
Project	Ashgrove Road, Sevenoaks, Kent (Farm Access)	Date	June 2021
Note	Ecological Assessment	Ref	UE0441.1
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1 Introduction

1.1 This Technical Note presents an Ecological Assessment for the site of a proposed farm access at Ashgrove Road, Sevenoaks, Kent (Grid Reference: TQ 52242 53413). The report has been prepared to record the ecological baseline and identify key ecological features within and around the proposal site.

Survey area and proposals

1.2 The site lies to the south of the town of Sevenoaks in Kent and comprises an agricultural hedgerow and field margin. The survey area included the location of the proposed farm access and extended north and south, to incorporate the entire length of the hedgerow.

1.3 Proposals for the site include the severance of the hedgerow and removal of a small section of the field margin. Replacement hedgerow planting is proposed in line with visibility splays. Appendix I illustrates the proposed site layout.

Objectives

1.4 The objectives of the Technical Note are to:

- ▶ Identify features present on the site or adjacent which are ecologically significant and which may act as constraints to the proposed access;
- ▶ Consider the need for further ecological surveys which may be necessary; and
- ▶ Make preliminary recommendations for the protection of important ecological features, to avoid or mitigate ecological impacts.

2 Methodology

Phase 1 habitat survey

2.1 The Phase 1 habitat survey of the survey area was undertaken on 31 March 2021 by Senior Ecologist Tim Lees BA(Hons) MSc MCIEEM. Weather conditions were warm (c.17°C), with a light breeze (Beaufort Scale 2), 50% cloud cover and no precipitation.

- 2.2 The survey area was classified, recorded and mapped using standard colour codes, in accordance with a list of ninety habitat types specified within the methodology for Phase 1 habitat survey (Joint Nature Conservation Council, 2010). This allows rapid visual assessment of the extent and distribution of different habitat types. Target notes were used to provide supplementary information on features which were particularly interesting or significant to specific construction proposals, or too small to map, or to provide additional details, for example relating to species composition and structure.
- 2.3 This basic methodology was extended to provide more detail in relation to habitats with potential to support rare or protected fauna, as described by the Chartered Institute of Ecology and Environmental Management's *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017). The assessment of habitat suitability for protected, rare or priority species is based on current good practice. Where a species/group is not specifically evaluated, this indicates that no habitat of potential value for the species was identified during the survey.

Hedgerow regulations survey

- 2.4 If a hedgerow is classified as important under the Hedgerow Regulations 1997, local planning authorities are able to prevent its removal. To be classified as important, the hedgerow should be over 30 years old and should comprise one of the following:
- ▶ At least 7 woody species/30m;
 - ▶ At least 6 woody species/30m and at least 3 features such as; an associated ditch, bank or wall, standard trees, parallel hedge, or connections to woodland or pond;
 - ▶ At least 6 woody species/30m and including any one of black poplar *Populus nigra*, wild service tree *Sorbus torminalis*, small-leaved lime *Tilia cordata*, large-leaved lime *Tilia platyphyllos*;
 - ▶ At least 5 woody species and at least 4 associated features;
 - ▶ If adjacent to a bridleway or footpath, at least 4 woody species and at least 2 features.
- 2.5 The Hedgerow Regulations do not apply to hedgerows which form the curtilage of residential properties or gardens. It should also be noted that hedgerows may qualify as important for historic or archaeological reasons and this report only assesses them according to the ecological criteria set out in the Hedgerow Regulations¹.

Preliminary Roost Assessment

- 2.6 Trees within/adjacent to the survey area were subject to an external inspection for potential bat roost features (subject to safe access). All observable features potentially suitable for bats were noted and the overall suitability of the tree for roosting bats was classified with reference to Table 2.1 (Collins (ed.), 2016). The objective was to establish whether each feature was of negligible, low, moderate or high roosting bat suitability, or a confirmed roost based on the presence of bats or their droppings.

¹ A full list of criteria can be found at: <http://www.legislation.gov.uk/uksi/1997/1160/schedule/1/made>

2.7 Trees were assessed for Potential Roost Features (PRF) such as woodpecker holes, cavities, cracks or splits in major limbs (e.g. hazard beams, rot holes, frost cracks, knot holes, occlusions, flush cuts, tear-outs, cankers or butt-rots), loose platey bark, aerial deadwood and dense ivy or epicormic growth. The tree inspection was carried out from ground level using binoculars and handheld torch.

Table 2.1: Potential suitability of structures/trees for roosting bats (after Collins, 2016)

Suitability	Roosting habitats
<u>Negligible</u>	Negligible habitat features on site likely to be used by roosting bats
<u>Low</u>	A tree of sufficient size and age to contain PRFs but with none seen from the ground / using ladders or features seen with only very limited roosting potential
<u>Moderate</u>	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (for roost type only)
<u>High</u>	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat
<u>Confirmed roost</u>	Bats or unequivocal evidence of bats found, i.e. bat droppings

Habitat Suitability Index

2.8 The Habitat Suitability Index (HSI; Oldham et al, 2000) is a tool used to assess ponds on the basis of their suitability to support breeding great crested newt *Triturus cristatus*. The HSI incorporates ten suitability indices which are considered to affect great crested newt distribution. These are:

- ▶ Location (in Britain);
- ▶ Pond area;
- ▶ Desiccation rate (years out of ten that pond dries);
- ▶ Water quality (subjective assessment);
- ▶ Percentage of pond shaded (% of pond margin shaded 1m from the bank);
- ▶ Number of waterfowl;
- ▶ Fish population (subjective assessment);
- ▶ Number of ponds within 1km;
- ▶ Terrestrial habitat quality; and
- ▶ Percentage macrophyte cover.

2.9 The results of the HSI calculation can then be compared to Table 2.2, which categorises HSI scores used by the National Amphibian and Reptile Recording Scheme (Oldham et al, 2000) to identify the probability of a pond supporting great crested newts.

Table 2.2: HSI Index classification for great crested newt

Habitat Quality	HSI Score
Poor	Below 0.5
Below Average	0.5 – 0.59
Average	0.6 – 0.69
Good	0.7 – 0.79
Exceptional	Above 0.8

2.10 The HSI gives an indication of whether a pond is suitable for breeding great crested newts, however, it should be noted that a low score does not preclude the possibility that great crested newt are using the pond. A survey of ponds carried out to test the HSI (ARG UK, 2010) found that 20% of ponds which were scored as 'below average' still contained great crested newts, although this increased to an occupation rate of 93% for those ponds scored as 'excellent'. Another important consideration when using the HSI is that pond scores can vary at different times of year, for example, if emergent vegetation is not present (and therefore under recorded) at the time of the HSI assessment.

Evaluation criteria

2.11 Important ecological features were evaluated to the extent possible under the survey methods used, and in relation to a geographical frame of reference, i.e. international/European value being most important, then national, regional, metropolitan/county/district/borough, and lastly local (based on CIEEM, 2018).

Limitations

2.12 Time of year when the survey was carried out and other variations will influence the results of the survey. Botanical species vary considerably in their flowering, seeding and fruiting periods, and surveys outside of these periods can confound accurate species identification. Where this is the case plants have been identified to lowest possible taxonomic group, normally genus. The possibility nonetheless exists for other species to be present on the site which were not recorded or otherwise indicated by the survey.

2.13 The survey reported herein was carried out in early spring, prior to flowering for many botanical species. However, diagnostic vegetative characteristics are often still discernible and the timing of the survey is not considered to be a significant limitation to meeting the report objectives.

2.13.1 There were no difficulties in gaining access to survey the site’s habitats and assess protected species suitability. Adjacent habitats were surveyed where appropriate in order to identify constraints falling outside of the proposed development site and to place the survey area in its ecological context. However, the adjacent residential gardens to the north could not be fully surveyed for signs of species such as badger *Meles meles* due to access restrictions.

2.14 The details of this report will remain valid for a period of 18 months from the date of the survey (March 2021), after which the validity of this assessment should be reviewed to determine whether further updates are necessary (CIEEM, 2019). Note that the recommendations within this report should be

reviewed (and reassessed if necessary) should there be any changes to the site boundary or development proposals which this report was based on.

2.15 See Appendix IV for general Legal and Technical Limitations which apply to this document.

3 Results

Habitats

3.1 The following Phase 1 habitats were identified within or adjacent to the survey area and are shown on the Phase 1 habitat survey plan at Appendix II.

Hedgerows

3.2 The survey area was dominated by a native species-rich hedgerow and trees. This tall hedgerow (c.5-9m) extended from neighbouring residential properties north of the survey area, to a small area of broadleaved woodland at the southern limits of the survey area. It comprised of hawthorn *Crataegus monogyna*, holly *Ilex aquifolium*, hazel *Corylus avellana*, pedunculate oak *Quercus robur* and English elm *Ulmus procera*. Standard beech *Fagus sylvatica* and ash *Fraxinus excelsior* trees were present particularly towards the southern end. Bramble *Rubus fruticosus*, honeysuckle *Lonicera periclymenum* and common ivy *Hedera helix* climbers were present, and the ground flora included cleavers *Galium aparine*, lords-and-ladies *Arum maculatum*, common nettle *Urtica dioica* and bluebell *Hyacinthoides non-scripta* (listed on schedule 8 of the Wildlife & Countryside Act 1981 (as amended) (WCA)). The hedgerow was c.108m long and c2-3m wide.

3.3 The hedgerow qualified as Hedgerows Habitat of Principal Importance (HPI) (Maddock, 2008).

Semi-improved neutral grassland

3.4 The hedgerow was bound by a sheep-grazed pastoral field, along its western edge. The sward was tussocky and showed signs of improvement, but also some diversity in terms of grasses and forbs. Grass species included abundant cock's-foot *Dactylis glomerata* and Yorkshire-fog *Holcus lanatus*, with frequent perennial rye-grass *Lolium perenne*, and occasional false oat-grass *Arrhenatherum elatius* and red fescue *Festuca rubra*. Herbaceous species included frequent common sorrel *Rumex acetosa*, creeping buttercup *Ranunculus repens*, cut-leaved cranesbill *Geranium dissectum*, white clover *Trifolium repens* and occasional common nettle.

Hardstanding

3.5 Ashgrove Road formed the eastern boundary of the survey area, comprising a strip of tarmacked highway, devoid of vegetation.

Dense scrub

3.6 A small area of dense scrub had accumulated towards the northern end of the hedgerow comprising patches of bramble.

Hedgerow regulations survey

3.7 The Hedgerow Regulations assessment result for the hedgerow within the survey area is shown in Table 3.1. If a hedgerow is classified as important under the Regulations, local planning authorities are able to prevent its removal.

Table 3.1: Hedgerow regulations assessment

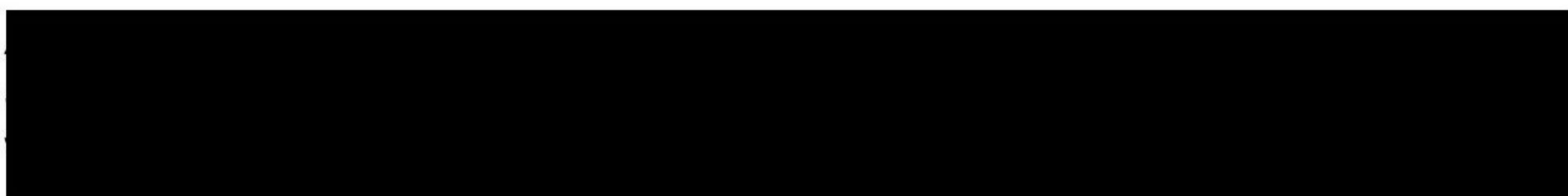
Feature	
Adjacent to bridleway/path	Yes
<i>Populus nigra, Sorbus torminalis, Tilia cordata, Tilia platyphyllos</i> present	No
Average number of woody species within 30m sections	5
Associated bank or wall	Yes
Intact hedgerow	Yes
Trees present within hedge	Yes
Ditch	No
Connection points	3
Parallel hedge	Yes
Residential curtilage	No
IMPORTANT	Yes

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3.8 No PRFs were observed within any of the trees within the hedgerow.

Other protected species

3.8.1



4 Evaluation

4.1.1 This section evaluates the survey area in terms of the habitats and species present or potentially present on site or its immediate vicinity, in the context of relevant legislation and planning policy. See Appendix III for a review of the legislation and planning context.

Habitats

4.2 Table 4.1 presents a preliminary evaluation of the habitats recorded within or adjacent to the survey area, with reference to the criteria defined at section 2.11.

Table 4.1: Preliminary evaluation of habitats within the survey area

Habitat	Evaluation	Rationale
Hedgerows	Local	Whilst this habitat qualifies as an HPI, hedgerows of this quality are not uncommon in the Sevenoaks District, which restricts its importance.
Semi-improved neutral grassland and dense scrub	Negligible	These habitats are common and widespread or poor-quality examples, none of which are HPI habitats.

Priority habitats

HPI Hedgerows

- 4.2.1 Priority hedgerow habitats are defined “as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less than 20m wide..., consisting predominantly (i.e. 80% cover or more) of at least one woody UK native species” (any bank, wall, ditch or tree within 2m of the centre of the hedgerow is considered to be part of the hedgerow habitat, as is the herbaceous vegetation within 2m of the centre of the hedgerow) (Maddock, 2008). The survey area’s hedgerow falls into this classification. Hedgerow HPI are of high intrinsic ecological value and can provide habitats suitable for a range of protected species, including amphibians and reptiles (shelter and dispersal), nesting birds, invertebrates, foraging / commuting bats, and hazel dormouse.
- 4.2.2 Approximately 43m of the hedgerow will be lost to facilitate the new access point. However, this loss will be offset by the creation of replacement hedgerow planting along the new visibility splays and returns into site which will exceed the length of hedgerow lost. While this newly created habitat will offset the losses some minor fragmentation effects will remain until the hedgerow reaches maturity.

Protected species

Amphibians (excluding great crested newt)

- 4.3 The semi-improved neutral grassland and hedgerow provide suitable terrestrial habitat for common and widespread amphibian species such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *Lissotriton helveticus*. The majority of habitat will be retained and the surrounding grassland, hedgerow and woodland habitat will continue to accommodate this species group. Common amphibians are not considered to present a constraint to the proposals.

Great crested newt

- 4.4 The semi-improved neutral grassland and hedgerow provide good quality terrestrial habitat for great crested newt. The composition of coarse grasses, with a variable sward height and structure is suitable for foraging great crested newt. The hedgerow and scrub provide shelter and dispersal habitat.

- 4.5 There is one pond (P1) located approximately 10m west of the survey area, which was assessed for its suitability to support breeding great crested newt using field observations supported by a HSI (Oldham et al, 2000).
- 4.6 Pond P1 is a shallow farmland pond, which showed no signs of regular management. The pond measured approximately 30m² and was surrounded by dense scrub, with a small patch of grass at its southern edge. It is considered the pond dries annually and no waterfowl or fish were present. There was an absence of aquatic vegetation with only small patches of soft rush at the margin. P1 achieved an HSI value of 0.42 (full results are shown in Table 4.2), making it of poor suitability for breeding great crested newt.

Table 4.2: HSI results for P1

Variable	Field score	SI value
Pond 1		
Location	A	1
Pond area (m2)	30	0.05
Desiccation rate	Dries annually	0.1
Water quality	Poor	0.33
% shaded 1m from bank	90	0.4
Fowl	Absent	1
Fish	Absent	1
Pond density (per km ²)	7	0.85
Terrestrial habitat	Good	1
Macrophyte cover %	0	0.3
HSI value	0.42	
Suitability	Poor	

- 4.7 Due to the small-scale works and poor suitability of the nearby pond (P1), it is concluded that the risk of great crested newt being present within the survey area is low and no further survey is necessary. However, due to the presence of ponds in the local area, site clearance works should be undertaken in accordance with a Non-licenced Method Statement to reduce the risk of killing/injuring great crested newt, as recommended at section 5.3.

Birds (nesting)

- 4.7.1 The survey area’s boundary hedgerows and scrub are suitable for nesting Species of Principal Importance (SPI) birds such as song thrush *Turdus philomelos* and house sparrow *Passer domesticus*.
- 4.8 The grassland and scrub are unlikely to support ground-nesting species such as skylark *Alauda arvensis* (SP) and meadow pipit *Anthus Pratensis* (Amber-listed) under the current intensive sheep-grazing regime. This is due to the short sward height, poor structural form and high levels of disturbance from the livestock.

- 4.9 Due to the small-scale nature of the works, further breeding bird surveys are not required. However, it is recommended that loss of the hedgerow habitat is minimised as much as possible. Precautionary measures for nesting birds are recommended at section 5.3.

Invertebrates

- 4.10 The habitats within the survey area provide limited suitability for invertebrates and are unlikely to support a diverse or abundant invertebrate fauna in general. The small-scale nature of the works and abundance of similar habitat in the local area, means that the loss of hedgerow is unlikely to affect populations of invertebrates. Invertebrates are not considered to present a constraint to the development proposals and no further surveys for this group are required.

4.11

Bats

- 4.12 None of the trees within the survey area displayed PRFs during a ground-level assessment, and PRFs are considered unlikely to be present higher up due to the relatively young age or good condition of the trees. Bats roosting in trees are not considered to present a constraint the development proposals and no further surveys are required.
- 4.13 The hedgerow may serve as navigation route or foraging feature for bats and is of moderate suitability. However, given the scale and nature of the works, and proposed replacement habitat, significant impacts to foraging/commuting bats are unlikely. It is anticipated that the increase in artificial lighting will be negligible. Works to create the access will be undertaken during the daytime, which may result in short periods of lighting at dusk during the winter months. No operational lighting will be installed. Accordingly, foraging/commuting bats are not considered to present a constraint to the development proposals and no further surveys are required.

Hazel dormouse

- 4.14 The hedgerow habitat within the survey area is dense and largely intact, providing potential habitat for dormouse. Food plants are present (including hazel, hawthorn, oak, and bramble) providing a good year-round source of food. The habitat is well connected via mature hedgerows to larger woodland blocks within the wider landscape. The majority of hedgerow will be retained and protected during, but severance of this habitat will be required. Accordingly, there is a risk of habitat loss, killing, injury or disturbance to dormice during the works.

- 4.15 Natural England standing advice includes displacement as a mitigation measure for hazel dormouse, if less than 100m of hedgerow will be removed and the remaining habitat is linked to a larger dormouse habitat². Current proposals will remove c.43m for the access road and visibility splays. Connectivity with the wider landscape will continue along the remaining length of hedgerow north and south of the development footprint.
- 4.16 If proposals change and a greater length is to be removed, then further presence / likely absence surveys of the hedgerow may be required. In the absence of surveys, pre-construction site clearance works to hedgerow should be undertaken in accordance with a Non-Licensed Method Statement to reduce the risk of killing/injury to hazel dormouse, as recommended at section 5.3.

Water vole and otter

- 4.17 There are no riparian habitats running through or adjacent to the survey area, nor in the wider landscape, making it unlikely that either water vole *Arvicola amphibius* or otter *Lutra lutra* species would be present. Neither species is considered to present a constraint to development proposals and further surveys are not required.

Plants, native

- 4.18 Native bluebell was recorded in low numbers at the base of the hedgerow. No other rare or protected species of flora were recorded within the survey area, but the time of year may have resulted in botanical species being under recorded due to an absence of inflorescences. Given the low numbers recorded, it is not considered that the proposals will affect the bluebell population in the local area. Botanical species are not considered to present a constraint to the development proposals and no further surveys for this group are required.

Plants – invasive non-native species and injurious weeds

- 4.19 No invasive plant species (i.e. species listed on Schedule 9 of the WCA) were located during this survey. No significant stands of injurious weed species were noted (ragwort *Senecio jacobaea*, spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, curled dock *Rumex crispus*, and broad-leaved dock *Rumex obtusifolius*). Invasive plant species and injurious weeds are not considered to present a constraint to the development proposals and no further action for this group is required.

Reptiles (terrestrial)

- 4.20 The composition of coarse grasses, in combination with the hedgerow, creates a mosaic for foraging reptiles. The hedgerow and scrub also provide shelter and dispersal habitat. Construction works would involve site clearance, vehicle movements and groundworks, which together could present a risk of killing or injury for reptiles if present within the survey area. No further survey is necessary, but vegetation clearance works should be undertaken in accordance with a Precautionary Working Method Statement to reduce the risk of killing/injury to reptiles, as recommended at section 5.3.

² <https://www.gov.uk/guidance/hazel-or-common-dormice-surveys-and-mitigation-for-development-projects>

Other protected, rare or notable species

4.21 The survey area contains habitats suitable for hedgehog, including semi-improved neutral grassland, hedgerows and scrub. Hedgehog is listed as an SPI and is undergoing a significant population decline. General ecological protection measures for hedgehog and other mammals are advised in section 5.4.

5 Recommendations

5.1 With regard to the objectives of this Preliminary Ecological Appraisal, recommendations are made for the protection of important ecological features and/or to avoid or mitigate ecological impacts. It is intended that these recommendations should be considered during future changes to the design of proposals so that protection of important ecological features is secured.

Habitat loss mitigation

5.2 The following habitats are of high intrinsic value (Table 5.1) and their loss should be mitigated as part of the proposals.

Table 5.1: Recommended habitat loss mitigation

#	Recommended habitat loss mitigation
R1	Hedgerow creation to mitigate the loss of Hedgerows HPI should use a range of native shrub species in keeping with the existing composition of the hedgerow. Fruit, seed, nut and nectar-bearing species should be used when selecting species for landscape planting, so that food sources are available throughout the year (e.g. hazel, hawthorn, blackthorn, pedunculate oak, holly and honeysuckle).

Precautionary measures

5.3 The following species/groups (Table 5.2) require specific precautionary measures to be adhered to prior to and during works to ensure that an offence under the relevant legislation is avoided.

Table 5.2: Recommended precautionary measures

#	Recommended precautionary measures
R2	Vegetation clearance works in the construction footprint should be undertaken in accordance with a Non-Licensed Method Statement to reduce the risk of killing/injury to great crested newt. The Method Statement should specify reasonable avoidance measures including timing restrictions (works to be carried out during the great crested newt active season, March to October), progressive reduction of vegetation height to displace any newts present into suitable surrounding areas of retained habitat, and should be carried out under the supervision of a suitably qualified ecologist. Once vegetation removal is complete, the site should be maintained in unsuitable condition to prevent recolonisation.
R3	Removal of nesting bird habitats should be undertaken outside of the bird nesting season, which runs from 1 March to 30 September. It should therefore be carried out between October and February. However, mitigation relating to other protected species will dictate that vegetation clearance must occur during the bird breeding season. Any clearance works undertaken within the bird breeding season will require a site check for nesting birds by a suitably qualified ecologist. This should take place no more than two days prior to works

#	Recommended precautionary measures
	commencing. This is to ensure that no disturbance to active bird nests occurs. If a nest is found it must be cordoned off and works adjacent to the nest must be delayed until such time that the chicks have fledged from the nest. This should be supervised by a suitably qualified ecologist.
R4	A pre-works inspection of the site and adjacent habitats for any newly excavated badger setts is recommended to take place within two months prior to commencement of clearance works as part of developing the site.
R5	Works to remove sections of the hedgerow should be undertaken in accordance with a Non-Licensed Method Statement to reduce the risk of killing/injury to hazel dormouse. The Method Statement should specify reasonable avoidance measures including progressive reduction of vegetation height by hand (initial cut to 15cm max during November to March, stump removal from May) to enable any dormice present to disperse into suitable surrounding areas of retained habitat, and should be carried out under the supervision of a suitably qualified ecologist.
R6	Hedgerow clearance works should be undertaken in accordance with a Precautionary Working Method Statement to reduce the risk of killing/injury to reptiles. The Method Statement should specify reasonable avoidance measures including timing restrictions (works to be carried out during the reptile active season, broadly March/April to September/October), progressive reduction of vegetation height to displace any reptiles present, and should be carried out under the supervision of a suitably qualified ecologist. Once vegetation removal is complete, the site should be maintained in unsuitable condition to prevent recolonisation.

Ecological protection measures

5.4 The following protection measures (Table 5.3) should be carried out as part of the proposed scheme.

Table 5.3: Recommended ecological protection measures

#	Recommended ecological protection measures
R7	British Standard BS 5837:2012 and/or National Joint Utilities Group Guidelines (NJUG, 1995) should be followed at all times during construction when working in close proximity to trees or hedgerows which are to be retained. According to NJUG Guidelines the root protection zone or precautionary area is 4x the circumference of the trunk (circumference is measured around the trunk at a height of 1.5m above ground level). The distance is measured from the centre of the trunk to the nearest part of any excavation or other work. If a separate tree survey is carried out for the proposed development, works should be undertaken in accordance with the recommendations therein.
R8	All excavations left overnight should either be covered over, or provided with a ramp to enable easy escape of badgers, hedgehogs, small mammals, amphibians and other fauna, and inspected each morning prior to recommencement. Open pipework greater than 150mm outside diameter should be blanked off at the end of each working day.

6 Summary

Ecological constraints

6.1 Table 6.1 presents a summary of ecological constraints identified within the survey area.

Table 6.1: Summary of ecological constraints

Feature	Detail
Constraints:	
Priority habitats	The hedgerow within the survey area qualifies as HPI and is assessed 'Important' according to Hedgerows Regulations assessment. The majority of the hedgerow will remain, but some severance will be required to make way for the new site access.
Great crested newt	Possible permanent loss of suitable terrestrial habitats (semi-improved neutral grassland, dense scrub and hedgerow base). No impact on aquatic habitat and the nearest pond is of poor suitability for breeding.
Birds (nesting)	Possible permanent loss of nesting habitats (dense scrub and hedgerows).
Bats (foraging / commuting)	Effects on moderate suitability habitats (hedgerow) for foraging and commuting bats, including through fragmentation and artificial light.
Hazel dormouse	Possible permanent loss of dense scrub and hedgerow habitat suitable for hazel dormouse.
Reptiles	Possible permanent losses of suitable habitats (semi-improved neutral grassland, dense scrub and hedgerow base).
Hedgehog	Permanent loss of semi-improved neutral grassland, dense scrub and hedgerow bases.

Recommendations

6.2 Recommendations are made for the protection of important ecological features to avoid or mitigate ecological impacts, as listed in section 5. It is intended that these recommendations should be considered during the design of proposals so that protection of important ecological features is secured.

Conclusions

6.2.1 The majority of land proposed for development comprises of Hedgerows HPI which is of high ecological value. Significant constraints to development were identified including priority habitats and the potential presence of great crested newt, badger, bats, hazel dormouse and reptiles. However, in the context of the small scale nature of the proposals, proportionate and effective mitigation is likely to be available to protect against significant impacts. No further surveys are required prior to submitting a planning application.

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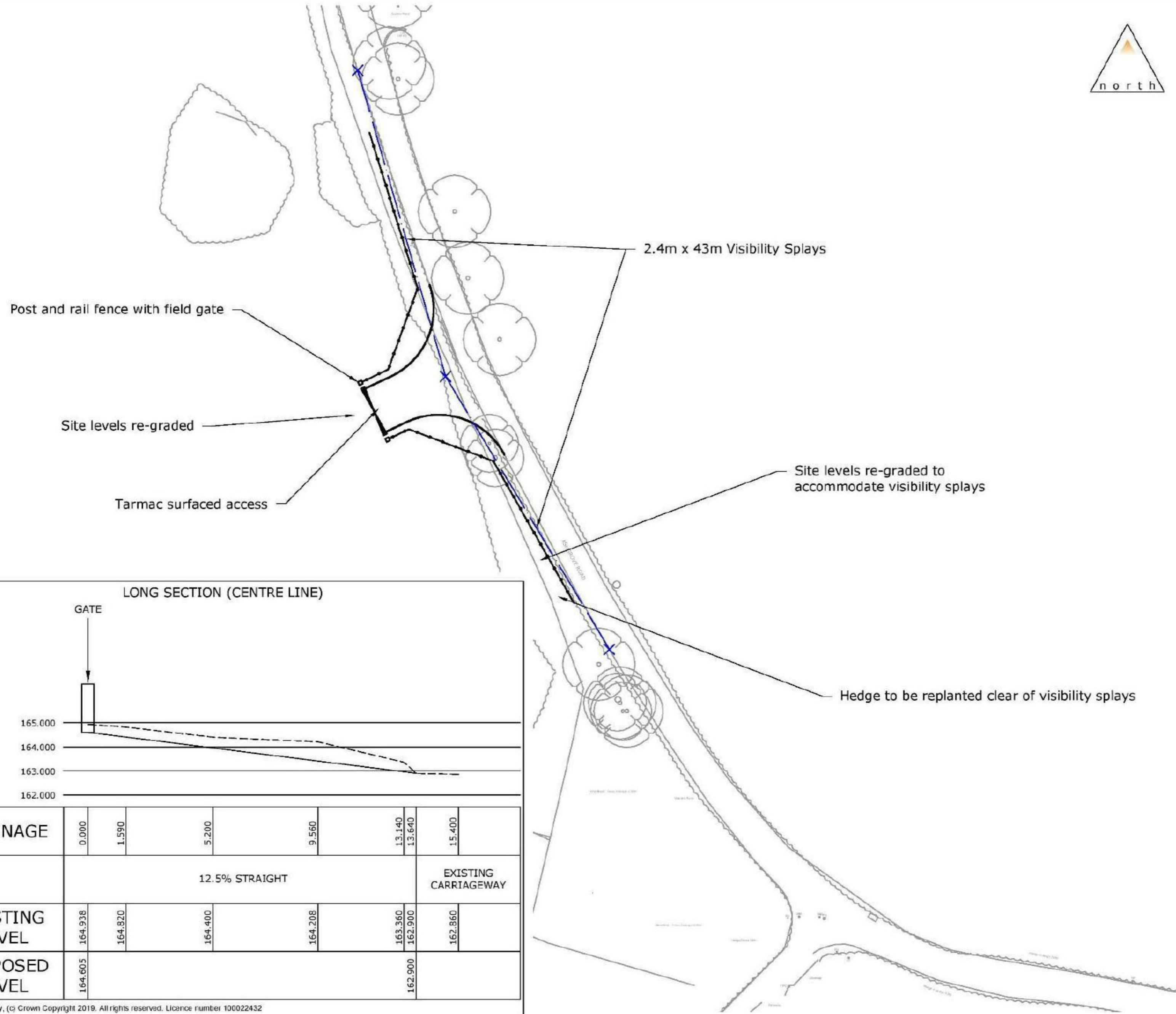
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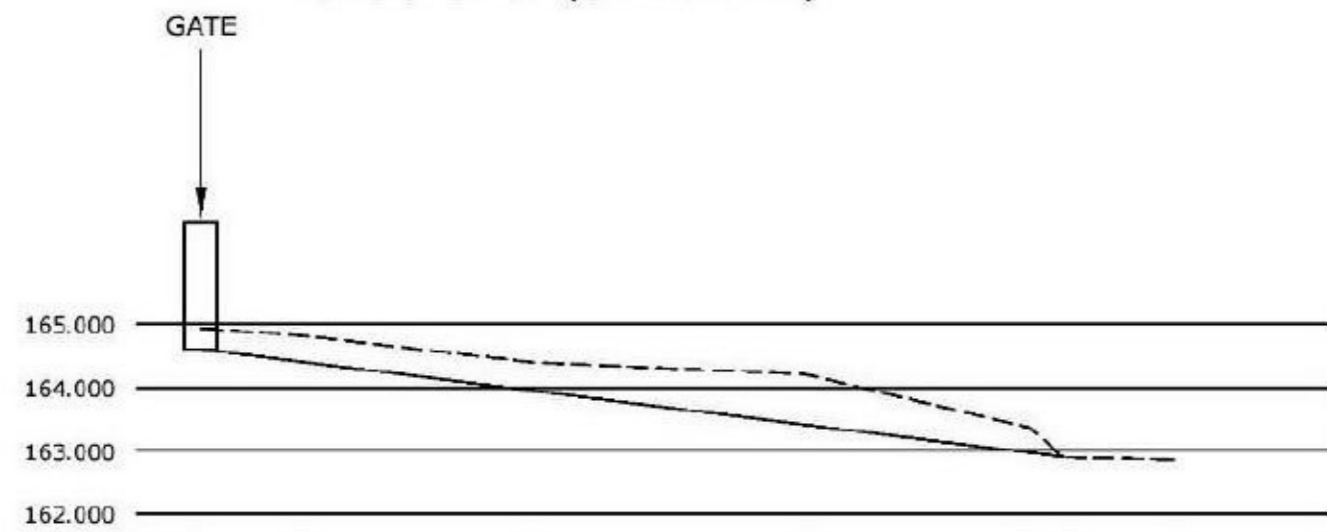
Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000): Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* **10**(4), 143-155.

Appendix I: Proposed Plan

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LONG SECTION (CENTRE LINE)



CHAINAGE	0.000	1.590	5.200	9.560	13.140	13.640	15.400
	12.5% STRAIGHT				EXISTING CARRIAGEWAY		
EXISTING LEVEL	164.938	164.820	164.400	164.208	163.360	162.900	162.860
PROPOSED LEVEL	164.605				162.900		

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Project:
 Land at Ashgrove Road, Sevenoaks

Title:
 Proposed Field Access











Scale: 1:500 (@ A3)

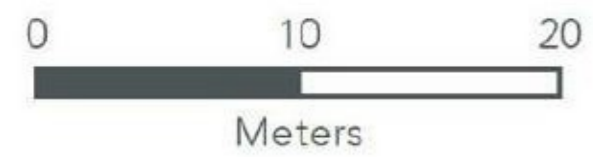
Drawing:
 2008028-02A

Revision:

Appendix II: Phase 1 Habitats Plan

Ashgrove Road, Sevenoaks, Kent

-  Survey area boundary
-  Hardstanding
-  Dense scrub
-  Semi-improved neutral grassland
-  Target note
-  Native species-rich hedge with trees
-  Broadleaved semi-natural woodland
-  Dense scrub
-  Semi-improved neutral grassland
-  Standing water



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Ordnance Survey 0100031673

Scale: 1:580 Created by: AD

Date: May 2021 Reviewed by: NP

Drawing number:

UE0441ECO-Farm Access_210526



Appendix III: Legislation and Planning Context

Legislation

General

The main legislative instruments for ecological protection in England and Wales are the Wildlife and Countryside Act 1981 (WCA; as amended), Countryside and Rights of Way Act 2000 (CRoW; as amended), Natural Environment and Rural Communities Act 2006 (NERC) and the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations; as amended). The Environment Bill (reintroduced to parliament in 2020) is expected to make significant changes to the legislative provisions when enacted.

WCA 1981 consolidated and amended pre-existing national wildlife legislation in order to implement the Bern Convention and the European Union Wild Birds Directive (Council Directive 2009/147/EC). It complements the Habitats Regulations, offering protection to a wider range of species than the latter. The Act also provided for the designation and protection of nationally important conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSI). Schedules of the act list protected species of flora and fauna, as well as invasive species, and detail the possible offences that apply to these species.

The CROW Act 2000 amended and strengthened existing wildlife legislation detailed in the WCA. It placed a duty on government departments & the National Assembly for Wales to have regard for biodiversity, provided increased powers for the protection and maintenance of SSSI, and created a right of access to parts of the countryside. The Act contained lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The NERC Act 2006 consolidated and replaced aspects of earlier legislation. Section 40 of the Act places a duty upon all local authorities and public bodies in England and Wales to have regard to the purpose of conserving biodiversity in exercising all of their functions, including by restoring or enhancing habitats and species populations. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity (otherwise known as priority habitats/species as listed in the now superseded UK Biodiversity Action Plan). These lists supersede Section 74 of the CRoW Act 2000. These species and habitats are a material consideration in the planning process.

Habitats Regulations 2017 are the principal means by the European Union Habitats Directive (Council Directive 92/43/EEC) was transposed into English and Welsh law, and place a duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria in Europe are designated as Sites of Community Importance by the European Commission, and subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. Since the UK's departure from the European Union the European Commission no longer has a role in designating SACs in the UK. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 establish a single stage designation process, where the appropriate authority is the decision maker. The selection and designation of SACs is based on the criteria set out in Annex

III of the Habitats Directive insofar as it applies to the UK, and having regard to the advice of the appropriate nature conservation body.

The 2019 Amendment Regulations have created a new national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes existing SACs, existing Special Protection Areas (SPA) originally designated as a result of Council Directive 2009/147/EC on the Conservation of Wild Birds, and any new SACs and SPAs designated under the 2019 Regulations. SACs and SPAs in the UK therefore no longer form part of the EU's Natura 2000 ecological network.

The Habitats Regulations also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively (European Protected Species (EPS)). Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade in these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations. Under the Habitats Regulations disturbance includes any activity which is likely to: impair the ability of a EPS to survive, breed, reproduce, or rear/nurture its young; impair the ability of a EPS to migrate or hibernate; or significantly affect the local distribution or abundance of the species.

When enacted, the Environment Bill is expected, among other things, to: establish an Office for Environmental Protection; require all new development requiring planning permission to achieve a net gain for biodiversity (expected to be at least 10%); amend the NERC Act duty to conserve biodiversity by explicitly adding a duty to enhance; and require local authorities to produce local nature recovery strategies.



Bats (Chiroptera)

Bats and their roosts are fully protected by protected by the WCA and the Habitats Regulations, and seven species of bats are species of principal importance. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a bat.
- ▶ Possess or control a live or dead bat, any part of a bat, or anything derived from a bat.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.
- ▶ Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- ▶ Make a false statement in order to obtain a licence for bat work.

Birds

Birds are protected by the Wildlife and Countryside Act, 1981 (as amended). This legislation makes it an offence to intentionally kill, injure or take away any wild bird. It is also an offence to take, damage or destroy the nest of any wild bird while it is in use or being built or to take or destroy the egg of any wild bird. In addition, certain species are listed on Schedule 1 of the WCA (such as kingfisher *Alcedo atthis*). This makes it an additional offence to intentionally or recklessly disturb the adults while they are in and around their nest or intentionally or recklessly disturb their dependent young. Such species are considered to be in greater need of legal protection or of high nature conservation priority.

Birds of Conservation Concern ("BoCC4) are included on Red and Amber lists (Eaton *et al.*, 2015). Birds on the Red list are those of highest conservation priority due significant and sustained population decreases and/or range contractions (e.g. house sparrow *Passer domesticus* and starling *Sturnus vulgaris*). Birds on the Amber list are the next most critical group and include species whose population/range have shown moderate declines, or which have recovered to some extent from historical decline, such as dunnock *Prunella modularis*.

Dormouse (*Muscardinus avellanarius*)

Dormouse is fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*:

- ▶ Intentionally kill, injure or take a dormouse.
- ▶ Possess or control a live or dead dormouse, any part of, or anything derived from a dormouse.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a dormouse uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a dormouse while it is occupying a structure or place that it uses for shelter or protection.

Great crested newt (*Triturus cristatus*; GCN) (and natterjack toad *Bufo calamita*)

GCN is fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a GCN (including its eggs).
- ▶ Possess or control a live or dead GCN, any part of, or anything derived from a GCN.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a GCN uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a GCN while it is occupying a structure or place that it uses for shelter or protection.

Otter (*Lutra lutra*)

Otter is fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take an otter.

- ▶ Possess or control a live or dead otter, any part of, or anything derived from an otter.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that an otter uses for shelter or protection.
- ▶ Intentionally or recklessly disturb an otter while it is occupying a structure or place that it uses for shelter or protection.

Reptiles

The four common species (slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara*, adder *Vipera berus* and grass snake *Natrix helvetica*) are partially protected under the WCA. They are protected, *inter alia*, against intentional killing and injuring. The handling and translocation of these reptiles does not require a licence.

Smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis* are fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a smooth snake or sand lizard.
- ▶ Possess or control a live or dead smooth snake or sand lizard, any part of, or anything derived from a smooth snake or sand lizard.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a smooth snake or sand lizard uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a smooth snake or sand lizard while it is occupying a structure or place that it uses for shelter or protection.

Water vole (*Arvicola amphibious*)

Water vole is fully protected by the WCA. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a water vole.
- ▶ Possess or control a live or dead water vole, any part of, or anything derived from a water vole.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a water vole uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a water vole while it is occupying a structure or place that it uses for shelter or protection.

Weeds Act 1959 / Ragwort Control Act 2003

This legislation provides for orders to be made for control where notifiable weed species such as ragwort are said to be a problem. The act does not make it illegal to have ragwort (or other weed species) on your land, make it illegal to allow ragwort to spread, or force landowners automatically to control it. However, if DEFRA is satisfied that there are injurious weeds to which this Act applies growing upon any land it may serve upon the occupier of the land a notice in writing requiring them, within the time specified in the notice, to take such action as may be necessary to prevent the weeds from spreading.

Planning context

National Planning Policy Framework (Section 15: Conserving and enhancing the natural environment)

The National Planning Policy Framework (NPPF), published in February 2019, outlines the Government's commitment to the conservation of wildlife and natural features. It is concerned with:

- ▶ Protecting and enhancing valued landscapes, sites of biodiversity or geological conservation value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- ▶ Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- ▶ Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- ▶ Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current & future pressures;
- ▶ Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- ▶ Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

The NPPF requires that local plans should “distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value...; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries”.

To protect and enhance biodiversity and geodiversity, the NPPF states that planning policies should:

- ▶ Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- ▶ 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.

When determining planning applications, local planning authorities should aim to protect and enhance biodiversity by applying 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 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.

The following wildlife sites should be given the same protection as habitats sites:

- ▶ potential Special Protection Areas and possible Special Areas of Conservation;
- ▶ listed or proposed Ramsar sites; and
- ▶ sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

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 policies within the NPPF (and additional guidance contained within Circular 06/2005) are a material planning consideration.

UK/Local Biodiversity Action Plan Designations and Birds of Conservation Concern and Red Data Book Listings

Note that BAP designations and status as RSPB Birds of Conservation Concern or Red Data Book species does not offer any further legal protection, but planning authorities are required to prevent these species from being adversely affected by development in accordance with National Planning Policy and the CROW and NERC Acts. The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, was a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contained a list of priority habitats and species of conservation concern in the UK, and outlined biodiversity initiatives designed to enhance their conservation status.

However, as a result of devolution, and new country-level and international drivers and requirements, much of the work previously carried out by the UK BAP is now focussed at a country-level rather than a UK-level, and the UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in July 2012. The UK lists of priority habitats and species nonetheless remain an important reference source and were used to draw up statutory lists of priority habitats and species in England, Northern Ireland, Scotland and Wales. The priority habitats and species correlate with those listed on Section 41 and 42 of the NERC Act.

The UKBAP required that conservation of biodiversity be addressed at a County level through the production of Local BAPs. These are targeted towards species of conservation concern characteristic of each area. In addition, a number of local authorities and large organisations have produced their own BAPs. Where they exist, Local BAP targets with regard to species and habitats are a material consideration in the planning process.

Local Planning Policy

The following policy relating to wildlife and biodiversity is contained within the adopted Core Strategy for Sevenoaks (Sevenoaks District Council, 2011):

Policy SP 11

Biodiversity

The biodiversity of the District will be conserved and opportunities sought for enhancement to ensure no net loss of biodiversity.

Sites designated for biodiversity value will be protected with the highest level of protection given to nationally designated Sites of Special Scientific Interest, followed by Local Wildlife Sites and sites of local importance for biodiversity. Designated sites will be managed with the primary objective of promoting biodiversity whilst also providing for appropriate levels of public access.

Opportunities will be sought for the enhancement of biodiversity through the creation, protection, enhancement, extension and management of sites and through the maintenance and, where possible, enhancement of a green infrastructure network to improve connectivity between habitats.

Appendix IV: Legal and Technical Limitations

- This report has been prepared by Urban Edge Environmental Consulting Ltd (UEEC Ltd) with all reasonable skill, care and diligence within the terms of the contract made with the Client to undertake this work, and taking into account the information made available by the Client. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us.
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- The advice provided in this report does not constitute legal advice. As such, the services of lawyers may also be considered to be warranted.
- Unless otherwise stated in this report, the assessments made assume that the sites and facilities that have been considered in this report will continue to be used for their current planned purpose without significant change.
- All work carried out in preparing this report has utilised and is based upon UEEC Ltd's current professional knowledge and understanding of current relevant UK standards and codes, technology and legislation. Changes in this legislation and guidance may occur at any time in the future and may cause any conclusions to become inappropriate or incorrect. UEEC Ltd does not accept responsibility for advising the Client or other interested parties of the facts or implications of any such changes;
- Where this report presents or relies upon the findings of ecological field surveys (including habitat, botanical or protected/notable species surveys), its conclusions should not be relied upon for longer than a maximum period of two years from the date of the original field surveys. Ecological change (e.g. colonisation of a site by a protected species) can occur rapidly and this limitation is not intended to imply that a likely absence of, for instance, a protected species will persist for any period of time;
- This report has been prepared using factual information contained in maps and documents prepared by others. No responsibility can be accepted by UEEC Ltd for the accuracy of such information;
- Every effort has been made to accurately represent the location of mapped features, however, the precise locations of features should not be relied upon;
- Populations of animals and plants are often transient in nature and a single survey visit can only provide a general indication of species present on site. Time of year when the survey was carried out, weather conditions and other variables will influence the results of an ecological survey (e.g. it is possible that some flowering plant species which flower at other times of the year were not observed). Every effort has been made to accurately note indicators of presence of protected, rare and notable species within and adjacent to the site but the possibility nonetheless exists for other species to be present which were not recorded or otherwise indicated by the survey;
- Any works undertaken as a consequence of the recommendations provided within this report should be subjected to the necessary health & safety checks and full risk assessments.