

PRELIMINARY ECOLOGICAL APPRAISAL

(inc. THIRD-PARTY DATA SEARCH)

LAND AT OAKSEY PARK GOLF & LEISURE,
OAKSEY, MALMESBURY, WILTSHIRE, SN16
9SB

for

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CONTROL SHEET

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Land at Oaksey Park Golf & Leisure, Oaksey, Malmesbury, Wiltshire, SN16 9SB

Preliminary Ecological Appraisal

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1. RECOMMENDATIONS

No works should be undertaken which could damage or otherwise alter the habitats on site until additional Biodiversity Net Gain assessments have been completed.

1. All new planning applications under the Town and Country Planning Act 1990 are subject to mandatory Biodiversity Net Gain (BNG), unless exempt¹. Developments will be statutorily required to deliver a minimum of 10% net gain in biodiversity. A baseline BNG assessment must be completed for the site, using the Statutory Biodiversity Metric Calculation Tool. Where 'significant onsite enhancements' are anticipated, the production of a draft Habitat Management and Monitoring Plan (HMMP) may be required as part of the formal planning submission.
2. A Stage 2 (Appropriate Assessment) Habitat Regulations Assessment (HRA) is indicated based on the nature of development operations, proximity to North Meadow and Clattinger Farm SAC, and information contained within the 'Interim Recreation Mitigation Strategy' produced for the SAC (Gallagher et al, 2023). The applicant will be required to provide sufficient information to allow the competent authority to determine how any adverse impacts will be mitigated. A 'Shadow HRA' may therefore be required to determine if, with appropriate mitigation and protective measures, there will be any adverse effect on the integrity of the identified SAC, in view of its conservation objectives (alone or in combination with other projects and plans). The Local Planning Authority should be consulted to agree the extent of any additional information required to inform the assessment.
3. A Reasonable Avoidance Measures (RAMs) Method Statement specifically for great crested newts must be produced and adhered to during the works. This

¹ Exemptions are set out in The Biodiversity Gain Requirements (Exemptions) Regulations 2024 and include: a *de minimus* exemption (subject to relevant conditions), householder applications within the meaning of article 2(1) of the Town and Country Planning (Development Management Procedure) (England) Order 2015, the High Speed Railway Transport Network, and developments required to satisfy the biodiversity gain planning permission of another development.

document will include such information as pre-start inspection details, specific works to be completed under supervision, methods of vegetation clearance, and additional mitigation during the construction phase. Should great crested newts be found during any part of the development then work must cease immediately. The Ecological Clerk of Works must be contacted (if not on site). They will then liaise directly with Natural England (as required) to determine any licensing requirements necessary to allow lawful completion of the works. The RAMS Method statement should be secured within the recommended Ecological Mitigation and Enhancement Strategy (see below).

4. Any removal of potential bird nesting habitat should be undertaken outside the bird nesting season (March – August inclusive) or otherwise under the direction of a suitably qualified ecologist.
5. Areas of existing short, managed vegetation within the development footprint should be maintained short (c.50mm) to prevent it from becoming suitable for vertebrate fauna (e.g., amphibians, reptiles *etc.*).
6. The mitigation hierarchy must be implemented regarding night lighting. A 'no light approach' should be followed unless there is a justifiable need for lighting. If artificial lighting is required during the construction phase and / or post-development, it **must** be minimal and low-level. A lighting plan should be designed in collaboration with an ecologist to prevent unnecessary illumination of wildlife habitats.
7. Once the development proposals are confirmed, a detailed Ecological Mitigation & Enhancement Strategy should be written and agreed with the Local Planning Authority. The strategy will ensure that the future development of this site minimises the impact upon protected / notable species and contributes towards local and national ecological targets.

2. RESULTS

2.1 Overview

Focus Environmental Consultants was commissioned by John Cooper ('the client') to undertake a Preliminary Ecological Appraisal of the Land at Oaksey Park Golf & Leisure, Malmesbury, Wiltshire (centred on Ordnance Survey grid reference ST 9937 9409) ('the site'). This was accompanied by a third-party data search (2km search radius) from Wiltshire & Swindon Biological Records Centre and Gloucestershire Centre for Environmental Records.

The site was surveyed by an ecological consultant from Focus Environmental Consultants on 12 November 2024. It is understood that development proposals are for the construction of 12 residential units with associated hard and soft landscaping.

The site is 0.986ha in size and largely comprises a semi-natural plot dominated by short-sward 'other neutral' grassland with smaller areas of structurally heterogeneous 'other neutral' grassland, as well as short-sward modified grassland, mixed scrub, native species-rich hedgerows (H1 – H2), and trees (T1 – T2). The site also includes 0.318ha of stone gravel comprising a vehicular access track shared with the wider Oaksey Park Golf and Leisure Club. Grassland habitat on site has been subject to degradation during site preparation authorised under a previous planning permission, and thus the site features areas of stripped grassland, excavations, and earth mounds.

2.2 Designated Sites

Three sites designated under the National Site Network (previously referred to as European designated Natura 2000 sites) are located within 20km of the site.

- North Meadow & Clattinger Farm SAC, c.940m south-east of the site.
- Rodborough Common SAC, c.15.4km north-west of the site.
- Cotswold Beechwoods SAC, c.18.5km north-west of the site.

There are two statutory designated sites located within 2km of the site.

- Clattinger Farm SSSI, c.940m south-east of the site.
- Cotswold Water Park SSSI, c.1.2km east of the site.

The third-party data search has identified eight non-statutory designated sites within 2km of the site. The closest of these sites include:

- Oaksey Moor Farm Meadows Local Wildlife Site (LWS), c.480m east of the site.
- Oaksey Wood LWS, c.1.2km south-west of the site.
- Lower Moor Farm LWS, c.1.3km south-east of the site.

2.3 Protected / Notable Habitats

2.3.1 Hedgerows²

Hedgerows H1 and H2 are considered to meet the environmental criteria (BRIG (ed. Ant Maddock), 2008) to qualify as a habitat '*...of principal importance for the purpose of conserving biodiversity*' under Section 41 (S. 41) of the Natural Environment and Rural Communities (NERC) Act, 2006. H1 and H2 are defined as '*species-rich*'³.

A full appraisal of the qualification of hedgerows as '*important*' under the Hedgerows Regulations (1997) is outside the scope of this survey. H1 and H2 are >30 years in age and therefore could qualify as '*important*' if supporting specific bird / invertebrate species as described in Part II Section 6 of the Regulations. The hedgerows on site are not considered to meet any alternative criteria⁴ at this juncture.

2.4 Protected / Notable Species

2.4.1 Bats

There are no built structures and no mature trees suitable for roosting bats within the survey boundary.

The boundary hedgerows (H1 – H2), trees (T1 – T2), and mixed scrub on site provide suitable foraging and commuting habitat for bats. The site is located within a rural wider landscape with broadleaved woodland, agricultural land, open countryside, and a large golf course present in the surrounding area. As such the habitats on site are

² to qualify as a Priority Habitat, hedgerows must predominately (e.g. 80%) consist of at least one UK native woody species and be over 20m in length.

³ Species rich hedgerows are those containing at least five woody native species within a 30m section (Defra, 2007).

⁴ In order to meet the criteria of '*important*' hedgerows under The Hedgerows Regulation 1997 the hedgerow must have existed for 30 years or more as well as satisfying at least one of the criteria listed within Part II of Schedule 1 of this Act.

of 'Moderate' potential suitability for foraging and commuting bats, with reference to published best practice guidelines (Collins, 2023).

The third-party data search has identified 114 records of bats within the 2km search area. Species include common pipistrelle, soprano pipistrelle, brown long-eared bat, Daubenton's bat, Natterer's bat, Bechstein's bat, lesser horseshoe bat, noctule, serotine, and barbastelle.

2.4.2 Great Crested Newts

There are no suitable breeding habitats for amphibians within the survey boundary.

Nine off-site ponds (Ponds 1 - 9) and three off-site ditches (Ditches 1 – 3) are shown on Ordnance Survey mapping located within 250m of the site. Pond 1 has 'below average' suitability for great crested newts based on the results of a Habitat Suitability Index (HSI) assessment.

Much of the site is unsuitable for great crested newts and comprises short grassland and hardstanding lacking suitable refuge habitat. However, the site does offer suitable terrestrial habitats for amphibians including c.0.09ha of mixed scrub, c.0.035ha of tall unmanaged grassland, a stone pile (TN1), artificial refugia (TN2) including discarded fencing, and the bases of H1 and H2.

The third-party data-search has returned 67 records of great crested newts within the search area. The closest of which is 260m to the south of the site. Other amphibians recorded from the data-search include common toad and common frog.

The government's multi-agency website 'MAGIC' reveals that Pond 5 located 243m south of the site supports a population of great crested newts, with a European Protected Species (EPS) mitigation licence granted in 2017 for the damage of a breeding site and destruction of a resting place. Additionally, use of 'MAGIC' reveals three further locations in proximity to Pond 5 between 260 – 400m of the site have been confirmed as supporting great crested newts between 2016 – 2017.

2.4.3 Birds

A variety of bird species were recorded incidentally during the site visit and are listed within Table 1, below.

Table 1: bird species recorded (heard and / or seen) at Land at Oaksey Park Golf & Leisure

Species	WACA 1981 Schedule 1 ⁵	NERC S.41 ⁶	Conservation Status (BoCC5) ⁷
Blackbird	-	-	Green
Dunnock	-	Priority Species	Amber
Fieldfare	Yes	-	Red
Goldfinch	-	-	Green
Jackdaw	-	-	Green
Kestrel	-	-	Amber
Linnet	-	Priority Species	Red
Red kite	Yes	-	Green
Redwing	Yes	-	Amber
Robin	-	-	Green
Woodpigeon	-	-	Amber
Wren	-	-	Amber
Yellowhammer	-	Priority Species	Red

The dense mixed scrub, H1 – H2, and T1 – T2 provide good nesting and foraging habitat for passerine birds, whilst the scrub and H1 – H2 provide foraging and roosting opportunities for non-breeding (wintering) passerine birds also. The site is unsuitable for ground-nesting birds due to the predominantly short sward height of grassland. Records of linnet and yellowhammer made during the survey relate to birds commuting over the proposed development site only, although H1, H2, and the mixed scrub on site provides suitable nesting opportunities for these red-listed ‘Priority Species’.

2.4.4 Reptiles

Most habitats on site are unsuitable for reptiles, comprising short grassland and hardstanding lacking the structural heterogeneity preferred by these animals.

⁵ Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended).

⁶ Natural Environment and Rural Communities Act 2006

⁷ Birds of Conservation Concern 5 (Stanbury *et al.*, 2021).

However, the site does provide some terrestrial habitat for reptiles including c.0.09ha of mixed scrub, c.0.035ha of tall unmanaged grassland, and the bases of H1 and H2.

The third-party records search has returned 8 records of slow-worm, 16 records of common lizard and 53 records of grass snake within the specified search-area. The closest record returned is of a common lizard c.1.3km to the south-east of the site.

2.4.5 Hazel Dormice

The mixed scrub and H1 – H2 offer a small quantity of broadly suitable habitat for hazel dormice that is reasonably well-connected to pockets of broadleaved woodland and a mature hedgerow network within the wider Oaksey Park Golf and Leisure Club.

The third-party data search has returned no hazel dormice records from within the search area.

2.4.6 Badgers

No setts or evidence of badger activity (latrines, snuffle holes, tracks *etc.*) was observed within the site boundaries. However, it is likely that this abundant mustelid is present within the surrounding landscape and may use the site for foraging.

The third-party data search has returned 20 badger records from within the search area. The nearest record is c.350m to the east of the site.

2.4.7 Riparian Mammals

The site has no suitable habitats for riparian mammals such as otter, water vole or water shrew.

The third-party data search has returned records of water shrew (two), beaver (four), water vole (13) and otter (290) within the search area. The nearest record is of an otter c.430m to the south-west of the site.

2.4.8 Other Notable Mammals

The site offers some foraging opportunities for mammals typical of a rural environment, such as hedgehog, fox, field vole and small mustelid species, *e.g.*, weasel and stoat.

The third-party data search has returned records of hedgehog, brown hare, and polecat within 2km of the site, each of which is listed as a 'Priority Species' under S.41 of the NERC Act, 2006.

2.4.9 Invertebrates

A full assessment of the invertebrate assemblage at this site is beyond the scope of this survey. No invertebrate species were recorded incidentally during the survey. No triggers were identified to indicate that the site supports legally protected or notable terrestrial invertebrates (English Nature, 2005).

The third-party data search has returned 302 records of 'notable'⁸ invertebrates from within the search area, including cinnabar, brown hairstreak and dingy skipper.

2.4.10 Notable Plants

No plants listed under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) or under S.41 of the NERC Act 2006 were recorded on site.

2.4.11 Invasive Species

No legally notifiable plant species listed under Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended) were recorded within the site (e.g., Japanese knotweed, giant hogweed, Himalayan balsam, wall cotoneaster).

⁸ I.e. listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and / or S.41 of the NERC Act 2006.

3. DISCUSSION & CONCLUSIONS

The client is currently seeking full planning permission for the construction of 12 residential units with associated hard and soft landscaping. This report and discussion are based on the following plans provided by the architect: 'Phase 4 Site Layout' (drawing no. 1630-106, dated 31-08-2022). The following have been identified which may represent constraints or opportunities within a future development at this site.

3.1 Designated Sites

3.1.1 National Site Network

There are three sites listed on the National Site Network within 20km of the site. The closest of these sites is North Meadow & Clattinger Farm SAC positioned c.940m south-east of the site, selected as an SAC due to the presence of the habitat type '6510 Lowland hay meadows', listed under Annex 1 of the EC Habitats Directive 1992.

When applying the Conservation of Habitats and Species Regulations 2017 (as amended), the Local Planning Authority has an obligation to ensure that no plans or projects have an adverse effect upon the integrity of sites designated under the National Site Network within the area. The Site Improvement Plan (SIP) for North Meadow & Clattinger Farm SAC identifies public access / disturbance (*i.e.* recreational pressure) as a priority issue due to increasing visitor pressure on the site and its sensitive habitats (Natural England, 2014). An Interim Recreation Mitigation Strategy produced for the SAC (Gallagher et al, 2023) identified that the majority of visitors to the site travel from within a 1km radius, and has established a Zone of Influence (ZOI) of up to 4.2km from the site for recreational pressure by such 'local year-round users'.

This indicates the development proposals are expected to give rise to a '*likely significant effect*' on North Meadow & Clattinger Farm SAC alone or in combination with other plans / projects. As such, it is likely that recourse to Stage 2 (Appropriate Assessment) of the Habitats Regulations Assessment will be required. The applicant will be required to provide sufficient information to the competent authority to determine how any adverse impacts will be mitigated. A 'Shadow HRA' may therefore be required to determine if, with appropriate mitigation and protective measures, there

will be any adverse effect on the integrity of the identified SAC, in view of its conservation objectives (alone or in combination with other projects and plans).

Conversely, the scale and spatial separation of the proposed development site from all other sites listed under the National Site Network are such that the proposals are considered highly unlikely to result in any measurable adverse impacts to these sites. Recourse to Stage 1 of the Habitat Regulations Assessment procedure for such sites is therefore considered unnecessary at this juncture.

3.1.2 Other Statutory Sites

The Natural England SSSI Impact Risk Zones used to assess planning applications for likely impacts on SSSIs was consulted via the government's multi-agency website 'MAGIC'. The site is located within the risk zone of Clattinger Farm SSSI and Cotswold Water Park SSSI. However, the planning application does not fall under any of the relevant flagged categories. Therefore, no formal requirement to consult Natural England is indicated in relation to any nearby SSSIs.

3.1.3 Non-statutory Sites

There are several non-statutory sites within 2km of the site. Given the degree of physical separation between the prospective development site and the non-statutory sites, it is considered highly unlikely that future development will adversely impact on the functionality or integrity of these sites or affect their conservation status, provided that standard construction procedures are following during the works.

3.2 Protected / Notable Habitats

3.2.1 Hedgerows

The native hedgerows on site (H1 & H2) are listed as 'Priority Habitats' under S.41 of the NERC Act 2006 and will be retained in full as part of the proposals. These hedgerows provide nesting, foraging, shelter and commuting habitat suitable for a variety of wildlife including birds, bats, amphibians, reptiles, small mammals, and invertebrates. The hedgerows should be managed to encourage tall and thick growth for the maximum benefit of wildlife, but hedgerow cutting should still be undertaken sympathetically (e.g. once every three - five years) to prevent succession and maintain a shrubby structure. Any existing / established gaps should be plugged with native

species in the appropriate growing season (November – March). The hedgerows may be managed on a three-to-five-year rotation to ensure not all the hedgerow is cut at any one time, and that thick nesting cover and foraging resources (e.g. berries) are present on site annually for birds and other wildlife. The hedgerows should be cut with hand-tools only where possible, and only outside of the bird nesting season (running March – August, inclusive). The planting and sensitive management of native species-rich hedgerow habitat is encouraged across the site where possible.

3.3 Protected / Notable Species

It is rare for Local Planning Authorities to condition further survey work to determine the presence or absence of legally protected species, in line with published guidelines. Conversely, developers should not be required to undertake surveys for legally protected species which are unlikely to be present on site or otherwise unlikely to be significantly affected by development proposals:

“The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.” (ODPM Circular 06/2005. Paragraph 98).

“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances,...”

“However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development.” (ODPM Circular 06/2005. Paragraph 99).

3.3.1 Bats

The habitats on site and within the immediate surrounding landscape are considered to offer ‘moderate’ potential for foraging and commuting bats (with reference to Collins, 2023). The vegetated site boundaries (H1 & H2) will remain intact and unaffected by the development proposals, and it is also understood that mixed scrub habitat on site will be largely / fully retained. This will ensure the preservation of viable commuting and foraging habitats that may be used by bats (and other wildlife) in the local area.

A sensitive lighting strategy should be designed and implemented following industry-recognised best practice guidelines (see BCT and ILP, 2023, ILP, 2020). This must prevent the unnecessary illumination of notable foraging and commuting habitats (*i.e.*, H1, H2, retained mixed scrub) for bats and other nocturnal wildlife. Where work is carried out in accordance with the sensitive lighting scheme, it is considered highly unlikely that the development of this site will give rise to any significant fragmentation or isolation of habitats on-site, or within the surrounding landscape, and will ensure that there is no detriment to the ‘*favourable conservation status*’ of bats at this site. Accordingly, there is no requirement for further bat activity survey work, in line with published government guidance (ODPM Circular 06/2005. Paragraph 99).

3.3.2 Great Crested Newts

There are nine lentic waterbodies (Ponds 1 – 9) and three ditches (Ditches 1 – 3) shown on Ordnance Survey mapping within 250m of the site. Of these, Ponds 1 - 5 are within 250m of the actual development footprint (*i.e.*, excluding the shared site access track). Pond 1 is located 63m to the south-west of the footprint, whilst Pond 2 lies 110m to the south-west, Pond 3 232m to the south-west, Pond 4 235m to the south-east, and Pond 5 243m to the south of the footprint. The government’s multi-agency website ‘MAGIC’ reveals Pond 5 supports a population of great crested newts, with three further localities in proximity of Pond 5 within 260m – 400m of the site supporting great crested newts between 2016 – 2017. Great crested newts frequently live in metapopulations (Langton *et al*, 2001), and thus there is a reasonable likelihood that the species could be present in Ponds 1 – 4.

Completion of the Natural England Rapid Risk Assessment indicates the development proposals would be ‘*likely*’ to give rise to a legal offence if great crested newts are

present in Pond 1 and / or Pond 2, and conversely would be '*highly unlikely*' to cause a legal offence if the species is present in Ponds 3 and / or 4, and still present in Pond 5. This assessment is based on the quantity and proximity of all land affected by the development proposals and generally aligns with published literature revealing the majority (>90%) of great crested newts remain within 100m of their breeding ponds (Cresswell and Whitworth, 2004; Jehle *et al*, 2011, Jehle, 2000⁹). However, in their guidance, Natural England clearly state that the risk assessment tool is very generic and does not consider site-specific details, and that such details have potential to decrease the likelihood of impact on great crested newts.

In this scenario, Pond 1 has 'below average' suitability for great crested newts based on the results of a HSI assessment, primarily because heavy shading from the surrounding woodland creates unfavourable breeding conditions for great crested newts as macrophyte growth is low (Jehle *et al.*, 2011), and as little as 20% pond shading can reduce the abundance of great crested newt larvae (Cooke *et al.*, 1994).

In addition, the habitats on site are mostly unsuitable for great crested newts, and all land within 100m of Pond 1 to be affected by the scheme comprises unsuitable short-sward grassland only. The base of H2 provides shelter, foraging and commuting opportunities for great crested newts in proximity to Pond 1 but will be retained in full as part of the proposals. It is also understood that at least the majority of mixed scrub habitat (all >100m from Pond 1) will be retained as part of the scheme, but that c.0.035ha of adjacent unmanaged grassland broadly suitable for great crested newts c.120m from Pond 1 is likely to be temporarily impacted during construction, and that TN1 c.100m from Pond 1 will be removed.

With reference to published literature on typical dispersal distances (Cresswell and Whitworth, 2004; Jehle *et al*, 2011, Jehle, 2000), these habitats are considered reasonably unlikely to support great crested newts in any case, particularly taking into account that Pond 1 is surrounded by higher quality, more preferential habitat within c.1.2ha of private woodland. Pond 2 is also >100m from the site boundary and c.200m

⁹ NOTE: a study completed by Jehle (2000) demonstrated that 50% of adult great crested newts remained within 15m of their breeding pond and 95% remained within a radius of 63m of the pond.

from the small quantity of suitable terrestrial habitat potentially affected by the proposals, with much greater proximity to the c.1.2ha woodland than the site.

Considering the above, providing that a Reasonable Avoidance Measures (RAMs) Method Statement is produced and implemented fully during site clearance and construction works, the likelihood of the development proposals giving rise to an offence under wildlife legislation or resulting in any measurable impact on the '*favourable conservation status*' of great crested newts at this site is highly unlikely. Recourse to further survey work and licencing procedure is thus not considered appropriate at this juncture (see ODPM Circular 06/2005, Paragraph 98, 99).

3.3.3 Birds

It is understood that the development proposals seek to retain the habitats of greatest value to birds at the site (*i.e.*, H1 – H2 and mixed scrub habitat), and the grassland habitat losses proposed are expected to have a negligible impact on birds. Post-development, a suitable soft-landscaping scheme will be implemented to provide new habitats of value to birds and will include the planting of native flowering and fruit / seed-bearing trees and shrubs, planting and sensitive management of native hedgerows, and creation of native species-rich wildflower grassland. Further details on habitat creation will be provided in a HMMP contained within a Biodiversity Gain Plan, whilst provision of bird boxes should be directed within an EMES.

3.3.4 Reptiles

The development proposals are expected to result in a small loss of suitable reptile habitat in the form of c.0.035ha of structurally heterogenous grassland. It is understood that at least most of the c.0.09ha of mixed scrub habitat providing opportunities for reptiles will be retained as part of the proposals, as will H1 and H2. Therefore, if reptiles are present, it is considered reasonably unlikely that significant impacts would occur.

Accordingly, it would be unreasonable to undertake expensive and time-consuming presence / absence surveys for reptiles when the predicted impacts are likely to be small (no more than site level). Industry-recognised mitigation measures secured within the framework of an Ecological Mitigation and Enhancement Strategy (EMES) can provide confidence in compliance with wildlife legislation (see *e.g.* ODPM Circular

paragraph 99), whilst enhancement opportunities for reptiles will be provided as part of an appropriate soft-landscaping scheme incorporating habitats such as structurally heterogeneous grassland, and 'habitat piles' comprising log and brash materials *etc.*

Further details on habitat creation will be provided in a HMMP contained within a Biodiversity Gain Plan to be submitted as a pre-commencement condition to any planning consent arising for this project. Provision of 'habitat piles' should be directed within an EMES produced for the development scheme.

3.3.5 Hazel Dormice

Although broadly suitable for hazel dormice, the habitats on site are small and unlikely to sustain a viable population of dormice. The mixed scrub habitat measures c.0.09ha and lacks a sufficient quantity or variety of resources to support the foraging requirements of hazel dormice year-round, whilst research has shown that 1ha of hedgerow habitat will support just 1.3 adult hazel dormice (Bright & Morris, 2005), and only 0.16ha of hedgerow habitat is present on site. The lack of third-party hazel dormice records returned from within 2km of the site also indicates that hazel dormice are not abundant in the surrounding landscape.

Whilst H1 is gappy and has reduced suitability as a dispersal route, H2 is continuous and connects directly to a small off-site woodland copse measuring c.1.2ha in size. In any case, both H1 and H2 are being incorporated within the scheme and their connectivity to broadly suitable habitats in the surrounding landscape will be maintained. It is also understood that at least the majority of mixed scrub habitat will be retained. Considering the above, it is reasonably unlikely that hazel dormice will be impacted by proposals subject to sensitive working methods being adopted. Industry-recognised mitigation measures secured within an EMES can provide confidence in compliance with wildlife legislation, whilst those habitats broadly suitable for hazel dormice should be enhanced through new tree / shrub planting and bolstering of gaps with suitable native species. Further details will be provided in a Habitat Management and Monitoring Plan (HMMP) contained within a Biodiversity Gain Plan to be submitted as a pre-commencement condition to any planning consent arising for this project.

3.3.6 Badgers

No setts or evidence of badger activity was observed within the site boundary and good access was obtained to all areas of the site. At this juncture it can be said with confidence that the development proposals will not give rise to any licensable impact on badgers with reference to Natural England guidance (Natural England, 2022b).

3.3.7 Other Notable Mammals

The development proposals will result in the loss of grassland providing some foraging habitat suitable for mammals such as hedgehogs. This loss is not expected to have a measurable impact upon mammals considering the quantity of similar quality habitats in the immediate vicinity. Post-development, an appropriate soft landscaping scheme will be implemented to provide new habitats of value for mammals, *e.g.*, through creation of structurally heterogeneous grassland, provision of hedgehog boxes, and construction of 'habitat piles' comprising brash and log materials. Further details on habitat creation will be provided in a HMMP contained within a Biodiversity Gain Plan, whilst provision of wildlife boxes / features should be directed within an EMES.

3.3.8 Invertebrates

Given the relatively low species-richness and structural homogeneity of grassland habitats on site to be affected by the proposals, the future development is expected to have a negligible impact upon invertebrates. Opportunities to create new habitats of value to invertebrates will be provided as part of an appropriate soft landscaping scheme, incorporating habitats such as native species-rich wildflower grassland and a variety of invertebrate boxes. Further details on habitat creation will be provided in a HMMP contained within a Biodiversity Gain Plan. Provision of wildlife boxes / features should be directed within an EMES.

4. ANNEXES

4.1 Photographs

4.2 Plans

4.3 Survey & Third-Party Data

4.4 Survey Objectives

4.5 Limitations

4.6 Methods

4.7 References & Bibliography

4.8 Legislation & Best Practice

4.1 Photographs

All photographs taken on 12 November 2024.



Plate 1: showing short-sward grassland with physical damage, an earth pile, and boundary hedgerows. Photograph looking east.



Plate 2: mixed scrub and T1 at the north-east of the site. Photograph looking north.



Plate 3: disturbed 'other neutral' grassland towards the north-east of the site with colonising ruderal species. Photograph looking north-east.



Plate 4: structurally heterogenous grassland and mixed scrub habitat towards the south-east of the site. Photograph looking east.



Plate 5: H1. Photograph looking north-east.



Plate 6: H2. Photograph looking south-west.



Plate 7: typical view of Pond 1.



Plate 8: Pond 1 and surrounding habitat.

4.2 Plans

Plans:

4.2.1 Location Plan

4.2.2 UK Habitat Classification Survey Plan

4.2.3 Pond Location Plan

4.2.1. Location Plan



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Please note: this plan is intended only to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

4.2.2 UK Habitat Classification Survey Plan

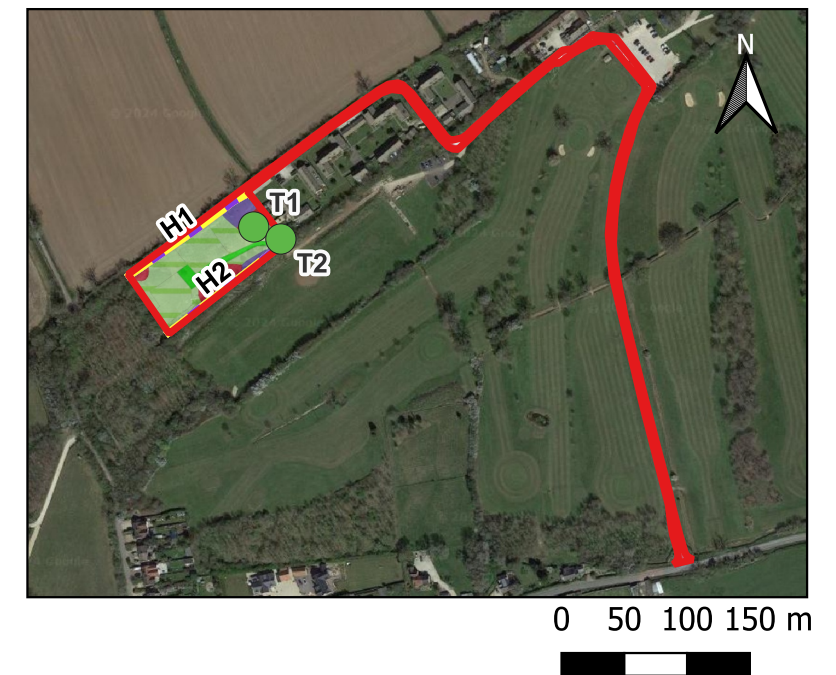


KEY:

- Red Line Boundary
- u1c - Artificial unvegetated, unsealed surface
- h3h - Mixed scrub
- g4 - Modified grassland
- g3c - Other neutral grassland
- g 510 - Bare ground
- h2a5 - Native species-rich hedgerow with trees
- Individual Trees

TN#

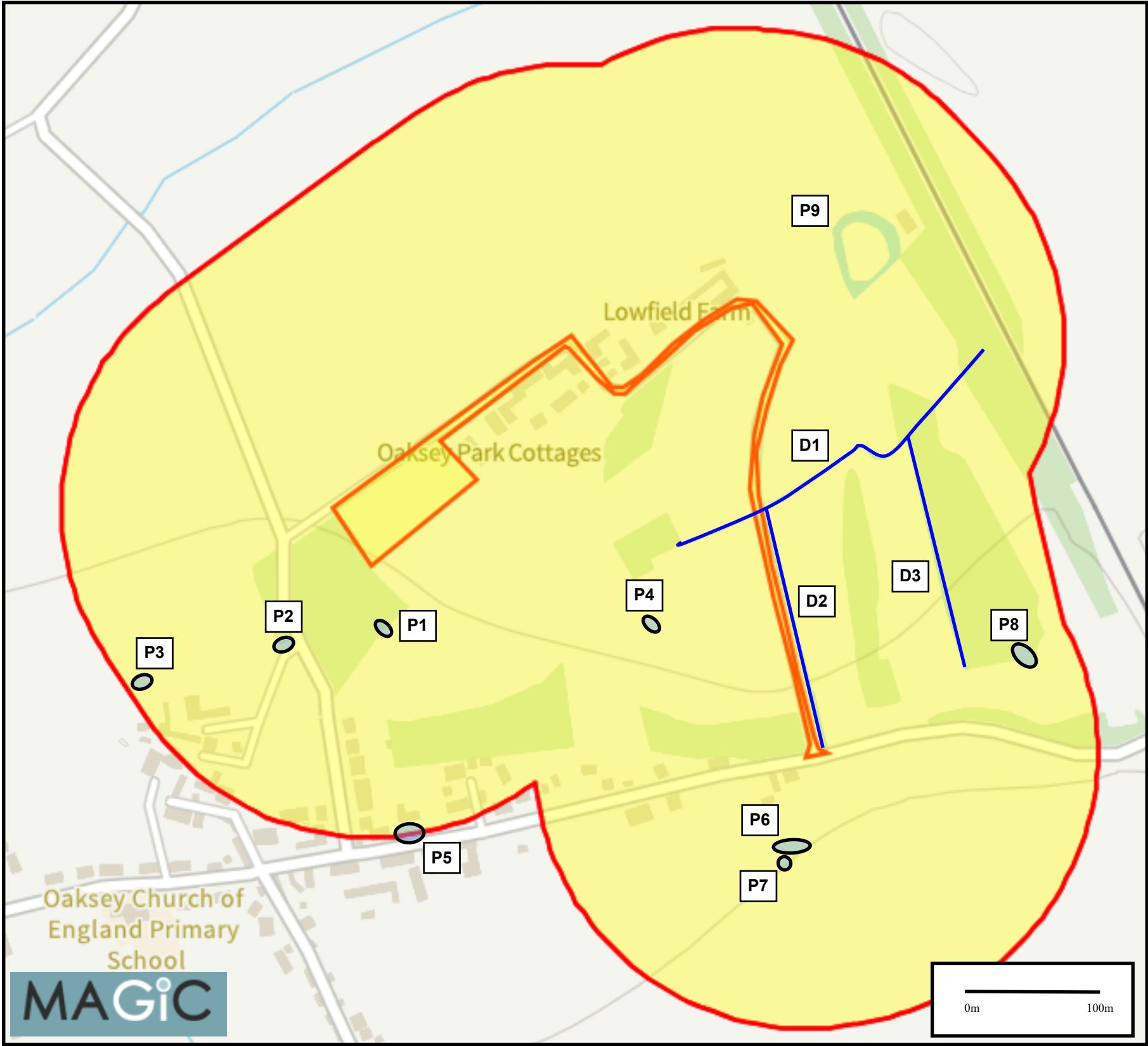
Target Notes
Please refer to the text and 'Target Notes' box for further details.



Client: John Cooper
Site: Land at Oaksey Park Golf & Leisure, Oaksey, Malmesbury, Wiltshire, SN16 9SB.
Title: UK Habitat Classification Survey Plan
Contract: 3192
Date: 12 November 2024

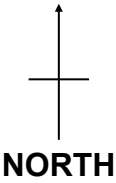
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4.2.3. Pond Location Plan



KEY:

- Site Boundary
- 250m Radius
- Pond
- Pond Number
- Ditch
- Ditch Number



Client: John Cooper
Site: Land at Oaksey Park Golf and Leisure,
Oaksey, Malmesbury, Wiltshire, SN16 9SB.
Title: Pond Location Plan
Contract: 3192
Date: December 2024

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Please note: this plan is intended only to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

4.3 Survey & Third-party Data

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

Table 2: Summary of Habitat Features

UK Habitat Classification Habitat Type & Code	Size / Extent	Condition	Qualifies as S.41 Habitat
u1c – Artificial unvegetated, unsealed surface	0.318ha	A stone gravel vehicular track shared with the wider Oaksey Park Golf & Leisure Club.	No
h3h – Mixed scrub	0.09ha	Two areas of mixed scrub (0.07ha and 0.02ha respectively) comprising hawthorn, blackthorn, hazel, goat willow, grey willow, and bramble with associated herbaceous flora including cock's-foot, false-oat grass, hogweed, common nettle and great willowherb.	No
g3c – Other neutral grassland	0.399ha	There are several distinctly separate parcels of other neutral grassland present across the site. A strimmed, damaged sward on a bund at the north-east features ruderal species typical of post-disturbance colonisation, including common nettle, broad-leaved dock, creeping thistle, hogweed, and creeping buttercup, with cock's-foot, false oat-grass, and common ragwort. Two areas of more structurally heterogenous grassland are present at the south-east and feature creeping bent, common bent, cock's-foot, false oat-grass, Timothy, crested dog's-tail,	No

UK Habitat Classification Habitat Type & Code	Size / Extent	Condition	Qualifies as S.41 Habitat
		perennial rye-grass, creeping cinquefoil, white clover, common vetch, bush vetch, common ragwort, dandelion agg., great willowherb, common nettle, hogweed, and bramble. A strimmed, damaged sward to the north features ruderal species typical of post-disturbance colonisation, including broad-leaved dock, creeping buttercup, common nettle, creeping thistle, and bristly oxtongue, with cock's-foot, creeping bent, white clover, and soft rush. Heavily damaged grassland following grass-stripping is present at the north-west and south-west and includes substantial bare ground with re-colonising species including creeping bent, cock's-foot, perennial rye-grass, crested dog's-tail, white clover, broad-leaved dock, creeping buttercup, selfheal, and soft rush. A short, forb-rich sward is present towards the west of the site and features abundant glaucous sedge with creeping buttercup, white clover, selfheal, creeping bent, Yorkshire-fog, cock's-foot, dandelion agg., bristly oxtongue, spear thistle, greater plantain, creeping cinquefoil, and a variety of acrocarpous mosses.	
g4 – Modified grassland	0.084ha	There are three separate areas of modified grassland at the site. A footpath runs along the northern site boundary and is colonised by short-sward modified grassland including perennial rye-grass, cock's-foot, white clover, creeping buttercup, annual meadow-grass, and daisy.	No

UK Habitat Classification Habitat Type & Code	Size / Extent	Condition	Qualifies as S.41 Habitat
		A short-mown formal lawn is present at the north-east and comprises perennial rye-grass, Yorkshire-fog, white clover, creeping buttercup, annual meadow-grass, selfheal, daisy, and dandelion agg. An area of damaged grassland colonising an informal vehicular track with substantial erosion includes perennial rye-grass, Yorkshire-fog, white clover, creeping buttercup, annual meadow-grass, selfheal, daisy, and dandelion agg.	
g 510 – Grassland; bare ground	0.073ha	Two piles of unvegetated bare earth.	No
h2a5 11 – species-rich native hedgerow; hedgerow with trees	H1: 0.111km H2: 0.111km	H1: a partially gappy / defunct hedgerow with trees lacking recent management, >1.5m in average height and <1.5m in average width. Species include hawthorn, wild privet, hazel, dog-rose, field maple, ash, English elm, dogwood, elder, blackthorn, and bramble. H2: a tall, thick hedgerow with trees, >2m in average height and width. Species include hawthorn, field maple, hazel, grey willow, dog-rose, blackthorn, and elder.	Yes
Trees	N/A	Two semi-mature crack willows, one of which is within mixed scrub habitat and the other within an area of 'other neutral' grassland.	No

Table 3: HSI of Pond 1 off-site.

Feature	Score	Observation
Sl ₁ Location	1	Zone A, location is optimal
Sl ₂ Pond Area	0.15	Pond approximately 75m ²
Sl ₃ Pond Drying	0.5	Sometimes dries: Dries between three years in ten to most years.
Sl ₄ Water Quality	0.33	Poor: Low invertebrate diversity (e.g. species such as midge and mosquito larvae). Few submerged plants.
Sl ₅ Shade	0.2	100% shade.
Sl ₆ Waterfowl	1	Absent: No evidence of waterfowl impact (moorhens may be present).
Sl ₇ Fish	1	Absent: No records of fish stocking and no fish revealed by netting or observed by torchlight.
Sl ₈ Ponds	1	25 ponds in 1km area, ponds blocked by major barriers (e.g. main roads) have not been included.
Sl ₉ Terrestrial Habitat	1	Good: Habitat that offers good opportunities for foraging and shelter (e.g. most semi-natural environments, such as rough grassland, scrub or woodland, also brownfield sites and low intensity farmland) covers more than 75% of available area.
Sl ₁₀ Macrophytes	0.3	0% coverage of macrophytes.
TOTAL SCORE	0.52	BELOW AVERAGE

NOTE: $HSI = (Sl_1 \times Sl_2 \times Sl_3 \times Sl_4 \times Sl_5 \times Sl_6 \times Sl_7 \times Sl_8 \times Sl_9 \times Sl_{10})^{1/10}$

4.4 Survey Objectives

The objectives of the survey were:

1. to carry out a Preliminary Ecological Appraisal of the site to identify any habitats, species or features of nature conservation significance;
2. to undertake a “third-party data” search to acquire details of any protected species records held by third-parties and information on nature conservation designations relevant to the site. To collate and comment upon the responses;
3. to undertake a Habitat Suitability Index of suitable waterbodies on site, following best practice guidelines (Oldham *et. al.*, 2000);
4. to produce a concise report identifying known and likely ecological constraints associated with a project. The report will identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA). It will also indicate mitigation measures that may be required, applying the ‘mitigation hierarchy’, to ensure compliance with wildlife law and recognised best practice. Intrinsic opportunities offered by a project to deliver ecological enhancement will be identified within the report.

4.5 Limitations

The Preliminary Ecological Appraisal was carried out by a suitably experienced ecologist from Focus Environmental Consultants. The month of survey (November) is outside the optimal survey period for most habitats and species in England (JNCC, 2010). Many fauna species become inactive and their field signs less apparent in the winter months. Similarly, some plant species may also become less evident in the winter because of their annual growth pattern or natural process of die-back to roots, corms, bulbs and tubers.

The reader is reminded that an ecological survey that is based on a single site visit will typically under-represent the biological diversity of a site, owing to seasonal variations in animal activity and plant growth form. However, a Preliminary Ecological Appraisal such as this can be completed by an experienced ecologist at any time of year subject to suitable weather conditions (CIEEM, 2017a).

Preliminary Ecological Appraisals typically have a lifespan of 12 – 18 months for planning purposes (see CIEEM, 2019). After this time has elapsed, the Local Planning Authority may require update surveys to be completed.

A limitation of the HSI assessment of Pond 1 is that the percentage of shade and macrophyte cover was estimated outside of the optimal survey periods for these components (May – September and March – September, respectively) (ARG, 2010). This is not considered a significant limitation at this juncture, as shading without leaf cover is already estimated to be the maximum 100% due to the surrounding woodland, macrophyte cover is likely to be minimal as a result (Jehle et al, 2011), and the context of the development site and layout proposals are such that negative impacts to great crested newts are highly unlikely to occur providing the recommended RAMs is produced and implemented during site clearance and construction activities.

4.6 Methods

4.6.1 Third-Party Data Trawl

A third-party data trawl was conducted in November 2024, to collect any existing site records and protected/notable species data records for within the site boundary and a 2km area around the site. The following third-party consultees were contacted: Wiltshire & Swindon Biological Records Centre and Gloucestershire Centre for Environmental Records. The government's multi-agency website 'magic' was also consulted (www.magic.gov.uk).

4.6.2 Preliminary Ecological Appraisal

An experienced ecological consultant undertook a field survey in accordance with the Preliminary Ecological Appraisal (CIEEM, 2017 2nd Edition), the UK Habitat Classification system (UKHab Ltd (2023), and the Handbook for Phase 1 Habitat Survey (JNCC, 2010). The extent of each habitat type was mapped and details of relative plant species abundance within homogenous areas were recorded. Species abundance was measured on the DAFOR scale (Dominant, Abundant, Frequent, Occasional and Rare), with the addition of the term 'Local' to describe variation on a small-scale.

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

The survey method was extended to include a search for notable and/or legally-protected fauna ('important ecological features' with reference to CIEEM, 2018).

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

4.6.3 Great Crested Newt Habitat Suitability Index

The off-site Pond 1 was assessed using the GCN Habitat Suitability Index (HSI) (Oldham *et al.*, 2000). An HSI is a numerical score where 0 indicates unsuitable habitats and 1 indicates optimal habitats. The HSI for the great crested newts incorporates ten suitability indices.

Categorisation of HSI Scores:

HSI		<u>Pond Suitability</u>
<0.5	=	poor
0.5 – 0.59	=	below average
0.6 – 0.69	=	average
0.7 – 0.79	=	good
>0.8	=	excellent

4.7 References & Bibliography

Altringham, J. D. (2003). *British Bats*. Harper Collins Publishers, Glasgow, UK.

Atherton, I, Bosanquet, S and Lawley, M (eds) (2010). *Mosses and Liverworts of Britain and Ireland – A Field Guide*. British Bryological Society.

Bat Conservation Trust (2022). *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys*. Bat Conservation Trust, London, UK.

<https://cdn.bats.org.uk/uploads/images/Interim-guidance-note-on-NVAs-May-2022-FINAL.pdf?v=1652957834>

Bat Conservation Trust & Institute of Lighting Professionals (2023). *Bats and artificial lighting at night – Guidance Note GN08/23*. Institute of Lighting Professionals, Warwickshire, UK.

Battersby, J. (Ed) & Tracking Mammals Partnership (2005). *UK Mammals: Species Status and Population Trends. First Report by the Tracking Mammals Partnership*. JNCC/Tracking Mammals Partnership, Peterborough, UK.

Bird Survey & Assessment Steering Group. (2022). *Bird Survey Guidelines for assessing ecological impacts*, v.1.0.0. <https://birdsurveyguidelines.org>

Bright, P.W. & Morris, P.A. (2005). *The Dormouse*. The Mammal Society, London, UK.

Bright, P., Morris, P., Mitchell-Jones, T. (2006). *The Dormouse Conservation Handbook (2nd Edition)*. English Nature (now Natural England), Northminster House, Peterborough, UK.

BRIG (ed. Ant Maddock) 2008. *UK Biodiversity Action Plan; Priority Habitat Descriptions*. (Updated Dec 2011). <https://data.jncc.gov.uk/data/2728792c-c8c6-4b8c-9ccd-a908cb0f1432/UKBAP-PriorityHabitatDescriptions-Rev-2011.pdf>

BTHK (2018). *Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals*. Exeter, Pelagic Publishing.

Burfield, I. (2004). *Birds in Europe – Population Estimates, Trends & Conservation Status*. BirdLife Conservation Series 12. BirdLife International.

CIEEM (2017a). *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

CIEEM (2017b). *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

CIEEM (2019). Advice Note on the lifespan of ecological reports & surveys. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

<https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

CIEEM (2020). *Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK*. Chartered Institute of Ecology and Environmental Management, Winchester, UK. <https://cieem.net/wp-content/uploads/2016/03/Guidelines-for-Accessing-and-Using-Biodiversity-Data-March-2020.pdf>

CIEEM (2021). *Good Practice Guidance for Habitats and Species (version 3)*. Chartered Institute of Ecology and Environmental Management, Winchester, UK. <https://cieem.net/wp-content/uploads/2021/05/Good-Practice-Guide-2023-edit.pdf>

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

Cooke, S., Cooke, A., and Sparks, T. (1994). *Effects of scrub cover on great crested newts breeding performance*. English Nature, Peterborough, UK.

Cresswell, P., Harris, S., & Jeffries, D.J., (1990). *The history, distribution, status and habitat requirements of the badger in Britain*. Nature Conservancy Council, UK.

Cresswell, W., and Whitworth, R. (2004). *An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt *Triturus cristatus**. English Nature, Peterborough, UK.

Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trehella, W.J., Wells, D. and Wray, S. (2012). *UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society, Southampton, UK.

Defra (2007). *Hedgerow Survey Handbook. A standard procedure for local surveys in the UK*. Defra, London, UK.

English Nature (2001). *Great Crested Newt Mitigation Guidelines*. English Nature (now Natural

England), Peterborough, UK.

English Nature (2004). *Reptiles: guidelines for developers.* English Nature (now Natural England), Peterborough, UK.

English Nature (2005). *Organising surveys to determine site quality for invertebrates: a framework guide for ecologists.* English Nature (now Natural England), Peterborough, UK.

Gallagher, M., Hobson, D., Jones, R., Price, S., Squirrell, N. (2023). *North Meadow and Clattinger Farm Special Area of Conservation Interim Recreation Mitigation Strategy 2023 – 2028.* Cotswold District Council, Natural England, Swindon Borough Council, Wiltshire Council.

Gent, A.H., and Gibson, S.D., eds. (2003). *Herpetofauna Workers' Manual.* Joint Nature Conservation Committee, Peterborough, UK.

Harris, S., Creswell, P., and Jefferies, D.J., (1989). *Surveying Badgers.* Mammal Society, London, UK.

Her Majesty's Stationary Office (1981). *The Wildlife and Countryside Act.* Her Majesty's Stationary Office, London, UK.

Her Majesty's Stationary Office (1992). *The Protection of Badgers Act.* Her Majesty's Stationary Office, London, UK.

Her Majesty's Stationary Office (1997). *The Hedgerows Regulations.* Her Majesty's Stationary Office, London, UK.

Her Majesty's Stationary Office (2000). *The Countryside and Rights of Way (CROW) Act.* Her Majesty's Stationary Office, London, UK.

Her Majesty's Stationary Office (2006). *The Natural Environment and Rural Communities (NERC) Act.* Her Majesty's Stationary Office, London, UK.

Her Majesty's Stationary Office (2017). *The Conservation of Habitats and Species Regulations.* Her Majesty's Stationary Office, London, UK.

Her Majesty's Stationary Office (2019). *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.* Her Majesty's Stationary Office, London, UK.

Her Majesty's Stationary Office (2021). *The Environment Act.* Her Majesty's Stationary Office,

London, UK.

Institution of Lighting Professionals (2020). Guidance Notes for the Reduction of Obtrusive Lighting. GN01:20. [online] Institution of Lighting Professionals. Available at <https://www.theilp.org.uk/documents/obtrusive-light/>

Jehle, R. (2000). *Terrestrial habitat exploitation of radio-tracked crested and marbled newts: implications for site protection.* The Herpetological Journal.

Jehle, R., Thiesmeier, B., Foster, J. (2011). *The Crested Newt: a dwindling pond-dweller.* Laurenti-Verlag, Bielefeld, Germany.

Joint Nature Conservancy Council (2010). *Handbook for Phase 1 Habitat Survey - a technique for environmental audit.* Nature Conservancy Council, Peterborough, UK.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001). *Great Crested Newt Conservation Handbook.* Froglife, Halesworth, UK.

Mathews F, Roche N, Aughney T, Jones N, Day J, Baker J, Langton S. (2015). *Barriers and benefits: implications of artificial night-lighting for the distribution of common bats in Britain and Ireland.* Phil. Trans. R. Soc. B 370: 20140124. <http://dx.doi.org/10.1098/rstb.2014.0124>

Mathews F, Harrower C, and Mammal Society (2020). *IUCN-compliant Red List assessment for Britain's terrestrial mammals.* Natural England, Peterborough. <https://www.mammal.org.uk/science-research/red-list>

NARRS (2013). *National Reptile and Amphibian Monitoring Scheme Reptile Survey Protocols (v.2013).* <http://www.narrs.org.uk/documents/NARRS%20Reptile%20Protocol%20v.2013.pdf>

Natural England (2011). *Badgers and Development. A Guide to Best Practice and Licensing. Interim Guidance Document Revised 12/11.* <http://www.wildlifeco.co.uk/wp-content/uploads/2014/03/badgers-and-development.pdf>

Natural England (2014). *Site Improvement Plan – North Meadow & Clattinger Farm.* [SIP141121FINALv1.0 North Meadow & Clattinger Farm.pdf](https://www.naturalengland.org.uk/Images/SIP141121FINALv1.0_North_Meadow_%26_Clatteringer_Farm.pdf)

Natural England (2022a). *Guidance - Bats: advice for making planning decisions. How to assess a planning application when there are bats on or near a proposed development site.* [Bats: advice for making planning decisions - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/bats-advice-for-making-planning-decisions)

Natural England (2022b). *Guidance - Badgers: advice for making planning decisions. How to assess a planning application when there are badgers on or near a proposed development site.*

<https://www.gov.uk/guidance/badgers-advice-for-making-planning-decisions>

Natural England (2022c). *Guidance - Great crested newts: advice for making planning decisions. How to assess a planning application when there are great crested newts on or near a proposed development site.* [Great crested newts: advice for making planning decisions - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/great-crested-newts-advice-for-making-planning-decisions)

Natural England (2022d). *Guidance - Hazel dormice: advice for making planning decisions. How to assess a planning application when there are hazel (common) dormice on or near a proposed development site.* <https://www.gov.uk/guidance/hazel-dormice-advice-for-making-planning-decisions>

Natural England (2022e). *Guidance - Otters: advice for making planning decisions. How to assess a planning application when there are otters on or near a proposed development site.* <https://www.gov.uk/guidance/otters-advice-for-making-planning-decisions>

Natural England (2022f). *Guidance - Reptiles: advice for making planning decisions. How to assess a planning application when there are reptiles on or near a proposed development site.* [Reptiles: advice for making planning decisions - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/reptiles-advice-for-making-planning-decisions)

Natural England (2022g). *Guidance - Water voles: advice for making planning decisions. How to assess a planning application when there are water voles on or near a proposed development site.* <https://www.gov.uk/guidance/water-voles-advice-for-making-planning-decisions>

Natural England (2022h). *Guidance – White-clawed crayfish: advice for making planning decisions. How to assess a planning application when there are white-clawed crayfish on or near a proposed development site.* <https://www.gov.uk/guidance/white-clawed-crayfish-advice-for-making-planning-decisions>

Natural England (2022i). *Guidance - Wild birds: advice for making planning decisions. How to assess a planning application when there are wild birds on or near a proposed development site.* <https://www.gov.uk/guidance/wild-birds-advice-for-making-planning-decisions>

Office of the Deputy Prime Minister (2005). *Circular 06/2005: Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system.* Her Majesty's Stationary Office, London, UK.

Office of the Deputy Prime Minister (2023). *National Planning Policy Framework (NPPF).* Her Majesty's Stationary Office, London, UK.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10 (4), 143-155.

PTES (2019). *Hedgehogs and development*. Available online at: <http://www.hedgehogstreet.org>

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield, UK.

Rodwell, J. S. (Ed) (1991 et seq.). *British Plant Communities*. Cambridge University Press, Cambridge, UK.

Stace, C. (2019 4th. Edn.). *New Flora of the British Isles*. Cambridge University Press, Cambridge, UK.

Stanbury, A., Eaton, M., Aebisher, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., Win, I. (2021). *The Status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List Assessment of extinction risk for Great Britain*. *British Birds*. 114. pp.723 – 747.

UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

Woods, M. (1995). *The Badger*. The Mammal Society, London, UK.

4.8 Legislation & Best Practice

4.8.1 The Environment Act 2021

The Environment Act 2021 is a far-reaching Act of parliament, which received Royal Assent on 9th November 2021. It is described by the Chartered Institute of Ecology and Environmental Management as ‘world leading’ legislation and has the primary focus of providing targets, plans and policies for improving the natural environment. In implementing the Act, the Secretary of State is required to set long-term targets for a number of priority areas including: air quality, water, biodiversity, resource efficiency and waste reduction. Schedule 14 of the Act establishes a mandatory requirement for all developments to secure a 10% net gain in biodiversity, with a few exceptions such as ‘permitted development’ and marine and intertidal developments. Schedule 14 of the Act details the required amendment of the Town and Country Planning Act 1990 (inserting a new s.90A and Schedule 7A) with respect to ‘normal’ development. Schedule 15 describes amendments to the Planning Act 2008 with respect to Nationally Significant Infrastructure Projects, inserting a new s.99 and Schedule 2A.

The measurement of baseline and post-development biodiversity figures involves the use of the most up to date version of the state-sponsored ‘biodiversity metric’. A ‘small sites’ metric is available for sites of up to 0.5ha in size supporting 1 - 9 residential units or for other forms of development, with a floorspace of less than 5000m² and in both cases without priority habitats being present (with the exception of hedgerows and arable field margins). The 10% biodiversity net gain requirement described by the Act will not be mandatory until February 2024 (major developments), although may still be required by local plan policy in the intervening period. Other matters covered by the Environment Act are the creation of a Biodiversity Gain Site Register, the provision of Biodiversity Credits, the establishment of the Office for Environmental Protection (OEP) and the establishment of Local Nature Recovery Strategies. The Act further strengthens the biodiversity duty enshrined within s.40 of the Natural Environment and Rural Communities Act 2006, requiring not only the conservation of biodiversity but also its ‘enhancement’.

4.8.2 The Conservation of Habitats and Species Regulations 2017 (as amended) & The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

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

<https://www.legislation.gov.uk/ukxi/2019/579/contents/made>

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

(‘UK National Site Network’ in the UK). The Habitats Directive also requires the strict protection of animals and plants of Community Interest listed under Annex IV. Habitat types requiring strict protection as SACs are listed under Annex I. The conservation of animals and plants listed under Annex II requires the designation of SACs.

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

4.8.3 The Wildlife and Countryside Act 1981 (as amended)

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

4.8.4 The Countryside and Rights of Way (CROW) Act 2000

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

4.8.5 The Natural Environment and Rural Communities (NERC) Act 2006

The Natural Environment and Rural Communities Act imposes a *Biodiversity Duty* (S.40) on all public bodies to conserve biodiversity at both species and habitat levels (S40). “Every public authority must,

in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.”

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

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

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

4.8.6 The Hedgerow Regulations 1997

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

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

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

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

Exemptions to the Regulations fall into three categories:

- “small scale works;”

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

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

4.8.7 National Planning Policy Framework

The National Planning Policy Framework (NPPF) was most recently updated in December 2023. The NPPF sets out the government’s planning policies for England and how these are expected to be applied. This framework acts as guidance for planning authorities (LPAs) in England to form Local Plan policies in favour of sustainable development as part of the government’s reforms to increase the accessibility of the planning system and promote long term sustainable growth. Along with the Circular 06/205, the NPPF consolidates the Planning Policy Statements and Guidance Notes, many of which are now obsolete, including *Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9)*.

The framework states that “*planning policies and decisions should contribute to and enhance the local environment*” (paragraph 180).

Chapter 15 of the framework focusses on habitats and biodiversity. Specifically, paragraph 186 states: “*...when determining planning applications, local planning authorities should apply the following principles:*

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments) should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

- *development proposals whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

4.8.8 Circular 06/2005: Biodiversity and Geological Conservation

The Circular 06/2005 complements the NPPF by advising on how the law relates to planning and nature conservation in England, with particular reference to designated sites and protected species. Part IV also reminds LPAs and developers that licences and mitigation measures may be required in addition to planning permissions if protected species are to be affected by the development. *“The breach of protected species legislation can often give rise to a criminal offence”* (Paragraph 101).

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

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

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

4.8.10 Bats

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

- deliberate capture, injury or killing of a bat;
- deliberate disturbance of a bat and in particular disturbance which is likely to impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 - or to affect significantly the local distribution or abundance of the species to which they belong.

- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange, any bat or any part of a bat or anything derived from one.

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

4.8.11 Badgers

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

4.8.12 Birds

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

4.8.13 Great Crested Newts

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

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

Great crested newts are also afforded protection from intentional or reckless 'disturbance' by the Wildlife and Countryside Act 1981 (as amended). The deliberate or reckless obstruction of access to a structure or place used by great crested newts for shelter and protection is also an offence under the Act. This applies to both aquatic and terrestrial habitat.

4.8.14 Reptiles

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

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

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

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

Sand lizards and smooth snakes are also afforded protection from intentional or reckless 'disturbance' by the Wildlife and Countryside Act 1981 (as amended). The deliberate or reckless obstruction of access to a structure or place used by these reptiles for shelter and protection is also an offence under the Act. All six native UK reptiles are listed under S.41 of the Natural Environment and Rural Communities Act (2006) as amended.

4.8.15 Hazel Dormice

The hazel dormouse (*Muscardinus avellanarius*) is a "European Protected Species" (EPS) and listed on Annex II and Annex IV of the EC Habitats Directive. The Directive is transposed into UK law through the Conservation of Habitats and Species Regulations 2017 (as amended). The following actions affecting hazel dormice are prohibited under the legislation:

- deliberate capture, injury or killing of a hazel dormouse;
- deliberate disturbance of a hazel dormouse and in particular disturbance which is likely to impair their ability:

- to survive, to breed or reproduce, or to rear or nurture their young, or
- in the case of animals of a hibernating or migratory species, to hibernate or migrate;
- or to affect significantly the local distribution or abundance of the species to which they belong.
- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange, any otter, any part of a hazel dormouse or anything derived from one.

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

4.8.16 Otters

The otter (*Lutra lutra*) is a "European Protected Species" (EPS) and listed on Annex II and Annex IV of the EC Habitats Directive. The Directive is transposed into UK law through the Conservation of Habitats and Species Regulations 2017 (as amended). The following actions affecting otters are prohibited under the legislation:

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

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

4.8.17 Water voles

Water voles (*Arvicola amphibius*) are fully protected under the Wildlife and Countryside Act 1981. It is an offence to intentionally:

- kill, injure or take them.
- possess or control them (alive or dead).

It is also an offence to intentionally or recklessly:

- damage or destroy a structure or place used for shelter or protection.

- disturb them in a place used for shelter or protection.
- obstruct access to a place used for shelter or protection.

Water voles are also listed as a '*species of principal importance*' under Section 41 of the Natural Environment and Rural Communities Act (2006).

5. QUALIFICATIONS & EXPERIENCE

Focus Environmental Consultants® has the expertise to provide sure-fire environmental solutions to a wide range of projects. The company ethos forges the highest standards of professional scientific practice with a best value approach for our clients. Our core area of expertise is in the production of specialist environmental reports and advice to support planning applications. Our comprehensive services include Preliminary Ecological Appraisals (PEA), Biodiversity Net Gain (BNG) assessments and calculations, Ecological Impact Assessment (EclA), Habitat Regulations Assessment (HRA) and fulfilling protected species surveys, licensing and mitigation requirements. Focus Environmental Consultants is a CIEEM Registered Practice, with all ecological staff being members of this professional body. Our flexible approach, range of skills and broad project experience from major infrastructure contracts to small private developments allows us to adapt to your individual requirements. As well as offering a full suite of ecological services, Focus Environmental Consultants can provide expert arboricultural advice and reports and is building an enviable reputation for innovative habitat creation and management solutions. Focus Environmental Consultants is situated in Worcestershire, providing a convenient and central UK location.

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