *Schedule 2* of the *Conservation of Habitats & Species Regulations*

2017, which gives it full protection under *Regulation 43*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection;
- or
- sell or attempt to sell any such species.

9.4 ***Great crested newt***

Great crested newt (*Triturus cristatus*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. This species is also listed as a European Protected Species on *Schedule 2* of the *Conservation of Habitats & Species Regulations 2017*, which gives it full protection under *Regulation 43*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection;
- or
- sell or attempt to sell any such species.

The great crested newt is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRow Act.

9.5 ***Otter***

Otter (*Lutra lutra*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. This species is also listed as a European Protected Species on *Schedule 2* of the *Conservation of Habitats & Species Regulations 2017* which gives it full protection under *Regulation 43*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;

- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

The otter is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRow Act.

The otter is also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

The European sub-species is also listed as globally threatened on the IUCN/WCMC RDL.

9.6 **Water vole**

Water vole (*Arvicola amphibius*) is protected under *Section 9 (4)* of *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), which affords protection to its places of shelter. This protection was extended by the CRow Act 2000. Under this legislation, it is an offence to intentionally or recklessly damage, destroy or obstruct access to any structure or place that water voles use for shelter or protection, or to intentionally or recklessly disturb water voles while they are using such a place.

The water vole is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRow Act.

9.7 **Badger**

Badger (*Meles meles*) is protected in Britain under the *Protection of Badgers Act 1992* (as amended) and *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended).

The legislation affords protection to badgers and badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a badger sett; or
- to disturb a badger when it is occupying a sett.

Guidance to what may be classed as disturbance to a badger (when occupying a sett) can be found at: <https://www.gov.uk/guidance/badgers-protection-surveys-and-licences>

9.8 *Birds*

9.8.1 *Birds - general protection*

All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the CRow Act.

The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

9.8.2 *Birds - specially protected species*

Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The protection was extended by the CRow Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

9.9 *Widespread species of reptile*

Common lizard (*Zootoca vivipara*), grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), and adder (*Vipera berus*) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the CRow Act.

Under the above legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

9.10 *European Protected Species Licences*

Where it is necessary to carry out an action that could result in an offence under the *Conservation of Habitats & Species Regulations 2017* it is possible to apply for a European Protected Species (EPS) licence from Natural England. Licences are only issued where Natural England are satisfied that three derogation tests are met. These are that the activity is for **imperative reasons of overriding public interest**, that there must be **no satisfactory alternative** and that **favourable conservation status of the species must be maintained**.

Consideration of these three derogation tests was previously left to Natural England as part of their deliberations on whether to grant a licence for the development activity after a planning consent has been issued. However, the regulations now require that **all** public bodies, *i.e.* **Local Planning Authorities** (LPAs), have regard to the requirements of the European Habitats Directive when

carrying out their functions. As a result, LPAs **must** address the three derogation tests when considering a planning application that could impact upon any European Protected Species (EPS).

9.11 *National planning context*

9.11.1 *General*

Surveys should be completed in line with Natural England's *Standing Advice for Local Authorities* (<http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/default.aspx>), which states:

- Natural England will not comment on applications that are submitted without the relevant protected species surveys if there are no other issues (i.e. in relation to SSSIs or landscape).
- Natural England will not comment on scoping surveys that recommend further surveys where these have not been undertaken and submitted with the scoping reports.

In addition to the above, *Section 40* of the *Natural Environment and Rural Communities Act* (2006) imposes a new duty on all public authorities to have regard for biodiversity.

9.11.2 *Biodiversity Net Gain (BNG)*

Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) have to deliver at least 10% biodiversity net gain (BNG) (required since January 2024 and since April 2024 for small sites). BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. This sits alongside:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity,
- new biodiversity reporting requirements for local authorities, and mandatory spatial strategies for nature: Local Nature Recovery Strategies or 'LNRS'.

From the 20th July 2021, the Government published the revised National Planning Policy Framework. The document sets out the government's planning policies for England and how these are expected to be applied. This replaces a previous version which was published in June 2019. It states: "*at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).*"

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

- an economic objective;
- a social objective; and
- an environmental objective.

The environmental objective is to "*contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy*".

Planning policies and decisions should contribute to and enhance the natural and local environment by *“protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)”* and *“minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”*.

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.

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.

It states that *“development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity”*.

It should be noted that the *“presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site”*.

The NPPF also encourages *“minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”* and aims to *“promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”*. This applies to non-statutory designated sites including Sites of Importance for Nature Conservation (SINCs) and equivalent county wildlife sites.

Early engagement with all necessary stakeholders, including expert bodies, is encouraged by the NPPF.

APPENDIX B: PLANT SPECIES LISTS

Species	DAFOR
a) Woody species	
<i>Corylus avellana</i> (Hazel)	VR
<i>Crataegus monogyna</i> (Hawthorn)	F
<i>Hedera helix</i> (Ivy)	A
<i>Ilex aquifolium</i> (Holly)	F
<i>Prunus laurocerasus</i> (Cherry Laurel)	VR
<i>Rubus fruticosus</i> agg. (Bramble)	A
<i>Sambucus nigra</i> (Elder)	R
<i>Ulmus</i> species (Elm)	R
b) Herbs	
<i>Galium aparine</i> (Cleavers)	O
<i>Geum urbanum</i> (Wood Aven)	R
<i>Lolium perenne</i> (Perennial Rye-grass)	VR
<i>Ranunculus ficaria</i> (Lesser Celandine)	R
<i>Rumex obtusifolius</i> (Broad-leaved Dock)	VR
<i>Sonchus oleraceus</i> (Smooth Sow-thistle)	VR
<i>Taraxacum officinale</i> agg.	VR
<i>Urtica dioica</i> (Common Nettle)	A
D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, VR=Very Rare	