



Heath Road Solar Farm, Bagworth

Ecological Appraisal

Prepared by:
**The Environmental Dimension
Partnership Ltd**

On behalf of:
**Renewable Connections
Developments Limited**

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(edp7530_d021a 20 June 2025 PDr/TRo)

Section 1 Introduction

- 1.1 This Ecological Appraisal has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Renewable Connections Developments Limited (hereafter referred to as 'the Applicant'). This Appraisal considers the ecological implications of proposed development at Heath Road Solar Farm, Bagworth (hereafter referred to as 'the Site').
- 1.2 This report has been prepared with reference to the following key guidance:
- Chartered Institute of Ecology and Environmental Management (CIEEM) *Guidelines for Preliminary Ecological Appraisal*¹;
 - CIEEM *Guidelines for Ecological Impact Assessment*²;
 - British Standard: *Biodiversity - Code of Practice for Planning and Development*³; and
 - British Standard: *Process for designing and implementing Biodiversity Net Gain*⁴.
- 1.3 EDP is an independent environmental planning consultancy with offices in Cirencester, Cardiff and Cheltenham. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk).

SITE CONTEXT AND PROPOSALS

- 1.4 The Site is centred approximately at Ordnance Survey Grid Reference SK 454 060. The local planning authority is Hinckley and Bosworth Borough Council. The location and extents of the Site are illustrated on **Plan EDP 1** and described in the material supporting the planning application.
- 1.5 The Site measures 31.9 hectares (ha) and is located north of the residential village of Newbold Verdon. It comprises arable fields with grass margins, surrounded by hedgerows. Land uses in the surrounding landscape are similar arable farmland interspersed with woodland.
- 1.6 In brief, the proposed development includes a solar photovoltaic farm and associated infrastructure including two cable route corridors to the point of connection, new hedgerows, as well as enhancements to the existing hedgerows and tree belts. Parts of the Site would be retained as arable land and species-rich grassland is proposed along the margins.

¹ CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

² CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

³ BSI (2013). *Biodiversity - Code of Practice for Planning and Development*. BS 42020:2013. British Standards Institute.

⁴ BSI (2021). *Process for designing and implementing Biodiversity Net Gain. Specification*. BS 8683:2021. British Standards Institute.

- 1.7 The proposals are to be the subject of a detailed planning application, and the Illustrative Landscape Strategy is provided as **Appendix EDP 1** to this report.
- 1.8 The ecological sensitivities of the Site have influenced the final layout through an iterative design process. Thus, the masterplan incorporates a degree of 'inherent' mitigation to avoid or reduce the severity of potential ecological impacts.

SCOPE OF THE ASSESSMENT

- 1.9 This Ecological Appraisal describes the current ecological interest within and around the Site, which has been identified through standard desk- and field-based investigations. It then considers the potential ecological impacts and opportunities for ecological enhancement based on the final masterplan (incorporating inherent mitigation) in the context of relevant legislation and planning policy. Finally, this Appraisal identifies the necessary additional measures to avoid, mitigate or provide compensation for potential impacts, and the mechanisms for securing such measures.
- 1.10 The remainder of this report is structured as follows:
- **Section 2** summarises the methodology employed in determining the baseline ecological conditions within and around the Site (with further details provided within appendices and on plans where appropriate);
 - **Section 3** summarises the baseline ecological conditions (with further details also provided within appendices and on plans where appropriate) and identifies and evaluates any pertinent ecological features/receptors;
 - **Section 4** describes how the development design has responded to the ecological constraints and any embedded/inherent mitigation, and then considers the potential impacts of the proposals on pertinent ecological features; and
 - **Section 5** proposes mitigation and enhancement measures for the current and possible future planning stages, in the context of relevant legislation and planning policy, and mechanisms to secure their delivery.

Section 2

Baseline Methodology

- 2.1 This section of the Ecological Appraisal summarises the methodologies employed in determining the baseline ecological conditions within and around the Site. This has been undertaken by appropriately qualified ecologists using relevant best practice methodologies wherever possible. Reasons for any departure from best practice methodology are given and normally relate to the timing of EDP's commission and/or the availability of access to parts of the Site or wider study area. Full details of the techniques and processes adopted are, where appropriate, provided within appendices and on plans to the rear of this report.

DESK STUDY

- 2.2 The desk study is an important element of undertaking an initial ecological appraisal of a site proposed for development, which entails the initial collation and review of contextual information, such as designated sites, together with known records of important habitats or species.
- 2.3 The desk study involved collating biodiversity information from the following sources:
- Leicestershire and Rutland Environmental Records Centre (LRERC);
 - Multi-Agency Geographic Information for the Countryside (MAGIC) website⁵; and
 - National Biodiversity Network (NBN) Atlas website⁶.
- 2.4 The desk study was undertaken during January 2024 and involved obtaining the following information:
- International statutory designations (10km radius around the Site);
 - National statutory designations and non-statutory local sites (2km radius around the Site);
 - Annex II bat species⁷ records (6km radius around the Site);
 - All other protected and notable⁸ species records (2km radius around the Site);
 - The draft Local Nature Recovery Strategy; and

⁵ www.magic.gov.uk.

⁶ www.nbnatlas.org.

⁷ Bat species listed in Annex II of the *EC Habitats Directive*, namely greater horseshoe, lesser horseshoe, barbastelle and Bechstein's bats.

⁸ Certain species are listed as Priority Species (also termed Species of Principal Importance), the conservation of which public authorities in England must have due regard to as part of policy or decision making under Section 40 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Other species of conservation note are also included here, where they are listed under other conservation lists (e.g., red data books).

- All other notable⁹ habitat (Irreplaceable Habitats or priority habitats) records (500m radius around the Site).
- 2.5 These search areas are considered sufficient to cover the potential zones of influence¹⁰ of the proposed development in relation to designated sites, habitats and species.
- 2.6 The Hinckley and Bosworth Borough Council Local Plan (2020-2039)¹¹ was also reviewed as part of the desk study to understand local priorities with regard to protection of ecological features/biodiversity.
- 2.7 Hinckley and Bosworth Council are currently working on a new Local Plan which will set out land allocations and planning policies for the period 2024 to 2045. The Draft Local Plan (June 2021-August 2021) has completed its initial Regulation 18 and Regulation 19 Consultation, and a further round of Regulation 18 Consultation in July 2024-September 2024. The Local Development Scheme (LDS) indicates that the timeframes going forward will need to include a further round of Regulation 18 and 19 consultations, to be programmed in late 2025-early 2026 to allow for changes arising from the new *National Planning Policy Framework (NPPF)*, *National Planning Policy Guidance (NPPG)* and standard housing method introduced in December 2024. As such, the Local Plan is anticipated for submission to the Secretary of State (Regulation 22) in late 2026 and for adoption late 2027.

HISTORICAL SURVEYS

- 2.8 Previous surveys in 2022 and 2023 were only conducted within the southern fields shown on **Plan EDP 1** which included an Extended Phase 1 Habitat survey, breeding bird surveys, a wintering bird survey and great crested newt (*Triturus cristatus*) surveys. However, in November 2023 the Applicant included the northern field within the proposals. Therefore, a suite of surveys was conducted to include both fields as discussed below.

BASELINE HABITAT SURVEY

- 2.9 The main habitats within the Site, together with their dominant/characteristic plant species, were identified by undertaking a baseline habitat survey in May 2024. This survey was undertaken following the guidance for habitat surveys as set out in The Statutory Biodiversity Metric User Guide¹², for which the habitat definitions primarily rely on descriptions set out in the UK Habitat Classification¹³ and habitat conditions as set out for the Statutory Biodiversity Metric¹⁴. Although this survey was undertaken in February due to the habitats on-site

⁹ Certain habitats are listed as Priority Habitats (also termed Habitats of Principal Importance), the conservation of which public authorities in England must have due regard to as part of policy or decision making under Section 40 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Irreplaceable habitats are those listed under *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*.

¹⁰ Zone of Influence - the areas and resources that may be affected by the proposed development.

¹¹ https://www.hinckley-bosworth.gov.uk/downloads/file/7356/draft_local_plan_2020_-_2039

¹² Defra (February 2024). *Statutory Biodiversity Metric User Guide*.

¹³ UKHab Ltd (July 2023). *UK Habitat Classification Version 2.0* [<https://www.ukhab.org>].

¹⁴ DEFRA (February 2024). *Statutory Biodiversity Metric Technical Annex 1: Condition Assessments*.

(predominantly arable fields), this was considered suitable to identify and fully classify the habitat type and condition.

- 2.10 This method allows for an assessment of the main habitat types present on-site, including those listed as priority habitats or Irreplaceable Habitats. This survey was extended so that any evidence (actual or potential) for protected or notable species present on-site was recorded. Any evidence of Schedule 9 invasive non-native species¹⁵ was also recorded. Plant species lists and their abundance for each habitat type were recorded but only where pertinent to identify the habitat type or condition. It was not the aim of the survey to collate a comprehensive botanical or species inventory of the Site.
- 2.11 Full details of the habitat survey methodology limitations are provided within **Appendix EDP 2**.

DETAILED SURVEYS

- 2.12 The scope of further surveys undertaken within the Site was defined following the initial studies described above.
- 2.13 The surveys 'scoped in' based upon the findings of the habitat survey are summarised in turn below, with reference to sources of further detailed information where applicable.

Breeding Bird Survey

- 2.14 The Site contains several habitats which are suitable for nesting birds, including open arable habitat surrounded by woodland and hedgerow networks. A full breeding bird survey was therefore undertaken of the original red line and a full breeding bird survey was undertaken of the additional field which was incorporated into the existing red line with reference to standard methodology, entailing a modified Common Bird Census (CBC)¹⁶ approach. This involved the completion of three visits to the Site each, undertaken monthly between May, June and July 2022 and April, May, July 2024 to coincide with the height of the breeding bird season for lowland Britain.
- 2.15 Full details of the breeding bird survey methodology and limitations are provided in **Appendix EDP 3**.

Wintering Bird Survey

- 2.16 While the Site contains several habitats which are suitable for wintering birds, including open arable farmland, these are limited in their suitability due to the dense woodland and hedgerow network surrounding the Site and there are no wetlands/estuaries in the vicinity which are known to support an important wintering or migratory bird assemblage. As such, full winter bird surveys were not considered necessary, though a single 'pilot' wintering bird survey was completed of the southern fields and two surveys of the amended red line were completed to confirm this.

¹⁵ Those listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended).

¹⁶ Marchant, J. (1983). *Common Bird Census Method*. BTO.

- 2.17 The survey involved the completion of three visits to the Site, undertaken in March 2023 (southern fields only), December 2023 and January 2024.
- 2.18 Full details of the winter bird survey methodology and limitations are provided in **Appendix EDP 4**.

Bat Surveys

- 2.19 During the initial habitat survey, multiple trees present within, or immediately adjacent to, the Site were identified as having potential to support roosting bats. There are no buildings present within the Site boundaries. The south of the Site is bounded by woodland habitat along the western boundary which provides optimum habitat for roosting bats, such as Barbastelle (*Barbastella barbastellus*) and Bechstein's bat (*Myotis bechsteinii*).
- 2.20 The following surveys for bats were therefore undertaken, with reference to best practice guidelines¹⁷.

Tree Roost Surveys

- 2.21 Owing to the presence of suitably mature trees within or adjacent to the Site, a Ground Level Tree Assessment (GLTA) of these trees was undertaken to record any external evidence of roosting bats or any features capable of supporting roosting bats that can be seen from the ground.
- 2.22 The survey was completed on 13 May 2024 by a bat licensed ecologist in accordance with the good practice guidelines referred to above. The trees were searched as thoroughly as possible from ground level with all elevations covered where these could be accessed.
- 2.23 Suitable features for roosting bats (Potential Roost Features - PRFs) recorded (where present) include features formed by disease, decay, damage and association as listed within the guidelines published by the Bat Conservation Trust and detailed within the 'Bat Roosts in Trees' book¹⁸. In addition, bat, bird and dormouse (*Muscardinus avellanarius*) boxes are also considered to provide potentially suitable roosting opportunities.
- 2.24 Signs of roosting bat presence recorded (where present) include seeing a bat within a PRF, or finding bat droppings within, around or beneath a PRF. Other signs which could indicate a roost include smoothing of the entrance to a PRF, staining around or beneath a feature, audible squeaking from the roost at dusk or during warm weather, and large/regularly used roosts may produce a distinctive odour.
- 2.25 The roost suitability of each tree was categorised as either:
- None - Either no PRFs in the tree or highly unlikely to be any;

¹⁷ Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*. The Bat Conservation Trust, London.

¹⁸ Andrews, H (2018). *Bat Roosts in Trees. A Guide to Identification and Assessment for Tree-Care and Ecology Professionals*. Pelagic Publishing, Exeter.

- Further Assessment Required (FAR) - Tree is of a size, age or condition that is likely to have PRFs, further assessment is therefore required to establish if PRFs are present in the tree;
- PRF - Tree supports at least one PRF which is visible from the ground; and
- Confirmed roost - Signs of roosting bat presence were found within or around a PRF.

Limitations

- 2.26 It should be noted that this type of assessment is based on features visible from ground level and is not considered to be a definitive bat roosting survey and not all aspects of the trees were visible.

Bat Activity Surveys

- 2.27 It is assumed that the Site's hedgerow network, which connects to the off-site woodlands, are key flightlines for bats due to their optimum nature. All hedgerows are being retained and buffered, with impacts and mitigation made on the assumption that these hedgerows are significant for commuting and foraging bats, and as a result, no bat activity surveys have been undertaken on the Site. This is discussed further within this report.

Badger Survey

- 2.28 A survey to record any evidence of badger (*Meles meles*) activity within the Site was undertaken during the baseline habitat survey on 13 May 2024.
- 2.29 During the survey, any signs of badger activity such as holes, faeces, latrines, trails, snuffle holes and hairs on fencing or vegetation were recorded.
- 2.30 Where holes of a size and shape consistent with badgers were identified, the following signs of badger activity were searched for in order to determine whether they were currently in use:
- Fresh spoil outside entrances;
 - Bedding material (typically dried grass) outside entrances;
 - Holes being cleared of leaf litter/other debris;
 - Badger guard hairs; and
 - Footprints and fresh tracks leading to/from the holes.
- 2.31 Each hole was then categorised into the following¹⁹:
- Well used: these are clear of any debris or vegetation, and are obviously in regular use;
 - Partially used: these are not in regular use and have debris such as leaves or twigs in the entrance or have moss and/or other plants growing in or around the entrance. They could be in regular use after minimal amount of clearance; or

- Disused: these have not been in use for some time, are partially or completely blocked and cannot be used without a considerable amount of clearance.

2.32 Several categories of badger setts are used to describe a sett, as described below¹⁹:

- Main setts are defined as setts with a 'large number' of entrance holes (although this can be fewer) associated with large spoil heaps and well-trodden paths. This is normally where cubs are raised and is in continuous use throughout the year;
- Annexe setts - These setts are intermediate-sized (with 'several holes') and may be used by breeding badgers. These setts are normally close to a main sett (within 150m of the main sett) and connected to it by obvious paths. They may not be in use all the time, even if the main sett is very active;
- Subsidiary setts - These are similar to annexe setts but are likely to be further away (at least 50m from the main sett) and not as well connected to the main sett as annexe setts. They are not continuously active; and
- Outlier setts - Outlier setts are small setts with one or two entrance holes which are used sporadically by badgers as a temporary refuge. Spoil heaps are likely to be small and there may not be obvious paths connecting to other setts. Use may be sporadic. There may be several outlier setts within one badger social group's territory.

Limitations

2.33 Badger surveys can be undertaken at any time of year and are therefore not limited by seasonal factors. There were no access or weather constraints during the survey, therefore no limitations were identified for this survey.

Great Crested Newt Survey

2.34 An initial assessment of the Site's suitability to support great crested newt was undertaken during the baseline habitat survey and with reference to desk study records as described above. One pond was identified within the boundaries of the Site. In addition, waterbodies identified adjacent to and within a 500m radius of the Site were assessed.

2.35 The waterbody on-site, and those within 500m of the Site, were subject to the following survey types in accordance with relevant best practice guidance:

- Habitat Suitability Index (HSI) Assessment²⁰; and
- Environmental DNA (eDNA) Sampling²¹.

¹⁹ Harris, S., Cresswell, P. and Jeffries, D. (1989). *Surveying Badgers. Occasional publication of Mammal Society*, Number 9. Mammal Society.

²⁰ 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.

²¹ As approved by Natural England. <http://www.freshwaterhabitats.org.uk/wordpress/wp-content/uploads/2013/09/eDNA- water-sample-methods-FHT.pdf>.

- 2.36 Waterbodies more than 500m from the Site were not surveyed as the likelihood of great crested newts dispersing over this distance to the negligible suitability arable habitats present within the Site is much reduced, and surveys of the nearer waterbodies are sufficient to identify likelihood of presence on-site and assess impacts on the local population.
- 2.37 All drains recorded on-site were dry at the time of the survey. No further surveys were undertaken on the drains.
- 2.38 Full details of the great crested newt survey methodology and limitations are provided in **Appendix EDP 5** and a copy of the eDNA analysis report is provided separately as **Appendix EDP 6**.

BIODIVERSITY NET GAIN

- 2.39 The *Biodiversity Gain Requirements (Exemptions) Regulations 2024* exempt certain types of development from meeting the biodiversity gain requirement that would otherwise be imposed as a general condition of planning permission. This includes the following developments:
- Small developments where an application for planning permission is made or has been granted before April 2024;
 - Developments with no impact on priority habitat and where impacts on other habitat fall below specified thresholds;
 - Householder applications;
 - The high-speed railway network;
 - Off-site gain developments, i.e., developments which fulfil the Biodiversity Net Gain (BNG) requirement arising in relation to another development; and
 - Certain self-build and custom build developments.
- 2.40 The proposed development is not one of the types of developments listed above. Therefore, if the application for planning permission is granted, this development will be subject to the biodiversity gain condition as set out in the *Environment Act (2021)*. The condition requires that a Biodiversity Gain Plan, which demonstrates a minimum of 10% BNG, must be submitted to the local planning authority and approved prior to the commencement of the development. Planning practice guidance on BNG²² states that an application for planning permission for a development subject to the biodiversity gain condition must be accompanied by minimum biodiversity gain information. This information, along with an indicative calculation of the scheme's net biodiversity impact using the Statutory Biodiversity Metric, is provided within the BNG Assessment included as **Appendix EDP 7**.

²² <https://www.gov.uk/guidance/biodiversity-net-gain>.

ECOLOGICAL SURVEYS SCOPED OUT

- 2.41 **Table EDP 2.1** summarises other survey types which, whilst occasionally required to inform a planning submission for development sites, are not deemed to be necessary/appropriate in this case.

Table EDP 2.1: Ecology Surveys Scoped Out

Survey Type	Reasons for Scoping Out
Botanical Surveys	Habitat survey information was sufficient to confirm habitat value, with no indication of particularly high value habitat present. No notable plants were recorded within the Site and the habitats present are unlikely to support significant numbers or assemblages of rare or protected plant species.
Bats	Activity surveys have been scoped out as all suitable features (hedgerows and adjacent woodland) for foraging and commuting bats are to be retained and buffers are being proposed.
Hazel dormouse (<i>Muscardinus avellanarius</i>)	There were no records of hazel dormouse returned from the desk study within 2km of the Site in the last 10 years and all suitable habitats for this species are being retained and buffered, so no impacts are anticipated.
Eurasian otter (<i>Lutra lutra</i>)/ European Water Vole (<i>Arvicola amphibius</i>)	There were no records of otter and only two records of water vole returned from the desk study within 2km of the Site in the last 10 years. No suitable habitat is present within the Site, and they are therefore assumed absent and will not be further mentioned within this report.
Reptiles	The desk study returned one record of grass snake (<i>Natrix natrix</i>) within 2km of the Site in the last 10 years. The Site is dominated by arable fields with suitable habitat limited to the field margins (tall ruderal, scrub and hedgerows) and only small areas will be impacted by the proposals. Therefore, reptile surveys were not undertaken.
Invertebrates	The Site is dominated by arable fields of negligible value to important invertebrate populations. Instead, the off-site woodland, including the hedgerows and scrub, are likely to support the species and are to be retained and buffered. Invertebrates will not be further discussed in this report.

Section 3

Baseline Results

- 3.1 This section of the Ecological Appraisal summarises the baseline ecological conditions determined through the course of desk-based and field-based investigations described in **Section 2**. In particular, this section identifies and evaluates those ecological features/receptors that lie within the Site's potential zone of influence, and which are pertinent in the context of the proposed development. Further technical details are, where appropriate, provided within appendices and on plans to the rear of this report.
- 3.2 Where a particular ecological feature/receptor has been confirmed to be present, or presence is inferred based on habitat suitability, its ecological importance is assessed. The level of ecological importance assigned to each ecological feature is based upon established geographical value systems and uses the following scale: International and European (highest) > National > Regional > County > District > Local > Site > Negligible (lowest).

DESIGNATED SITES

- 3.3 Information regarding designated sites was obtained during the desk study. Statutory designations (those receiving legal and planning policy protection) and non-statutory designations (those receiving planning policy protection only) are discussed in turn below.

Statutory Designations

- 3.4 Statutory designations represent the most significant ecological receptors. Internationally important statutory designations include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites (including potential SPAs, possible SACs and proposed Ramsars). These designations are protected under the *Conservation of Habitats and Species Regulations 2017* (as amended) (hereafter referred to as 'the Habitats Regulations'). These designations are referred to as 'habitats sites' in the NPPF and development which would adversely affect a habitats site (alone or in combination) cannot benefit from the NPPF presumption in favour of sustainable development.
- 3.5 Nationally important statutory designations include Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs). NNRs are also SSSIs, both of which are protected under the *Wildlife and Countryside Act 1981* (as amended). The NPPF states that development which would adversely affect an SSSI should not normally be permitted.
- 3.6 Local level statutory designations include Local Nature Reserves (LNRs) and are generally considered to be of importance at the County level or lower. LNRs are designated under the *National Parks and Access to the Countryside Act 1949*, however, protection of LNRs is given via local planning policies and/or by-laws.
- 3.7 Statutory designations are also recognised as key natural assets within the Hinkley and Bosworth Borough Council Local Plan Policy NAT07: *Protecting Biodiversity*.

- 3.8 No part of the Site is covered by any statutory designations and there are no internationally important designations within 10km of the Site, and no nationally important designations or county important designations within 2km of the Site.

Non-statutory Designations

- 3.9 Non-statutory designations are also commonly referred to in planning policies as 'local sites', although such designations are typically considered to be of importance at a County level. In Leicestershire, such designations are termed Local Wildlife Sites (LWSs). Additional sites such as non-designated nature reserves (e.g., Wildlife Trust nature reserves) are considered here when not covered by other designations. The importance of LWSs is recognised in the NPPF and in the Hinckley and Bosworth Borough Council Local Plan, specifically Policy SP24. The County also identifies areas that are key target areas for nature conservation action, these are referred to as Biodiversity Opportunities Areas.
- 3.10 No part of the Site is covered by any non-statutory designations. There are eight LWSs located within 2km of the Site, as summarised in **Table EDP 3.1**.

Table EDP 3.1: Non-statutory Designations Within 2km of the Site

Designation	Approximate Distance from Site	Interest Feature(s)
Bagworth, Merrylees Rd hedge, opposite Great Fox covert LWS	0.3km east	Hedgerow- no further details given.
Bagworth, grassland opposite Woodside Farm LWS	0.6km north	Species rich wet mesotrophic grassland in small v-shaped ditch valley within a national forest planting. Includes a pond.
Mature Ash Tree, The Swallows, Merry Lees LWS	0.7km east	Mature tree – no further details given.
Bagworth Heath Country Park LWS	1km north-east	Mesotrophic and wet grassland, recent plantations, several ponds and small lakes; small area of created heathland.
Hedge at Hill Farm, Barlestone LWS	1.4km west	Hedgerow- no further details given.
Newbold Verdon Desford Rd (north) Wrask Farm LWS	1.5km south	Hedgerow- no further details given.
Barlestone hedgerow LWS	1.8km south-west	Hedgerow- no further details given.
May Meadow and adjacent sites LWS	1.8km west	Marsh and tall herbs, with ponds and scrub, wet woodland, small stream on adjacent land. Wet rush pasture in field in the north.

Priority Habitats (within 500m of the Site)

- 3.11 Seven parcels of Lowland Mixed Deciduous Woodland (a priority habitat) are located within 500m of the Site; the closest is located approximately 125m west of the Site.
- 3.12 There are no Ancient Woodlands nor any other Irreplaceable Habitats within 500m of the Site.

HABITATS

- 3.13 There are several mechanisms by which habitats that lie outside of statutory and non-statutory designations are protected, or by which their importance is recognised at a national level. This includes the following:
- 'Important' hedgerows are protected from removal (outwith the planning process) by the *Hedgerows Regulations 1997*;
 - Certain habitats are listed as priority habitats (also termed habitats of principal importance), the conservation of which public authorities in England must have due regard to as part of policy or decision making under Section 40 of the *Natural Environment and Rural Communities (NERC) Act 2006*. The NPPF states that plans should promote the conservation, restoration and enhancement of priority habitats;
 - In England, principal amendments to the *Town and Country Planning Act (1990)*, including a new Schedule 7A (inserted by the *Environment Act 2021*), introduce a statutory framework for BNG. Under the statutory framework, every grant of planning permission (unless otherwise exempt) is deemed to have been granted subject to the general biodiversity gain condition which requires a Biodiversity Gain Plan to be submitted and approved prior to the commencement of development. The Biodiversity Gain Plan must demonstrate a minimum 10% BNG measured against the baseline value of the on-site habitats;
 - Paragraph 193 of the NPPF includes a presumption against development which results in significant harm to biodiversity (including habitats), or results in the loss of Irreplaceable Habitats²³. This paragraph also encourages development to integrate biodiversity improvements as part of their design, especially where this can secure measurable net gains for biodiversity; and
 - The importance of protecting habitats, and networks of habitats, is reflected in the Hinckley and Bosworth Borough Council Local Plan.

ON-SITE HABITATS

- 3.14 The distribution of different habitat types within the Site is illustrated on **Plan EDP 1**. The habitats are further described in **Appendix EDP 2** alongside illustrative photographs and species lists.

²³ As identified in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*.

3.15 A summary and qualitative assessment of the existing habitats is provided below in **Table EDP 3.2**. Further details of the habitat condition assessment, with reference to the criteria contained within The Statutory Biodiversity Metric - Technical Annex 1: Condition Assessment Sheets and Methodology are provided within **Appendix EDP 7**.

Table EDP 3.2: Summary of Existing Habitats Within the Site

Habitat Type	Condition	Notes	Intrinsic Ecological Importance*
Cereal Crops	N/A	Arable fields.	Negligible.
Developed Land; Sealed Surface	N/A	Existing farm access track.	Negligible.
Ditches	N/A	Dry ditches associated with hedgerows across the Site.	Negligible.
Modified Grassland	Good.	Species-rich grassland with varied sward height	Site.
Pond (non-priority)	Moderate.	A small pond within the northern field.	Site.
Bramble Scrub	N/A	Small areas along the northern boundary and surrounding the pond.	Site.
Mixed Scrub	Poor.	Dense scrub along the northern boundary of F2 .	Site.
Ruderal/Ephemeral	Moderate.	Large areas around the boundaries of F2 and F3 .	Site.
Native Hedgerow	Moderate.	Hedgerows border the majority of the open arable fields.	Local (priority habitat).
Native Hedgerow with Trees	In moderate and good condition.	Hedgerows border the majority of the open arable fields.	Local (priority habitat).
Native Species-rich Hedgerow with Trees- Associated with Bank or Ditch	Moderate.	Hedgerows border the majority of the open arable fields.	Local (priority habitat).
Native Hedgerow with Bank or Ditch	Moderate.	Hedgerows border the majority of the open arable fields.	Site (priority habitat).

*Importance irrespective of any protected, priority or other notable species which may be present.

- 3.16 As noted within **Table EDP 3.2**, the majority of the Site is made up of habitats which are of less than Local intrinsic importance.
- 3.17 However, a number of hedgerows present within the Site are of Local level importance and are priority habitats as protected under the NPPF. There are no Irreplaceable Habitats present within the Site.
- 3.18 Furthermore, a number of the habitats, including those which are of limited intrinsic importance, also require consideration in relation to their importance in maintaining populations of protected, priority or other notable species. This is discussed further below.
- 3.19 Further details of the existing habitats in respect of the BNG Assessment are provided within **Appendix EDP 7**.

PROTECTED, PRIORITY OR OTHER NOTABLE SPECIES

- 3.20 Certain species receive legal protection in the UK and are commonly known as ‘protected species.’ In reality, the level of protection for different species varies considerably, from protection solely against ‘killing and injury’ to full protection of the species and their places of refuge. Where pertinent, details of legal protection afforded to species/species-groups are provided below.
- 3.21 In addition to protected species, there are other species/species-groups that do not receive legal protection, but which are notable owing to their conservation status. This includes priority species, the conservation of which public authorities in England must have due regard to under the *NERC Act* (2006). The NPPF recognises species as an important component of biodiversity, as does the Hinckley and Bosworth Borough Council Local Plan, specifically Policy NAT08: *Enhancing Biodiversity and habitat connectivity*.
- 3.22 The likelihood of presence, or confirmed presence, of protected, priority or other notable²⁴ wildlife species within the Site is summarised below with reference to desk study records, habitat suitability and detailed surveys where relevant. Further details are made available within the appendices and plans where referenced.

Breeding Birds

- 3.23 All wild birds, their nests and eggs are protected under the *Wildlife and Countryside Act 1981* (as amended). This makes it an offence to:
- Intentionally kill, injure or take any wild bird;
 - Take, damage or destroy the nest of any wild bird while it is in use or being built;
 - Take, damage or destroy the egg of any wild bird; or

²⁴ Notable species are those which are not legally protected but are formally identified as being of conservation concern

- To have in one's possession or control any wild bird (dead or alive) or egg, or any part of a wild bird or egg.
- 3.24 In addition, further protection is afforded to those wild bird species listed on Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended), prohibiting any intentional or reckless disturbance to these species while it is nest building, or at a nest containing eggs or young, or to recklessly disturb the dependent young of such a bird. A number of species are also included as priority species.
- 3.25 A large number of records of bird species were retrieved during the desk study, including four records of *Wildlife and Countryside Act 1981* (as amended) Schedule 1 species, 19 records of priority species, and a further 11 records of species included on the latest Red and Amber lists of Birds of Conservation Concern²⁵. The vast majority of records received relate to species that would not normally breed in habitats found within the Site. Records of the species with possible suitable breeding habitats on-site include skylark (*Alauda arvensis*) and yellowhammer (*Emberiza citrinella*).
- 3.26 The full results of the breeding bird survey are provided in **Appendix EDP 3**. In summary, a total of 37 bird species were recorded as likely breeding on-site. No *Wildlife and Countryside Act 1981* (as amended) Schedule 1 species were recorded on or near the Site, however, 15 listed as either priority species or species of conservation concern were recorded.
- 3.27 The majority of species recorded were associated with the hedgerows, scrub, and field margins, with the exception of skylark, which were recorded in the centre of fields. Species were also recorded in the adjacent woodland. All notable species were recorded in relatively low numbers and for this reason, the breeding bird assemblage of the Site is judged to be of Local level ecological importance.
- 3.28 Breeding bird surveys that were originally undertaken at the Site in 2022 confirmed the presence of two skylark territories, both within what is now the southern parcel of the Site (see **Plans EDP 2-4**).
- 3.29 Update breeding bird surveys in 2024 recorded a maximum of five possible skylark territories within the Site's updated boundary (see **Plans EDP 5-7**); three in the southern parcel and two in the northern parcel. Surveys also noted the skylark territories within the surrounding arable fields outside the red line boundary. Winter bird surveys undertaken during 2023 and 2024 also identified the presence of skylark utilising arable fields for foraging, indicating that the Site is also used as a foraging resource outside the breeding period.
- 3.30 Skylark is a Species of Principal Importance and Red listed, but within Leicestershire it is a common resident breeder. The presence of a maximum of five pairs within open arable fields in Leicestershire is therefore expected, and given the numbers across the country, is not likely to be significant beyond the local population for this species. Skylark has therefore been assessed as being of Local level ecological importance.

²⁵ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and 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: 723-747.

Wintering Birds

- 3.31 Wintering birds do not receive direct legal protection; however, they may form part of a protected assemblage originating from a statutory designation in the vicinity or significant numbers of Priority Species or other notable species may be present.
- 3.32 The full results of the wintering bird survey are provided in **Appendix EDP 4**. In summary, a total of 16 bird species were recorded on-site. This includes 2 *Wildlife and Countryside Act 1981* (as amended) Schedule 1 species, fieldfare (*Turdus Pilaris*) and redwing (*Turdus iliacus*), and 8 priority species and species of conservation concern. The majority of birds were recorded within the southern fields.
- 3.33 All bird species recorded are those that are common, numerous or abundant winter visitors or residents within the local area and across the county as a whole.
- 3.34 It is concluded that the diversity and abundance of over-wintering birds within the Site reflects the diversity of habitats present but is not exceptional. The wintering bird assemblage present within the Site is judged to be of no greater than Site ecological importance.

Bats

- 3.35 All species of British bat are listed as European Protected Species (EPS) on Schedule 2 of the Habitats Regulations. This affords strict protection to bats and their roosts, and makes it an offence to:
- Deliberately capture, injure or kill a wild animal of an EPS;
 - Deliberately disturb wild animals of an EPS wherever they are occurring, in particular, any disturbance which is likely to impair their ability to survive, to breed or reproduce, to significantly affect the local distribution or abundance of the species to which they belong, or in the case of hibernating or migratory species, to hibernate or migrate; or
 - Damage or destroy a breeding site or resting place of a wild animal of an EPS.
- 3.36 Additional protection for bats is also afforded under the *Wildlife and Countryside Act 1981* (as amended), making it an offence to intentionally or recklessly disturb bats whilst they are occupying a structure or place which is used for shelter or protection, or to obstruct access to this structure or place. In addition, soprano pipistrelle (*Pipistrellus pygmaeus*), brown-long-eared bat (*Plecotus auritus*), greater horseshoe bat (*Rhinolophus ferrumequinum*), barbastelle bat (*Barbastella barbastellus*), Bechstein's bat, noctule (*Nyctalus noctula*), and lesser horseshoe bat (*Rhinolophus hipposideros*) are also listed as priority species.
- 3.37 The desk study returned multiple records for bats within the 2km search radius around the Site. These records relate to at least 12 different species, with the closest record of confirmed bat roosting being for brown long-eared located approximately 1.1km west from the Site.
- 3.38 One record of Annex II species was returned within 6km of the Site. This was for Barbastelle, which was recorded 2.2km south-west of the Site.

- 3.39 The closest record relating to European Protected Species Mitigation Licences (EPSML) issued for bats returned from the data search on MAGIC was for common pipistrelle for the destruction of a breeding and resting site, 1.6km north-east of the Site. There were no EPSMLs issued for Annex II bats within 6km of the Site.

Commuting and Foraging Bats

- 3.40 The Site is of very low suitability for foraging and commuting bats, being made up of intensively managed arable fields. These fields may be used by individual, opportunistic bats, most likely to include pipistrelle species. The arable fields themselves are intensively managed which limits both the abundance and diversity of invertebrates (prey items), thereby reducing their foraging capacity. The majority of bat species do not cross large open expanses, with the exception of species like noctule which fly high over large tracts of land and do not follow hedgerow features as closely as other species.
- 3.41 The more suitable areas of the Site are the peripheral areas including the hedgerow network and grassland field margins. These are assumed to be used by a range of bat species including rarer species (e.g., Bechstein's and barbastelle). The species-rich hedgerows and field margins provide clear wooded connection routes, making them ideal for bats commuting between the large woodland blocks and better prey abundance for foraging.
- 3.42 Notable populations and assemblages of bats are assumed to be using the off-site woodlands for commuting and foraging. It is assumed that both Bechstein's and barbastelle use the off-site woodlands.
- 3.43 On a precautionary basis, the hedgerows (and adjacent off-site woodland) are assumed to be of County level significance for foraging and commuting bats, with the arable fields being less than Site level importance.

Tree Roost Surveys

- 3.44 Multiple trees were identified during the GLTA as requiring further assessment or having PRFs for bats as shown on **Plan EDP 1**. However, as these are all to be retained, no further bat surveys were undertaken.

Badgers

- 3.45 Badgers and their setts are protected under the *Protection of Badgers Act 1992*, which makes it an offence (*inter-alia*) to:
- Wilfully kill, injure, take, or cruelly ill-treat a badger; and
 - Damage or interfere with a sett, by doing one of the following things:
 - Damage a badger sett or any part of it;
 - Destroy a badger sett;
 - Obstruct access to, or any entrance of, a badger sett;
 - Cause a dog to enter a badger sett; or

- Disturb a badger when it is occupying a sett.

- 3.46 The 1992 Act defines a badger sett as “*any structure or place which displays signs indicating current use by a badger*”.
- 3.47 The protection afforded to badgers is primarily due to animal welfare issues and history of persecution rather than concerns over their unfavourable nature conservation status.
- 3.48 Within 2km of the Site, 12 records of badger were returned. The grassland margins of arable fields, hedgerows within the Site and adjacent woodland offer opportunities for badger foraging and sett building.
- 3.49 No evidence of badger activity or sett creation was identified on-site, though given their mobile nature, the common status of badgers within the country and district, and the habitats present within the Site, it is considered that badger could be present in the future and will be considered to be of Site level importance.

Other Mammal Species

- 3.50 Within 2km of the Site, 18 records of European hedgehog (*Erinaceus europaeus*)²⁶ were returned and no records of brown hare (*Lepus europaeus*) or polecat (*Mustela putorius*) were returned.
- 3.51 Hedgehog records exist from the wider landscape, and they may inhabit the Site, though opportunities for this species are primarily restricted to the field boundary habitats. Owing to their priority species status, if any such population is present, it is considered to be of up to Site level importance.
- 3.52 No records of brown hare exist from the local landscape; however, the species is considered likely to forage and breed across the Site. Owing to their priority species status, the population is considered to be of up to Site level importance.
- 3.53 Polecat are unlikely to be present within the arable fields and are likely to be only present within the adjacent off-site woodland.

Great Crested Newts

- 3.54 Great crested newt is an EPS receiving strict protection under the Habitats Regulations as summarised above in respect of bats. Additional protection is also afforded to this species under the *Wildlife and Countryside Act 1981* (as amended) as summarised above in respect of bats. This species is also listed as a priority species.
- 3.55 Within 2km of the Site, one record of great crested newt was returned, being circa 500m away. One nearby record relating to EPSMLs issued for great crested newt was returned from the data search on MAGIC, 500m north-east.

²⁶ Hedgehogs are also protected from capture or killing by specific methods under Schedule 6 of the WCA.

- 3.56 The full results of the great crested newt surveys are detailed in **Appendix EDP 5** and summarised in **Table EDP 3.3**. The locations of the surveyed waterbodies are illustrated on **Plan EDP 11**.

Table EDP 3.3: Great Crested Newt Survey Results

Waterbody Reference No.	Distance to Site	HSI Result	eDNA Result
P1	On-site	Below average 0.58	Negative
P2	270m east	Dry	-
P3	220m south	Average 0.66	Positive

- 3.57 In terms of terrestrial habitats, the Site is bounded by woodland to the west and contains hedgerows and limited grassland around the arable fields which dominate the Site. The majority of the Site is of negligible/very low suitability for great crested newts, being arable habitat which is only suitable for incidental foraging and commuting. However, there are some on-site habitats that are of moderate suitability to support great crested newts in the terrestrial phase of their annual life cycle (e.g., the hedgerows, scrub and ruderal/ephemeral), and which are therefore possibly used for foraging and dispersal or refuge and hibernation.
- 3.58 Based on the survey results above, a population of great crested newt is using the Site, however given the distance to the breeding site and the habitats present on-site, great crested newt is judged to be of Site importance.

Other Amphibian Species

- 3.59 Other legally protected amphibians are rare and have a very restricted distribution²⁷, however, common toad (*Bufo bufo*) is a widespread species which is listed as a priority species and eight records were returned from the desk study within 2km of the Site. The on-site pond has suitable habitat and therefore the Site has potential to support the species. On the assumption that this species is present, common toad (or any other amphibian) are not likely to be more than Site level importance.

Reptiles

- 3.60 All species of common reptile, namely common lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*), grass snake and adder (*Vipera berus*) receive at least limited protection from harm under the *Wildlife and Countryside Act 1981* (as amended), making it an offence to cause intentional killing and injuring of these species. In addition, these species are also listed as priority species.
- 3.61 No reptile records were returned within 2km of the Site.
- 3.62 In terms of habitats, the Site is dominated by arable land of negligible suitability to support reptiles, however, the scrub, ruderal/ephemeral, hedgerows and off-site woodland have

²⁷ Natterjack toad (*Epidalea calamita*) and Northern pool frog (*Pelophylax lessonae*) are EPS, protected under *Wildlife and Countryside Act 1981* (as amended) and Priority Species.

suitability to support the species, and the hedgerows are therefore likely to be used for foraging and dispersal or refuge and hibernation.

- 3.63 Reptile populations are likely absent from the majority of the Site and are likely limited to incidental individuals. Due to the widespread distribution across the County, the populations of reptiles within the Site are judged to be of no more than Site level importance.

Invasive Non-native Species

- 3.64 Multiple records of giant hogweed (*Heracleum mantegazzianum*) and wall cotoneaster (*Cotoneaster horizontalis*) were returned within 2km of the Site, however, none have been found on-site.

SUMMARY OF ECOLOGICAL FEATURES

- 3.65 The ecological features/receptors pertinent to the development proposals, based on the survey findings described above, are set out below in **Table EDP 3.4**.

Table EDP 3.4: Summary of Ecological Features

Feature	Key Attributes	Ecological Importance
Non-Statutory Designated Sites		
Eight Local Wildlife Sites	Predominantly designated for the wetland, hedgerows, standing water, woodland and grassland habitats they support.	Off-site (between 0.3km and 1.8km). County importance.
Off-site Habitats		
Lowland Mixed Deciduous Woodland	A priority habitat 125m west of the Site.	District (priority habitat).
Other Woodland; Broadleaved	A small pocket of woodland adjacent to the Site.	Local.
Habitats		
Pond (non-priority)	A small pond within the Site.	Site.
Scrub and Ruderal/Ephemeral	Small areas along the boundaries of the Site and along hedgerows.	Site.
Modified Grassland	Along the field margins	Site.
Other Habitats of Negligible Importance	Developed land; sealed surface and cereal crops.	Negligible.
Hedgerows	A mixture of species-rich and species-poor hedgerows some with and some without standing trees and associated ditch.	Local (priority habitats).

Feature	Key Attributes	Ecological Importance
Species		
Breeding Birds	Suitable habitat for ground nesting and woodland/farmland edge species. With confirmed breeding status for three priority species (song thrush, skylark and yellowhammer).	Local level, but legally protected whilst nesting.
Breeding Skylark	Up to five pairs recorded breeding within the open arable fields within the Site.	Local level.
Wintering Birds	Population comprises common and widespread species, with some large flocks of skylark and redwing present.	Site level.
Bats	Notable assemblages of bats are assumed to be using the adjacent woodland for commuting, foraging and roosting as well as using the hedgerows as key flight lines and foraging. It is assumed that barbastelle use the adjacent woodland.	Assumed County.
Badgers	Sub-optimal habitat for badgers but included as a precaution owing to local records, and it is possible they could utilise the Site for foraging or commuting.	Site level, but legally protected.
Other Mammals	Range of suitable habitats for brown hare and hedgehog.	Assumed Site level.
Great Crested Newt	The majority of habitats within the Site are very low suitability (arable fields), however, with breeding ponds off-site (220m south of the Site), a pond on-site and small areas of suitable habitat within the Site, this species is assumed present within the Site.	Site level, but legally protected.
Other Amphibians	Common toad are assumed present breeding in the ponds.	Assumed Site level.
Reptiles	The majority of habitats within the Site are very low suitability (arable fields), however, with small areas of suitable habitat within the Site, these species are assumed present within the Site.	Assumed Site level, but legally protected.

Section 4

Impact Assessment

- 4.1 This section of the Ecological Appraisal first considers any avoidance/mitigation which is embedded within development design, as represented by the Illustrative Landscape Strategy provided as **Appendix EDP 1**. It then considers the likely impacts of the development proposals on the pertinent ecological features identified in **Section 3** in the absence of additional mitigation.

EMBEDDED MITIGATION

- 4.2 Paragraph 193 of the NPPF, requires that *“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”*.
- 4.3 This section sets out an ecological mitigation hierarchy that has been followed through the impact assessment and includes mitigation/compensation recommendations.
- 4.4 Throughout the design process, all ecologically valuable features were considered, and project design and mitigation were included to ensure that impacts were avoided where possible. Ecologically valuable habitats include the hedgerows and adjacent woodland, as well as the species they support (e.g., bats). As general mitigation, the following minimum buffers from any solar panel or security fencing were included:
- Adjacent woodland and stream within the woodland: 10m; and
 - All hedgerows: 6m.
- 4.5 Cable routes and access tracks also followed the above buffers, however, in some instances they were required to cross through hedgerows. In all cases, the cable routes and access tracks utilised existing gaps within these features, and avoided the root protection areas, thereby ensuring no loss of connecting hedgerows or woodland areas.

IMPACTS ON DESIGNATED SITES

Non-statutory Designations

- 4.6 As described in **Section 3**, there are eight statutory designations within the potential zone of influence of the Site. The potential impacts on these designations, in the absence of additional mitigation, are discussed below.
- 4.7 There are no designated sites immediately adjacent to the Site, nor connected through any ecological pathway (e.g., a watercourse) from the Site. The closest designated site lies 0.3km east from the Site and is a hedgerow designation. Therefore, direct impacts through the construction of a solar site are not considered likely and there will not be a significant increase

in traffic that will cause deterioration of air quality, which would impact these designated sites. Impacts from this proposal are, therefore, not considered likely on any designated site.

IMPACTS ON HABITATS

- 4.8 As described above, with respect to embedded mitigation, the development design follows the mitigation hierarchy. In addition, it also follows the Biodiversity Gain Hierarchy as set out in the *Town and Country Planning (Development Management Procedure) (England) Order 2015*. The scheme was firstly designed to ensure that the adjacent woodland was retained and suitably buffered (see embedded mitigation section above). Secondly, where present on-site, the scheme has sought to retain the most important habitats within the proposed layout, including the network of hedgerows which are considered a priority habitat and the pond (non-priority).
- 4.9 Based on the Illustrative Landscape Strategy and associated landscape proposals, assumptions can be made regarding the habitats present post-development, made up of habitats retained in their current state (with no change), habitats retained and newly created habitats. An assessment of the predicted habitat losses/gains as a result of the proposed development has been undertaken using the Statutory Biodiversity Metric. This assessment considers all habitats proposed to be lost, retained or created through the proposed development.
- 4.10 A full account of the habitat impacts as result of the proposed development is provided in the indicative BNG Assessment provided in **Appendix EDP 7. Table EDP 4.1** provides a summary of the net impacts on habitats.

Table EDP 4.1: Net Impact on Habitats

	Habitat Units	Hedgerow Units
Total Net Unit Change	39.78	13.47
Total Net % Change	66.88%	47.06%
Trading Rules Satisfied	Yes	Yes

- 4.11 Based on the Statutory Biodiversity Metric calculations described above, the net impact on habitats, following implementation and maturation of the proposed landscaping, is predicted to be positive. However, in the absence of further mitigation measures, there is a risk of the following:
- Damage/deterioration/pollution of retained habitats from adjacent construction activities; and
 - Not achieving target condition for retained and new habitats due to inappropriate management.
- 4.12 Mitigation for this is set out in the following section, which will ensure that these impacts do not come to pass.

IMPACTS ON PROTECTED, PRIORITY OR OTHER NOTABLE SPECIES

Breeding Birds

- 4.13 The population of breeding birds present is very restricted by the limited habitats within the Site and the majority recorded with the Site were within the optimal habitats to be retained. No impacts on the assemblage or populations of notable or rare species are considered likely. In fact, the conversion of arable field to grassland under the solar arrays and the ecological enhancement of the other areas (creation of more diverse grassland and scrub/woodland edge/hedgerow creation) will significantly benefit all the species recorded during the breeding bird survey, particularly declining farmland bird species like yellowhammer and foraging skylark.
- 4.14 All hedgerows are proposed to be retained, however if the works for the cable route and access tracks are thought to cause disturbance to breeding birds through accidental damage or slight removal of the edges of hedgerows, a suitably trained ecologist would need to be present to oversee the works.
- 4.15 Cable routes will be situated as part of the internal road network and will utilise the existing hedgerow gaps for field entrances. Cable routes are only impacting the northern parcel hedgerow to join Heath Road where they are leaving the Site. In the absence of mitigation, this may cause the loss of, or damage to, breeding bird nests.
- 4.16 The creation of open grassland will increase the foraging suitability of the Site for most bird species including skylark. However, the creation of the solar arrays is likely to reduce the suitability for nesting for skylark, as they prefer open uninterrupted vistas to avoid predation of their nests. It should be assumed that all skylark territories within these areas will be lost. The loss of up to five territories for skylark is unlikely to have an impact on this species above the Site level given the abundance of skylark within the county and local area. However, as this species is a priority species in decline, a cumulative impact on this species, with the loss and deterioration of suitable habitats elsewhere, is still possible. Therefore, a Skylark Mitigation Strategy (report reference: edp7530_r005) has been submitted alongside the planning application and should be read in conjunction with this report.

Bats

Impacts on Roosting Bats

- 4.17 All trees with the potential to support roosting bats are being retained as part of the proposals. No direct impacts are considered likely. If any trees are to be subsequently lost or adversely affected for any reason, then additional surveys will be required to fully understand any impacts.

Noise Impacts on Potential Bat Roosts

- 4.18 The Bat Mitigation Guidelines²⁸ suggest that bats in flight are most likely to be affected by frequency ranges which overlap with echolocation and of a sound intensity greater than 50dBA, however, this may vary dependent upon the character of the sound and bat species.

²⁸ Reason, P.F. & 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.

- 4.19 The cooling fans used for the inverters and the small 'customer substations' all produce a certain level of noise. The noise generated is anticipated to be predominantly within the human auditory range, with the loudest noise (as measured in A-weighted decibels - dBA) at a frequency of 125 Hz (72 dBA at 1m from the battery station on the side closest to the cooling fan) and the highest frequency decibel peak at 8kHz (49.2dBA at 1m from the battery station on the side closest to the cooling fan). This is far below the frequencies at which UK bats echolocate, with the lowest peak frequency used by noctule bats at around 18-20kHz. Nonetheless, there will be some noise produced at higher frequencies than this, with noise at 22.4kHz (the highest frequency information provided by the battery station's manufacturer noise test), however, this higher frequency noise attenuates more quickly and is anticipated to be just over 35dBA at 1m but less than 25dBA at 5m distance from the battery station. Scale examples of 25dBA suggests this is as loud as the sound of breathing or a whisper. These figures should, however, be regarded as an underestimate of the loudness experienced by bats, given that the A-weighting of the decibel measurement skews loudness in relation to that heard by human ears and therefore can under-represent sounds audible to bats and not humans.
- 4.20 To minimise noise disturbance on the assumed roosting sites, both the inverters and substations have all been positioned at least 20m away and pointing away from these habitats. These locations are fixed and are shown on the figures accompanying the planning application.

Light Impacts on Potential Bat Roosts

- 4.21 Lighting (during construction and from security lights during operation) overspilling into the woodland and hedgerow habitats may reduce the suitability of roosts if present within the woodland edges and hedgerows.

Impacts on Foraging/Commuting Bats

- 4.22 No direct impacts on the optimum foraging habitats and key commuting lines for bats (hedgerows, pond and adjacent woodland) are proposed. As set out in the embedded mitigation, these areas have been retained and buffered through project design.
- 4.23 Indirect impacts on the key foraging and commuting areas for the bats are identical to those described above for impacts on roosting bats (through light and noise).
- 4.24 The conversion of arable fields to solar arrays is unlikely to significantly impact the foraging suitability of these areas as invertebrate (prey items) abundance and density are already exceptionally low in intensively managed arable fields. Furthermore, a section of the arable within the north is to be retained.

Badgers

- 4.25 No badger setts were recorded within the Site boundary and the higher suitability badger habitats (arable field margins, hedgerows and adjacent woodland) are all being retained and buffered. Although the conversion of arable farmland to solar array is not likely to significantly impact badger foraging habitat, the installation of security fencing could potentially disrupt key commuting lines and access to these (lower) suitability foraging areas within the centres of the fields.

- 4.26 Any excavation/trenching works may entrap badgers (and other mammals) if left open overnight.
- 4.27 Given their current absence from the Site, it is considered that badger will not be significantly impacted by the proposed development. However, if badgers do create setts within the Site between the assessment date and the construction commencement then these setts may be impacted.

Other Mammals

- 4.28 The higher suitability mammal habitats (arable field margins, hedgerows and adjacent woodland) are all being retained and buffered. Although the conversion of arable farmland to solar array is not likely to significantly impact this habitat for these species, the installation of security fencing could potentially disrupt key commuting lines and access to these (lower) suitability foraging areas within the centres of the fields.
- 4.29 Any excavation/trenching works may entrap mammals if left open overnight.

Great Crested Newts

- 4.30 No ponds with great crested newt presence (**P3**) or any other waterbodies will be directly impacted through the proposals.
- 4.31 All works are offset from the great crested newt pond (**P3**) by at least 200m. No direct or indirect impacts are considered likely on great crested newt ponds.
- 4.32 All suitable terrestrial habitat for great crested newts is being retained throughout the proposals including the hedgerows. Some temporary cabling works may occur in the grassland margins around the fields.
- 4.33 The creation of solar arrays within the arable fields is unlikely to reduce the suitability of this very low suitability habitat, which is currently only suitable for commuting and incidental foraging.
- 4.34 With the inherent scheme design and embedded mitigation, no negative impact to the Favourable Conservation Status of great crested newt is therefore anticipated.
- 4.35 In the absence of mitigation, there is a possibility that individual great crested newt using the arable fields for commuting or incidental foraging may get accidentally killed or injured during the construction or decommissioning of the Site. This may therefore lead to a breach in wildlife legislation.

Other Amphibians

- 4.36 Impacts to other amphibians (notably common toads that are most likely to be present within the on-site and off-site waterbodies and terrestrial habitat on-site) are identical to those for great crested newt, although it should be noted that this species may be present within waterbodies where great crested newt was proven absent, and therefore they have a different range across the Site to great crested newt.

- 4.37 Any works within suitable terrestrial habitat in close proximity to a waterbody may therefore kill or injure common toad, and although this in itself would not lead to a breach in wildlife legislation, due to this species being a priority species, it should be avoided where possible and mitigation should be secured to reduce the likelihood of this occurring.

Reptiles

- 4.38 Suitable habitat for reptiles is being retained throughout the proposals, including the hedgerows, pond and adjacent woodland. If during the cabling works reptiles are thought to be impacted within the discrete locations within suitable habitats - the rough grassland margins and adjacent to the hedgerows around the fields - suitable mitigation will be put in place to minimise impacts, namely supervision of an ecologist to oversee works.
- 4.39 The creation of solar arrays within the arable fields is unlikely to reduce the suitability of this negligible suitability habitat.
- 4.40 With the inherent scheme design and embedded mitigation, no negative impact to the populations of reptiles (if present) is therefore anticipated.
- 4.41 In the absence of mitigation, there is a possibility that individual reptiles using the suitable rough grassland and hedgerow areas may get accidentally killed or injured during the construction of the Site. This may therefore lead to a breach in wildlife legislation.

Section 5

Mitigation and Enhancement Strategy

- 5.1 This section of the Ecological Appraisal considers the impacts set out in **Section 4** and puts forward additional measures to firstly avoid any ecological impact, and if this is not possible, then to minimise the likely impacts of the proposed development to insignificant levels, to comply with relevant planning policy and avoid any infringement of relevant legislation.
- 5.2 This section also sets out proposed ecological enhancements for the Site, in line with the wording within the NPPF and the adopted Hinckley and Bosworth Borough Council Local Plan, requiring developments to contribute to and enhance the natural and local environment.
- 5.3 Throughout the design process, all ecologically valuable features were considered, and project design and mitigation were included to ensure that impacts were avoided where possible. Ecologically valuable habitats include the woodlands (including the ancient woodland) and the hedgerows, as well as the species they support (e.g., bats), i.e., the assumed Functionally Linked Habitat. Indirect impacts on these features were also considered. As general mitigation, the following minimum buffers from any solar panel or security fencing were included:
- Adjacent woodland and stream within the woodland: 10m; and
 - All hedgerows: 6m.
- 5.4 All of the above areas will be included in the Ecological Protection Zone (EPZs), which will be protected by suitable fencing, to ensure that no accidental incursion/damage occurs. Protective fencing will be securely installed in accordance with BS 5837: 2012 *Trees in Relation to Design, Demolition and Construction* around these protection zones. This fencing will prevent damage and/or incursion by construction vehicles or personnel.
- 5.5 Cable routes and access tracks also followed the above EPZs, however, in some instances they were required to cross through hedgerows. In all cases, the cable routes and access tracks will utilise existing gaps within these features, and avoid the root protection areas, thereby ensuring no loss of connecting hedgerows or woodland areas. These areas will also be protected from accidental damage by appropriately installed fencing as identified above.

DESIGNATED SITES

Non-statutory Designations

- 5.6 Given the spatial separation between the Site and any non-statutory sites or any ancient woodland, and the nature of the development proposals, there is not considered to be a risk of any direct or indirect effects.

HABITATS

- 5.7 Measures will be required to protect the retained habitats described in **Section 4** from damage and disturbance during the construction phase. This can be achieved through a combination of the following:
1. Tree protection measures (for trees, hedgerows and adjacent off-site woodland), to be detailed within an Arboricultural Method Statement (AMS) or an equivalent document;
 2. Additional physical protection for wider habitats such as woodlands, grasslands and water courses, to be detailed within an Ecological Construction Method Statement (ECMS) and an Ecological Decommissioning Management Plan (EDMP) or equivalent documents. The ECMS will define the EPZs set out above, in which construction activities will be excluded or carefully controlled in order to avoid or minimise harm to habitats; and
 3. General environmental protection measures, including control of dust and other pollutants, to be detailed in a Construction Environmental Management Plan (CEMP).
- 5.8 The AMS, ECMS and CEMP are standard documents which are capable of being secured by planning conditions.
- 5.9 In addition to ensuring the adequate protection of retained habitats, the proposed development incorporates a range of new habitats. The Illustrative Landscape Strategy enclosed as **Appendix EDP 1** provides details of areas of new habitats of ecological value, which include (primarily) the following:
- Creation of shade tolerant grassland throughout the solar array areas (inside the security fencing);
 - Creation of species-rich grassland in all areas outside of the solar array;
 - Creation of scrub and woodland infill areas providing more naturalised edges to the woodland; and
 - Creation of new species-rich hedgerows, with and without standing trees, connecting up the hedgerow network further.
- 5.10 The biodiversity value of all newly created and enhanced habitats and their contribution to BNG is set out within the BNG Assessment provided in **Appendix EDP 7**.
- 5.11 Detailed specifications for new planting and other habitat creation should be provided within a Landscaping Scheme secured by a suitably worded planning condition.
- 5.12 In addition, measures to restore and enhance existing habitats, to ensure successful establishment of new habitats, and to maintain the value of all ecological features in the long-term, will be delivered through a Landscape and Ecology Management Plan (LEMP), or an equivalent document, which can be secured by planning condition.
- 5.13 As the proposed development relies on significant on-site enhancements, part of the requirement for the Biodiversity Gain Plan (through the pre-commencement planning condition)

is to secure these habitats and their management. To provide details of this, a Habitat Management and Monitoring Plan (HMMP) will be provided alongside the Biodiversity Gain Plan.

- 5.14 Subject to the implementation of the measures summarised above, impacts on retained habitats will be avoided and the net gains in biodiversity predicted within the BNG Assessment (see **Appendix EDP 7**) will be achieved in accordance with relevant planning policy.

PROTECTED, PRIORITY OR OTHER NOTABLE SPECIES

Breeding Birds

- 5.15 The habitat protection measures described above will avoid harm to breeding birds present with retained habitats. However, some removal of certain habitats, which are capable of supporting nesting birds (including open fields suitable for skylark and scrub), will be required to facilitate the development. Any removal of these habitats should be undertaken between September and February inclusive to avoid the bird breeding season. Any habitat removed outside of this period should be inspected by a suitably experienced ecologist prior to removal. These measures can be delivered through the ECMS.
- 5.16 The proposed planting of new native woodland planting within the woodland belt, scrub and hedgerows, and the development of more species-rich and structurally diverse grassland, will together significantly enhance opportunities for foraging and nesting birds post-development.
- 5.17 Further enhancement of bird nesting opportunities can be achieved through the installation of bird boxes on retained trees. These measures/specifications can be delivered through the LEMP.

Skylark Plots

- 5.18 A Skylark Mitigation Strategy (report reference: edp7530_r005) has been submitted alongside the planning application and should be read in conjunction with this report.
- 5.19 The proposals will retain 3.5 hectares (ha) of arable land within the northern part of the Site. This area will be continued to be sown with spring cereals long-term, which will provide continued opportunities for nesting skylark. Notably, two skylark territories were recorded within the northernmost field during the latest round of breeding bird surveys. In addition, new foraging resources will be provided in the form of skylark plots - bare patches in winter cereal fields designed to help skylarks to forage. These plots are proven to help improve productivity for skylarks and are a simple and highly effective measure.
- 5.20 Species-rich grassland creation beneath the solar arrays will provide a highly suitable foraging habitat for skylark and provide valuable food sources throughout the year for the local population.
- 5.21 As an additional measure, an area (1.5ha in size) within the south of the Site will be annually sown with a suitable wild bird seed mix. This will provide a long-term foraging resource for skylark but also a range of other farmland specialists.

Bats

Roosting Bats

- 5.22 No trees are to be removed as part of the proposals and all trees are included within the protection zones identified above. If any trees are to be subsequently lost or adversely affected for any reason, then additional surveys will be required, and suitable mitigation and licensing will be required.
- 5.23 Enhancement of bat roosting opportunities can be achieved through the installation of bat boxes on retained trees. These measures/specifications can be delivered through the LEMP.

Foraging/Commuting Bats

- 5.24 Important bat foraging and commuting areas (hedgerows, pond and adjacent woodland) are retained and protected by suitable buffers and inclusions within the EPZs.

Lighting Strategy

- 5.25 To reduce the impact of artificial light spillage on the ecological features of interest on or immediately adjacent to the Site, namely the hedgerows and adjacent woodland which may be used by foraging/commuting bats, a sensitive lighting strategy is to be adopted throughout the construction phase of the development.
- 5.26 The use of artificial lighting is to be limited to the essential minimum throughout the Site and any lighting to be used should avoid upward pointing lights, with the spread of light being kept near to or below the horizontal. Between April and September, night working (and therefore the use of artificial lighting) should be avoided where possible. All lighting will be switched off outside of working hours.
- 5.27 Any illuminated site compounds will be sited away from all retained features, namely hedgerows and adjacent woodland. Lighting with a low UV component should be used to reduce invertebrate attraction, and directional lighting/shielding of lights with accessories such as hoods, covers, louvres and shields is to be used throughout to avoid excessive light spill.

Badgers

- 5.28 A pre-commencement badger walkover survey should be completed by an appropriately qualified ecologist no greater than three weeks prior to construction works commencing to confirm that badger remain absent. Should active badger setts be identified within 30m of development activities then a Natural England badger licence may be sought if impacts to the sett are predicted and unable to be avoided.
- 5.29 Intrinsic mitigation for the proposed development has retained the vegetated boundary habitats around the solar panel footprints including the hedgerows. These features will be protected during construction through the adoption of an EPZ, as detailed above and secured through an ECMS.
- 5.30 During construction, any excavations will be sealed flush at ground level, fitted with a wooden ramp or formed with gently sloping sides, to help any trapped badger (or other animals) to escape. Additionally, excavations must be visually checked in the morning by the Construction

Contractor prior to being filled in, to ensure badger (or other animals) are absent. Should any badger or other protected species be present/suspected present, then work must cease at that location immediately (where safe to do so) and a suitably experienced ecologist contacted immediately for advice on how to proceed.

- 5.31 Training ('toolbox talks') and information about badger will be provided to all relevant construction personnel involved in the construction. The toolbox talks will ensure full understanding of the identification and legal protection of badger.
- 5.32 Construction mitigation measures will be detailed within an ECMS, secured via planning condition.
- 5.33 To ensure badgers (and other mammal species) can continue to use the Site, badger gates or passes will be installed periodically throughout the security fencing and will be identified within the LEMP.
- 5.34 The creation of species-rich grassland, hedgerows, woodland planting and scrub mosaic will enhance the Site for foraging for badger and the reduction of disturbance from standard agricultural practices will also enable the Site to be used more readily by this species.

Other Mammals

- 5.35 The mitigation and enhancements put in place for badger will also protect and benefit the other mammal species likely present within and around the Site.

Great Crested Newts

- 5.36 Although no great crested newts are breeding on or directly adjacent to the Site, they are known to be present within close proximity to the Site. They are therefore likely to be present in suitable habitats such as hedgerows, scrub and grassland within the Site. They are also likely to use the arable fields for commuting and occasional foraging. The creation of more natural habitats in place of the arable fields across the Site, particularly the creation of species rich grassland and scrub mosaic, will increase the Favourable Conservation Status of this species, by increasing optimum habitats for foraging, commuting and resting.
- 5.37 Hibernacula and refugia sites will be installed within the newly created grassland/scrub mosaic surrounding the on-site pond to further enhance the Site. The exact details and locations will be set out within the LEMP.
- 5.38 Due to the presence of great crested newts within close proximity to the Site, accidental killing or injury cannot be ruled out. Given the improvements to the favourable conservation status for great crested newts, it is considered that either a district licence, a more traditional style mitigation licence or a non-licensed method statement will be accepted by Natural England.

Other Amphibians and Reptiles

- 5.39 The mitigation set out above for great crested newts will also benefit and protect other species of amphibians and reptiles within the Site. The clearance of any suitable habitat for amphibians and reptiles will be undertaken with due precaution at the appropriate time of year. The exact details will be agreed within the LEMP.

CONCLUSION

- 5.40 EDP concludes that, in light of the embedded mitigation and subject to the full implementation of the additional measures summarised above, the proposed development is capable of compliance with relevant planning policy and legislation and can deliver net benefits for wildlife and biodiversity.

IMPACTS FROM CLIMATE CHANGE AND PLANNING FOR THE FUTURE

- 5.41 The Site, as it stands, is managed with the agricultural practices ensuring that the majority of the Site is kept in optimum arable production with minimal opportunities for native habitat and species to become established. In the absence of change (i.e., these proposals), it is not considered that this situation will change, and the Site will remain as it is, with negligible ecological suitability. To ensure that the Site becomes more ecologically suitable for a wide range of protected, notable and common species and habitats, the Illustrative Landscape Strategy has taken existing (retained) habitats and provided larger areas of edge habitat to these. These mosaics and edge habitats are vital for climate resilience both for the retained habitats as well as for the existing and establishing species. The planting mixes chosen are generalist habitats to ensure that they are more climate resilient, with a diverse range of species used to ensure that if any fail, the habitats will still be diverse. Remediation set out in the HMMP will ensure that any failure of establishment of habitats will be rectified to ensure the BNG as well as the continued mitigation and enhancements for protected and notable species.

Appendix EDP 1
Illustrative Landscape Strategy
(edp7530_d014f 20 June 2025)



- Site Boundary
- Existing Vegetation
- Proposed Native Woodland Infill
- Proposed Hedgerow Trees
- Proposed Native Hedgerow
- Proposed Native Scrub
- Shade Tolerant Grassland
- Species Rich Grassland
- Retained Arable
- Retained Arable Over-sown with Wild Bird Seed Mix
- Public Right of Way (PRoW)
- Solar Arrays
- Access Tracks
- Built Infrastructure
- Security Fence

client	Renewable Connections Developments Limited		
project title	Heath Road Solar Farm, Bagworth		
drawing title	Illustrative Landscape Strategy		
date	20 JUNE 2025	drawn by	CMa
drawing number	edp7530_d014f	checked	VPo
scale	Refer to scale bar @ A3	QA	Gyo



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Appendix EDP 2

Baseline Habitat Survey

METHODOLOGY

- A2.1 The main habitats within the Site, together with their dominant/characteristic plant species, were identified by undertaking a habitat survey in May 2022 and May 2024 by a suitably experienced surveyor. This survey was undertaken following the guidance for habitat surveys as set out in *The Statutory Biodiversity Metric User Guide* (Defra, November 2023), for which the habitat definitions primarily rely on descriptions set out in the *UK Habitat Classification*¹³ and habitat conditions as set out for the *Statutory Biodiversity Metric*¹⁴.
- A2.2 This method allows for an assessment of the main habitat types present on-site, including those listed as priority habitats or Irreplaceable Habitats. Plant species lists and their abundance for each habitat type were recorded but only where pertinent to identify the habitat type or condition. It was not the aim of the survey to collate a comprehensive botanical or species inventory of the Site.
- A2.3 To determine if a hedgerow is species-rich, the middle 30m of all hedgerows up to 100m in length were surveyed, whilst the central 30m of each half of hedgerows up to 200m in length were surveyed. For hedgerows exceeding 200m in length, the central 30m section from each third of the hedgerow was surveyed. This technique is not formally set out within the *Statutory Biodiversity Metric User Guide* or the *UK Habitat Classification User Manual* but is taken from *The Hedgerow Regulations* 1997 for determining species-richness.

Limitations

- A2.4 The habitat survey was undertaken by a suitably experienced surveyor in May which is considered an optimal month for botanical surveys. There were no access limitations during the survey. Therefore, the survey is not considered to have been constrained by accessibility, seasonal or climatic factors.

RESULTS

- A2.5 The principal habitats within the Site together with their dominant/characteristic plant species identified during the surveys are discussed in turn below. The type, distribution and species composition of the habitats present is discussed below. Information on habitat condition, as required for completion of the Statutory Biodiversity Metric, is included within **Appendix EDP 7**.
- A2.6 The following should be read in conjunction with **Plan EDP 1**, and illustrative photographs provided where appropriate.

Cereal Crops

- A2.7 The majority of the Site is made up of large open arable fields. These are intensively managed with no botanical interest observed.



Image EDP A2.1: Arable land within the Site.

A2.8 They are considered to be of Negligible intrinsic value.

Modified Grassland

A2.9 The limited grassland across the Site is relatively species-poor in uniform short swards. The sward dominated by common grass species. Perennial rye-grass (*Lolium perenne*) is dominant and cock's-foot (*Dactylis glomerata*) are abundant with Yorkshire fog (*Holcus lanatus*), meadow foxtail (*Alopecurus pratensis*), false oat grass (*Arrhenatherum elatius*), occurring frequently. Herbaceous species are present but not abundant and include common nettle (*Urtica dioica*), cleavers (*Galium aparine*), cow parsley (*Anthriscus sylvestris*), garlic mustard (*Alliaria petiolate*), creeping buttercup (*Ranunculus repens*), common hogweed (*Heracleum sphondylium*), creeping thistle (*Cirsium arvense*), common groundsel (*Senecio vulgaris*) and broad-leaved dock (*Rumex obtusifolius*), burdock (*Arctium*), great willowherb (*Epilobium hirsutum*), cut leaved cranesbill (*Geranium dissectum*), bramble (*Rubus fruticosus*) and bracken (*Pteridium*). These species were at a density of an average of six species per m².



Image EDP A2.2: Area of modified grassland along the southern boundary of **F2**.

- A2.10 Given the small areas of this habitat on-site and the common nature of this habitat within the local area, modified grassland is judged to be of Site level importance. This habitat is not a priority habitat nor an Irreplaceable Habitat.

Scrub

- A2.11 An area of mixed scrub was present along the northern boundary of **F2** and comprising of bramble, cherry (*Prunus avium*), common hawthorn (*Crataegus monogyna*) and elder (*Sambucus nigra*).
- A2.12 Small areas of bramble scrub were present along the northern boundary of the Site and surrounding the on-site pond.



Image EDP A2.3: Area of scrub within the Site.

- A2.13 Given the species-poor composition of the scrub these areas, and the common nature of this habitat within the local area, scrub is judged to be of Site importance. This habitat is not a priority habitat nor an Irreplaceable Habitat.

Ruderal/Ephemeral

- A2.14 Areas of ruderal/ephemeral habitat were present along the field boundaries. Species present include common hogweed, common nettle, false oat grass, rough meadow grass, great willowherb, cleavers, creeping thistle and creeping buttercup.



Image EDP A2.4: Area of ruderal habitat within the Site.

- A2.15 Given the species-poor composition of the ruderal habitat, these areas, and the common nature of this habitat within the local area, are judged to be of Site importance. This habitat is not a priority habitat nor an Irreplaceable Habitat.

Ponds (Non-priority)

- A2.16 A single waterbody is located within the within the Site boundary (**P1**). It is located within the northern field along the western boundary connected to dry ditch associated with **H10**. This pond was highly vegetated and largely inaccessible. The emergent vegetation was dominated by bullrush (*Typha latifolia*) with some common reed (*Phragmites australis*) and edge bramble and common nettle.



Image EDP A2.5: Pond P1 within F1.

- A2.17 This habitat is not a priority habitat nor an Irreplaceable Habitat and is judged to be of Site level importance.

Hedgerows (Priority Habitats)

- A2.18 The network of hedgerows across the Site has a mixture of species-rich and species-poor hedgerows, some with and without standing trees. Some of the species include English Oak (*Quercus robur*), bramble, guelder rose (*Viburnum opulus*), ash (*Fraxinus excelsior*), blackthorn (*Prunus spinosa*), field maple (*Acer campestre*), elder, common dogwood (*Cornus sanguinea*), sycamore (*Acer pseudoplatanus*) and common hawthorn.



Image EDP A2.6: Hedgerow within the north of the Site.

A2.19 This habitat is a priority habitat and is judged to be of Local level importance.

Developed Land; Sealed Surface

A2.20 An existing farm track is present along the eastern boundary of **F1**. There are no botanical interests associated with this habitat. This habitat is considered to be of Negligible intrinsic value.

Offsite- Other Woodland; Broadleaved

A2.21 There is a small pocket of mixed woodland along the western boundary of **F2**. The species include sycamore, willow (*Salix* sp.), guelder rose, elder blackthorn, ash, dog rose (*Rosa canina*), holly (*Ilex aquifolium*) and ivy (*Hedera helix*).



Image EDP A2.7: Woodland along the edge of **F2**.

A2.22 This habitat is not a priority habitat nor an Irreplaceable Habitat and is judged to be of Local level importance.

Appendix EDP 3

Breeding Bird Survey

METHODOLOGY

A3.1 Survey visits were spread evenly between late March and early July to cover the main bird breeding season. Visits were started within half an hour from sunrise and timed to ensure they were completed prior to 11am to cover the peak activity period. The dates and timings of the breeding bird survey visits and the weather conditions encountered are summarised in **Tables EDP A3.1** and **A3.2**.

Table EDP A3.1: Breeding Bird Survey Visit Details Southern Fields

Visit Number	Date	Timing of Survey	Wind Speed (Beaufort Scale)	Cloud Cover (%)	Precipitation
1	25/05/2022	05:50-08:15	3	90	Light rain from 06:45
2	21/06/2022	04:40-06:30	1	10	None
3	01/07/2022	04:55-06:40	1	30	None
4	19/04/2024	06:10-07:15	2-4	90	None

Table EDP A3.2: Breeding Bird Survey Visit Details Northern Field

Visit Number	Date	Timing of Survey	Wind Speed (Beaufort Scale)	Cloud Cover (%)	Precipitation
1	30/05/2024	04:30-05:30	2	20	None
2	04/07/2024	05:00-06:15	2	5	None

A3.2 During each visit, the Site was walked at a slow pace to enable all birds detected to be identified and located. Frequent stops were made to scan suitable habitats and to listen for singing and calling birds. All areas of suitable breeding habitat within the Site boundary and immediately adjacent areas were approached to within 50m.

A3.3 During the survey, the location and activity of each bird detected (including those seen or heard) was recorded and mapped using standard two-letter British Trust for Ornithology species codes. The breeding status of each bird species identified at the Site was determined according to the nature and frequency of the behavioural elements recorded, as set out below in **Table EDP A3.3**.

Table EDP A3.3: Field Evidence used to Determine Bird Breeding Status

Breeding Status	Examples of Behaviour Exhibited
Confirmed	• Distraction display; • Nest building; • Nest with eggs; • Nest with young; • Used nest; • Recently fledged young; and • Adult carrying faecal sac/food.
Probable	• Pair observed in suitable nesting habitat in breeding season; • Permanent territory presumed through registration of territorial behaviour (song, etc.) on at least two different occasions, a week or more apart at the same place; • Courtship and display; • Visiting a probable nest site; • Agitated behaviour or anxiety calls from adults; • Brood patch on adult examined in the hand; and • Nest building or excavating nest-hole.
Possible	• Species observed in breeding season in possible nesting habitat; • Male in song; and • Adult giving alarm call.
Non-breeder	• Feeding birds only; • Birds flying over only; and • Lack of suitable breeding habitat.

A3.4 To inform the assessment in this report, the numbers of potential territories identified, the abundance of species at the County and National level, the quality of the habitat present and the geographical range of the birds concerned have been considered, based on national and regional accounts.

A3.5 The conservation status of each species of bird was also taken into account and the following lists were considered:

- Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended) – affords greater protection to certain breeding species that are considered appropriately at risk nationally and are listed additional legal protection accordingly;
- Priority species;

- Birds of Conservation Concern²⁹ - under this approach UK bird populations are assessed, using quantitative criteria, to determine the population status of each species and then placed on one of three lists; Red, Amber or Green; and
- Local conservation status as listed in the Leicestershire and Rutland Annual Bird Report 2020³⁰.

Limitations

- A3.6 As with all breeding bird surveys following this technique, the process is open to some subjectivity in interpretation except where active nests are located. Therefore, recorded locations indicate the 'centre' of a territory and not necessarily the breeding location.
- A3.7 Following best practice, the survey visits were timed to start to coincide with the period of peak activity for birds, most particularly passerine songbird species. They were also undertaken during suitable weather conditions, i.e., days/periods with strong winds and heavy or persistent rain were generally avoided. The results are therefore not significantly limited by seasonal or climatic factors.
- A3.8 All surveys were conducted at the correct time of year, in suitable weather conditions. The weather was however unseasonably cold for the second survey of the northern field, and this could have contributed to a reduced number of species recorded.
- A3.9 Only two visits within the northern parcel were undertaken due to there being only arable and hedgerows present with no complex habitat structures within the Site.
- A3.10 The entire Site was accessible, with no significant limitations identified for this survey.

RESULTS

Southern Fields

- A3.11 During the 3 surveys of the southern fields in 2022, a total of 29 bird species were recorded, of which 4 were confirmed as breeding on or immediately adjacent to the Site, 10 were recorded as probably breeding and 4 were recorded as possibly breeding, and the other 11 were considered to not be breeding within the Site.
- A3.12 Of the 18 bird species that were recorded as breeding on-site (with varying degrees of likelihood), 7 are species of nature conservation importance, namely being listed as a priority species and/or being species included on the latest Red and Amber lists of Birds of Conservation Concern. No Schedule 1 bird species were recorded on-site during the surveys.

²⁹ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and 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: 723-747.

³⁰ Leicestershire and Rutland Annual Bird Report (2020). *The Leicestershire & Rutland Ornithological Society*.

- A3.13 An update survey of the southern fields was conducted in April 2024 and a total of 16 bird species were recorded during this survey, with green woodpecker being the only species recorded that was not found during the 2022 surveys.
- A3.14 Full details of each notable species recorded as likely breeding on-site, including their breeding status on-site and their conservation status, are provided in **Table EDP A3.4**. Those notable species that are not considered as breeding are provided in **Table EDP A3.5**. Any species not included on any list of conservation concern (Schedule 1, priority species or Birds of Conservation Concern) but were considered to be breeding within or immediately adjacent to the Site are provided within **Table EDP A3.6**.
- A3.15 The distribution of species recorded within the Site is shown on **Plans EDP 2-5**.
- A3.16 Notable species include song thrush, skylark, and yellowhammer; all are priority species. Song thrush were recorded singing in 2022 and 2024, and they are in decline regionally. Skylark were recorded singing in 2022 and 2024, with males singing and possible pairs observed. Though skylark are a common resident breeder regionally, they are ground-nesting and can be impacted by development and therefore require specific mitigation measures. Yellowhammer were recorded singing on all three surveys in 2022 and are in decline regionally.
- A3.17 Other notable species, such as common whitethroat and dunnock, were recorded in low numbers across the southern fields.
- A3.18 There were three Birds of Conservation Concern recorded as non-breeding species: herring gull, stock dove, and sparrowhawk. All three were not considered to be breeding due to the lack of nesting habitat or the lack of nests found. The herring gull was seen on one survey and did not interact with the Site, as it was observed only flying over. The sparrowhawk was recorded on the third visit only and was calling from adjacent woodland. Despite not breeding on-site, the Site provides a foraging resource for some non-breeding species, with stock doves observed on only one survey feeding on a manure heap.

Northern Field

- A3.19 Once the red line was amended, two surveys of the additional northern field were conducted in May and July 2024. A total of 22 bird species were recorded during the 2 surveys, of which 1 was confirmed as breeding, 8 were recorded as probably breeding and 10 were recorded as possibly breeding on or immediately adjacent to the Site.
- A3.20 Of the 19 bird species that were recorded as breeding or probably/possibly breeding on-site, 8 are species of nature conservation importance, namely being listed as a priority species and/or being species included on the latest Red and Amber lists of Birds of Conservation Concern. No Schedule 1 bird species were recorded on-site during the surveys.
- A3.21 Full details of each notable species recorded as likely breeding on-site, including their breeding status on-site and their conservation status, are provided in **Table EDP A3.7**. There were no notable species recorded that are not considered as breeding, therefore a separate table has not been provided. Any species not included on any list of conservation concern (Schedule 1, priority species or Birds of Conservation Concern) but were considered to be breeding within or immediately adjacent to the Site are provided within **Table EDP A3.8**.

A3.22 The distribution of these species recorded within the Site is shown on **Plans EDP 6-7**.

A3.23 Skylark were recorded on both surveys, though only recorded within the Site during the July survey, where two individuals were observed. Other notable species, such as common linnet, common whitethroat, dunnock, song thrush, and yellowhammer were all recorded in low numbers across the Site.

A3.24 There were no Birds of Conservation Concern recorded as non-breeding species; the three species recorded as non-breeding were all green list species. Despite not breeding on-site, the Site provides a foraging resource for these non-breeding species, with barn swallows, carrion crow, and jackdaw recorded foraging over the Site but not considered to be breeding due to the lack of nesting habitat or the lack of nests found.

Overview

A3.25 The same notable species' were recorded within the northern and southern fields, namely common linnet, common whitethroat, dunnock, song thrush, and yellowhammer, and all were recorded in low numbers across the Site.

A3.26 The notable species recorded were priority and Red listed species skylark, and yellowhammer.

A3.27 Ground nesting skylark were recorded across all surveys. During the 2022 surveys, of the southern fields, one individual was recorded on-site and during the 2024 update survey three males were recorded singing. Skylark were also found on-site in the northern field in 2024, with two individuals recorded, giving a total of five possible pairs of skylark across the entire Site. The presence of five pairs within open arable fields is therefore expected but not likely to be significant beyond the local population for this species.

A3.28 In 2022, yellowhammer was recorded across all three surveys within the southern field but were not recorded in 2024. During the surveys of the northern field in 2024 two individuals, one was a male, were recorded singing.

A3.29 The abundance and diversity of bird species recorded within the Site was consistent with the extent and diversity of nesting habitats present. The majority of species recorded were associated with hedgerows, scrub, and field margins, with the exception of skylark, which were recorded in the centre of fields. Species were also recorded in the woodland adjacent to the Site. The breeding bird assemblage of the Site is judged to be of Local level ecological importance.

Table EDP A3.4: Breeding Birds of Conservation Importance (Schedule 1; priority species and other notable species) Recorded as Likely Breeding On-site Within the Southern Fields 2022-2024

Common Name	Scientific Name	UK Status	Regional Status ³¹	Estimated No. Breeding Pairs in the Site	Survey Observations
Dunnock	<i>Prunella modularis</i>	Amber List Priority	Abundant resident breeder, passage migrant.	2-3	In 2022, three males were recorded singing across the Site, with males and possible females recorded on all three surveys. In 2024, no dunnocks were recorded.
Skylark	<i>Alauda arvensis</i>	Red List Priority	Common resident breeder.	3	In 2022, one male recorded singing within the Site boundary on the first and third surveys, with one male recorded in a field north of the Site on the second survey. Other skylark recorded in fields adjacent to the Site. In 2024, three males were recorded singing within the Site boundary. Other skylark recorded in fields adjacent to the Site.
Song Thrush	<i>Turdus philomelos</i>	Amber List Priority	Common resident breeder, recent decline.	1-2	In 2022, two males were recorded singing along the western boundary during the first survey but only one was recorded during the second and third surveys. In 2024, one male was recorded singing along the western boundary, utilising the woodland strip.
Common Whitethroat	<i>Curruca communis</i>	Amber List	Common migrant breeder.	3-5	In 2022, males were recorded singing across all three surveys, with a pair and their fledglings observed during the third survey. In 2024, common whitethroat were not recorded.

³¹ Leicestershire and Rutland Annual Bird Report (2020). *The Leicestershire & Rutland Ornithological Society*.

Common Name	Scientific Name	UK Status	Regional Status ³¹	Estimated No. Breeding Pairs in the Site	Survey Observations
Woodpigeon	<i>Columba palumbus</i>	Amber List	Abundant resident breeder.	4-17	In 2022, two males recorded singing and a flock of three were observed during the first survey but then a total of 12 birds were recorded during the second survey, with a total of 50 recorded during the third survey. In 2024, a flock of nine were recorded.
Wren	<i>Troglodytes troglodytes</i>	Amber List	Abundant resident breeder.	6-15	In 2022, males were recorded singing across all three surveys, with a maximum of 15 males recorded singing during the first survey and a minimum of six males recorded during the second survey. In 2024, seven males were recorded singing across the Site.
Yellowhammer	<i>Emberiza citrinella</i>	Red List Priority	Common resident breeder, recent decline.	1-4	In 2022, males were recorded singing across all three surveys, with a male recorded along the central hedgerow on all three surveys. In 2024, no yellowhammer were recorded.

Table EDP A3.5: Birds of Conservation Importance Not Considered to be Breeding Within the southern fields 2022-2024

Common Name	Scientific Name	UK Status	Regional Status	Survey Observations
Herring Gull	<i>Larus argentatus</i>	Red List Priority	Common winter visitor, uncommon in summer, recent colonist.	In 2022, herring gull were recorded as not breeding as only one individual was recorded flying over the Site on the third visit. In 2024, no herring gull were recorded.
Stock Dove	<i>Columba oenas</i>	Amber List	Fairly common to common resident breeder.	In 2022, stock dove were recorded as not breeding as they were only recorded on the first survey, with a flock of 18 recorded feeding on a manure heap and a further seven flying across the Site. In 2024, no stock dove were recorded.
Sparrowhawk	<i>Accipiter nisus</i>	Amber List	Fairly common resident breeder.	In 2022, one female was recorded on only one survey calling from woodland adjacent to the Site. In 2024, no sparrowhawks were recorded.

A3.30 The species within **Table EDP A3.6** are those not included on any list of conservation concern (Schedule 1, priority species or Birds of Conservation Concern) but were considered to be breeding within or immediately adjacent to the Site.

Table EDP A3.6: Breeding Bird Survey Results, Non-notable Species Within the Southern Fields 2022-2024

Common Name	Scientific Name
Blackbird	<i>Turdus merula</i>
Blackcap	<i>Sylvia atricapilla</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Chiffchaff	<i>Phylloscopus collybita</i>
Chaffinch	<i>Fringilla coelebs</i>
Great Tit	<i>Parus major</i>
Green woodpecker	<i>Picus viridis</i>
Jay	<i>Garrulus glandarius</i>

Common Name	Scientific Name
Lesser whitethroat	<i>Curruca curruca</i>
Pheasant	<i>Phasianus colchicus</i>
Robin	<i>Erithacus rubecula</i>
Treecreeper	<i>Certhia familiaris</i>

Table EDP A3.7: Breeding Birds of Conservation Importance (Schedule 1; priority species and other notable species) Recorded as Likely Breeding On-site Within the Northern Field 2024

Common Name	Scientific Name	UK Status	Regional Status ³²	Estimated No. Breeding Pairs in the Site	Survey Observations
Common Linnet	<i>Linaria cannabina</i>	Red List Priority	Common resident breeder and passage migrant.	2-3	A flock of 5-6 observed within the same hedgerow on both surveys calling to each other.
Common Whitethroat	<i>Sylvia communis</i>	Amber List Priority	Common migrant breeder.	0-1	One male recorded singing on both surveys.
Dunnoek	<i>Prunella modularis</i>	Amber List Priority	Abundant resident breeder, passage migrant.	2-3	Three individuals recorded in May, with males observed singing.

³² Leicestershire and Rutland Annual Bird Report (2020). *The Leicestershire & Rutland Ornithological Society*.

Common Name	Scientific Name	UK Status	Regional Status ³²	Estimated No. Breeding Pairs in the Site	Survey Observations
Skylark	<i>Alauda arvensis</i>	Red List Priority	Common resident breeder.	1-2	One individual recorded on-site in May and July, these were both males observed singing and displaying. Individuals were also recorded in off-site adjacent fields; two in July and three in May.
Song Thrush	<i>Turdus philomelos</i>	Amber List Priority	Common resident breeder, recent decline.	0-2	Two males recorded singing in May, none observed in July.
Woodpigeon	<i>Columba palumbus</i>	Amber	Abundant resident breeder.	2-3	Pairs and a small flock recorded in May and July.
Wren	<i>Troglodytes troglodytes</i>	Amber	Abundant resident breeder.	1-5	Males recorded singing in May and July, with a juvenile recorded in July.
Yellowhammer	<i>Emberiza citrinella</i>	Red List Priority	Common resident breeder, recent decline.	1-2	Two individuals recorded in May; one was a male recorded singing. Only one individual recorded in July.

A3.31 The species within **Table EDP A3.8** are those not included on any list of conservation concern (Schedule 1, priority species or Birds of Conservation Concern) but were considered to be breeding within or immediately adjacent to the Site.

Table EDP A3.8: Breeding Bird Survey Results, Non-notable Species Within the Northern Field 2024

Common Name	Scientific Name
Blackbird	<i>Turdus merula</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Buzzard	<i>Buteo buteo</i>
Chaffinch	<i>Fringilla coelebs</i>
Great Tit	<i>Parus major</i>
Green Woodpecker	<i>Picus viridis</i>
Jay	<i>Garrulus glandarius</i>
Magpie	<i>Pica pica</i>
Pheasant	<i>Phasianus colchicus</i>
Pied Wagtail	<i>Motacilla alba</i>
Robin	<i>Erithacus rubecula</i>

Appendix EDP 4
Winter Bird Survey

METHODOLOGY

- A4.1 The species targeted were those of nature conservation importance (i.e. *Wildlife and Countryside Act 1981* (as amended) Schedule 1, priority species and Red and Amber listed species of conservation concern), including the species whose main habitat is farmland, but also those species that use farmland in large numbers in winter but for which it is not necessarily their main habitat.
- A4.2 The surveys were conducted by an experienced surveyor and undertaken in March and December 2023 and January 2024. The surveys were conducted over a single pre-defined transect route designed to take the surveyor to within 75m of the suitable habitats for the target species. However, there was some variation to these, at the discretion of the surveyor, according to the nature of the habitat present and the influence this had on bird detectability (e.g., height of crop/grassland). Surveyors used binoculars and telescopes. Each surveyor recorded any target species encountered, along with any notable behaviour.
- A4.3 The dates and timings of the survey and the weather conditions encountered, are summarised in **Table EDP A4.1**.

Table EDP A4.1: Winter Bird Survey Visit Details

Visit Number	Date	Timing of Survey	Wind Speed (Beaufort Scale)	Cloud Cover (%)	Precipitation/ Visibility
1	03/03/23	07:10-09:10	2	60	Good (no precipitation)
2	06/12/23	08:00-10:00	0	30	Good (no precipitation)
3	16/01/24	08:20-10:20	1	10	Good (no precipitation)

- A4.4 The first and last hours of daylight were not surveyed to avoid counting when birds are moving between foraging and roosting habitats. Registrations of target bird species were recorded and assigned to the location where they were first detected (if flushed). Flying birds were only recorded if they were clearly associated with the Site (e.g., just flushed or about to land).
- A4.5 Following completion of all survey visits, where applicable a maximum count of each species of conservation concern was calculated for the Site.
- A4.6 To inform the assessment in this report, the abundance of species on-site, the abundance of species at the County and National level, the quality of the habitat present and the geographical range of the birds concerned have been considered, based on national and regional accounts.

A4.7 The conservation status of each species of bird was also taken into account and the following lists were considered:

- Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended) – affords greater protection to certain breeding species that are considered appropriately at risk nationally and are listed additional legal protection accordingly;
- Qualifying species lists for proximate designated sites;
- Priority species;
- Birds of Conservation Concern³³ - under this approach UK bird populations are assessed, using quantitative criteria, to determine the population status of each species and then placed on one of three lists, Red, Amber or Green; and
- Local conservation status as listed in the Leicestershire and Rutland Bird Report³⁰.

Limitations

A4.8 Survey visits were completed on calm days with good visibility, and avoiding periods of heavy rain where possible, although some days of higher wind speed are expected due to the time of year. It is therefore considered that the results provide a representative overview of the wintering bird interest at the Site and have not been limited by seasonal or climatic factors.

A4.9 A limitation with surveying birds on agricultural land in winter is that birds vary in detectability. This is typically a function of the species size, species behaviour (including ‘flushing’ distance, flocking behaviour, crypticity), foraging ecology and field characteristics (including vegetation density and height, area of the field)³⁴. As such, a simple ‘field perimeter’ based count can miss significant numbers of birds, particularly where the field vegetation is tall or dense. This is particularly true for certain bird species, including the Red listed skylark, and the Amber listed meadow pipit (*Anthus pratensis*).

A4.10 It should be noted that for a large number of species, including thrushes, sparrows, finches and buntings in most field types, the overall majority (i.e., >90%) can be recorded using a ‘perimeter count’. However, where detectability may be an issue, comparisons of bird densities or total numbers between fields will not be possible purely from using perimeter counts as the field characteristics, and hence detectability, vary between field parcels.

A4.11 The survey methodology therefore involved walking to within a maximum distance of 75m of all suitable habitats for the target wintering bird species. However, with regard to the effect of vegetation density and height on the ability to record birds, the survey method relies on the judgement of an experienced surveyor to assess when a count is complete. As such, in fields

³³ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and 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: 723-747.

³⁴ Atkinson, P.W., Fuller, R.A., Gillings, S. & Vickery, J.A. (2006). Counting birds on farmland habitats in winter. *Bird Study*, 53:3, 303-309.

with more ground cover, a greater frequency of transects across open areas (and hence reduced maximum distance) is required.

- A4.12 'Double counting' could also affect results, particularly with the whole-area search approach where birds could be flushed from one field to another. With reference to Wilson *et al.* (1996)³⁵, although this source of error cannot be eliminated, it can be minimised by taking account of birds flushed to fields yet to be counted (namely through the detailed recording of bird movements on site plans).
- A4.13 Only two surveys were undertaken of the updated Site boundary; due to the habitats on-site being synonymous with the surrounding landscape, the distance to any large waterbody and the results of the first visit, it was considered that any more subsequent visits would not add any additional data, nor prove a greater significance of the Site.
- A4.14 The surveys were conducted at the correct time of year, in suitable weather conditions. The entire Site was accessible and no significant limitations were identified for this survey.

RESULTS

- A4.15 A total of 16 bird species of nature conservation importance were recorded during the course of the winter bird survey (see **Tables EDP A4.2** and **A4.3**), with a further 17 species not of conservation importance recorded (see **Table EDP A4.4**). The distribution of these species recorded within the Site is shown on **Plans EDP 8-10**.
- A4.16 The diversity and abundance of species recorded is considered to be fairly typical for a site of this size and type within Leicestershire.
- A4.17 Moderate flocks of fieldfare, meadow pipit and starling were recorded as well as larger flocks of redwing and skylark.
- A4.18 These numbers are thought to be typical of farmland habitats in Leicestershire with both redwing and fieldfare utilising a range of habitats when moving through the landscape to forage over winter. While these species are declining farmland species, they are common in the region and flocks of these sizes are not unusual through the winter months.
- A4.19 All bird species recorded are those that are common, numerous or abundant winter visitors or residents within the local area.
- A4.20 It is concluded that that the diversity and abundance of over-wintering birds within the Site reflects the diversity of habitats present but is not exceptional. The wintering bird assemblage present within the Site is judged to be of no greater than Site ecological importance.

³⁵ Wilson, J.D., Taylor, R. & Muirhead, L.B. (1996) *Field use by farmland birds in winter: an analysis of field type preferences using re-sampling methods*. Bird Study, 43, 320–332.

Table EDP A4.2: Winter Bird Survey Results, Notable Species Only of the Southern Fields

Common Name	Scientific Name	UK Status	Regional Status ⁴	Distribution On-site	Abundance On-Site			
					Visit 1	Visit 2	Visit 3	Peak. Count
Bullfinch	<i>Pyrrhula pyrrhula</i>	Priority Species Amber	Common resident breeder.	A single bullfinch recorded within the northern section of the fields.		1		1
Dunnock	<i>Prunella modularis</i>	Amber	Abundant resident breeder, passage migrant.	Recorded along the northern, central and southern boundaries.	6	2	2	6
Fieldfare	<i>Turdus pilaris</i>	Schedule 1 Red	Common winter visitor, rare in summer.	Recorded along all the boundaries of the fields.	1	3	9	9
Greenfinch	<i>Chloris chloris</i>	Red	Common resident breeder, passage migrant and winter visitor.	Recorded along the northern and central hedgerows.		1	1	1
Herring Gull	<i>Larus argentatus</i>	Priority Species Red	Common winter visitor, uncommon in summer, recent colonist.	Recorded within the centre of the arable fields.			4	4
Meadow Pipit	<i>Anthus pratensis</i>	Amber	Common passage migrant, fairly common winter visitor, uncommon breeder	Recorded along the northern hedgerow and within the northern section of arable fields.		28	20	28
Redwing	<i>Turdus iliacus</i>	Schedule 1 Amber	Common winter visitor.	Recorded along the northern and southern hedgerows.	1	14	62	62

Common Name	Scientific Name	UK Status	Regional Status ⁴	Distribution On-site	Abundance On-Site			
					Visit 1	Visit 2	Visit 3	Peak Count
Rook	<i>Corvus frugilegus</i>	Amber	Abundant resident breeder.	Recorded within the northern of the fields.	2			2
Skylark	<i>Alauda arvensis</i>	Priority Species, Red	Common resident breeder, autumn migrant and winter visitor.	Recorded within the centre of the arable fields.	4	10	26	26
Song Thrush	<i>Turdus philomelos</i>	Priority Species Amber	Common resident breeder, recent decline; winter visitor.	Recorded within the centre and along eastern hedgerow.		2	1	2
Sparrowhawk	<i>Accipiter nisus</i>	Amber	Fairly common resident breeder.	Recorded within the north of the field.	1			1
Starling	<i>Sturnus vulgaris</i>	Priority Species Red	Abundant resident breeder, passage migrant and winter visitor.	Recorded within the centre of the fields.	1			1
Woodpigeon	<i>Columba palumbus</i>	Amber	Abundant resident breeder and winter visitor.	Recorded along the boundary hedgerows except for the northern boundary.	2	2	11	11
Wren	<i>Troglodytes troglodytes</i>	Amber	Abundant resident breeder.	Recorded along the northern and western hedgerows.		2	3	3
Yellowhammer	<i>Emberiza citrinella</i>	Priority Species, Red	Common resident breeder, recent decline.	Recorded along the central hedgerow.	2			2

Table EDP A4.3: Winter Bird Survey Results, Notable Species Only of the Northern Field

Common Name	Scientific Name	UK Status	Regional Status ⁴	Distribution On-site	Abundance On-Site		
					Visit 1	Visit 2	Peak Count
Dunnock	<i>Prunella modularis</i>	Priority Species Amber	Abundant resident breeder, passage migrant.	Recorded along the western hedgerow.	1	1	1
Fieldfare	<i>Turdus pilaris</i>	Red	Common winter visitor, rare in summer.	Recorded along eastern and southern hedgerows.	8	33	33
Linnet	<i>Linaria cannabina</i>	Priority Species Red	Common resident breeder and passage migrant.	Recorded in the of the field.	4		4
Meadow Pipit	<i>Anthus pratensis</i>	Amber	Common passage migrant, fairly common winter visitor, uncommon breeder.	Recorded in the north and south of the field.	15	3	15
Redwing	<i>Turdus iliacus</i>	Amber	Common winter visitor.	Recorded within the northern section of the field.	5	24	24
Skylark	<i>Alauda arvensis</i>	Priority Species Red	Common resident breeder, autumn migrant and winter visitor.	Recorded within the centre of the field.	30	40	40
Sparrowhawk	<i>Accipiter nisus</i>	Amber	Fairly common resident breeder.	Recorded within the north of the field.	1		1
Starling	<i>Sturnus vulgaris</i>	Priority Species Red	Abundant resident breeder, passage migrant and winter visitor.	Recorded across the field.	31		31
Woodpigeon	<i>Columba palumbus</i>	Amber	Abundant resident breeder and winter visitor.	Recorded across the field.	4	2	4

Table EDP A4.4: Winter Bird Survey Results, Non-notable Species

Common Name	Scientific Name
Blackbird	<i>Turdus merula</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Buzzard	<i>Buteo buteo</i>
Canada Goose	<i>Branta canadensis</i>
Carrion Crow	<i>Corvus corone</i>
Chaffinch	<i>Fringilla coelebs</i>
Goldcrest	<i>Regulus regulus</i>
Goldfinch	<i>Carduelis Carduelis</i>
Great spotted woodpecker	<i>Dendrocopos major</i>
Great Tit	<i>Parus major</i>
Jackdaw	<i>Corvus monedula</i>
Jay	<i>Garrulus glandarius</i>
Long-tailed Tit	<i>Aegithalos caudatus</i>
Magpie	<i>Pica pica</i>
Pied Wagtail	<i>Motacilla alba</i>
Raven	<i>Corvus corax</i>
Robin	<i>Erithacus rubecula</i>

Appendix EDP 5

Great Crested Newt Survey

METHODOLOGY

HSI Assessment of Waterbodies

- A5.1 A Habitat Suitability Index (HSI) assessment is a standardised method³⁶ which uses a range of criteria, such as water quality, fish/waterfowl presence and surrounding terrestrial habitat quality, to derive a suitability score or 'index'. Waterbodies with high scores are more likely to support great crested newt compared to those with lower scores. HSI scores and the associated suitability categories for great crested newts are set out within **Table EDP A5.1**.

Table EDP A5.1: HSI Scores and Waterbody Suitability Categories

HSI Score	Suitability of Waterbody to Support Great Crested Newts
<0.5	Poor suitability
0.5–0.59	Below average suitability
0.6–0.69	Average suitability
0.7–0.79	Good suitability
>0.8	Excellent suitability

- A5.2 An HSI assessment was undertaken of all waterbodies on-site, and those within 500m of the Site to which access was granted. The assessment was undertaken by a suitably experienced ecologist on 14 June 2022.

Limitations

- A5.3 The on-site pond and ponds within 500m of the Site were assessed and there were no access restrictions to this survey. However, drains outside of the Site boundary were not assessed at the time of the survey.

Environmental DNA Sampling of Waterbodies

- A5.4 Environmental DNA (eDNA) is DNA that is collected from the environment in which an organism lives. In aquatic environments, animals including amphibians shed cellular material into the water via their saliva, urine, faeces, skin cells, etc. This eDNA may persist for several weeks, and can be collected through a water sample, and analysed to determine if the target species of interest is/has been present in the waterbody. eDNA sampling of waterbodies between 15 April and 30 June (inclusive) gives a highly reliable indication of the presence or likely absence of great crested newt.

³⁶ 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.

- A5.5 eDNA sampling was undertaken of the waterbody on-site, and those within 500m of the Site. With reference to **Plan EDP 11**, the waterbodies sampled are ponds **P1** and **P3**. Pond **P2** was not assessed as it was dry at the time of the survey.
- A5.6 The sampling was undertaken by a suitably experienced ecologist on 14 June 2022, using sampling kits obtained from SureScreen Scientifics and following a standard protocol set out by the Freshwater Habitats Trust³⁷ which is approved by Natural England. Briefly, this protocol involves (per waterbody):
- Collecting 20 water samples from selected areas evenly spread around the accessible perimeter of the waterbody, including both open water and vegetated areas;
 - Collecting a ladle of water at each sampling location, stirring the water column without stirring up sediment during collection;
 - Shaking and inverting the combined samples thoroughly once all 20 ladles are collected; and
 - Extracting 15ml of this mixed sample into six conical tubes, each containing preservative fluid, a shaking thoroughly to homogenize the sample.
- A5.7 The water samples were then sent to SureScreen Scientifics be analysed for great crested newt eDNA, using real-time Polymerase Chain Reaction.

Limitations

- A5.8 The off-site waterbody pond **P2** was dry at the time of the eDNA survey and therefore no water samples were taken. This, however, was not a limiting factor as the neighbouring waterbody pond **P3** was positive for great crested newt, and surveys of these other waterbodies within 500m are sufficient to identify likelihood of presence on-site and assess impacts on the local population.

RESULTS

- A5.9 The results of the surveys of the waterbodies are set out in **Table EDP A5.2**. These should be read in conjunction with **Plan EDP 11**. In summary, there was evidence of presence in **P3**. A copy of the eDNA analysis report is provided separately as **Appendix EDP 6**.
- A5.10 In terms of terrestrial habitats, some of the Site is bounded by woodland and contains hedgerows and limited grassland around the arable field which dominates the Site. The majority of the Site is of negligible/very low suitability for great crested newts, being arable habitat which is only suitable for incidental foraging and commuting. However, there are some on-site habitats that are of moderate suitability to support great crested newts in the terrestrial phase of their

³⁷ Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F 2014. *Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (Triturus cristatus) environmental DNA*. Freshwater Habitats Trust, Oxford.

annual life cycle (e.g., the hedgerows, scrub and ruderal/ephemeral), and which are therefore likely to be used for foraging and dispersal or refuge and hibernation.

Evaluation of Population

- A5.11 Based on the survey results above, a population of great crested newt is using the Site, which is judged to be of Site importance.

Table EDP A5.2: Great Crested Newt Survey Results

Waterbody	Photograph	Description	HSI	eDNA
P1		Small field pond surrounded by scrub on-site.	Below Average	Negative

Waterbody	Photograph	Description	HSI	eDNA
P2		Large woodland pond. Off-site, 250m east.	Dry	-
P3		Off-site large woodland pond, 220m south.	Average	Positive

Appendix EDP 6

Great Crested Newt eDNA Analysis Report

Folio No: E14218
Report No: 1
Purchase Order: EDP7530
Client: EDP LTD
Contact: EDP

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS (TRITURUS CRISTATUS)

SUMMARY

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analysing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

RESULTS

Date sample received at Laboratory: 17/06/2022
Date Reported: 24/06/2022
Matters Affecting Results: None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
0814	P3	457 054	Pass	Pass	Pass	Positive	4
0815	4	454 049	Pass	Pass	Pass	Negative	0
0816	1	453 062	Pass	Pass	Pass	Negative	0

If you have any questions regarding results, please contact us: ForensicEcology@surescreen.com

Reported by: Esther Strafford

Approved by: Chris Troth



METHODOLOGY

The samples detailed above have been analysed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample which then undergoes DNA extraction. The extracted sample is then analysed using real time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

If GCN DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If GCN DNA is not present then amplification does not occur, and a negative result is recorded.

Analysis of eDNA requires scrupulous attention to detail to prevent risk of contamination. True positive controls, negative controls and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added security.

SureScreen Scientifics Ltd is ISO9001 accredited and participate in Natural England's proficiency testing scheme for GCN eDNA testing. We also carry out regular inter-laboratory checks on accuracy of results as part of our quality control procedures.

INTERPRETATION OF RESULTS

- SIC:** **Sample Integrity Check** [Pass/Fail]
When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results.
- DC:** **Degradation Check** [Pass/Fail]
Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample between the date it was made to the date of analysis. Degradation of the spiked DNA marker may lead indicate a risk of false negative results.
- IC:** **Inhibition Check** [Pass/Fail]
The presence of inhibitors within a sample are assessed using a DNA marker. If inhibition is detected, samples are purified and re-analysed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.
- Result:** **Presence of GCN eDNA** [Positive/Negative/Inconclusive]
Positive: GCN DNA was identified within the sample, indicative of GCN presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.
Positive Replicates: Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for GCN presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. In accordance with Natural England protocol, even a score of 1/12 is declared positive. 0/12 indicates negative GCN presence.
Negative: GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.



Appendix EDP 7

Biodiversity Net Gain Assessment

METHODOLOGY

- A7.1 The Biodiversity Net Gain (BNG) Assessment has been undertaken to objectively measure the net biodiversity impacts of the proposed development and to assess the scheme's ability to deliver net biodiversity gain. The BNG Assessment has been undertaken using the Statutory Biodiversity Metric published by the Department for the Environment Farming and Rural Affairs (Defra) on 29 November 2023 (last updated 12 February 2024). The assessment has been undertaken by an ecological consultant suitably experienced in these types of assessment, and with reference to the Statutory Biodiversity Metric User Guide³⁸ and current best practice guidance³⁹.
- A7.2 The Biodiversity Metric tool uses habitat as a proxy for wider biodiversity with different habitat types scored according to their relative biodiversity potential. There are three different types of biodiversity unit which can be measured in the Biodiversity Metric tool, namely habitat units, hedgerow units and watercourse units.
- A7.3 Factors such as distinctiveness, size, condition and strategic significance affect the unit score, and in the case of newly created or enhanced habitats, the risk (time and difficulty) to reach target habitat condition affects the resulting score. The council has not yet published a Local Nature Recovery Strategy; therefore, we have used the following documentation to assign strategic significance for biodiversity enhancements within the biodiversity:
- Local Plans and Neighbourhood Plans;
 - Biodiversity Action Plans;
 - Species conservation and protected sites strategies; and
 - Woodland strategies.
- A7.4 The total number of 'biodiversity units' pre- and post-development are calculated in the Biodiversity Metric tool and used to calculate the total net change as a result of the proposed development.
- A7.5 The Biodiversity Metric tool only considers direct impacts on biodiversity through impacts on their supporting habitats. Indirect impacts are not included. The Metric does take account of habitat creation or enhancement delivered as part of a development for other schemes, such as:
- To comply with statutory obligations or policies (such as green infrastructure, sustainable drainage, or nutrient mitigation); or

³⁸ Defra. *The Statutory Biodiversity Metric User Guide*. February 2024.

³⁹ *Biodiversity Net Gain: Good practice principles for development* © CIEEM, CIRIA, IEMA, 2016. <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>.

- As mitigation or compensation for protected sites and species (for example European Protected Species mitigation licensing or suitable alternative natural green space).

- A7.6 However, rules apply as to how much of this habitat creation or enhancement can be counted towards a development's BNG contribution⁴⁰.
- A7.7 The provision of specific habitat features such as nesting and roosting sites (e.g., bird and bat boxes), basking sites (e.g., log piles) and hibernation sites (e.g., hibernaculum) are not counted in the Biodiversity Metric tool.
- A7.8 The application to be made is for full planning permission, submitted with detailed landscape plans. The BNG Assessment has therefore been undertaken on the final designs with no further update anticipated. However, as per national guidance under the *Environment Act 2021*, this final Biodiversity Metric calculation will be submitted to the local planning authority within the Biodiversity Gain Plan to discharge the general biodiversity gain condition applied to the planning permission.
- A7.9 The following sections break down the various components of the BNG Assessment to provide further clarity on how individual elements have been entered into the Metric. The following should be read in conjunction with the Statutory Biodiversity Metric (report reference: edp7530_r004), a copy of which has been submitted to the local planning authority alongside the planning application and is available on request.

On-site Baseline

- A7.10 The pre-development (baseline) biodiversity value of the Site was calculated using the information derived from the baseline habitat survey completed across 30 May 2022 and 13 May 2024, as described within **Appendix EDP 2**.
- A7.11 In this case, habitat units and hedgerow units were measured. Watercourse units were not measured as there are no qualifying water courses present and all ditches adjacent to the Site were dry during the surveys.
- A7.12 QGIS software (using Natural England's QGIS Template) was used to accurately measure the area/length of existing habitats. The measured habitat areas/lengths were entered into the Metric as illustrated on **Plan EDP 1**.

On-site Post-intervention

- A7.13 The post-development biodiversity value of the Site has been calculated based on the landscape proposals shown on the Illustrative Landscape Strategy (as provided within **Appendix EDP 1**).
- A7.14 This final version of the Statutory Biodiversity Metric will be undertaken and submitted with the Biodiversity Gain Plan (pre-commencement). The post-development habitats were entered into the Statutory Biodiversity Metric as illustrated on **Plan EDP 12**. Further details regarding the future habitats are set out below.

⁴⁰ <https://www.gov.uk/guidance/what-you-can-count-towards-a-developments-biodiversity-net-gain-bng>.

RESULTS

On-site Baseline

A7.15 The habitats present on-site are summarised in **Table EDP 3.3** within the main report. A full description of the baseline habitats is included in **Appendix EDP 2**. Justification for their conditions is shown in report edp7530_r007.

Irreplaceable Habitats

A7.16 There are no Irreplaceable Habitats present within the Site.

Habitat Degradation

A7.17 No unauthorised activities have been carried out on-site prior to the baseline habitat survey completed in May 2024 which have resulted in the deliberate loss or degradation of on-site biodiversity value. The relevant date used to calculate the on-site pre-development value is therefore taken as 13 May 2024.

On-site Post-intervention

A7.18 Full details of the newly created and enhanced habitats will be provided as part of the Biodiversity Gain Plan (and accompanying Habitat Management and Monitoring Plan (HMMP)) that will be produced as part of the standard pre-commencement condition. However, to provide the BNG score, the Illustrative Landscape Strategy was analysed and assumptions provided below:

- An area of arable land retained and over-sown with wild bird seed mix for skylark;
- Proposed shade tolerant grassland under solar arrays of moderate condition;
- Other neutral grassland created around the outside of the solar arrays (outside the security fence) likely poor condition due to the Public Right of Way (PRoW) and away from the PRoW moderate condition;
- Woodland belt retained and bolstered with native woodland planting in a poor condition;
- Mixed scrub is to be targeted for a conservative Moderate condition, however, in all likelihood, good condition could be achievable for the scrub;
- 930m of species rich native hedgerows with and without trees to be created in moderate condition; and
- 1271m of hedgerows to be enhanced to either species-rich hedgerow with trees - associated with bank or ditch, native hedgerow or native hedgerow - associated with bank or ditch.

A7.19 The targeted condition of the newly created or enhanced habitats alongside justification for that decision, including an outline of the creation or management measures required, is set out within the Target Condition Assessment (report reference: edp7530_r008).

NET BIODIVERSITY IMPACT

A7.20 The overall net change in biodiversity units, taking into account all proposed habitat retention, enhancement and creation, is summarised in **Table EDP A7.1**.

Table EDP A7.1: Biodiversity Metric Headline Results

	Habitat Units	Hedgerow Units
On-site Baseline	59.48	28.62
On-site Post-intervention	99.25	42.09
On-site Net Unit Change	+39.78	+13.47
On-site Net % Change	+ 66.88% (gain)	+ 47.06% (gain)
Trading Rules Satisfied	Yes	Yes

A7.21 The Metric has demonstrated that the proposed development is capable of delivering a net gain to biodiversity (in accordance with the *Environment Act 2021*). To ensure this is achieved, full details will be set out within the Biodiversity Gain Plan and accompanying HMMP which will be submitted to and approved by the local planning authority pre-commencement as per the general biodiversity gain condition under the granted planning permission.

Plans

Plan EDP 1: Habitat Survey

(edp7530_d007a 20 June 2025 DJo/MWn)

Plan EDP 2: Breeding Bird Survey Results May 2022

(edp7530_d009a 20 June 2025 DJo/MWn)

Plan EDP 3: Breeding Bird Survey Results June 2022

(edp7530_d010a 20 June 2025 DJo/MWn)

Plan EDP 4: Breeding Bird Survey Results July 2022

(edp7530_d011a 20 June 2025 DJo/MWn)

Plan EDP 5: Breeding Bird Survey Results April 2024

(edp7530_d018a 20 June 2025 PDr/TRo)

Plan EDP 6: Breeding Bird Survey May 2024

(edp7530_d022a 20 June 2025 PDr/TRo)

Plan EDP 7: Breeding Bird Survey July 2024

(edp7530_d023a 20 June 2025 PDr/TRo)

Plan EDP 8: Winter Bird Survey March 2023

(edp7530_d012a 20 June 2025 DJo/MWn)

Plan EDP 9: Winter Bird Survey December 2023

(edp7530_d019a 20 June 2025 PDr/TRo)

Plan EDP 10: Winter Bird Survey January 2024

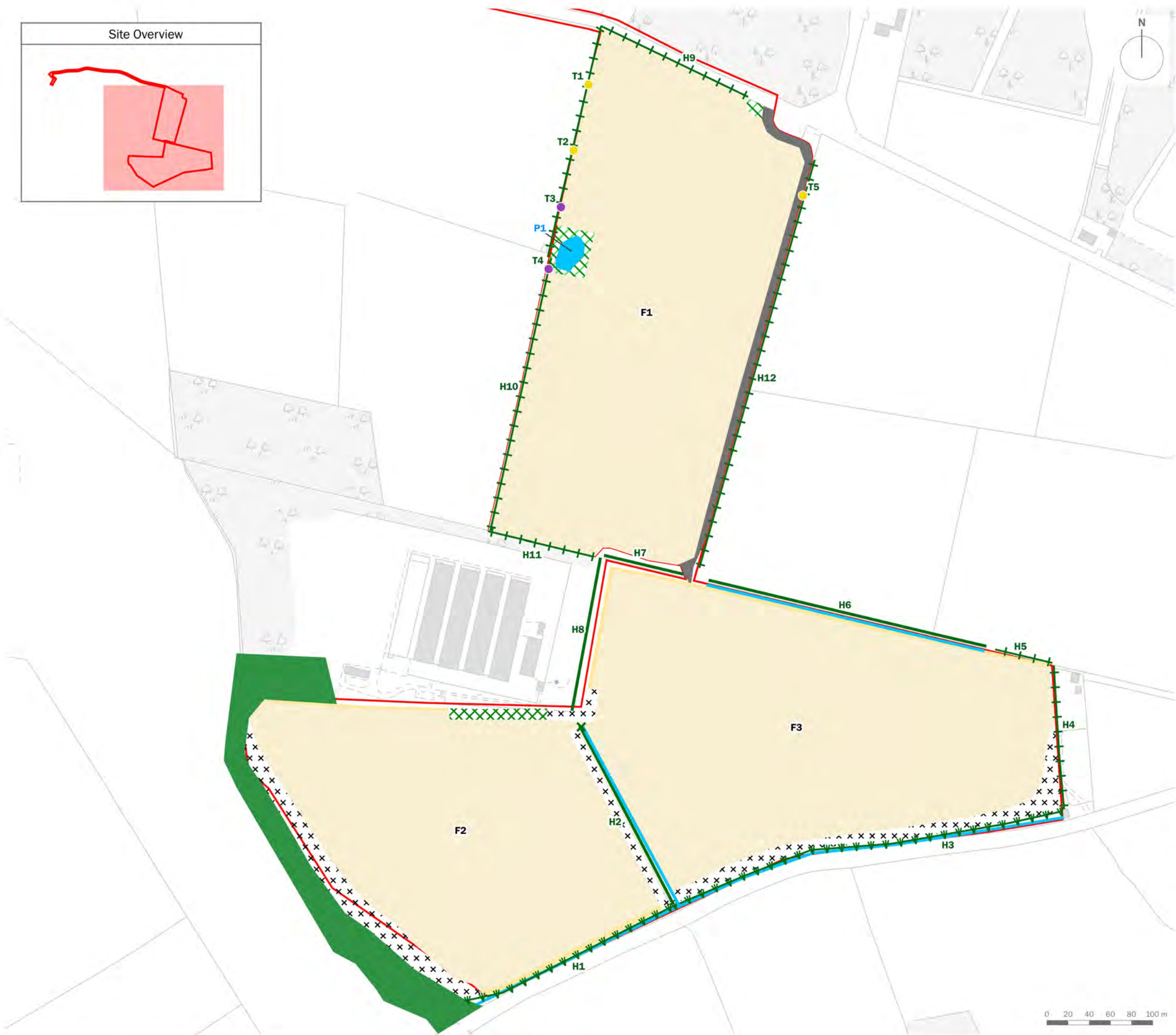
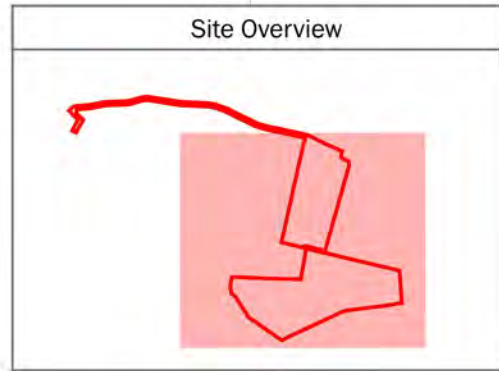
(edp7530_d020a 20 June 2025 PDr/TRo)

Plan EDP 11: Pond Locations

(edp7530_d008b 20 June 2025 PJo/MWn)

Plan EDP 12: Post-development Habitat Plan

(edp7530_d021a 20 June 2025 PDr/TRo)



- Site Boundary
- Other Woodland; Broadleaved
- Modified Grassland
- Cereal Crops
- Mixed Scrub
- Bramble Scrub
- Ruderal/Ephemeral
- Pond (Non-priority Habitat)
- Built Linear Features
- Species-rich Native Hedgerow with Trees
- Native Hedgerow with Trees
- Native Hedgerow
- Ditch
- Scattered Scrub
- Potential Roost Feature - For Individual Bats (PRF-I)
- Further Assessment Required (FAR)
- H1 Hedgerow Number
- F1 Field Number
- T1 Tree Number

client	Renewable Connections Developments Limited		
project title	Heath Road Solar Farm, Bagworth		
drawing title	Habitat Survey		
date	20 JUNE 2025	drawn by	DJo
drawing number	edp7530_d007a	checked	MWn
scale	1:3,500 @ A3	QA	RBa



Site Boundary

Conservation Status

△

Species of Principal Importance

○

Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

Red List

Amber List

BTQ Code

Common name

D.

Dunnock

S.

Skylark

SD

Stock Dove

ST

Song Thrush

WH

Common Whitethroat

WP

Woodpigeon

WR

Wren

Y.

Yellowhammer

client

Renewable Connections Developments Limited

project title

Heath Road Solar Farm, Bagworth

drawing title

Breeding Bird Survey May 2022

date

20 JUNE 2025

drawn by

DJo

drawing number

edp7530_d009a

checked

MWn

scale

1:3,000 @ A3

QA

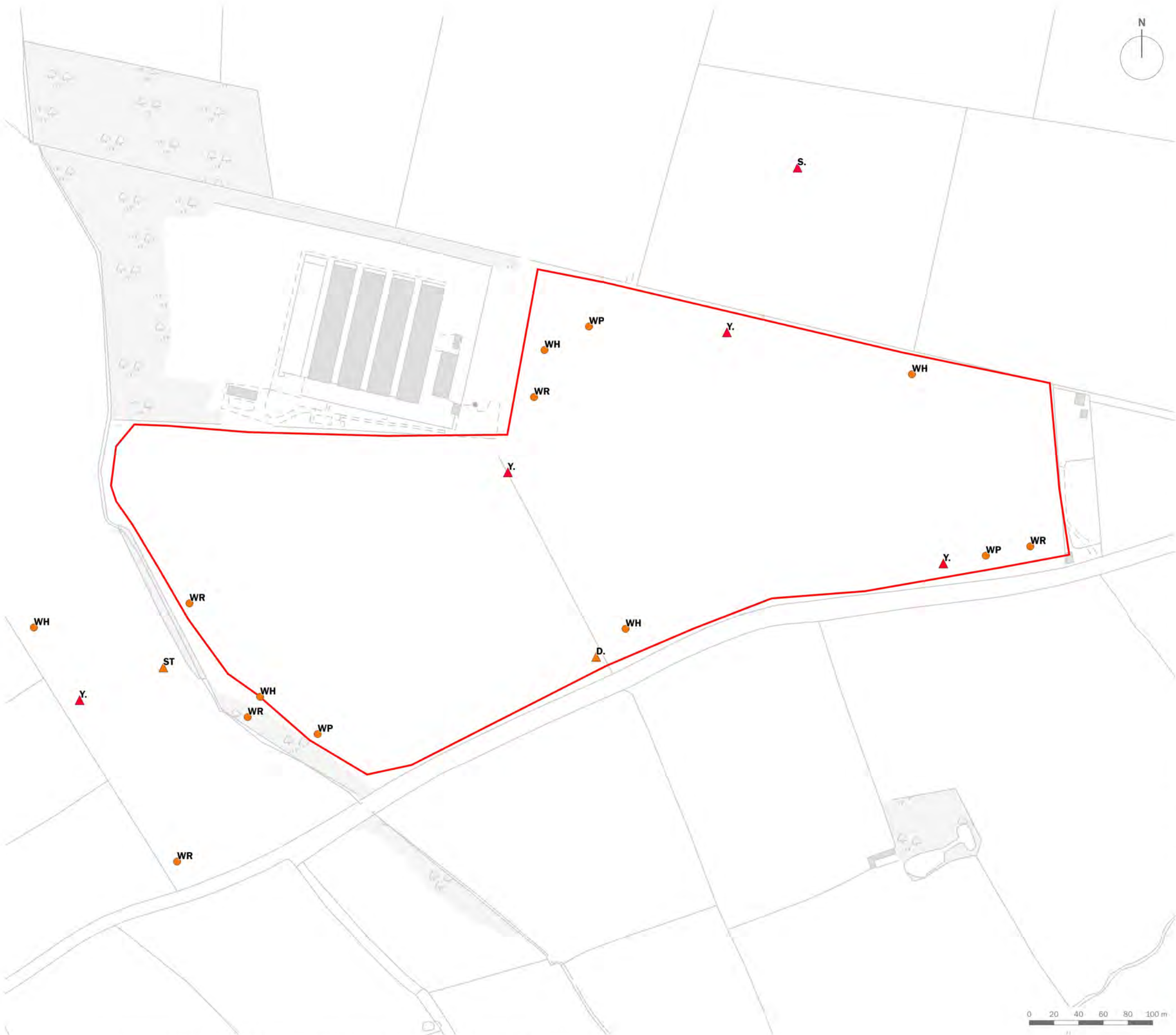
RBa

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Site Boundary

Conservation Status

△

Species of Principal Importance

○

Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

Red List

Amber List

BTO Code

Common Name

D.

Dunnoek

S.

Skylark

ST

Song Thrush

WH

Common Whitethroat

WP

Woodpigeon

WR

Wren

Y.

Yellowhammer

client

Renewable Connections Developments Limited

project title

Heath Road Solar Farm, Bagworth

drawing title

Breeding Bird Survey June 2022

date

20 JUNE 2025

drawn by

DJo

drawing number

edp7530_d010a

checked

MWn

scale

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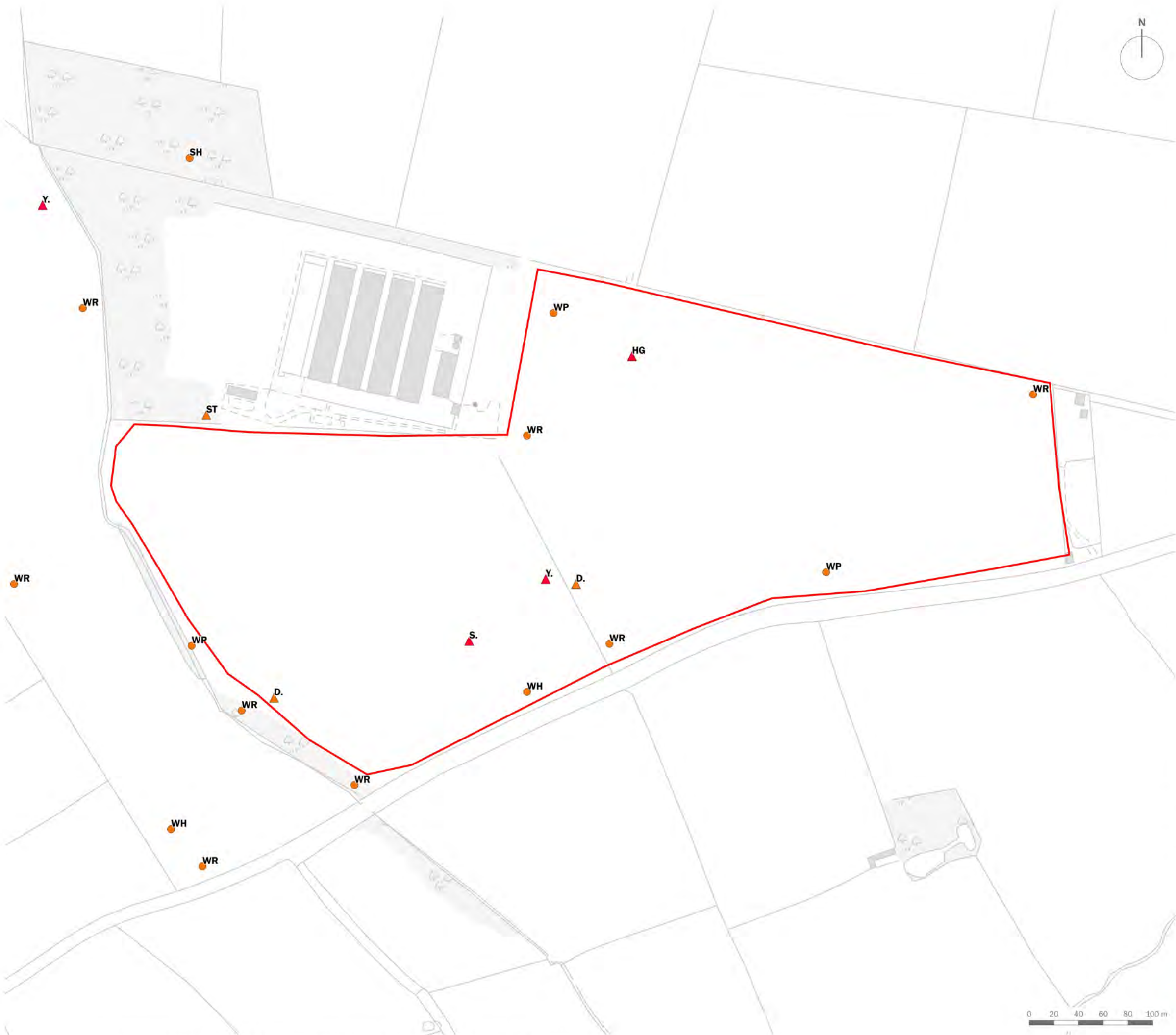
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Site Boundary

Conservation Status

△

Species of Principal Importance

○

Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

Red List

Amber List

BTO Code

Common Name

D.

Dunnock

HG

Herring Gull

S.

Skylark

SH

Sparrowhawk

ST

Song Thrush

WH

Whitethroat

WP

Woodpigeon

WR

Wren

Y.

Yellowhammer

client

Renewable Connections Developments Limited

project title

Heath Road Solar Farm, Bagworth

drawing title

Breeding Bird Survey July 2022

date

20 JUNE 2025

drawn by

DJo

drawing number

edp7530_d011a

checked

MWn

scale

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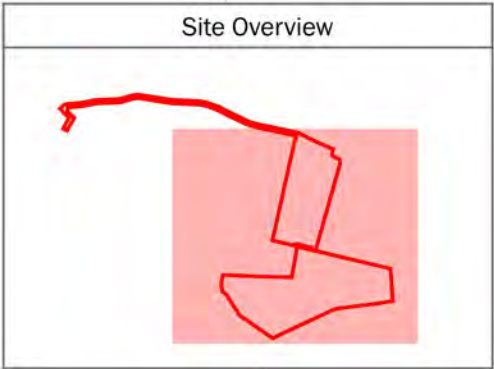
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Site Boundary

Conservation Status

- △ Species of Principal Importance
- Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

- Red List
- Amber List

BTO Code	Common Name
S.	Skylark
ST	Song Thrush
WP	Woodpigeon
WR	Wren

client
Renewable Connections Developments Limited

project title
Heath Road Solar Farm, Bagworth

drawing title
Breeding Bird Survey April 2024

date	20 JUNE 2025	drawn by	PDr
drawing number	edp7530_d018a	checked	TRo
scale	1:3,500 @ A3	QA	DJo

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Site Boundary

Conservation Status

△

Species of Principal Importance

○

Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

Red List

Amber List

BTO Code

Common Name

D.

Dunnock

LI

Common Linnet

S.

Skylark

ST

Song Thrush

WH

Common Whitethroat

WP

Woodpigeon

WR

Wren

Y.

Yellowhammer

client

Renewable Connections Developments Limited

project title

Heath Road Solar Farm, Bagworth

drawing title

Breeding Bird Survey May 2024

date

20 JUNE 2025

drawn by

PDr

drawing number

edp7530_d022a

checked

TRo

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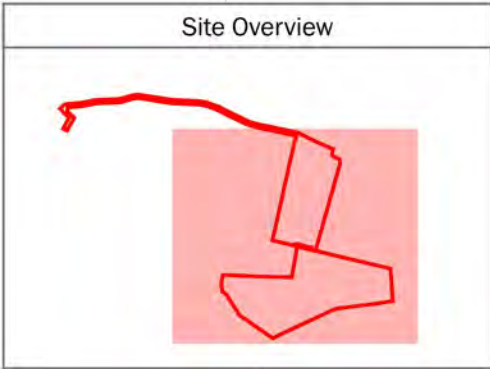
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Site Boundary

Conservation Status

△

Species of Principal Importance

○

Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

Red List

Amber List

BTO Code

Common Name

LI

Common Linnet

S.

Skylark

WH

Common Whitethroat

WP

Woodpigeon

WR

Wren

Y.

Yellowhammer

client

Renewable Connections Developments Limited

project title

Heath Road Solar Farm, Bagworth

drawing title

Breeding Bird Survey July 2024

date

20 JUNE 2025

drawn by

PDr

drawing number

edp7530_d023a

checked

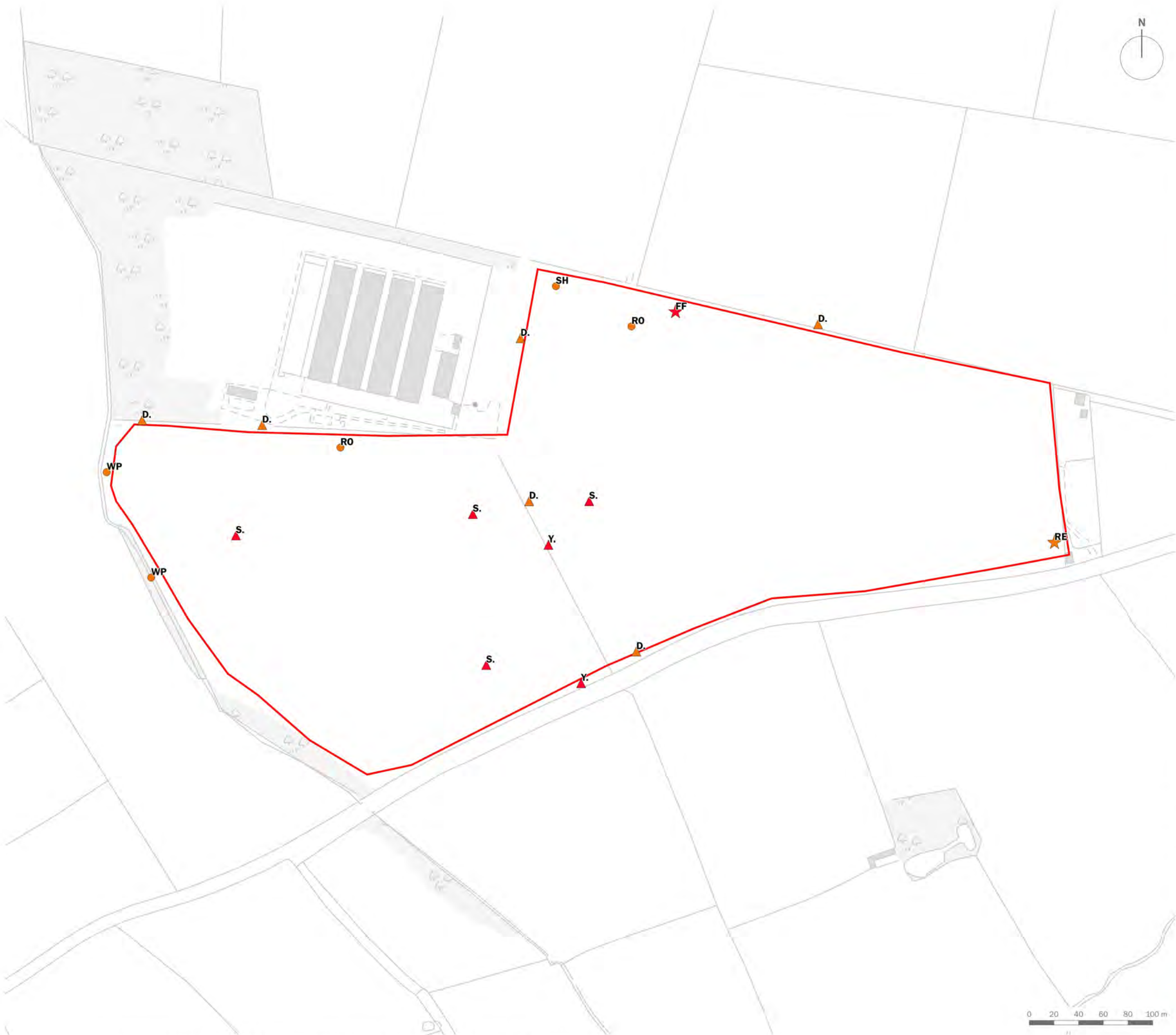
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scale

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QA

DJo



Site Boundary

Conservation Status

☆

Schedule 1 Species

△

Species of Principal Importance

○

Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

Red List

Amber List

BTO Code

Common Name

D.

Dunnoek

FF

Fieldfare

RE

Redwing

RO

Rook

S.

Skylark

SH

Sparrowhawk

WP

Woodpigeon

Y.

Yellowhammer

client

Renewable Connections Developments Limited

project title

Heath Road Solar Farm, Bagworth

drawing title

Winter Bird Survey March 2023

date

20 JUNE 2025

drawn by

DJo

drawing number

edp7530_d012a

checked

MWn

scale

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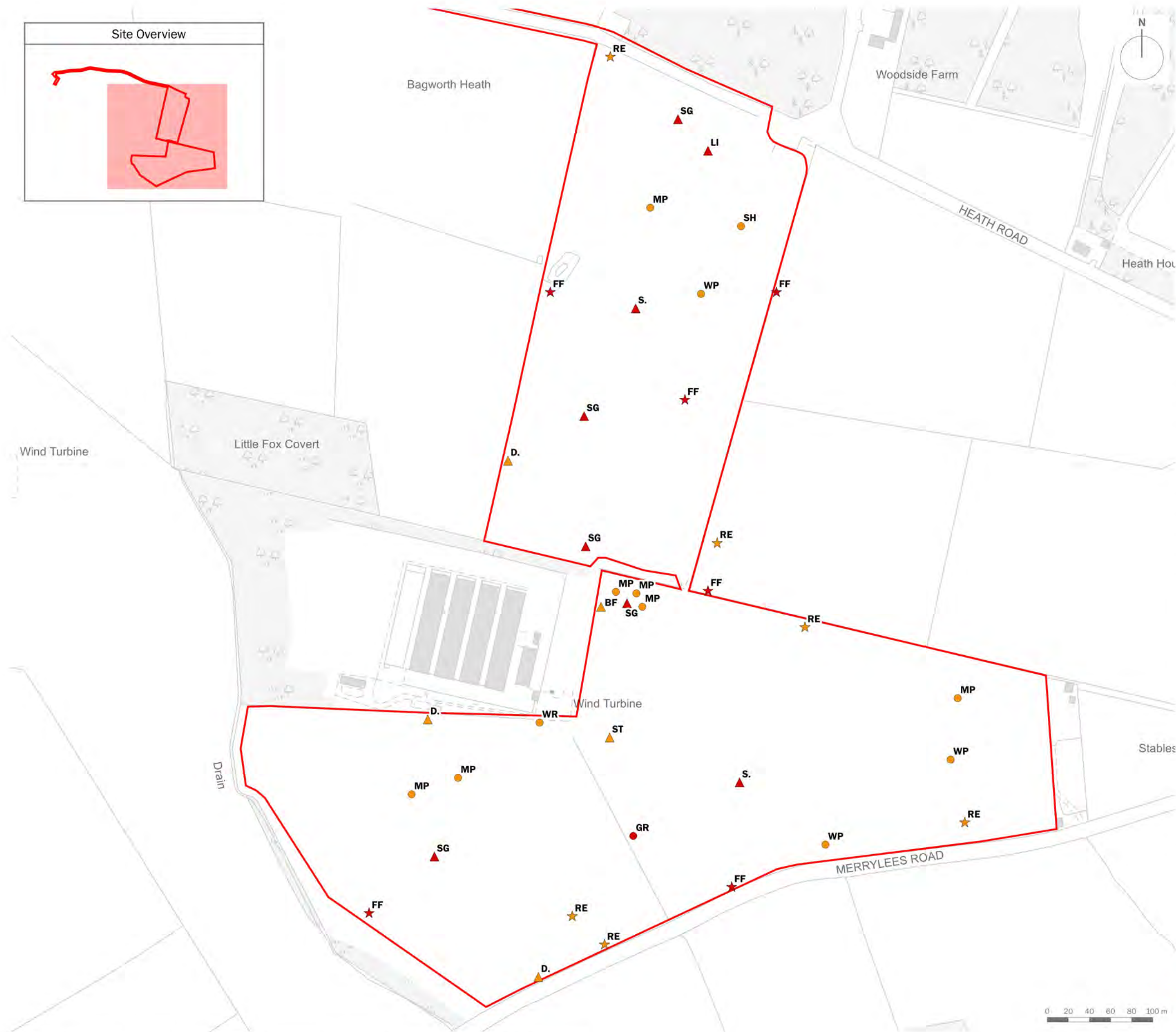
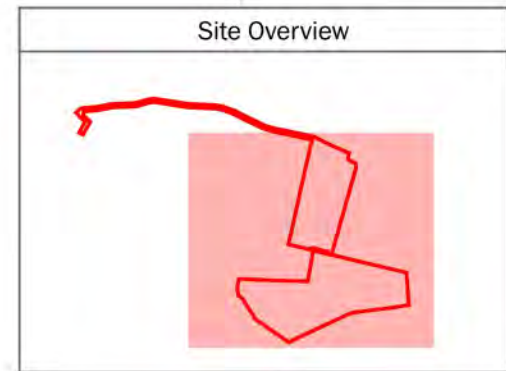
QA

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- Site Boundary
- Conservation Status
- ☆ Schedule 1
 - △ Species of Principal Importance
 - Not Listed as Schedule 1 or SPI

Birds of Conservation Concern

- Red List
- Amber List

BTO Code Common Name

BF	Bullfinch
D.	Dunnock
FF	Fieldfare
GR	Greenfinch
LI	Common Linnet
MP	Meadow Pipit
RE	Redwing
S.	Skylark
SG	Common Starling
SH	Sparrowhawk
ST	Song Thrush
WP	Woodpigeon
WR	Wren

client
Renewable Connections Developments Limited

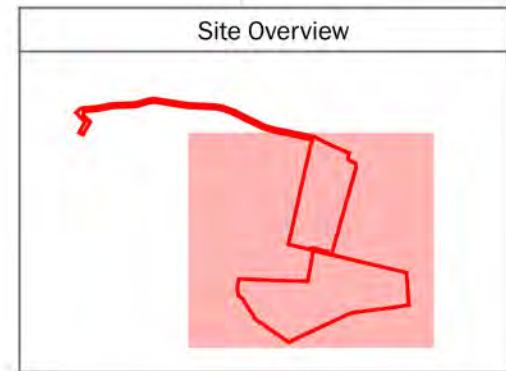
project title
Heath Road Solar Farm, Bagworth

drawing title
Winter Bird Survey December 2023

date	20 JUNE 2025	drawn by	PDr
drawing number	edp7530_d019a	checked	TRo
scale	1:3,500 @ A3	QA	DJo



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Site Boundary

Conservation Status



Schedule 1



Species of Principal Importance



Not Listed as Schedule 1 or SPI

Birds of Conservation Concern



Red List



Amber List

BTO Code Common Name

D.	Dunnock
FF	Fieldfare
GR	Greenfinch
HG	Herring Gull
MP	Meadow Pipit
RE	Redwing
S.	Skylark
SG	Common Starling
ST	Song Thrush
T.	Common Teal
WP	Woodpigeon
WR	Wren
Y.	Yellowhammer

client

Renewable Connections Developments Limited

project title

Heath Road Solar Farm, Bagworth

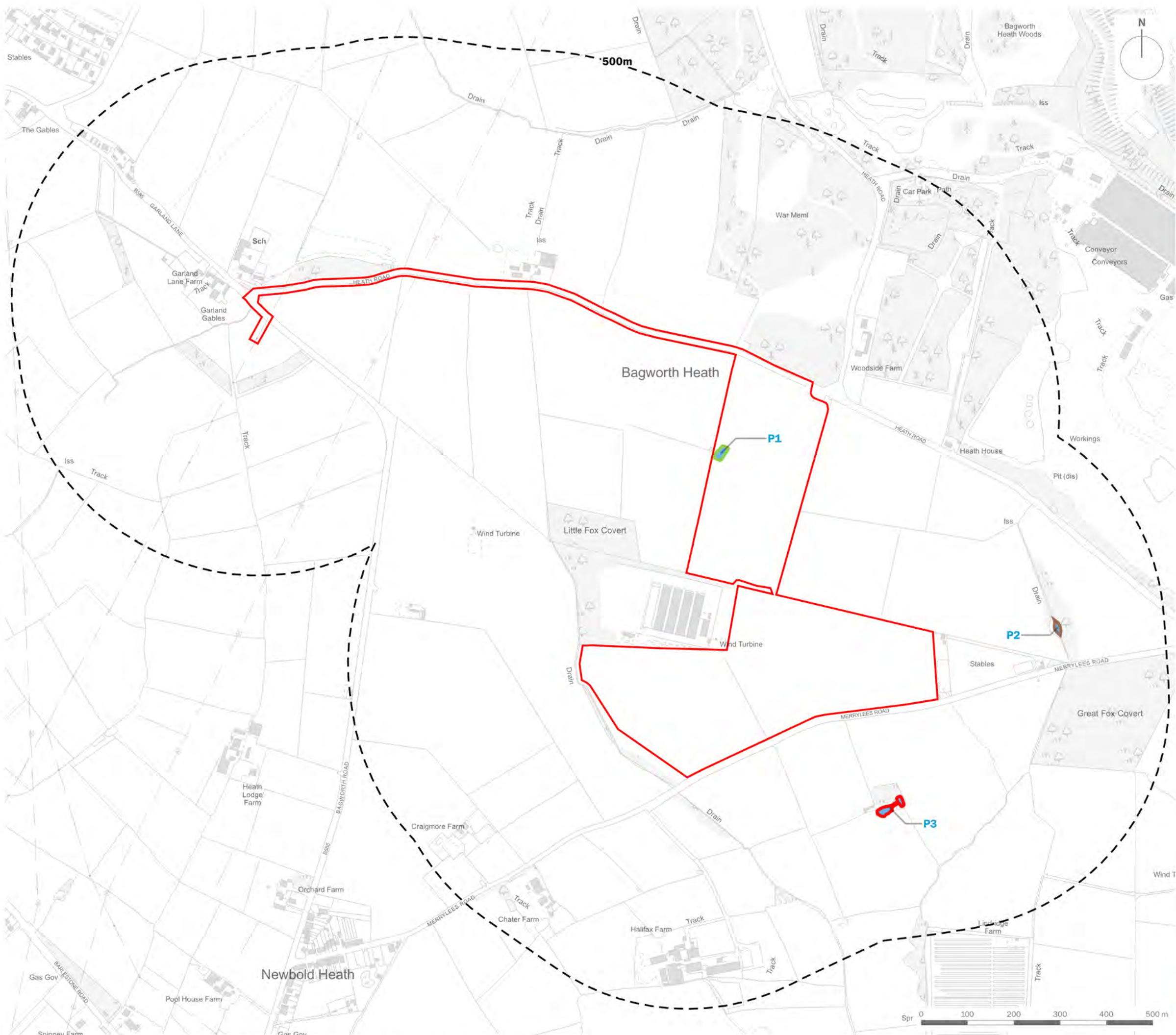
drawing title

Winter Bird Survey January 2024

date	20 JUNE 2025	drawn by	PDr
drawing number	edp7530_d020a	checked	TRo
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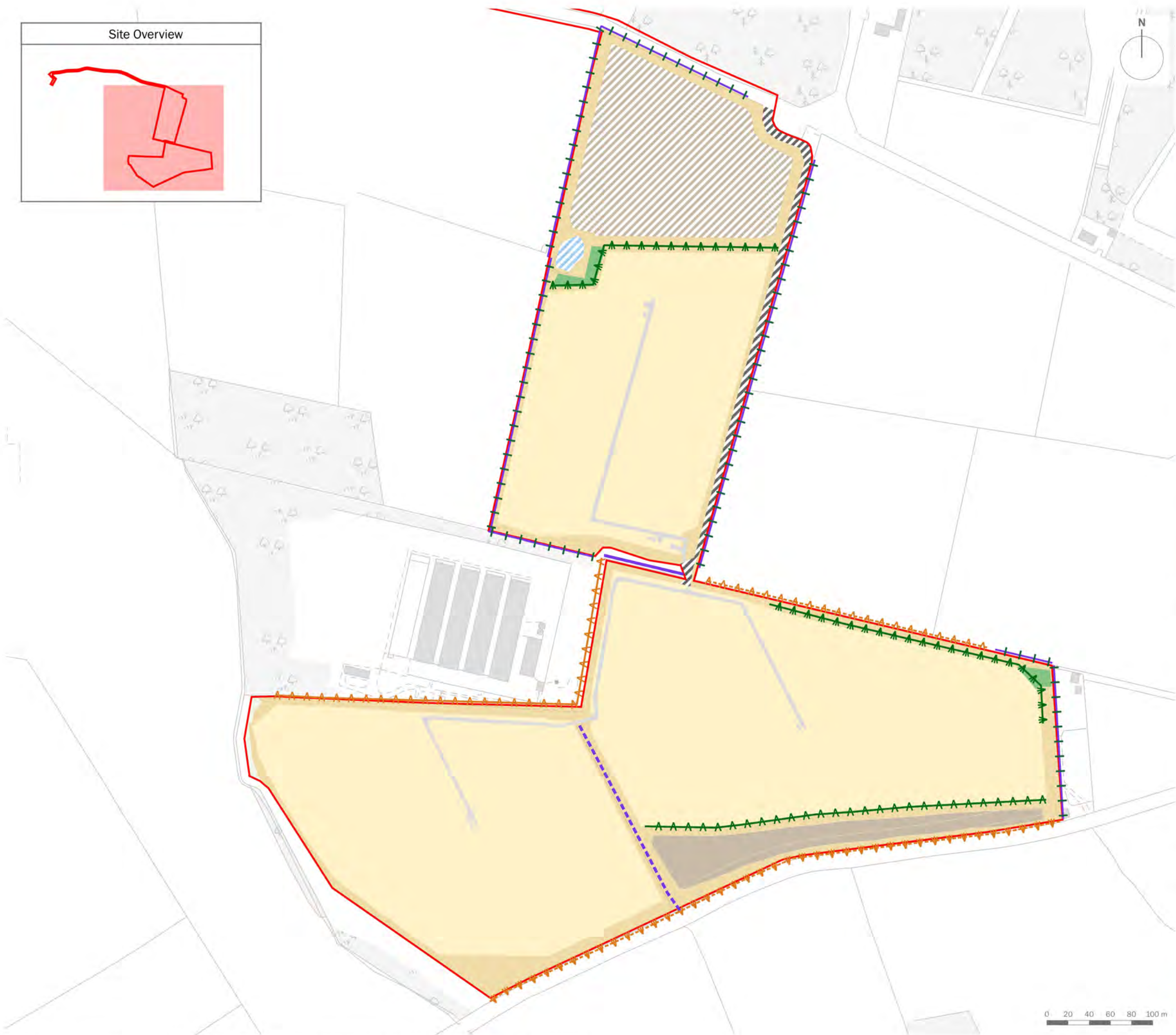
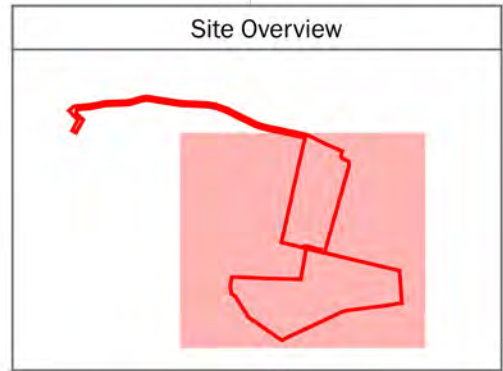


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- Site Boundary
- 1km Range Ring
- Dry Pond
- Negative EDNA Presence of Great Crested Newts
- Positive EDNA Presence of Great Crested Newts
- P1 Pond ID

client	Renewable Connections Developments Limited		
project title	Heath Road Solar Farm, Bagworth		
drawing title	Pond Locations		
date	20 JUNE 2025	drawn by	DJo
drawing number	edp7530_d008b	checked	MWn
scale	1:8,000 @ A3	QA	DJo



- Site Boundary**
- Proposed Habitats**
- Arable Field Margins Game Bird Mix
 - Developed Land; Sealed Surface
 - Mixed Scrub
 - Modified Grassland
 - Other Neutral Grassland
 - Other Woodland; Mixed
 - Species-rich Native Hedgerow
 - Species-rich Native Hedgerow with Trees
- Enhanced Habitats**
- Species-rich Native Hedgerow
 - Species-rich Native Hedgerow - Associated with Bank or Ditch
 - Species-rich Native Hedgerow with Trees - Associated with Bank or Ditch
- Retained Habitats**
- Cereal Crops
 - Pond (Non-priority Habitat)
 - Developed Land; Sealed Surface
 - Native Hedgerow
 - Native Hedgerow - Associated with Bank or Ditch
 - Native Hedgerow with Trees

client	Renewable Connections Developments Limited		
project title	Heath Road Solar Farm, Bagworth		
drawing title	Post-development Habitat Plan		
date	20 JUNE 2025	drawn by	PDr
drawing number	edp7530_d021a	checked	TRo
scale	1:3,500 @ A3	QA	DJo



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**URBAN
DESIGN
GROUP** REGISTERED PRACTICE



**Landscape
Institute**
Registered practice