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# Poors Field at Enborne Row

# Ecological Survey

Commissioned for:
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## Contents


**1 Introduction ..... 1**
1.1 Site Location ..... 1

**2 Methodology ..... 2**
2.1 Desk Study ..... 2
2.2 Field Survey ..... 2
2.2.1 Habitats ..... 2
2.2.2 Protected species ..... 2
2.2.3 Hedgerow Survey ..... 3
2.3 Limitations ..... 4
2.3.1 Desk Study ..... 4
2.3.2 Field Survey ..... 4

**3 Results ..... 5**
3.1 Desk based study ..... 5
3.1.1 Statutory sites ..... 5
3.1.2 Non Statutory sites ..... 5
3.1.3 Presence of protected species and other species of note ..... 5
3.2 Field Survey ..... 7
3.2.1 Habitats ..... 7
3.2.2 Presence of protected species and other species of note ..... 9

**4 Impact Assessment ..... 9**
4.1 Statutory and non-statutory sites ..... 9
4.2 Habitats ..... 10
4.3 Species ..... 10
4.3.1 Bats ..... 10
4.3.2 Birds ..... 10

**5 Recommendations ..... 11**
5.1 Wild flower meadow creation ..... 11
5.1.1 Establishment ..... 11
5.1.2 On-going management ..... 11
5.2 Pond creation ..... 12
5.3 Hedgerow Laying ..... 12

**6 References ..... 12**

**Appendix I: Habitat Map at Poors Field ..... 13**

**Appendix II: Target Notes ..... 14**

**Appendix III Photographs ..... 16**

**Appendix IV: Legislation ..... 22**

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**Chris Seabridge**
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# 1 Introduction

It is proposed to construct a solar PV array on approximately 3 hectares of land at Poors Field, Enborne Row. This comprises 4752 panels generating 2.5 MW per year. Development works also include an access road, sub-station house and erection of deer fencing.

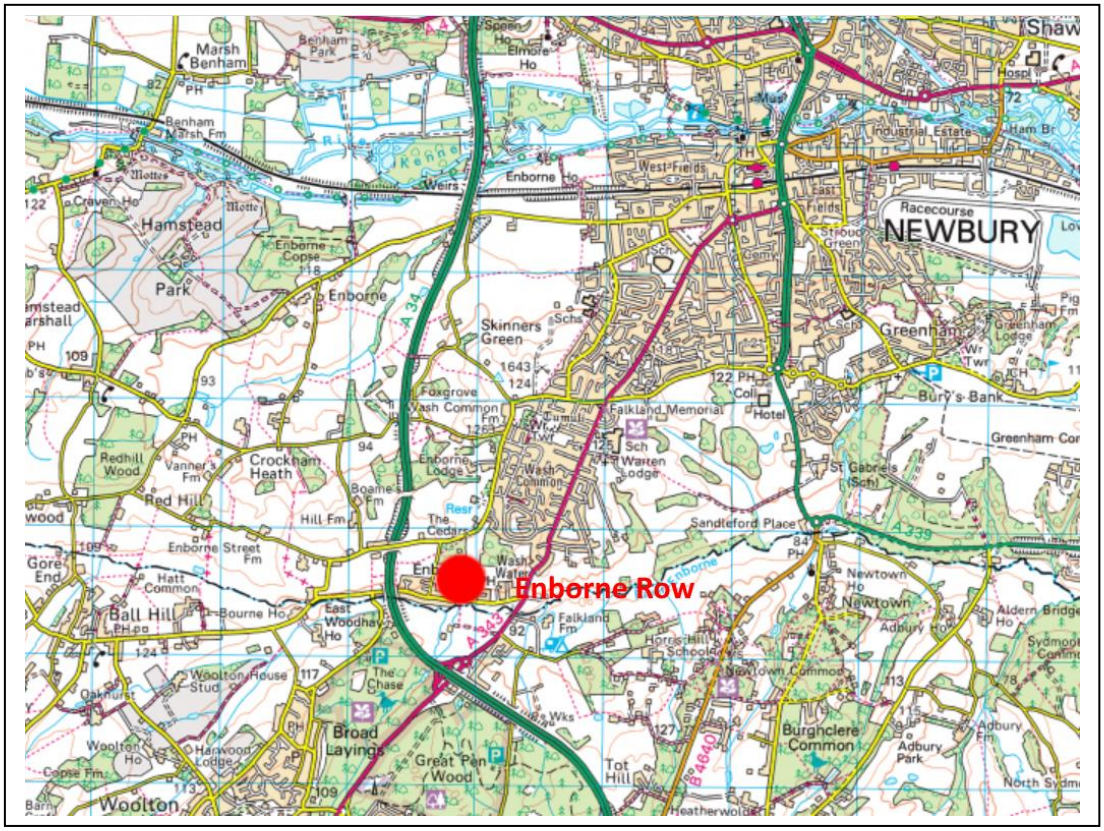
Nigel Baskerville of Chris Seabridge & Associates Ltd. was instructed to undertake an Ecological Survey of the proposed development area to determine its impact on habitats and species.

The methodology involved conducting a Habitat Survey of the site and its surroundings to identify habitats and the presence or potential presence of protected species and species of conservation concern.

## 1.1 Site Location

The site of the proposed development is located approximately 3.7km to the south west of Newbury at Grid Reference SU4492 6363. The location of the site is shown in Figure 1 below.

**Figure 1:** *Map showing location of development land at Poors Field, Enborne Row*



# 2 Methodology

## 2.1 Desk Study

Thames valley Environmental Records Centre (TVERC) provided species/sites records within 2km of the site boundary on 17th August 2021.

The following websites were also accessed to search for habitat and species records within the vicinity of the development site:

- Multi-Agency Geographic Information for the Countryside. www.magic.gov.uk
- National Biodiversity Network Gateway. www.data.nbn.org.uk

## 2.2 Field Survey

### *2.2.1 Habitats*

A UK Habitat Classification Survey was carried out on by Nigel Baskerville C.Env MCIEEM on 13th August 2021 following the procedure described in the User Manual for UK Habitat Classification (Butcher et al, 2020). The survey also included recording evidence of protected species and species of conservation concern (including Local Biodiversity Action Plan species), as well as identification of features and habitats capable of supporting such species.

Results of the Habitat Survey are presented as a colour coded map (See Appendix I - Habitat Survey of Poors Field), with 'Target Note' (TN) locations marked with numbers. Targets Notes comprising of more detailed information on selected features of ecological interest and the potential value to protected species are contained in Appendix II - Targets Notes Table. Associated photographic records are included in the assessment which cross references with the target notes and are shown in Appendix III – Photographic Record.

### *2.2.2 Protected species*

Habitats or features with the potential to support protected or priority species were recorded as a target note (see Appendix II - Targets Notes Table). In addition any of the characteristic field signs of protected species were recorded as shown in Table 1 below.

**Table 1:** *Key habitats and field signs of protected and priority species*

| Species | Indicative habitat | Characteristic field signs |
|---|---|---|
| Badger<br>*Meles meles* | Found in a variety of habitats notably woodland. | Setts, tracks, footprints, latrines, hairs caught on fence wire, scratch marks on trees. (Harris et al. 1989) |
| Great crested newts<br>*Triturus cristatus* | Breeding habitat – ponds.<br>Foraging habitat - rough grassland, scrub and woodland.<br>Resting and hibernation habitat - log and rubble piles, animal | Eggs on aquatic vegetation (spring). |

| Species | Indicative habitat | Characteristic field signs |
|---|---|---|
| | burrows.<br><br>The Habitat Suitability Score (HSI) was calculated for all ponds within the site boundary (Oldham et al. 2000). A HSI is a numerical index based on ten suitability indices giving a score of between 0 and 1. 0 indicates unsuitable habitat, 1 represents optimal habitat for great crested newts. | |
| Bats | Roosts – buildings, trees, underground features (caves etc.).<br>Foraging – woodland, ponds, hedgerows, wetland.<br>Commuting routes – linear habitats (hedgerows, watercourses, tree lines). | Droppings, prey residues (such as fly or moth wings) and urine stains at roost sites. |
| Water vole<br>*Arvicola terrestris* | Watercourses and water bodies. | Burrows, latrines, footprints, feeding signs in the form of 'grazing lawns'. |
| Reptiles | Rough grassland, log and rubble piles. | Sloughed skins. |
| Birds | A variety of habitats. | Nests, tree holes. |
| Invertebrates | All habitats. Richest sites tend to be semi-natural habitats (i.e. woodland, grassland). | Few specific signs. Solitary bee and wasp burrows. |

### *2.2.3 Hedgerow Survey*

The roadside hedgerow was assessed in accordance with the Wildlife and landscape criteria of the hedgerow Regulations 1997 (HMSO 1997).

Hedgerows that are assessed as important under the Wildlife and Landscape criteria of the Hedgerow Regulations 1997 require permission from the local planning authority before they can be removed. To be considered important, a hedgerow has to have been in existence for 30 years or more and satisfy at least one of the eight criteria listed in part II of Schedule 1 of the Hedgerow Regulations 1997.

The hedgerow length and dimensions were measured, noting any hedgerow trees and gaps in the hedge line. The number of connections with other hedgerows, ponds or woodland was also noted.

Woody species were identified and counted in the central stretch of 30m within each half of the hedgerows (as listed in Schedule 3 of the Hedgerow Regulations 1997). The aggregate number of species was divided by 2 to give the average number of woody species per 30m.

Any associated features such as hedge banks and ditches were also noted. Woodland species present in the hedge bottom were identified (as listed in Schedule 2 of the Hedgerow Regulations 1997).

## 2.3 Limitations

### *2.3.1 Desk Study*

The biological records from the desk study are not a comprehensive list of species data and therefore it is possible that protected species not identified in the search may be present within the vicinity of the development site.

### *2.3.2 Field Survey*

There were no constraints on access to the site and the full area was surveyed. The survey of flowering plants was conducted outside the optimal survey window, which meant that early flowering plants may not have been apparent at the time of survey.

# 3 Results

## 3.1 Desk based study

### *3.1.1 Statutory sites*

Avery's Pightie SSSI lies approximately 1980m to the north west of the site and was designated for its species-rich unimproved grassland.

### *3.1.2 Non Statutory sites*

There are 12 Local Wildlife Sites (LWS) within 2km of the development site as shown below in Table 2. The location of the non-statutory sites is shown on the map in Appendix VI.

**Table 2:** Non Statutory sites within 2km of Poors Field

| Site ID | Name | Reason for selection | Distance from site (m) |
|---|---|---|---|
| SU46H08 | Braylands Copse | Coppice woodland | 1325 |
| SU46S02 | High Wood Complex | ASNW | 1570 |
| SU46R01 | Corporation Copse | ASNW | 1170 |
| SU46R02 | Waterleaze Copse | ASNW | 1450 |
| SU46S01 | Brick Kiln Copse | ASNW | 1180 |
| SU46M01 | Little Copse | Broad-leaved woodland and pond | 830 |
| SU46M03 | Long Copse | ASNW | 1370 |
| SU46M05 | Oaken Copse | ASNW | 1440 |
| SU46M08 | Skinners Long Wood | ASNW | 1910 |
| SU46M02 | Reddings Copse & Lushy Gully | ASNW | 740 |
| SU46H13 | Church Wood Wet Field | Remanant Lowland Meadow | 1930 |
| SU46H12 | Church Lane scrub | Remnant Lowland Meadow | 1960 |

ASNW: Ancient Semi-natural Woodland

### *3.1.3 Presence of protected species and other species of note*

The data search from the desk study showed that several protected species and other species of principal concern have been recorded within 2km of the site. These are shown in Table 3 below.

**Table 3:** *Protected species and other species of Principal Concern within 2km of the development site*

| Species | Latin name | Status | Latest record | No of historic records | Recorded during survey |
|---|---|---|---|---|---|
| **Bats** | | | | | |
| Western barbestelle | *Barbastella barbestellus* | EPS, UK, PC | 2013 | 1 | |
| Brown long-eared bat | *Plecotus auritus* | EPS, UK, PC | 2017 | 9 | |
| Daubenton's bat | *Myotis daubentonii* | EPS, UK, PC | 2017 | 1 | |
| Noctule | *Nyctalus noctula* | EPS, UK, PC | 2017 | 4 | |
| Common pipistrelle | *Pipistrellus pipistrellus* | EPS, UK, PC | 2017 | 24 | |
| Soprano pipistrelle | *Pipistrellus pygmaeus* | EPS, UK, PC | 2017 | 3 | |
| Nathusius's pipistrelle | *Pipistrellus nathusii* | EPS, UK, PC | 2017 | 1 | |
| Serotine | *Eptesicus serotinus* | EPS, UK, PC | 2017 | 3 | |
| **Other Mammals** | | | | | |
| Badger | *Meles meles* | Protection of Badgers Act. 1992 | 2013 | 4 | |
| Western European hedgehog | *Erinaceus europaeus* | UK, PC | 2014 | 5 | |
| European otter | *Lutra lutra* | EPS, UK, PC | 2018 | 2 | |
| European water vole | *Arvicola amphibius* | EPS, UK, PC | 2000 | 2 | |
| Brown hare | *Lepus europaeus* | UK, PC | 2007 | 2 | |
| Hazel dormouse | *Muscardinus avellanus* | EPS, UK, PC | 2018 | 2 | |
| A**mphibians** | | | | | |
| Common toad | *Bufo bufo* | UK | 2013 | 14 | |
| Common frog | *Rana temporaria* | UK | 2009 | 1 | |
| **Reptiles** | | | | | |
| Slow worm | *Anguis fragilis* | EPS, UK, PC | 2016 | 2 | |
| **Birds** | | | | | |
| Kestrel | *Falco* | PC (amber) | 2017 | 12 | |

| Species | Latin name | Status | Latest record | No of historic records | Recorded during survey |
|---|---|---|---|---|---|
| | *tinnunculus* | | | | |
| Spotted flycatcher | *Muscicapa striata* | PC (red) | 2017 | 2 | |
| Starling | *Sturnus vulgaris* | PC (red) | 2017 | 20 | |
| Dunnock | *Prunella vulgaris* | PC (amber) | 2017 | 29 | |
| Marsh tit | *Poecile palustris* | PC (red) | 2016 | 9 | |
| Snipe | *Gallinago gallinago* | PC (amber) | 2016 | 1 | |
| Skylark | *Alauda arvensis* | PC (red) | 2017 | 22 | |
| Bullfinch | *Pyrrhula pyrrhula* | PC (amber) | 2017 | 21 | |
| Linnet | *Linaria cannabina* | PC (red) | 2015 | 4 | |
| Song thrush | *Turdus philomelos* | PC (red) | 2017 | 21 | |
| House Sparrow | *Passer domesticus* | PC (red) | 2017 | 25 | |
| Reed bunting | *Emberiza schoeniclus* | PC (amber) | 2017 | 10 | |

EPS: European Protected species UK: UK Protection. PC: Species of Principal Concern

## 3.2 Field Survey

### *3.2.1 Habitats*

The location and extent of habitats are shown on the Habitat map in Appendix I.

***Plantation broad-leaved woodland***

A small mature willow plantation extending to 0.22 ha (TN11) lies at the southern end of the site which comprises mainly grey willow (*Salix cinerea*). Ground cover is sparse beneath the dense canopy with vegetation including nettle (*Urtica dioica*), soft rush (*Carex effusus*) and tufted hair-grass (*Deschampsia cespitosa*) restricted to the margins.

Scrub

Scrub and trees have naturally regenerated along the northern boundary of the field which lies adjacent to neighbouring broad-leaved woodland (TN3, TN7 and TN8). Trees and shrubs include oak (*Quercus robur*), silver birch (*Betula pendula*) and ash (*Fraxinus excelsior*), holly (*Ilex europaeus*), grey willow, goat willow (*Salix caprea*), blackthorn (*Prunus spinosa*) and hawthorn (*Crataegus monogyna*). Bracken (*Pteridium aquilinum*)

dominates much of the ground vegetation with grassy areas including wavy hair-grass (*Deschampsia flexuosa*), cocksfoot (*Dactylis glomerata*) and false oat-grass (*Arrhenatherum elatius*). Large fallen deadwood was also present including a large fallen oak in the north western corner of the site (TN8).

***Trees***

There are two mature/over mature infield oak trees which lie in the eastern half of the field (TN4 and TN5). The northernmost tree (TN4) has the larger girth (approx. 1.2m diameter) and contains some large deadwood in the crown with some fissures in several branches. Grass has not been mown beneath the canopy of the trees with taller vegetation including naturally regenerating gorse (*Ulex europaeus*) developing.

Hedgerows

Hedgerows form the boundary of western and eastern sides of the site and are generally intact (TN1 & TN9).

The roadside hedgerow at the main entrance (TN9) is classed as native intact species-poor. The hedge extends to a length of 140m and is intact with no gaps. It connects to woodland to the north. A ditch runs along the western side of the hedge next to the road.

A total of five woody species were recorded with an average of 4 species per 30m stretch is shown in Table 4 below;

**Table 4:** *Woody Shrub composition of roadside hedgerow (TN9)*

| **30m Section** | **Woody Species – common name** | **Latin name** |
|---|---|---|
| Section 1 (TN9) | Common hawthorn<br>Blackthorn<br>Dog rose<br>Sycamore | *Cataegus monogyna*<br>*Prunus spinosa*<br>*Rosa canina*<br>*Acer pseudoplatanus* |
| Section 2 (TN9) | Common hawthorn<br>Blackthorn<br>Hazel<br>Dog rose | *Cataegus monogyna*<br>*Prunus spinosa*<br>*Corylus avellana*<br>*Rosa canina* |

Herb robert (*Geranium robertianum*) was the only woodland species from Schedule 2 of the Hedgerow Regulations noted within the hedge bottom.

The eastern boundary hedge has not been trimmed recently and consequently is taller (4-5m). It contains a total of six woody species including holly, hazel, oak, gorse, hawthorn and dog rose.

***Semi-improved neutral grassland***

The area of this grassland type extends to 7.62 ha in two fields (TN6). Currently a late hay crop is taken from the fields. Grasses include sweet vernal grass (*Anthoxanthum*

*odoratum*) and Yorkshire fog (*Holcus mollis*) with common bent (*Agrostis capillaris*). Herbs include bird's-foot trefoil (*Lotus corniculatus*), meadow buttercup (*Ranunculus acris*), common mouse-ear (*Cerastium fontanum*) common ragwort (*Senecio jacobaea*), red clover (*Trifolium pratense*), selfheal (*Prunella vulgaris*) and Autumn hawkbit (*Scorzoneroides autumnalis*).
The wetter parts of the fields (TN2 & TN12) include patches of soft rush, tufted hair-grass and lesser pond sedge (*Juncus acutiformis*). Herbs include greater bird's foot-trefoil (*Lotus peduculatus*) marsh thistle (*Cirsium palustre*) and sneezewort (*Achillea ptarmica*).

### *3.2.2 Presence of protected species and other species of note*

***Bats***

There are historic records of eight species of bat within 2km of the site. Potential roosting habitat is present within the vicinity of the site most notably within mature trees in the bordering woodland and potentially in the infield trees which have potential roost features in the form of holes and fissures.

***Badgers***

No badger setts or signs of activity were found within the development site.

***Reptiles***

There is a single record of slow worm within 2km of the site and there is potential habitat for reptiles around the margins of the site particularly in the areas of scrub/ tall grassland along the northern margin of the site.

***Amphibians***

There are no water bodies within the development area. The nearest pond lies within woodland to the north of the site. Whilst there are no records of great crested newts within 2km of the site, the areas of scrub and tall grassland around the margins of the site are potential foraging habitats for newts and other amphibians.

***Birds***

A variety of farmland and hedgerow birds were recorded during the visit and are likely to be breeding in the area, particularly in surrounding hedgerows, trees and scrub

# 4 Impact Assessment

## 4.1 Statutory and non-statutory sites

It is unlikely for the development to have a significant adverse effect on the adjacent non-statutory sites due to their distance from the site and also because they are not linked physically or hydrologically to have an indirect effect.

## 4.2 Habitats

Construction of the solar panel arrays will result in the loss of approximately 0.75 ha of semi-improved grassland beneath the panels, access road, attenuation pond and sub-station house. The grassland has a local conservation value but lacks species diversity and the presence of uncommon/rare plant species.

It is not intended to fell any living mature trees as part of the development. However development works could potentially damage rooting systems if provision is not made to ensure that works are not carried out too close to trees and hedgerows i.e. not within the Root Protection Zone.

Hedgerows are a UK Biodiversity Action Plan (BAP) Priority Habitat and as such should where possible be retained within the development layout. A section of hedgerow will need to be removed to widen the main entrance to the site at the western boundary (TN 9). This would be a temporary effect while vehicles bring in the solar PV materials.

A 70m visibility splay (30 mph) is also required in each direction to improve highway visibility requirements. This could be achieved by reducing the height of the hedgerow. It is recommended that the hedgerow is laid prior to the development of the site, which would improve highway visibility and enhance the hedgerow habitat for wildlife.

The hedgerow is considered '**not important'** under the Hedgerow Regulations 1997 as it contains an average of only four woody species and has only has two associated features; less than 10% gaps and has a ditch along part of its length. In addition, the hedge does not run alongside a bridleway, footpath, road used as a public path, or a byway open to all traffic.

## 4.3 Species

### *4.3.1 Bats*

No mature trees capable of supporting roosting bats are proposed to be removed during the development works. These include the two in-field oak trees which are to be retained.

Proposed works will also not involve the removal of habitat that provides foraging/commuting habitat for bats, including scrub along the woodland edge at the northern boundary of the site. The provision of the attenuation pond is likely to provide further foraging habitat for bats.

### *4.3.2 Birds*

Development works could potentially cause disturbance to nesting birds. Clearance works should be ideally conducted outside the main bird nesting season (March – August inclusive). If works are carried out during the nesting season then a suitably qualified ecologist should make a check for nesting birds immediately before works commence.

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# 5 Recommendations

## 5.1 Wild flower meadow creation

It is proposed to establish a total area of approximately 2 ha of wild flower pollen and nectar mixture around the solar panel arrays.

### *5.1.1 Establishment*

Preparatory works and broadcasting of seed should be carried out either in the spring (March/April) or in the autumn (August/September).

A fine seed bed should be created to allow seed to have good contact with the soil and so promote germination. The floristically enhanced seed mixture should be broadcast at a minimum rate of 20kg/ha and rolled in using a Cambridge roller.

A list of recommended wildflower species in the seed mixture is shown in Table 5 below.

**Table 5**: *Recommended seed mixture for wild flower meadow creation at Poors Field*

| Species | Latin | Quantity |
|---|---|---|
| Common bent | *Agrostis capillaris* | 5% |
| Crested dogs-tail | *Cynosurus cristatus* | 10% |
| Smaller cats-tail | *Phleum bertolonii* | 5% |
| Sheep's fescue | *Festuca ovina* | 21% |
| Chewings fescue | *Festuca rubra* | 25% |
| Smooth stalked meadow grass | *Poa pratensis* | 25% |
| Field scabious | *Knautia arvensis* | 1% |
| Meadow buttercup | *Ranunculus acris* | 1% |
| Black knapweed | *Centaurea nigra* | 1% |
| Ladies bedstraw | *Galium verum* | 1% |
| Musk mallow | *Malva moschata* | 1% |
| Ox-eye daisy | *Leucanthermum vulgare* | 1% |
| Selfheal | *Prunella vulgaris* | 1% |
| Wild carrot | *Daucus carota* | 1% |
| Yarrow | *Achillea millefolium* | 1% |

Sow at 20kg/ha (8 kg/acre)

To aid establishment and control annual weeds, the sward should be topped several times the following year.

### *5.1.2 On-going management*

- The sward will be maintained by mowing and cut after 31st July, so that the sward has chance to flower and be available to pollinators. All cuttings should be removed to prevent the build- up of nutrients.

- No fertilisers or manures should be applied to the sward. In addition, no pesticides or herbicides should be applied except to spot treat or weed wipe to control nettles, injurious weeds or non-invasive plant species.

### 5.2 Pond creation

It is proposed to construct an attenuation pond to the south of the solar panel array which will have a water area of approximately 1350m$^2$. With the correct design and management, a new pond offers the potential to maximise ecological opportunities. The following principles should be incorporated into the design of the pond.

- Shallow margins or shelves to encourage the development of aquatic emergent vegetation and marshy grassland/fen around the margins.
- Irregular margins to maximise the length of valuable shallow water habitat.
- Allow rough grassland and scrub to develop around part of the pond banks to act as cover for any aquatic wildlife entering or emerging from the water.
- Where possible, maintain an open southern bank to allow sunlight to reach the water surface.

### 5.3 Hedgerow Laying

It is recommended that the roadside hedgerow is laid to both improve the highway visibility at the entrance to the site and also to enhance the hedgerow habitat by creating a dense lower structure for nesting birds. The hedge should be laid during the winter prior to development works commencing.

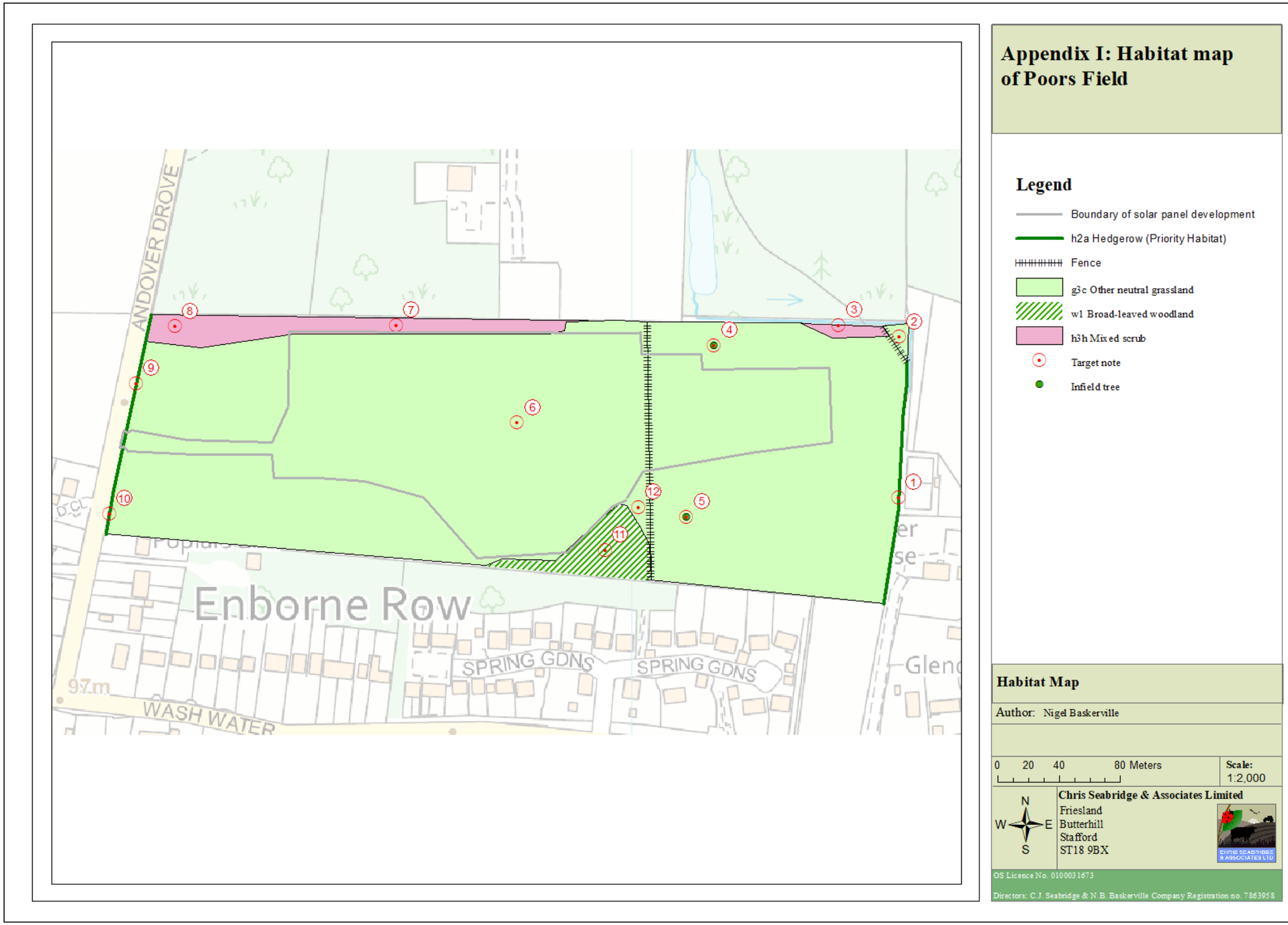
## 6 References

Butcher, P. et al. (2020). The UK Habitat Classification User Manual Version 1.1 at http://www.ukhab.org/

Harris, S., Cresswell, P. & Jefferies, D. (1989). Surveying for badgers. Occasional Publication of the Mammal Society No. 9. Mammal Society, Bristol.

Stace C.A. (1997) New flora of the British Isles. 2nd Edition. Cambridge University Press. Cambridge.

## Appendix I: Habitat Map at Poors Field




**Appendix I: Habitat map of Poors Field**

**Legend**

- Boundary of solar panel development
- h2a Hedgerow (Priority Habitat)
- Fence
- g3c Other neutral grassland
- w1 Broad-leaved woodland
- h3h Mixed scrub
- Target note
- Infield tree

**Habitat Map**

Author: Nigel Baskerville

0 20 40 80 Meters

Scale: 1:2,000

N W E S

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## Appendix II: Target Notes

| Target note | Habitat/ feature | Description | Protected species potential |
|---|---|---|---|
| 1 | Hedgerow (h2a) | Intact, untrimmed hedgerow, 4-5m tall, comprising hawthorn, holly, hazel, oak, gorse, dog rose and bramble. | Nesting birds Foraging/commuting bats |
| 2 | Field corner | Fenced off wet field corner with tufted hair grass, Yorkshire Fog, soft rush and lesser pond sedge. Herbs include marsh thistle, meadow vetchling, silverweed and common ragwort. Large piece of deadwood. | Nesting birds, foraging bats |
| 3 | Field margin | Unmown strip up to 8m width with several naturally regenerating oak and ash saplings. Ash dieback evident. | |
| 4 | In-field mature tree | Mature/ over mature oak with DBH of approximately 1.2m. some deadwood and fissures noted in the crown. | Nesting birds Roosting bats |
| 5 | In-field mature tree | Mature/ over mature oak with DBH of approximately 1 m. some deadwood and fissures noted in the crown. | Nesting birds Roosting bats |
| 6 | Semi-improved neutral grassland (g3c) | Grasses include Yorkshire fog, common bent, false oat-grass and sweet vernal grass with herbs including frequent bird's-foot trefoil, red clover, meadow buttercup, white clover, selfheal, autumn hawkbit and germander speedwell | |
| 7 | Mixed scrub (h3h) | Field margin (approximately 10m width) naturally regenerated with trees and shrubs along woodland edge and include grey and goat willow, silver birch and holly. Ground vegetation includes abundant bracken | Nesting birds, foraging bats |
| 8 | Mixed scrub (h3h) | Field corner of naturally regenerated silver birch and oak saplings with hawthorn, holly, hazel, blackthorn, grey willow and bramble. Large fallen oak tree | Nesting birds, foraging bats |
| 9 | Hedgerow (h2a) | Intact trimmed roadside hedgerow of 2m height. Shrubs include Blackthorn, hazel, dog rose, hawthorn and sycamore. Hedge bottom on field side includes bird's-foot trefoil, marsh woundwort, corn mint, herb | Nesting birds |

| Target note | Habitat/ feature | Description | Protected species potential |
|---|---|---|---|
| | | Robert meadowsweet and agrimony. | |
| 10 | Scrub (h3) | Patch of tall grey willow scrub | Nesting birds |
| 11 | Broad-leaved plantation (w1) | Mature willow plantation established at 3m centres with little ground vegetation under dense canopy. Patches of nettle, soft rush and tufted hair-grass on edges. | Nesting birds |
| 12 | Wet grassland (g3) | Small wet area on woodland edge with soft rush and tufted hair-grass. Herbs including greater bird's-foot trefoil, and sneezewort | |

## Appendix III Photographs

**Plate 1**: Looking north along hedgerow forming eastern boundary of the development site (TN1)

**Plate 2**: Looking into fenced off field corner at north eastern side of the site (TN2)

**Plate 3:** Looking west at northern boundary of field with naturally regenerating oak and ash saplings on uncut margin (TN3)

**Plate 4**: Looking at canopy of mature/over-mature infield oak tree (TN4) which contains some deadwood and fissures in branches.

**Plate 5:** Looking at in-field mature oak tree (TN5)

**Plate 6:** Looking north west across central section of the development site which comprises semi-improved grassland cut for hay (TN6)

**Plate 7:** Looking west along northern boundary of the site (TN7) showing development of woodland edge habitat along field margin

**Plate 8:** North west corner of the site where scrub has naturally regenerated around a fallen oak tree (TN8)

**Plate 9:** Looking south alongside western boundary hedgerow (TN9)

**Plate 10:** Western boundary hedge and entrance gate (TN9)

**Plate 11:** Willow plantation (TN11)

**Plate 12:** Area of wet grassland on edge of willow plantation (TN12)

# Appendix IV: Legislation

Legal information given below is a summary, and intended only for general guidance. The original legal documents should be consulted for definitive information.

## *Habitat Regulations*

The conservation (Natural Habitats & c.) Regulations 1994, as amended by the Conservation (Natural Habitats & c.) (Amendment) Regulation 2007 and 2009 respectively, transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) into English law, making it an offence to deliberately capture, kill or disturb any wild animal protected under the Habitat Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

## *Wildlife & Countryside Act*

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting.
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection.
- Pick or uproot any wild plant listed under Schedule 8 of the Act.

## *Protection of Badgers Act*

The Protection of Badgers Act 1992 makes it illegal to kill, injure or take a badger or to intentionally or recklessly interfere with a badger sett. Sett interference includes disturbing badgers whilst they are occupying a sett or obstructing access to it.