Shropshire Council

Proof of Evidence

Of Diane Corfe

Ecology and Nature Conservation

Town and County Planning Act 1990 (as amended)

APPEAL BY ECONERGY INTERNATIONAL LTD

Against the Refusal of Planning Permission by Shropshire Council for:

"Erection of an up to 30 MW Solar PV Array, comprising ground mounted solar PV panels, vehicular access, internal access tracks, landscaping and associated infrastructure, including security fencing, CCTV, client storage containers and grid connection infrastructure, including substation buildings and off-site cabling."

Appeal Reference: **APP/L3245/W/23/3332543**

SC Planning Application Reference: **22/04355/FUL**

SC Appeal Reference: **23/03207/REF**

Waterman Infrastructure & Environment Ltd
Pickfords Wharf, Clink Street, London SE1 9DG
www.watermangroup.com

Client Name:	Shropshire Council
Document Reference:	Document Reference
Project Number:	20615101-WAT-XX-XX-RP-N-750001

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Revision	Status	Date	Prepared by	Checked by	Approved by
01	Draft	01/02/24	Diane Corfe Technical Director (Ecology)		
Comments					
02	Final	15/02/24	Diane Corfe Technical Director (Ecology)	Becky Bailey Associate Director (Ecology)	Ruth Jeffs Director
Comments					
Comments					

Revision		**Status**	
P*nn*	Preliminary (shared; non-contractual)	S1	Coordination
C*nn*	Contractual	S2	Information
		S3	Review & Comment
		S4	Review & Authorize
		S5	Review & Acceptance
		A0, A1, A*n*	Authorized & Accepted (*n*=work stage if applicable)

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This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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APPENDICES

1. Personal Details

1.1. My name is Diane Corfe. I am employed by Waterman Infrastructure and Environment Ltd as a Technical Director and their National Service Lead for Ecology. Waterman is a Registered Chartered Institute of Ecology and Environmental Management (CIEEM) Ecology Practice. I have held senior positions in multi-disciplinary consultancies (Atkins, Scott Wilson, Jacobs) and a pure sustainability consultancy (ERM Ltd) before joining Waterman.

1.2. My academic and professional qualifications are Bachelor of Science Degree (with joint honours) in Botany and Zoology (Environmental Biology) and a Master of Science degree in Environmental Engineering. I am a full member of the Royal Society of Biology and a Chartered Biologist and a full member of CIEEM.

1.3. I have over 30 years' experience in consultancy across a range of market sectors including renewable energy, with a specialism in the ecological impact assessment of major developments, evidenced by my contributions to the CIEEM working group that revised the Guidelines for Ecological Impact Assessment which were republished in September 2018 (**CD 10.28).** This Guidance is consistent with the British Standard on Biodiversity (**CD 10.29**) and sets out current good practice for the rigorous and transparent impact assessment of developments such as new solar farms. It provides guidance on how accurate ecological baselines are established, Important Ecological Features are identified and how significant effects are determined and addressed through the application of the mitigation hierarchy.

1.4. I am part of the CIEEM Professional Standards Committee responsible for establishing and maintaining standards, drafting and updating guidance in the profession and assisting with professional conduct inquiries. I am also a member of the British Standards Institution Biodiversity Committee.

1.5. I am required by CIEEM to abide by the Code of Professional Conduct (the Code) which includes exercising sound professional judgement in my work, identifying clearly the limitations and applying objectivity, relevance, accuracy, proportionality and impartiality to the information and professional advice I provide.

1.6. I have not been involved in the scheme prior to the submission of the appeal. To inform my Proof and consideration of standing as expert witness for the Council, I have evaluated all the information provided to the planning committee and visited the site in January 2024.

2. Scope and Structure of Evidence

2.1. This Proof of Evidence addresses the Council's reasons for refusal on ecological grounds of the planning application **22/04355/FUL** at land south of Berrington, Shrewsbury, Shropshire, SY5 6HA.

2.2. The development comprises:

"Erection of an up to 30 MW Solar PV Array, comprising ground mounted solar PV panels, vehicular access, internal access tracks, landscaping and associated infrastructure, including security fencing, CCTV, client storage containers and grid connection infrastructure, including substation buildings and off-site cabling".

2.3. Following validation of the application on 27th September 2022, the application was refused against the Officer's recommendation for approval at the Shropshire Southern Area Planning Committee on 9th May 2023.

2.4. The Decision Notice was issued on 16th May 2023 with the following ecological reason for refusal:

"Skylarks are protected under the EU Birds Directive 79/409/EEC. The application affects land used for Skylarks for nesting. The applicant proposes to mitigate for the loss of nesting opportunity by providing protected plots on land to the immediate north of the site. However, this land if (sic) of a different character and the general area is also used for seasonal shooting which may coincide with the Skylark nesting season. It is considered that the applicant has not demonstrated sufficiently that the proposed off site mitigation would provide an appropriate safe and undisturbed environment for successful Skylark nesting. The proposals are therefore contrary to Core Strategy CS17 and SAMDev policy MD12".

2.5. The Scope of Evidence addresses the following ecological grounds for refusal as set out in the Statement of Case (**CD 4.11** and **CD4.12)** taking each point in turn:

1) The Council will provide evidence to demonstrate that the proposed development is not in accordance with the adopted Development Plan conflicting with Core Strategy Policy CS17 and SAMDev policy MD12.
2) The Council will provide evidence to demonstrate that the proposed mitigation for the loss of skylark nesting opportunity by providing protected plots on land to the immediate north of the site is unsatisfactory.
3) The Council will provide evidence to demonstrate that the site of the proposed new skylark nesting opportunities is of a different character.
4) The Council will also present evidence to show that the general area in which the mitigation is proposed is also used for shooting.
5) The Council will evidence that the applicant has not demonstrated sufficiently that the proposed off-site mitigation would provide an appropriate safe and undisturbed environment for successful Skylark nesting.

2.6. Whilst I was considering whether I could accept instruction on this matter, I also noted that there were a number of potential shortcomings with the information that had been provided by the applicant. I therefore alerted the Council to the fact that there were a number of reservations that I felt necessary to draw to the Inspector's attention. The Council, therefore, has made an application to add a few further points to its Statement of Case, as follows:

6) The EcIA under section 2.4 states:

On the 18th of January 2022 Natural England responded to the EIA Screening Consultation (reference 380253) from Ecoenergy International Ltd. Natural England's advice was as follows "based on the materials supplied with the consultation, there is potential likely significant effects to statutorily designated

sites and further assessment is required" (emphasis added). Further consideration on whether an Environmental Impact Assessment is required was recommended by Natural England.

There doesn't appear to be any evidence of how the applicant addressed this potential concern highlighted by Natural England. However, it is noted that Natural England provided a response to the screening consultation on 18th January 2022 (**CD 2.6**). The Council provided an EIA screening opinion on 26th January 2022 (**CD 3.4**) which confirmed that the development did not fall under the Town and Country (Environmental Impact Assessment) Regulations 2017 (as amended).

7) The EcIA under section 6.3, states:

There are no other developments within the area which could have cumulative impacts in associated with the proposed development. In addition, no negative residual effects have been identified as a result of the proposed development.

8) There does not appear to be any evidence of the cumulative impact assessment being undertaken i.e a list of sites/developments considered: other solar farms/potentially disturbing developments to skylark in the locality, developments with planning consent but not built out yet etc, or how these were assessed to arrive at this conclusion.
9) Skylark is a priority species and Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act 2006. The Council will provide evidence to demonstrate that the proposed development is not in accordance with para 185 b of the National Planning Policy Framework, 2023.
10) The Council will provide details as to why the ecology baseline established for skylark on the Application Site and mitigation land is not considered robust (for example, skylark baseline survey findings are absent for the mitigation land), the evaluation of the importance of skylark in the local area is not sufficient and resultingly, the suitability of the mitigation land has not been fully evaluated and its likelihood of success as a mitigation measure in doubt.
11) The Council will provide details as to why Part 3 of Policy DP26 and DP12 of the emerging local plan has not been fully met, with respect to the presence of a priority species and how alternative options of onsite design to avoid mitigation and compensation has been demonstrated, and which alternative compensation options were assessed.

2.7. My Proof does not cover the assessment of Biodiversity Net Gain (BNG) (**CD 1.21** and **CD 1.22**) as this was not part of the grounds for refusal and the mandatory legal basis for BNG is founded on habitats and not their supporting species. Impacts on species, such as skylark are assessed in accordance with CIEEM's Ecological Impact Assessment Guidelines **(CD 10.28),** which takes account of the value of an ecological feature in relation to its geographical significance, the development impacts and if it is likely to result in significant effects to the ecological feature or not. This is because not all development impacts result in significant effects on a given species/ecological feature. However, for those that are considered to be important, the mitigation hierarchy is applied to avoid, mitigate, compensate and enhance.

3. Site Description and Baseline

3.1. This section of my Proof provides a brief summary of baseline information that the applicant provided to accompany the planning application in September 2022 and any supplementary information after that date in correspondence with the Council as set out below.

3.2. The Application Site extends to 44.09 hectares (ha) of agricultural land and is located in an area of open countryside to the south-west of the village of Berrington. The Site is formed of two field parcels, separated by a single-track road. The proposed skylark mitigation land extends over approximately 25 ha and is located to the immediate north of the Application Site, divided into four fields. This land is understood to be in a mix of arable and/or grazing/silage use, however, its exact use and status with respect to agri-environment schemes remains unclear (refer to **Figures 3** and **4** appended to my Proof).

3.3. The site is positioned at an elevated level and tree cover to the centre of the two-field site is fairly minimal with most being boundary trees and hedges. The full baseline description is set out in the Preliminary Ecological Appraisal (PEA) (**CD 1.8**) and both versions of the Ecological Impact Assessment (EcIA) (**CD1.23 and CD1.25)**. Both versions of the EcIAs includes the findings of the species-specific field surveys and in particular the breeding bird survey which identified the presence of approximately 11 skylark territories on the Application Site.

3.4. There is no ecological baseline verified by accepted field survey methods for the area proposed for the off-site skylark mitigation (**CD 1.15** and **CD 1.16**). Furthermore, this mitigation land has not been subject to an impact assessment to identify what measures may be required to address adverse impacts that may arise through the adaptation of the existing land use and agricultural practices.

3.5. The timeline summary of submission data below demonstrates the degree of liaison between the applicant and the Council leading up to the Shropshire Southern Area Planning Committee held on 9th May 2023. This has been provided to show that it was during this period of consultation that the formalisation of off-site skylark mitigation commenced, and it had not been provided as an integral part of the proposal from the outset.

3.6. The Council required onsite mitigation to be considered fully and an amended EcIA (version 2) was submitted in January 2023 (**CD 1.23**), which concluded that incorporation of a total of 3.16ha of skylark protection areas split into four zones within the Application Site would address the impacts of loss of existing arable land (foraging habitat for skylark) and also provide sufficient nesting habitat for the skylark territories identified. However, the Council did not agree with this proposal and requested additional information which was undertaken via e-mails and Technical Notes through February to April 2023.

3.7. It was not until the 20th April 2023 (via e-mail), that the Council agreed that a bespoke skylark mitigation strategy would be required to discharge a suitably worded planning condition or obligation to meet policy CS17. It was clearly stated that due to "*uncertainty as to what mitigation option is to be adopted, the s106 will need to include details of all options with sufficient detail so it is clear what is required….in the form of a management plan with maps that we can review…".*

3.8. It was not until early May 2023, that a finalised Skylark Mitigation and Monitoring Plan (**CD 1.15**) and a Skylark Mitigation Plan (**CD 1.16**) were provided to the Council for consideration at the Shropshire Southern Area Planning Committee held on 9th May 2023.

Summary of Submission of ecological documentation to the Council

Original Application September 2022

3.9. The planning application submitted in September 2022 was accompanied by a PEA (August 2021) (**CD 1.8**) and EcIA (July 2022 version 1 **CD 1.25**) Under the Residual Impact for breeding birds on page 39 of

the EcIA, it stated "*It is anticipated that there will be a net loss of available Skylark habitat on site, though no significant effects on the population at local, regional or national levels are anticipated as a result of the development. Similar alternative habitat is present within the immediate area, with Skylark present in all adjoining land parcels outside of the site boundary, and therefore no significant local scale impacts are expected".*

3.10. The EcIA also states on page 41*: "During the operational phase there will be minimal disturbance to birds and no direct impact on any habitats used by breeding or nesting birds……. Similar alternative habitat is present within the immediate area, with Skylark present in all adjoining land parcels outside of the site boundary, and therefore no significant local scale impacts are expected*." However, no evidence to support these statements about skylark being present in adjoining land parcels outside the site boundary have been presented in this version of the EcIA or version 2 (**CD1.23**) (also refer to extracts of Appendix 7 of the EcIA in my Proof).

3.11. It is also important to highlight that the PEA (**CD1.8**) and EcIA (**CD 1.25**) had errors in the accompanying habitat plans and thus target notes and habitat classifications were incorrectly located. It is notable that the Application Site was not subject to habitat classification resurvey in 2022, other than areas of site boundary extension on the northern border and the north-west corner as stated on page 11 of the revised EcIA (**CD 1.23**). The age of this habitat information is therefore at the limit of what good practice sets out by CIEEM (**CD10.30**), being 22 months since the baseline was established in March 2021. In addition, it appears that there was no updated request for protected species records from the Local Environment Records Centre since the original request in March 2021.

Council Ecologist formal request for additional information in October 2022

3.12. Additional information was requested, including but not limited to the following:

a) Queries raised on the number of ponds subject to great crested newt surveys; stated that District Level Licensing for great crested newts would be more appropriate and asked for confirmation from the applicant.

b) A requirement to assess the impacts on Local Wildlife Sites (LWS)

c) Confirmation that the unmitigated loss of skylark habitat was not acceptable

d) A requirement to assess the white claw crayfish potential of the lagoon located in the development site

e) A requirement to show the trees in the Application Site with bat roosting potential

f) A requirement to show the stream on the habitat plan

*Applicant response in November 2022 (**CD 1.24B**) and January 2023 (**CD 1.24C**) (information not uploaded to the Planning Portal until 10th February 2023)*

3.13. Additional information and amendments were provided to address the Council Ecologist's response, with the exception of addressing the need to provide skylark mitigation. The Council's position at the time had been that the loss of skylark habitat was not acceptable and replacement nesting habitat was required on the Application Site as part of the solar farm design. In the applicant's response several research papers were referenced however, these were individual pieces of research except for the BTO reference (**CD 10.1)**.

3.14. This note also responded to the reported errors in the ecological documentation submitted, for example Cound Brook being located 200m from the site boundary whereas it is located 20m from its boundary. Table 4 of version 2 of the EcIA states Cound Brook is located 1.17km to the southeast, however, **Figure 1** appended to my Proof shows this site is very close to the Application Site boundary. This is one example of a significant error in terms of the understanding of the development's impacts on the nearby

non-statutory designated Local Wildlife Sites (LWS) in the Zone of Influence as defined by CIEEM, 2018 (**CD 10.28**). In addition, to the errors in the Figures accompanying the first version of the EcIA (**CD 1.25**) Applicant submission of File note (25th January 2023) and amended Ecological Impact Assessment (dated January 2023), which I have included in **Appendix A** of my proof for ease of referencing.

3.15. The amended EcIA version 2 (**CD 1.23**) included the following key changes as set out in the File Note:

a) The inclusion of 4 skylark protection zones around the site (Site Layout Figure in Appendix 1 of the EcIA).

b) Amended mapping to show the trees with bat roosting suitability, justification for reasonable avoidance measures for great crested newt, justification for no additional consideration of white clawed crayfish and an amended landscape plan/reduced red line near to Big Pool LWS (Refer to **Figure 1** of my Proof).

c) Responses to the queries raised with respect to great crested newt, white clawed crayfish and amendments to the Phase 1 map to show the small off-site stream

3.16. The four skylark areas were notably at the edge of the site boundary (three to the south and one to the north) in areas bordered by existing or proposed screening woodland and hedgerow, as such reducing their effectiveness as mitigation due to skylark requiring clear sightlines and uncluttered landscapes that can provide perch sites for potential predators.

3.17. In this revision, it is also notable that two of the four trees identified with bat roost suitability (and therefore subject to additional survey needs if adverse impacts and thus significant effects are anticipated, due to the highest level of legal protection afforded to them under the Habitats Regulations (2017, as amended), appear to be in the location of proposed solar panels (Site Layout Figure in Appendix 1) and would therefore be subject to removal. However, the aerial imagery shown in **Figure 4** appended to my Proof indicates that the two trees shown are not present in the locations indicated in the EcIA so this demonstrates additional errors in the mapping presented in the New Phase 1 Habitat Survey Plan in Appendix 4 of the EcIA (**CD 1.23**)

3.18. It is also of note between the first revision of the EcIA submitted in September 2022 and the second revision submitted in January 2023 (**CD 1.23**), the breeding bird survey maps (in Appendix 7) have a different red line boundary, which appears to be inverted with the breeding bird data incorrectly presented across the three figures entitled: Breeding Bird Survey Red Listed, Breeding Bird Survey Amber Listed and Breeding Birds Survey Skylark Territories. The EcIA (**CD 1.23**) appears to have corrected this error but has not included a map of the Red Listed species and included a duplicate of the Amber Listed species. However, the information can be extracted by viewing both sets of Figures.

Council Ecologist formal Response to the amended submission in February 2023

3.19. The Council agreed with the updates but requested more details with respect to the skylark protection zones including their management and the extent of protective buffers around them. A plan to show the areas of skylark mitigation/compensation land with appropriate buffers was requested.

*Applicant response on 21st February 2023 (File Note Ref 1120051) (CD **1.24D***

3.20. The applicant responded to the Council's concerns with respect to the surrounding landscape already being at capacity and unable to support additional pairs of displaced skylark by referencing their decline and supporting evidence that 50 pairs per km2 had been suggested in an unreferenced Natura 2000 management plan which suggests that integration to higher densities would be possible. The applicant stated that skylark may continue to nest around the panels or on the edge of the site and therefore did not include any buffers as skylark protection zones other than a 10m standoff at field boundaries. The applicant also disagreed with the requirement of unbroken sightlines referencing little peer reviewed study

of the requirements of various ground nesting birds. They noted that a pheasant release pen is present in the Application Site and therefore likely that predator control is in place on site.

Applicant response on 1st March 2023 (not uploaded onto the planning portal until 28th April 2023)

3.21. This included alterations to the layout plan and landscape masterplan with an increased buffer between the solar panels and Application Site red line boundary at Newman's Hall Cottages. In addition to additional tree planting to fill gaps and strengthen existing screening.

*Council Ecologist response to the amendments on 7th March 2023 (**CD 2.1**)*

3.22. The Council confirmed that there was still insufficient information to conclude that the loss of skylark nesting habitat can be adequately mitigated/compensated for. A summary of some of the most pertinent scientific research was detailed therein, confirming that skylark usually avoid edge habitats due to the risk of predation. An In-Practice CIEEM article 2022 **(CD 10.22**) was referenced as this concluded that impacts on ground nesting birds such as skylark are being undervalued and overlooked with resulting inappropriate mitigation. The article presented the findings of a review of over 100 active solar installation that demonstrated there was no conclusive skylark nests located within active solar arrays, however, male skylark had been identified singing over solar arrays. Displacement into surrounding habitats was considered possible depending on a number of factors, not least the carrying capacity of the surrounding habitats, with the likelihood for successful displacement reducing in arable landscapes.

3.23. Additional details were requested on buffer zones from existing hedgerows and trees and other potential predator perches. The Council confirmed that if adequate mitigation could not be found within the Application site boundary, off-site compensation could be considered.

Applicant response on 9th March 2023 by e-mail

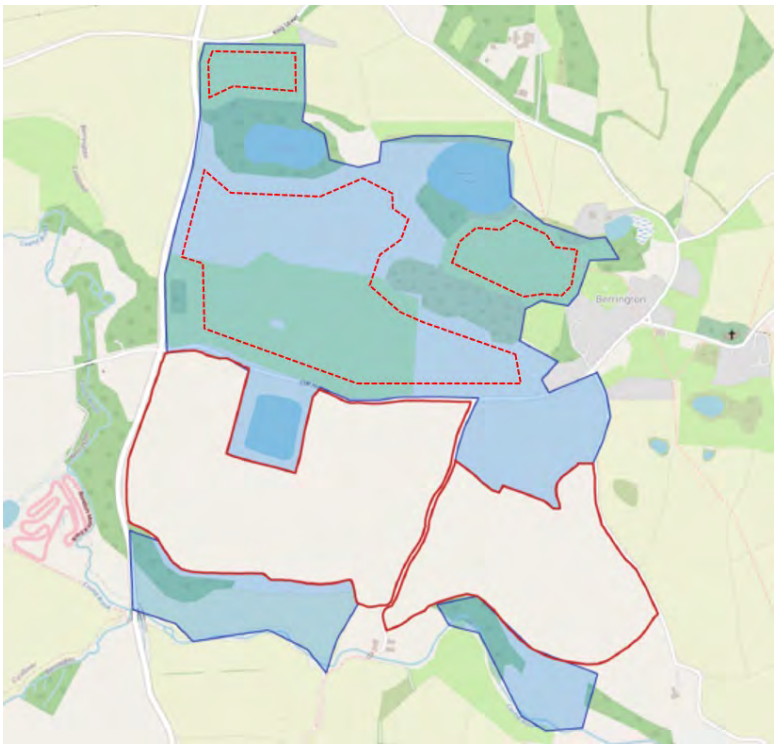
3.24. The applicant confirmed that a 50m buffer would be included at the field boundaries as recommended in best practice guidance, and requested whether panels could be included in these areas.

Council Ecologist response on 10th March 2023 by e-mail

3.25. The Council provided some detail around the removal of potential predator perches and stated that the Council think it is possible to alter the site layout to produce larger, more meaningful areas of skylark mitigation plots and buffers by moving the locations of the panels to encourage continuation of skylark breeding on the Application Site.

Applicant response on 20th March 2023 by e-mail

3.26. The applicant asked if the wider landowner landholdings as shown in **Extract 1** (shaded blue) would be acceptable for replacement habitat off-site.



Extract 1

Council e-mail correspondence in March 2023

3.27. The Council set out that the proposal to use off-site land for skylark mitigation was acceptable in principle, but more details would be required with accompanying justification and the Strategy would be subject to a Section 106 obligation. The Council did identify potential incompatibility between the off-site land being pasture and its suitability for skylark mitigation.

Applicant correspondence during April 2023 and subsequent Council response on 20th April 2023

3.28. A version of the Agricultural Production Assessment (**CD 1.20**) was issued by e-mail to address the queries being raised around existing and proposed use of the mitigation land. This report covered the whole land holding (152.6ha) encompassing the Application Site and proposed mitigation land (covered by the area shaded as HK7 reproduced in **Appendix B** of my Proof). This shows that the mitigation land was historically farmed under an arable rotation but in March 2012, 58ha were entered into an Entry Level and Higher-level Stewardship Agreement to protect Berrington Pool Site of Special Scientific Interest (SSSI). The mitigation land forms part of the former HLS for the restoration of species-rich semi-natural grassland and was under this management until February 2022. The management conditions referenced to "*at least 6 weeks grazing with cattle*" between May to September which would impact any ground nesting birds attempting to hold territories. The report goes on to predict the future use of the mitigation land if the solar farm is granted planning consent (an extract is reproduced of Figure 5 in **Appendix B** of my Proof).

3.29. The applicant confirmed that the intention for the mitigation land is for arable-use/productive grassland to replace skylark habitat lost within the proposed Application site, therefore suggesting that the future use of the land (not being grazing) would not be in conflict with the requirements of the mitigation strategy. It is notable that the future management of the land as assessed and presented in the Agricultural Production Assessment (**CD 1.20**) appears to have had no revisions to take into account the skylark

mitigation proposals, since the assessment was undertaken in November 2022.

3.30. The Council requested that the details were developed so there is certainty in terms of stocking rates/ desired vegetation height/structure etc and that those details would need to be accompanied by detailed plans to be appended to a future Section 106 obligation. This information is outstanding at the time of drafting my Proof.

Applicant issued the Skylark Mitigation and Management Plan on 5th May 2023

3.31. This is Version 1 and was available at the Planning Committee held four days later on 9th May 2023.

4. The Case for the Council

4.1. In preparing this Proof I have referenced the Ecology core documents submitted to the Council by the Applicant and have had regard to the Statement of Case of Council, the draft Statement of Common Ground, the Statement of Case of the Appellant and the rule 6 party representations.

4.2. I have set out the case for the Council taking each of the grounds for refusal listed in the Appeal Statement/Statement of Case (**CD 4.11 and CD 4.12**) and Section 2 of my Proof by grouping these starting with Planning policy, and then addressing skylark, as follows:

Planning Policy (National Planning Policy Framework, Core Strategy Policy CS17 and SAMDev policy MD12 and emerging Local Plan Policy DP26 and DP12) Refusal items 2.5: 1, 2, 3, 4, 5…9, 10 and 11.

4.3. The National planning policy Framework (December 2023) (**CD 6.1**) para 185 states:

To protect and enhance biodiversity and geodiversity, plans should:

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

b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

4.4. The mitigation land comprises good quality semi-improved grassland which although it is identified as non-priority it is on the Habitat Inventory (refer to **Figure 3** appended to my Proof). This means it is one of the four habitats that are not categorised as Priority, but nevertheless hold potential importance for conservation of biodiversity in England, due to the fact that they may contain smaller areas/mosaics of Priority habitat and/or have restoration potential and/or contribute to ecological networks. The mitigation meets all these criteria as the land was under an Entry Level and Higher-level Stewardship Agreement between March 2012 to March 2022. Furthermore, its northern boundary abuts a number of designated sites: Top Pool Local Wildlife Site (LWS), the Long Pool LWS and Berrington SSSI (national designation) which is also part of the Midland Meres & Mosses – Phase 1 Ramsar site (international designation). The Application Site also abuts a third LWS called the Big Bog and is in close proximity to Cound Brook LWS. The LWSs are designated for their open water, willow carr, bog and reedswamp habitats, the Brook is designated due to its range of habitats in a fast-flowing riparian environment. In addition, Top Pool's citation information states it is 'good ornithologically'.

4.5. Berrington Pool SSSI extends over nearly 5 hectares and is a deep mere with a rich flora of emergent species including some which are uncommon and is of interest for its aquatic fauna with ten species of dragonfly known to breed at the site. It also forms part of the Midland Meres & Moses – phase 1 Ramsar site, designated due to its diverse range of habitats including rare plants and rare wetland invertebrates. Pressures recorded as being a high risk affecting the SSSI in April 2022, include pollution from agriculture sources, land management due to scrub encroachment, water level changes and fishing impacts.

4.6. The Application Site and the proposed mitigation land is also located in the Shropshire Environmental Network (SEN) inclusive of its buffer zone, which comprises areas of high biodiversity value and areas that act as connective 'corridors and stepping stones' between them. It is also understood that the proposed mitigation land is located within the Nature Improvement Area (NIA) with the Meres and Mosses

of the Marches being one of 12 original NIAs, originally set up to establish and improve ecological networks.

4.7. The Shropshire Core Strategy (Adopted February 2011) sets out a Spatial Vision for Shropshire and the broad spatial strategy to guide future development and growth during the period to 2026. Policy CS17 – Environmental Networks states (together with the Environmental Networks Map that accompanies this document) that all development will be required to avoid 'significant adverse impacts on Shropshire's environmental assets.' Local Wildlife Sites and Priority species (refer to paras 4.11 to 4.18) are clearly defined in the supporting text as being a key part of Shropshire's environmental assets.

4.8. The full policy is below:

Development will identify, protect, enhance, expand and connect Shropshire's environmental assets, to create a multifunctional network of natural and historic resources. This will be achieved by ensuring that all development:

- *Protects and enhances the diversity, high quality and local character of Shropshire's natural, built and historic environment, and does not adversely affect the visual, ecological, heritage or recreational values and functions of these assets, their immediate surroundings or their connecting corridors. Further guidance will be provided in SPDs concerning the natural and built environment;*
- *Contributes to local distinctiveness, having regard to the quality of Shropshire's environment, including landscape, biodiversity and heritage assets, such as the Shropshire Hills AONB, the Meres and Mosses and the World Heritage Sites at Pontcysyllte Aqueduct and Canal and Ironbridge Gorge*
- *Does not have a significant adverse impact on Shropshire's environmental Shropshire Core Strategy: Final Plan for Publication February 2010 114 assets and does not create barriers or sever links between dependant sites;*
- *Secures financial contributions, in accordance with Policy CS8, towards the creation of new, and improvement to existing, environmental sites and corridors, the removal of barriers between sites, and provision for long term management and maintenance. Sites and corridors are identified in the LDF evidence base and will be regularly monitored and updated.*

4.9. Site Management and Allocation of Development Document Policy MD12 (the natural environment) aims to conserve, enhance and restore Shropshire's natural assets, and to ensure that the social or economic benefits of development can be demonstrated to clearly outweigh the harm to natural assets including biodiversity and visual amenity. Under this Policy, development proposals must firstly assess whether they are likely to affect a natural asset, using current accepted guidance and best practice. The assessment should be proportionate to the effect and the nature of the proposal. Effects can be direct, indirect or cumulative.

4.10. The sections that I would like to draw the Inspector's attention to are as follows:

1. *Shropshire Council will require new development proposals to conserve, enhance and restore Shropshire's natural and heritage assets and landscape character in order to support the delivery of CS6 and CS17. Internationally and nationally important habitats, sites of wildlife conservation and geological interest and legally protected species will be afforded the highest level of protection in accordance with the relevant legislation and policy*.

Development proposals which are likely to have a significant adverse effect, directly, indirectly or cumulatively, on any of the following assets:

i)the special qualities of the Shropshire Hills AONB;

ii) locally designated sites;

iii) priority species;

iv) priority habitats

v) valued woodlands, trees and hedges;

. will be rejected unless:

i. the social or economic benefits of the development proposal can be demonstrated to clearly outweigh the harm to the assets; and

ii. there is no satisfactory alternative means of delivering the proposal

In these circumstances, a hierarchy of mitigation then compensation measures will be sought through planning conditions and agreements. Proposals should demonstrate that on-site measures are not feasible, before off-site measures will be considered.

All mitigation and compensation provisions will also be required to include the following as appropriate:

i)long term sustainable management plans, including proposals for implementation

4.11. The Natural Environment and Rural Communities Act (NERC) 2006, section 40, sets out a "biodiversity duty":

"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity".

"Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat".

4.12. Section 41 of the Act requires the Secretary of State to publish a list of the living organisms and types of habitats which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity. Any decision which may affect biodiversity must also consider these listed species and habitats. Skylark is a Priority species which has the same meaning and is synonymous with being a Species of Principal Importance (SoPI). Natural England standing advice (**CD 10.10**) states that: "*some wild birds are listed as rare and most threatened species under Section 41 of the NERC Act (2006)*."

4.13. Launched in 2002, the Shropshire Biodiversity Action Plan (SBAP) provided a detailed outline of the work necessary for the conservation of 34 species and 15 habitats. Both the species and habitats originally listed in these plans still have significance and require consideration in planning decisions. They are termed SoPI and Habitats of Principal Importance (HoPI) and under the Natural Environment and Rural Communities Act 2006, local authorities must, in exercising their functions, have regard to these for the purpose of conserving biodiversity. The SBAP, includes a Species Action Plan (SAP) for skylark which is included under the Farmland birds SAP and reproduced in **Appendix C** of my Proof.

4.14. The Pre-Submission Draft of the Shropshire Local Plan (2016 to 2038) was submitted to the Secretary of State for examination on 3rd September 2021. The emerging Local Plan is at an advanced stage of preparation currently in the Examination Stage and therefore cannot yet be given significant weight, however, moderate weight can be given to the draft policies as a material consideration.

4.15. Part 3 of Policy DP26 describes that the assessment included within the application submission should be proportionate to the development proposed and include sufficient information to allow for an accurate evaluation of all impacts, both negative and positive, and should also cover all necessary ancillary infrastructure and the cumulative effects of existing or consent development types with similar impacts in the surrounding area.

4.16. DP12 requires proposals that are likely to have an adverse effect on, inter alia, locally designated

biodiversity sites, priority species and habitats (as listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, are accompanied by an EcIA, undertaken by suitably qualified professionals in accordance with industry standards.

4.17. Skylark is a SoPI, and there are also several locally designated sites near to the proposals (The Big Pool/Snipe Bog, The Long Pool, Top Pool and Cound Brook) (refer to **Figure 1** appended to my Proof). As such DP12 states:

Ensuring that proposals which are shown to have an adverse effect, directly, indirectly or cumulatively, to those natural assets listed above will only be permitted if it can be clearly demonstrated that: a. there is no satisfactory alternative means of avoiding the adverse effect through re-design or by re-locating on an alternative site and; b. the social or economic benefits of the proposal outweigh the adverse effect.

4.18. Where an adverse effect is identified, further work should be carried out to define the significance of the effect as well as the social or economic benefits of the proposal. Where loss or damage to an asset is likely, which is the case for Priority Species/SoPI of which skylark is one, then all reasonable alternative methods of delivering the proposal should be considered. If no solution can be found, through use of an alternative site or redesign to avoid harm for example, and the demonstrated social or economic benefits of the proposed development clearly outweigh the harm to that asset, then mitigation and compensation measures will be sought through planning conditions or planning obligations.

4.19. Proposals should demonstrate that on-site mitigation or compensation measures are not feasible, before off-site measures will be considered. Offsite compensation measures, including tree and/or hedge planting, will be considered within the same settlement or Place Plan area in which the development is located. All on- and off-site compensation, mitigation or offsetting measures should be accompanied by a management plan detailing management and implementation provisions and indicate how these will be resourced, both financially and practically over an agreed timescale.

4.20. If neither on- nor off- site mitigation or compensation is possible, applicants will be encouraged, where appropriate, to make a contribution via a section 106 agreement to funds to support the conservation and enhancement of natural assets (including the planting of trees, woodland and hedgerow) more widely in Shropshire in accordance with the Green Infrastructure Strategy, the Place Plans, any Local Nature Recovery Strategy and other relevant Shropshire Council strategies for the natural environment.

4.21. Furthermore, Policy DP12 (of Draft Shropshire Local Plan 2016 to 2038) covers Habitats Regulations Assessment (HRA). As the competent authority for the proposed development's impacts on former European and Ramsar sites, the Council assessed the impacts arising from the development presented in the EcIA (**CD1.23**), and due to there being no viable pathways between the proposed development and Berrington Pool Ramsar site, concluded that there would be no Likely Significant Effects (LSE) arising. This HRA screening was completed before the off-site mitigation land was proposed by the applicant and was only completed on the development proposals within the Application Site.

4.22. The details as presented in the Skylark Mitigation and management Plan (**CD 1.15 and 1.16**) do not provide sufficient clarity for the proposed mitigation strategy to currently ascertain what the risks to Berrington Pool SSSI and Midland Meres & Mosses – Phases 1 Ramsar site are, due to the series of options presented and the uncertainty that this presents in terms of impacts likely to be generated and resultant effects on the qualifying features of those designations.

4.23. The vulnerabilities/pressures on Berrington Pool Ramsar which is located in very close proximity to the proposed mitigation land (refer to **Figure 1** and **Figure 4** appended to my Proof) include the presence of invasive non-native species, eutrophication and unspecified urban development. Therefore, the management and land use options on the mitigation land to provide an effective solution to address the impacts on skylark, could theoretically result in an increase in the identified vulnerabilities/pressures by

increasing eutrophication as a result of ploughing and use of fertilisers if the mitigation land was turned to arable use. This vulnerability doesn't appear to have been assessed in the Mitigation and Management Plan (**CD1.15 and 1.16**). Furthermore, this is complicated by the status and continued status of any High-Level Stewardship agreement on the mitigation land, which given the proximity to Berrington Pools SSSI would require consultation with Natural England to understand the consenting requirement. It is not clear in the documentation provided by the applicant if this has taken place and if so whether this would cause an impediment to the deliverability of the mitigation options with respect to skylark.

4.24. Taken all the foregoing into account, I have concluded that the proposed development is not in accordance with the adopted Development Plan conflicting with Core Strategy Policy CS17 and SAMDev policy MD12. It is also not in accordance with Part 3 of Policy DP26 and DP12 of the emerging Local Plan, with respect to the presence of a Priority Species/ SoPI (ie skylark), and how alternative options of onsite design to avoid mitigation and compensation have been demonstrated.

4.25. Uncertainty in the Mitigation and Management Plan (**CD 1.15**) appears to be founded on the lack of a current baseline presented by the applicant including but not limited to: habitats, protected species such as breeding and wintering bird surveys, but also reptile and great crested newt (**CD 1.7**) and the agreed agricultural operations, grazing density, the status of the HLS option for the mitigation land since the previous agreement ended in March 2022). This uncertainty has resulted in a number of options for the management of the mitigation land being put forward but no fixed specification or an assessment of its ecological impacts (**CD 1.23**).

4.26. No species-specific field surveys appear to have been undertaken on the proposed mitigation land. In particular there have been great crested newt surveys completed in 2021, but these were focussed on impacts likely to arise from the Application Site and not the proposed mitigation land (**CD 1.7**) as that was not being considered as an integral part of the development at that time. **Appendix D** of my Proof reproduces the Figure which shows the location of ponds 3, 4 and 5 in the centre of the mitigation land and ponds 6, 7 and 8 along its northern limits. Of these six ponds, only two ponds (pond 2 and 3) were subject to eDNA surveys, and it is not clear why this was the case as Habitat Suitability Index (HSI) results do not align to great crested newt presence, an eDNA survey does that. Furthermore, the benchmark applied to the HSI to trigger the need for an eDNA for this development was set at ponds scoring 'Below Average' or higher, however, ponds 5, 6 and 7 met this trigger and where not subject to an eDNA survey.

4.27. A positive eDNA result on pond 3 meant that this pond was surveyed for a population assessment (six surveys). No great crested newt was confirmed in pond 3 in 2021. These findings are now over 2.5 years old and considered out of date (**CD 10.30**). This is highlighted in the Limitations and Constraints section of the great crested newt report: "*The report presented here is a statement of the findings of surveys carried out from May to June 2021. Any appreciable delay in making reference to this report may necessitate a re-survey*".

4.28. It is therefore, unclear as to what measures are intended to be implemented and the efficacy of them on a site where the ecological baseline (including great crested newt, a species protected under the Conservation of Habitats and Species Regulations 2017, as amended) has not been established, an impact assessment has not been completed and the future land management activities/operations have not been confirmed.

Skylark Refusal items 2.5: 2, 3, 4, 5, 6, 7, 8, and 10.

Established Skylark Baseline and Level of Importance

4.29. The breeding bird survey methodology is set out in Section 4.2.5 of the EcIA (**CD 1.23**). The EcIA also presents the findings of the survey in Section 5.3.7, with Figures in Appendix 7. However, the survey results are restricted to three maps and there is no raw field data such as that recording bird behaviour despite the method stating that bird activity such as "*singing or signs of breeding activity, using standard map symbols*" were recorded. Given the presence of skylark, a SoPI, holding 11 territories within the site, it is important to reference this detail to confirm the accuracy of the evaluation presented.

4.30. The breeding bird surveys are presented as a summary only within the EcIA Report (**CD1.23**), and the mapped findings are reproduced in **Appendix B** of my Proof. The British Trust for Ornithology's (BTO) recommended approach to noting the number of birds of each species seen has not been followed and neither has the direction of flight or other useful observations that can justify bird breeding territories (refer to **Appendix E** of my Proof).

4.31. The survey methodology was completed in 2022, by applying the BTO Common Bird Census (Marchant 1983; Bibby et al 1992), which does not follow the full requirements of either the full Common Bird Census methodology nor best practice bird survey methodology (**CD 10.4**), an earlier revision being available at the time of the surveys in 2022. As such a robust baseline was not established for the following reasons:

- Only four separate site surveys were completed between 23rd March to 30th May 2022. A minimum of six surveys is considered robust and proportionate for the scale of project and expected impacts on breeding birds. Furthermore, under the bird survey effort section of the Bird Survey Guidelines (**CD 10.4**) which states that '*any deviation in the number of surveys must be supported with detailed and robust justification. Additional survey effort may need to be considered for large-scale projects with the potential to have significant impact on birds, and/or high profile, sensitive projects. On the other hand, fewer visits may be justified for projects with very limited impacts, or sites with habitats of low value for birds*."
- Furthermore, Natural England's Standing advice for birds (**CD 10.10**) states that birds are a material planning consideration with those that are rare and most threatened identified under Section 41 of the Natural Environment and Rural Communities Act (NERC, 2006), and those listed as red and amber birds of conservation concern. No survey data is available for June to August 2022. As skylark have multiple broods and breed from April to mid-July, the findings for the Application Site is unlikely to present full territorial results. An analysis paper by Browne et al, 2000 (**CD10.26**) suggests that even using maximum counts, skylark numbers can be underestimated with approximately 16% of territories not being recorded.
- Skylark is one species that is considered difficult to estimate through generalist breeding bird surveys. D. W. Snow (1965) (**CD 10.32**). In addition, the relationship between census results and the breeding population of birds on farmland, identified that there was high variability in skylark numbers between surveyors (though consistent by surveyor) and that the species was difficult to record for surveyors focusing on hedgerow species in particular.
- The start and end time of each survey has not been provided, and although weather conditions were provided in terms of cloud cover, wind and visibility there is no record of whether it was dry or if there was rain at any time, as this can affect survey findings. No surveys appear to have been completed in the evening and no wintering bird surveys were completed. Skylark is a common resident bird in Shropshire (refer to extract from the Shropshire Bird Report (2022) and location plan **in Appendix F** of my Proof) and it is therefore important to understand how skylark are using the Application Site and the proposed mitigation land across the breeding and winter period. It is notable that the EcIA (**CD 1.25** and **CD 1.23**) does not use standard terms for describing bird breeding ie non-breeding, possible,

probable, confirmed (see BTO extract of breeding codes in **Appendix E** of my Proof), which means there is effectively no raw bird survey details that the Council can assess to confirm whether the evaluation undertaken, and conclusions drawn are robust.

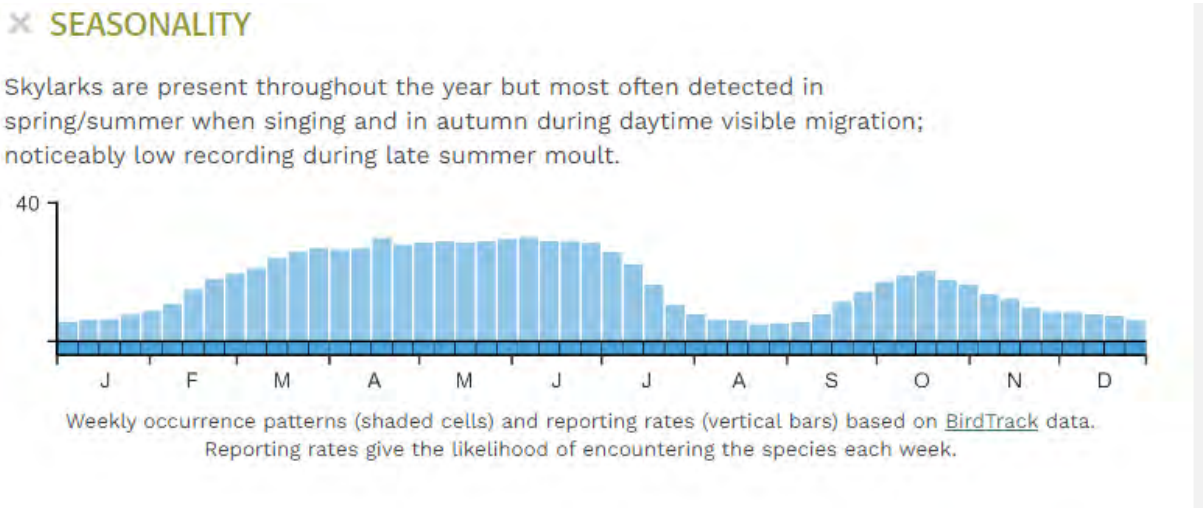
- The last survey visit was brought forward to 30th May 2022, with no explanation provided for the reasoning, given that skylark can have a third brood in July. The Limitations section states that there is minimal impact as late migrants were considered to be present. However, at the time of the surveys, there was evidence that whilst there was a good influx of early-migrants in March 2022 there were lower numbers of mid- and late-migrants present in the UK, as provided by the BTO Migration Blog for mid-April – May (April 2022[1]) stating "*However, this Spring has also seen some species arriving later and in lower numbers than would be predicted given the time of year."* (reproduced in **Appendix F** of my Proof) Furthermore, the Shropshire Bird Report (2022) reports confirmed breeding activity commencing on 27th March extending to as late as 21st July
- The EcIA (**CD 1.23**) states that the development was split into two parcels, but it is unclear how many transects were walked and by how many surveyors, the extent of the walked transects or the start and end times of each survey event. This is important as the accuracy of recordings drops after mid-morning and with the length of transect which is why surveys should be completed early as birds stop singing and forage, so evidence of breeding territories can be under-recorded. Given the size and nature of the Application Site (44 ha) and the results shown in the EcIA Figures reproduced in Appendix A, both the temporal and spatial extents were restricted and therefore subject to significant limitations. No observations of birds outside of the Application Site in adjacent bordering land have been made, and no observations of priority species such as skylark flying overhead, which indicates that the surveyors may not have assessed the full zone of influence of skylark territories at the site. These limitations were not clearly identified in the Limitations section (sub sections 4.2.6).
- There is no provision of specific observations in order to review territory analysis, or the numbers of registrations that have been used to support the number of territories being assessed.
- Desk study records do not appear to have been taken into account in the evaluation of the bird survey results (refer to **Figure 2** appended to my Proof, which shows current bird records held by the Local Ecological Records Centre (LERC). This shows that records of skylark were recorded in the same grid squares as the location of the Application Site and the proposed mitigation land.
- The importance of the Application Site for breeding birds was evaluated by applying Fuller, 1980 (**CD 10.33**). However, the EcIA method has also applied the geographical frame of reference as set out in Appendix 2 of the EcIA (**CD 1.23**) indicating that a regularly occurring, locally significant population of a species which is listed as a BAP would be conceivably valued at the County level. Taking into account survey limitations, arguably the value of skylark as an individual species on the Application Site has been undervalued at the collective breeding bird assemblage level as 'Local and Site' importance whereas a 'County' importance would address limitations in so doing apply the precautionary principle which is best practice in such circumstances. This proposed re-evaluation has taken into account the status of skylark in the local Berrington area (refer to **Appendix F** of my Proof) and the Revised Guidelines for the Selection of Local Sites in Shropshire (2017) (**CD 10.34**). The key criteria used in the evaluation are given in Table 1 below.

[1] BirdTrack migration blog (Mid-April - May) | BTO - British Trust for Ornithology

Table 1: Skylark Valuation

LWS criteria	Results for the Application Site
Any site that regularly supports 0.1% or more of the total British breeding population, or 1% or more of the total Shropshire breeding population, of any native species	There are 3,501 – 15000 breeding pairs in Shropshire. Therefore, 12 breeding pairs represents 0.324% of the Shropshire population in one year of survey with significant limitations.
Largest population in the County	Based on the 2020 Shropshire Bird Report, the Application Site would have identified the site as hosting the joint 5th largest population of breeding skylark. This could feasibly be considered of County Importance for this species alone.
Any site that regularly supports 0.1% or more of the total British non-breeding population, or 1% or more of the total Shropshire non-breeding population, of any species at any season	N/A
Any site which supports a breeding bird assemblage with a total score, calculated from tables below, which equals or exceeds the threshold site index values shown in the table	N/A
Any site which supports a regular breeding population of a rare or scarce Shropshire breeding bird species or a notable assemblage of species in a county context.	Skylark is not considered to be a rare or scarce Shropshire breeding species. It is not Sch1, nor at the edge of its range.
Any site consisting of semi-natural habitats with at least 50 breeding species or at least 65 wintering species, or where at least 110 species are recorded during the year.	43 species present of which 24 species considered to be breeding/holding territories. Wintering surveys not completed.

***Extract 2** (BTO) below shows the seasonality of skylark across a typical the year*



Extract 2

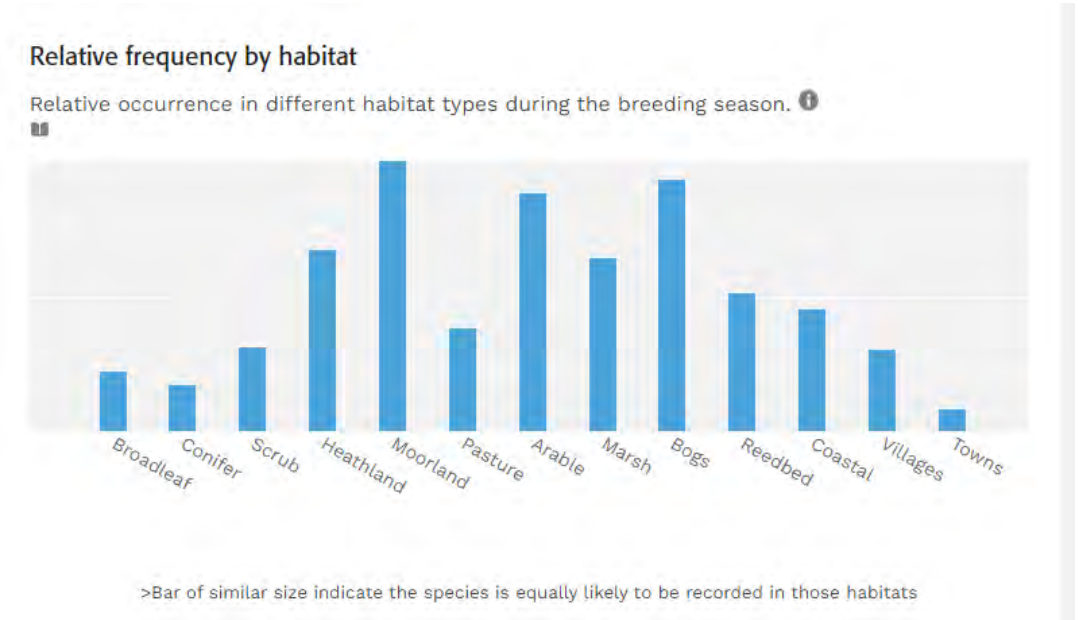
Skylark Conservation Status and Habitat Requirements

4.32. The UK Skylark population has declined by 63% since 1967. Skylark is a SoPI and red listed which is a measure of its conservation status (informed by factors such as decline, trends in population and range,

rarity, distribution and international importance are taken into account). Due to its large global range, it is in the category of Least Concern, however, it has declined by 67% since 1967. Furthermore, the State of Nature – England Report (2023) (**CD 10.34**) states that the abundance indicator for common breeding birds declined by 16% and within this group farmland birds have suffered the strongest declines of around 59% with the group of farmland birds which includes skylark suffering particularly strong declines with intensive management of agricultural land which constitutes 69% of England's area, being one of the most significant factors driving species population change. This further supports the importance of the value of skylark on the developments site.

4.33. This decline was largely caused by the move from spring to winter cereals, as well as by intensified grassland management (**CD 10.8**). Skylark is a farmland specialist which is ground nesting and needs suitable nesting habitat that can be provided within arable land using spring cereals or skylark plots in winter cereals, which are open enough to provide access to the ground and with vegetation that doesn't grow above 20-60cm in height. Skylark nest and forage in short vegetation with their highest densities present in lightly grazed grassland and lowland arable/mixed farming (**CD 10.8**) that provide a mosaic of sward heights (bar to 25cm) to meet both nesting and feeding requirements**.** Evidence provided in the research by Browne, Vickery and Chamberlain (**CD 10.14**) indicated that the highest densities of skylark and the highest habitat preferences were found for ungrazed grasslands and set-aside, with winter cereal, improved grasslands and set-aside showing the highest proportions of skylark on farmland in England.

4.34. Skylarks can nest successfully in late-cut hay meadows, or silage fields which are not cut before late May and subsequent cuts are at least seven weeks apart. They nest and forage in different habitats as shown in **Extract 3** (BTO), below. To avoid predators, they use open fields and avoid field boundary margins (located 10m or less from an existing field boundary fence line or hedgerow). Adult skylark feed on seeds and weedy winter stubble, and insects collected from pasture and crops particularly when they are nesting. Whilst skylark chicks are fed exclusively on insects and spiders in the first week of life.



Extract 3 (BTO)

4.35. BTO state that skylark need to make three nesting attempts between April and August (approx) to sustain their population. In areas where the vegetation is too dense and/or tall (i.e. winter crops), there may only be one brood which results in local population declines. (BTO). The effects of vegetation height on skylark abundance support the view that increases in winter cereal (with loss of spring cereal) has resulted in a reduced number of breeding attempts each year. Therefore, where there is very limited suitable alternative nesting habitat, skylark may curtail their breeding attempts early (**CD 10.14**)

4.36. BTO research has confirmed that there are two preferred habitat types (broadly, arable land and grassland) as follows:

- *Arable*: Spring cereals (not oilseed rape as this grows too high too quickly) in an arable plot provides ideal nesting habitat. Creating protected (from arable purposes) plots which are effectively undrilled patches or un-sprayed patches in winter cereal fields can maximise nesting success. Furthermore, winter stubble can provide winter feeding habitat particularly cultivation is delayed until March. As skylark benefit from having a good insect resource, any measures that increase this are beneficial, for instance beetle banks through the middle of arable fields.
- *Grassland*: hay meadows and unimproved grasslands provide safe nesting habitats and have high densities of skylark. Silage fields are used by nesting skylark but this is successful only if there is no cut between early April and end of May (inclusive). Subsequent cuts are no less than seven weeks apart to ensure the third and fourth broods are successful. Skylark can also nest in low stock rate grazing pastures that create a tussocky sward during the skylark peak nesting season (Ie April to August). Generally, heavy grazing makes a sward unsuitable for nesting and also detrimental for food abundance providing poor habitat for foraging (**CD 10.36**)

4.37. Farm Wildlife is a partnership of organisations (such as buglife, butterfly conservation, RSPB, Plantlife, the Wildlife Trusts) working to provide best-practice management advice on farmland. Guidance produced by Farm Wildlife (**CD 10.6**) identifies that bare patches (of 16m ^{2} created in cereal fields) can support skylark foraging grounds. The primary purpose in creating and maintaining skylark plots is not to provide nesting habitat but to provide areas that they can forage within easily throughout the breeding season and thus increase the number of successful broods raised and to halt the decline of this farmland bird SoPI.

4.38. These plots are required in areas of extensive winter crops, when tall vegetation that develops in most arable fields from June onwards means that skylark cannot land as there are no bare patches to do so. Two plots per hectare of winter cereals has resulted in an increase of 50%. The most benefits are seen in open fields of more than 5 ha in size, with limited if any field boundary vegetation as this can increase the risk of predation. For the same reasons, plots need to be away from field boundaries, tram lines and structures such as telegraph poles and substantial fence lines.


Source: **CD 10.6**

4.39. The Government website AB4: Skylark plots - GOV.UK (www.gov.uk) (**CD 10.7**) states that the creation of skylark plots works best in large, open winter cereal fields, preferably where skylarks are present or have been in the past. Avoid fields that are bordered by trees or next to woods as this increases the risks of predator attack." In addition, to minimise attack on nests from predators, the plots should be away from tramlines in a field ie in the middle of a field "*at least 50m from field boundaries and margins*." (**CD 10.6**).

4.40. Research cited in CIEEM (**CD 10.22**) is that skylark is often undervalued, and signs of breeding such as male skylark singing over solar farms may not indicate there is a nest or a viable territory but rather an indication of strong nest-site fidelity to the land after development takes place, which diminishes in the early years of operation as skylark respond to the reduction in habitat suitability and no longer use solar farm sites for breeding. This article also highlights that the skylark plots recommended by the Natural England , Farm Wildlife and RSPB (**CD 10.6, 10.7 and 10.8**) do not provide nesting sites but rather new foraging areas rich in invertebrates which can increase the density of territories held, citing Donald 2004,densities of 0.1 to 0.4 territories/ha in cereal crops increasing to 0.8 territories/ha in fields with skylark plots, thereby indicating that it is highly unlikely that 1 ha with additional skylark plots could support additional displaced territories.

4.41. If the same territory assumption is applied to the Application Site, on the basis that the current habitats and land management are not resulting in lower than average densities, it would be reasonable to expect approximately 11 territories (ie 0.25/ha) with complete displacement of all territories that would mean the surrounding habitats would have to be at least equivalent in size, however the proposed mitigation land is currently pastoral farmland/rough grazing so the density of territories is more in the region of 0.06 to 0.18 thus the calculated land requirements set out in the Mitigation and Management Plan (**CD 1.15 and CD 1.16**) although theoretically could accommodate the skylark population, the article does state that caution needs to be exercised and baseline surveys are required to assess likely carrying capacity of bordering land that may already have no capacity to absorb displaced skylark. Cumulative impacts are also flagged as being critical to understand if developments in the area could diminish capacity further. The success of this approach is based on the premise that the site can accommodate all displaced skylark and there is no impediment to this. The fact that the status of skylark on the Mitigation land is unknown is a fundamental and significant omission in the efficacy of the proposals.

4.42. The Mitigation and Management Plan (**CD1.15 and CD 1.16**) meet the requirement of being over 5 ha in size, but the mitigation land has field boundaries, scattered trees and woodland in amongst good quality semi-improved grassland refer to **Figure 3 and 4** appended to my Proof, effectively breaking up the sightlines. Furthermore, for the mitigation land to provide both foraging and nesting habitat for skylark, one option presented for the land is for it to be converted back to arable land. This would likely require ploughing and application of herbicide. Grassland habitats store tonnes of carbon in their soils but this can be released through disturbance as a result of conversion to arable. Furthermore, it is unclear in the

evidence provided if the impacts associated with this activity have been fully assessed with respect to the designated sites located in proximity including Berrington Pools SSSI and Ramsar site.

Cumulative Impact Assessment

4.43. Section 6.3 of the EcIA (**CD 1.23**) states:

There are no other developments within the area which could have cumulative impacts in associated with the proposed development. In addition, no negative residual effects have been identified as a result of the proposed development.

4.44. There does not appear to be any evidence of the cumulative impact assessment presented in the EcIA, for example the list of sites/developments considered: other solar farms/potentially disturbing developments to skylark in the locality, developments with planning consent have not been provided so it is unclear as to how this conclusion was arrived at. **Figure 5** appended to my Proof shows some of the solar farms located up to 5km from the Application Site.

4.45. Natural England (2017) (**CD 10.36**) reviewed over 400 scientific documents and grey literature from non-governmental and governmental organisations and found that solar farms on farmland may be a particular risk to open habitat species such as skylark with "*the potential for disturbance resulting in reduced opportunities for foraging, breeding, and roosting*." (citing as its source Birdlife Europe, 2011), and "*the potential for cumulative impacts of multiple solar PV developments in a concentrated locality is highlighted, which could negatively affect bird species at the population level*." In the same document it is clear that whilst the RSPB (as cited in Birdlife Europe, 2011) advocates solar technologies, it advises against deployment near protected areas or water features. The Application Site is located near open and running water habitats and with three other solar farms between 1km and 3km from its boundary.

4.46. The PPG for renewable and low carbon energy 2015 (**CD 6.2)** states that it is important to note that the need for renewable low carbon energy does not automatically override environmental protections and cumulative impacts of large-scale solar farms require consideration.

Suitability of Proposed Mitigation Land

4.47. It is important to preface this section with the fact that there is substantial scientific research to support a robust evidence base for skylark habitat preferences, however there is conflicting research relating to the efficacy of mitigation measures and their management, and in particular mitigation for solar farms despite work completed by Solar Energy UK (**CD 10.2**). As such, my Proof draws from individual papers, but also the findings of the Conservation Evidence team's database which is a searchable (**CD 10.37**), provides the documented evidence categorised based on the effectiveness and the certainty (the strength of evidence). The Conservation Evidence team is based at the University of Cambridge, with global collaborators. The searchable platform has been assessed by a combination of several expert's opinions rather than one paper's findings and represents a cumulative evidence synthesis rather than relying only a single source.

4.48. The mitigation land strategy (**CD 1.15 and CD 1.16**) has not been defined with sufficient certainty to conclude that skylark impacts arising as a result of the development of the solar farm on the Application Site have been compensated and indeed, whether they would in and of themselves, result in adverse impacts on the mitigation land ecology.

4.49. This possibility has not been evidenced with respect to the habitat (good quality semi-improved grassland) and species supported by the mitigation land or the designated sites located in close proximity (refer to **Figure 1, 3** and **4** appended to my Proof). The mitigation land is also of a different character in terms of there being field boundaries and scattered trees and woodland/ woodland copses within and bordering the mitigation land which is likely to restrict skylark use due to the sightlines being cluttered.

This would remain the case irrespective of any changes to land use within the plot as these will remain unchanged within the proposed mitigation strategy.

4.50. It is understood that shooting takes place across the Application Site and the mitigation land which is likely to affect how skylark use both sites. The Application Site appears to support high suitability for skylark, in the form of open water areas, semi-natural habitats and large open arable (winter cropped) fields, which is different to the mitigation land.

4.51. The evidence suggests that adverse effects from shooting in the defined season (approx Oct to Jan inclusive) is unlikely to be affecting the breeding skylark population on the Application Site significantly, but as there have been no wintering bird surveys to confirm how skylark are using both areas across the winter period, it is not known how shooting impacts the likelihood of a skylark population and the efficacy of skylark displacement into an area that is the main location for the shoot.

4.52. Montag et al (**CD 10.2**) reviewed 11 solar farms in the south of England and compared them to "control" plots nearby. This research identified that there "*was no overall difference in the numbers of skylark territories when comparing solar plots to control plots, although one site showed a significantly higher number within the control plot. Nesting skylarks were confirmed within several of the control plots but at only one solar plot. The nest within the solar plot was located within the security fencing surrounding the array, but outside of the actual footprint of the array. The study shows that although skylarks may not nest beneath solar arrays, they do nest within solar farms and they do incorporate solar farms into their territorial boundaries for foraging*." This confirms that the options to accommodate skylark plots within the Application Site is a potential option that could address the adverse impacts on the skylark population. This would be contingent on whether it is possible to increase the area originally identified as safeguarded for skylark (Site Layout Plan in **CD 1.23**) from approx 3 ha to a minimum of 6 ha located over 20m from any field boundary/vegetation line. This was the Council's original position during consultation with the applicant in February to March 2023 (refer to Section 2 of my Proof).

4.53. There is uncertainty as to what mitigation option is to be adopted, the S106 obligation or Unilateral Undertaking will need to include details of the final and fixed option with sufficient detail so it is clear what is required in terms of the specification for grazing stocking rates / desired vegetation height/structure at what time, how the proposed nesting plots will be enhanced to attract nesting skylark and how they will be protected from grazing cattle without increasing predator suitability through the installation of fences. In accordance with guidance provided by the government (**CD 10.38)** Section 106 obligation needs to precisely set out the requirements which it imposes on the party or parties giving the covenant in sufficient detail (including the parts of the land to which they are to apply, where relevant) to make them enforceable.

4.54. The mitigation as presented in the submitted documentation (**CD 1.15** and **CD 1.16**) has not been subject to any desk based or field based ecological surveys including those that would establish the current status for breeding bird surveys and in particular the SoPI skylark. This information together with the foregoing is required to confirm that the land is:

a) Suitable and that it has sufficient carrying capacity to accommodate the displaced skylark from the Application Site.

b) Whether any change to the existing agricultural practices on the site is required including change to the existing habitat and the impact that this could have on the non-priority semi-improved grassland of a good quality.

c) Suitable for the proposed changes to habitats/land management ie reversion to arable, and whether this would result in impacts requiring assessment or any separate consent/approval given its proximity to Berrington pool SSSI and Midland Meres and Mosses Phase 1 Ramsar site

4.55. Donald et al (2002) (**CD 10.39)** states that the research "*supports previous work suggesting that nest survival rates in farmed grassland are low due to the high rates of nest loss to agricultural operations and to trampling by livestock*." Measures taken to reduce the number of cuts taken from silage fields and so lengthen the gaps between such cuts to allow birds time to nest and raise chicks to independence (a total period of around 32 days) are likely to improve the species' breeding success on grassland. The promotion of lower-density stock grazing would have the double effects of raising sward heights to a level suitable for nesting attempts to be made (many pasture fields are too heavily grazed for birds to have sufficient cover to build nests) and reducing the number of nests lost to trampling.

4.56. Previous assessments of the value of cereal fields as a breeding habitat for Skylarks have typically been based only on the generally low density of territories present and the assumption that food availability is low and starvation rates therefore high. The high nest survival rates of Skylarks in cereal fields relative to other crop types suggest that this is in fact potentially a very productive breeding habitat. Measures to increase territory densities in cereal crops, such as the provision of safe nesting sites away from tramlines, are likely to be very effective in the conservation of this species since cereals hold a high proportion of the overall population (**CD 10.16**)

4.57. Fox (2022) (**CD 10.22**) states "*It is common to see ecologists propose a basic metric such as two plots for each skylark territory displaced*." It is not clear how this is decided upon and appears to confuse the 2 plots/ha rate of RSPB farmland management advice with a suggested rate per displaced territory.

4.58. Territory densities in cereal crops vary between approximately 0.1 and 0.4 territories/ha (**CD 10.40)**, increasing up to 0.8/ha with plots, so it is highly unlikely that 1 ha with plots would be able to support an additional displaced territory. As the density of skylark is not known on the proposed mitigation land it is not possible to confirm if the area provided will be sufficient. We therefore argue against using this rate as we do not know the density of skylark on the mitigation land, due to lack of survey data, 1 plot per 0.5ha does not necessarily provide the additional resource to support an increased number of skylark (the plots do not necessarily provide nesting habitat but provide a foraging resource to support nesting attempt).

4.59. Skylark are deterred from feeding or breeding in areas close to fencing as raptors use them as perches to scan for prey so fencing needs to be avoided in mitigation land for skylark. However, fenceposts and other structures may be used by male birds during the breeding season to alert nesting females.

4.60. The creation of bare patches in good quality grassland would result in reduction in the inherent value of that habitat in its own right. Plots in good quality grassland arable field are also not used preferentially to nest in but to forage in. Indeed, I cannot see the logic of providing skylark 'plots' on permanent pasture. Skylark plots are undrilled areas in winter cereals to provide enhanced foraging opportunities and not typically created in pasture/good quality semi-improved grassland. Within grassland, 'plots' could theoretically be achieved by fencing off to prevent trampling/predation by cattle but there is little evidence over the efficacy of this in terms of improving skylark populations by increasing the number of successful broods.

4.61. Skylark will feed and nest on permanent pasture subject to a late hay crop or if it is grazed to have a tussocky structure. This would be promoted by a low stocking rate and cessation of grazing at certain periods. Alternatively, if it is a silage crop, it should not be cut before August due to the possibility of a 4th brood in June/July and as a minimum not between April to the end of May. Subsequent cuts must be at least seven weeks apart to enable the success of later nests. However, without a breeding bird survey on the Mitigation land, it is currently unknown how many skylark territories are currently held, why that is the case and how it could be improved by a change in stocking densities and/or grassland management.

4.62. The submitted Mitigation Strategy and accompanying Plan (**CD 1.15** and **CD 1.16**) present two options:

1) Continue use as pasture but reduce grazing stock density, remove cattle from the plot during the

skylark nesting season (April to August) and/or install temporary electric fencing to keep cattle away from protected skylark plots;

2) Revert the mitigation land to arable use and set aside min 6ha for breeding and foraging skylark with the creation of traditional 16m^2 plots (undrilled plots of bare ground) , with one per 0.5ha to provide foraging areas. The crop would not be harvested until August to avoid nesting period.

4.63. Certainty over which options would be implemented is necessary to conclude that the proposed solar farm scheme's impact on skylark is compensated for. This needs to be based on a robust skylark baseline being available for the mitigation land. Whilst the proposed options set out in the Mitigation Strategy and Management Plan (**CD 1.15** and **CD 1.16**) are thorough and based on a reference to wide research evidence base, without an accurate baseline status of the site, I cannot see how an appropriate mitigation strategy can be arrived at.

4.64. Systematic reviews and conservation evidence has identified that the UK has significantly higher densities of farmland birds on fields removed from production and under set-aside designation than on conventionally farmed fields in both winter and summer (**CD 10.37**)

4.65. In conclusion, there is a large amount of research including systematic reviews that indicates the success of skylark mitigation off site varies. It is critical to understand the condition and status of the off-site, and for the proposed strategy to be subject to a management and monitoring plan with adaptive management actions integrated. There is no current evidence that skylark mitigation within a solar farm is successful unless there are large areas of land that can be retained which provides suitable nesting and foraging habitat and enough of it to sustain the skylark population affected.

5. Key Findings and Conclusions

5.1. In conclusion, the proposal does not meet the requirements of the para 185b of the NPPF (December 2023), Core Strategy Policy CS17 or SAMDev Policy MD12. In addition, the emerging local plan policies in Part 3 of Policy DP26 and DP12 are not fully met.

5.2. My Proof has demonstrated that there is uncertainty with respect to the ecology baseline of the Application Site, the assessment of impacts thereon, how on-site mitigation has been assessed and alternative options discounted, as follows:

- I have highlighted a number of drafting errors and omissions in the reporting of the findings and presentation of survey results.
- The breeding bird survey completed on the Application Site was not in accordance with best practice and therefore the number of skyla10.rk territories recorded may not be accurate.
- No wintering bird survey have been completed on the Application Site.
- The evidence indicates that the evaluation of skylark on the Application Site has been undervalued. As such I do not agree with the findings of the EcIA (**CD 1.23**) which concludes: "*no significant effects on the population at local, regional or national levels are anticipated as a result of the development. This is due to similar alternative habitats being present within the immediate area*." Evidence suggests that there would be significant effects at the County level.
- There have been no updated field surveys to consolidate the findings of the breeding bird surveys in 2022 and to address the limitations identified.
- The EcIA (**CD 1.23**) incorporated protected skylark areas within the curtilage of the Application Site but this amounts to less than half the land required as a minimum, to address the loss of skylark nesting and foraging habitat.
- There does not appear to be any evidence of the cumulative impact assessment findings including the in-combination assessment of other solar farms located up to 5km from the Application Site.
- The application was screened out of EIA by the Council, but it is not clear how any direct correspondence that the applicant has had with Natural England has been addressed

5.3. There is also uncertainty with respect to the ecology and land use of the proposed mitigation land, as follows:

- There has been no ecological baseline established by field survey completed on the proposed mitigation land, including but not limited to habitat classification, breeding birds, wintering birds, reptile or great crested newt.
- It is notable that waterbodies are present within and bordering the mitigation land, but the great crested newt surveys completed for the proposed development did not include all ponds relevant to assess impacts on great crested newt as a result of the mitigation proposals, because they were completed in 2021, and the proposed off-site mitigation land was only considered following consultation responses with the Council in early 2023. The proposals set out on the mitigation land could adversely affect this species which carries the highest level of protection afforded under the Conservation of Habitats and Species Regulations 2017, as amended.
- Shooting, likely to result in disturbance to skylark across the winter period, occurs across the mitigation land. This disturbance and the nature/character (field separated by field boundaries, with areas of woodland) of the proposed mitigation land does not offer a highly suitable area for skylark to hold territories in, because the land is cluttered and does not provide clear sightlines in which to sustain up to three broods each year. For the skylark population to be sustained, the mitigation proposal needs to be effective in providing a highly suitable alternative habitat for nesting and foraging

and this needs to be of sufficient size to accommodate at least 11 skylark territories.

5.4. As demonstrated in Section 2 of my Proof, there has been an extensive level of consultation between the applicant and the Council from submission of the first version of the EcIA and in particular since the version 2 of the EcIA was submitted in January 2023 (**CD 1.23**) and the Shropshire Southern Area Planning Committee was held on 9th May 2023. The mitigation land proposal was only finalised and provided to the Council a matter of days before the Planning Committee was held.

5.5. Based on the evidence provided by the applicant, it is not possible to conclude that the adverse effects on the skylark population using the Application Site have been accurately evaluated, or that the mitigation hierarchy has been applied appropriately.

5.6. As such, it is not possible for me to conclude that the effects have been sufficiently compensated for in the land to the north. In particular, the assumption with respect to the number of skylark territories present on the Application Site (due to the limitations associated with the breeding bird survey methodology applied) and the assumption that these would be displaced to the proposed mitigation/compensation land to the north is founded on significant uncertainty, not least that there will be sufficient carrying capacity on this land for the displaced skylark. This is regardless of the amount of land subject to a planning condition or Section 106 obligation, because there is currently no accurate baseline data to support this conclusion.

6. Summary of Evidence and Declaration

Qualifications, experience and role

6.1. My name is Diane Corfe. I am a Chartered Biologist and full member of CIEEM with over 30 years' experience in consultancy across a range of sectors with an established specialism in ecological impact assessment. A summary of my experience, qualifications and role on the Berrington Solar Farm is contained in my full proof of Evidence.

Scope of Evidence and The Case for the Council

6.2. The Decision Notice for the proposed development at Berrington was issued on 16th May 2023 with the following reason for refusal on ecological grounds:

"Skylarks are protected under the EU Birds Directive 79/409/EEC. The application affects land used for Skylarks for nesting. The applicant proposes to mitigate for the loss of nesting opportunity by providing protected plots on land to the immediate north of the site. However, this land if (sic) of a different character and the general area is also used for seasonal shooting which may coincide with the Skylark nesting season. It is considered that the applicant has not demonstrated sufficiently that the proposed off-site mitigation would provide an appropriate safe and undisturbed environment for successful Skylark nesting. The proposals are therefore contrary to Core Strategy CS17 and SAMDev policy MD12".

6.3. The Scope of Evidence centres around the accuracy and robustness of the ecological baseline established for the Application Site against which impacts have been assessed and a lack of baseline established for the proposed mitigation land which has been identified to provide mitigation measures to address adverse impacts affecting skylark. As such, the efficacy of the proposed mitigation in the land to the immediate north of the Application Site is uncertain, in which case Core Strategy CS17 and SAMDev policy MD12 are not fully met.

6.4. There is an extensive amount of published research on skylark ecology, habitat preferences and mitigation options. However, despite the monitoring work completed by Solar Energy UK (**CD 10.3** and **CD 10.12**), there is no definitive successful monitoring data available for solar farm developments affecting skylark populations.

Conclusions

6.1. Based on the evidence provided by the applicant, it is not possible to conclude that the adverse effects on the skylark population using the Application Site have been accurately evaluated, or that the mitigation hierarchy has been applied appropriately.

6.2. As such, it is not possible for me to conclude that the effects have been sufficiently compensated for in the land to the north. In particular, the assumption with respect to the number of skylark territories present on the Application Site (due to the limitations associated with the breeding bird survey methodology applied) and the assumption that these would be displaced to the proposed mitigation/compensation land to the north is founded on significant uncertainty, not least that there will be sufficient carrying capacity on this land for the displaced skylark. This is regardless of the amount of land subject to a planning condition or Section 106 obligation, because there is currently no accurate baseline data to support this conclusion.

Declaration

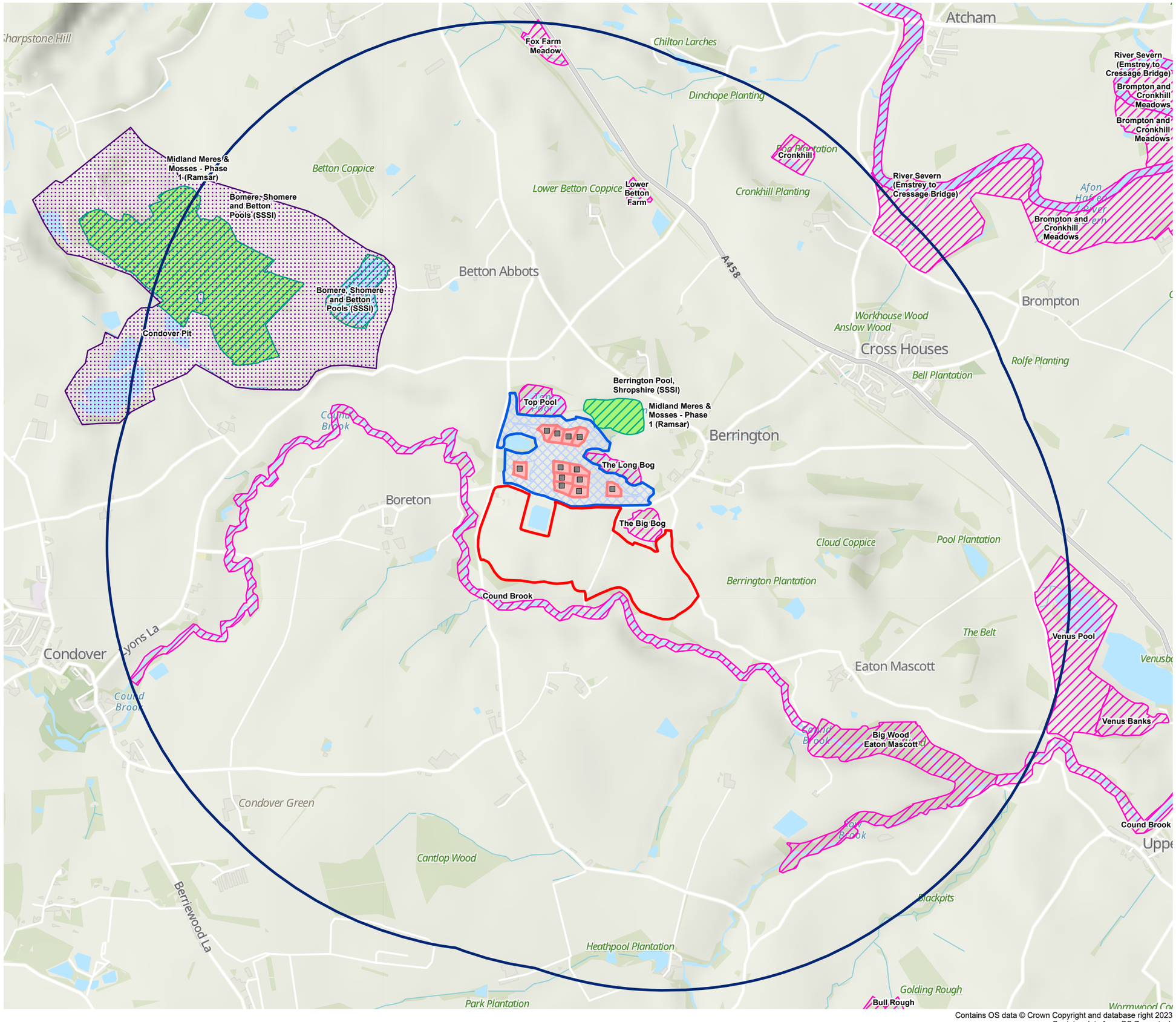
6.3. My Proof of Evidence includes all facts which I regard as being relevant to the opinions which I have expressed, and the Inquiry's attention has been drawn to any matter which would affect the validity of that

opinion.

6.4. I believe the facts I have stated in this Proof of Evidence are true and that the opinions expressed are correct.

6.5. I understand my duty to the Inquiry to assist it with matters within my expertise and I believe I have complied with that duty.

FIGURES



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Indicative Proposed Solar Farm to the west of Berrington (22/04355/FUL)

2km Search Area

Skylark Mitigation

Indicative Mitigation Field Boundary

Mitigation 50m Buffer

Mitigation Area

Mitigation Plot

Statutory Designated Sites

Sites of Special Scientific Interest (SSSI)

Ramsar Sites

Non-Statutory Designated Sites

Local Geological Sites

Local Wildlife Sites

Source: Site boundaries taken from ADAS Planning report ref BRT69105-1173 (00), May 2023).

Project Details	WIE20615-100: Berrington Solar Farm
Figure Title	Figure 1: Statutory and Non-Statutory Designated Sites
Figure Ref	20615100-WAT-XX-XX-GS-N-750001
Date	January 2024
File Location	N:\Projects\WIE20615-100\9_GIS\WIE20615-100_GIS_EC

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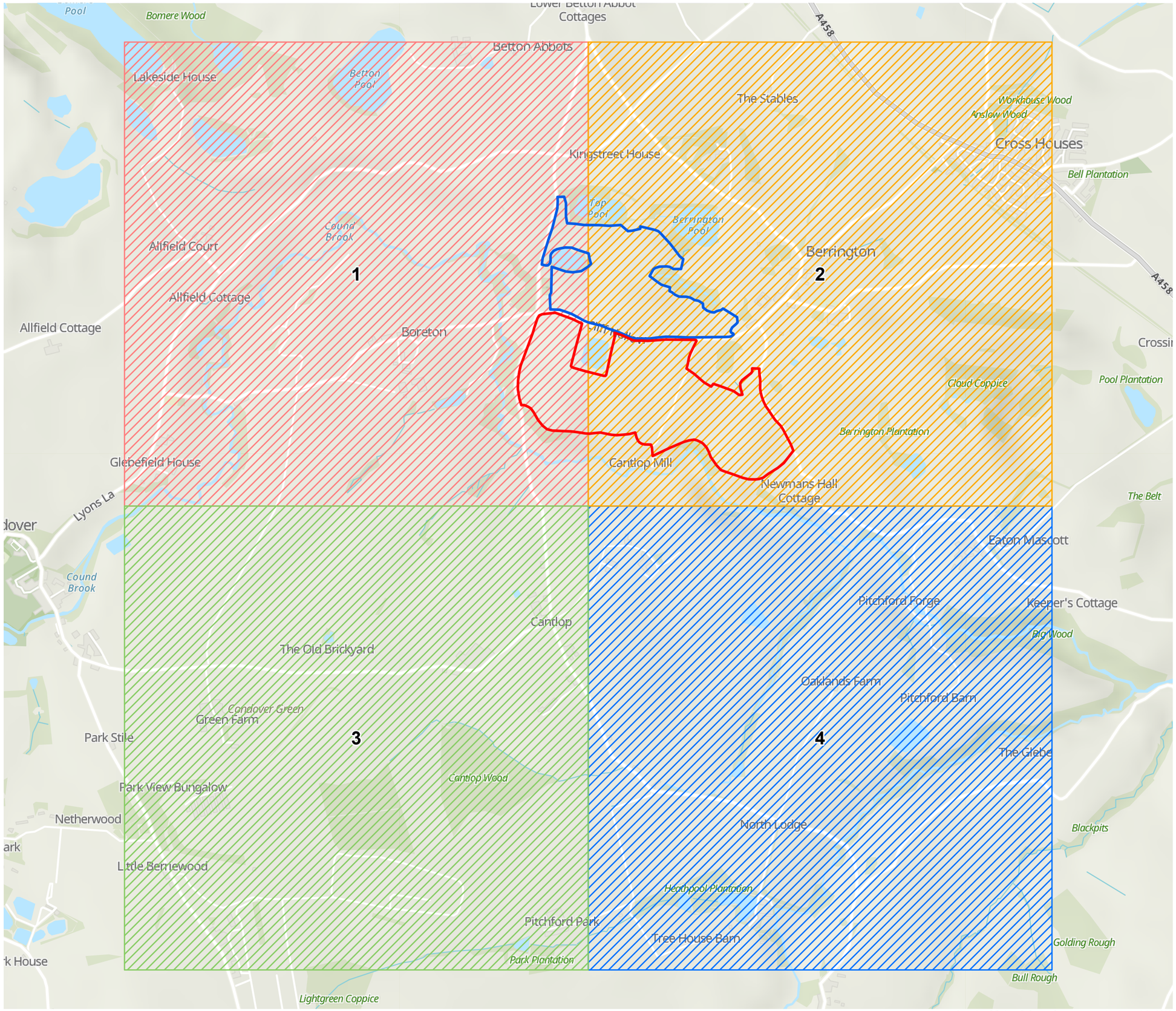

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Indicative Proposed Solar Farm to the west of Berrington (22/04355/FUL)

Indicative Mitigation Field Boundary

Bird Species Records (Telford Ecological Data Service (TEDS), 2013)

Grid Square 1	
Schedule 1 Species	**Red List Species**
Bittern	Cuckoo
Greylag Goose	Yellowhammer
Quail	Spotted Flycatcher
Redwing	House Sparrow
Fieldfare	Woodcock
Brambling	Curlew
Green Sandpiper	Lapwing
Barn Owl	Skylark
	Starling
	Mistle Thrush

Grid Square 2	
Schedule 1 Species	**Red List Species**
Greylag Goose	Yellowhammer
Redwing	House Sparrow
Fieldfare	Lapwing
Barn Owl	Skylark
	Starling
	Mistle Thrush

Grid Square 3	
Schedule 1 Species	**Red List Species**
Redwing	Yellowhammer
Fieldfare	House Sparrow
	Skylark
	Starling
	Mistle Thrush
	Lapwing

Grid Square 4	
Schedule 1 Species	**Red List Species**
Greylag Goose	Yellowhammer
Redwing	House Sparrow
Fieldfare	Skylark
	Starling
	Mistle Thrush
	Lapwing

N

0 0.2 0.4 0.8 km

Project Details	WIE20615-100: Berrington Solar Farm
Figure Title	Figure 2: Bird Species Records
Figure Ref	20615100-WAT-XX-XX-GS-N-750002
Date	February 2024
File Location	N:\Projects\WIE20615-100\9_GIS\WIE20615-100_GIS_EC

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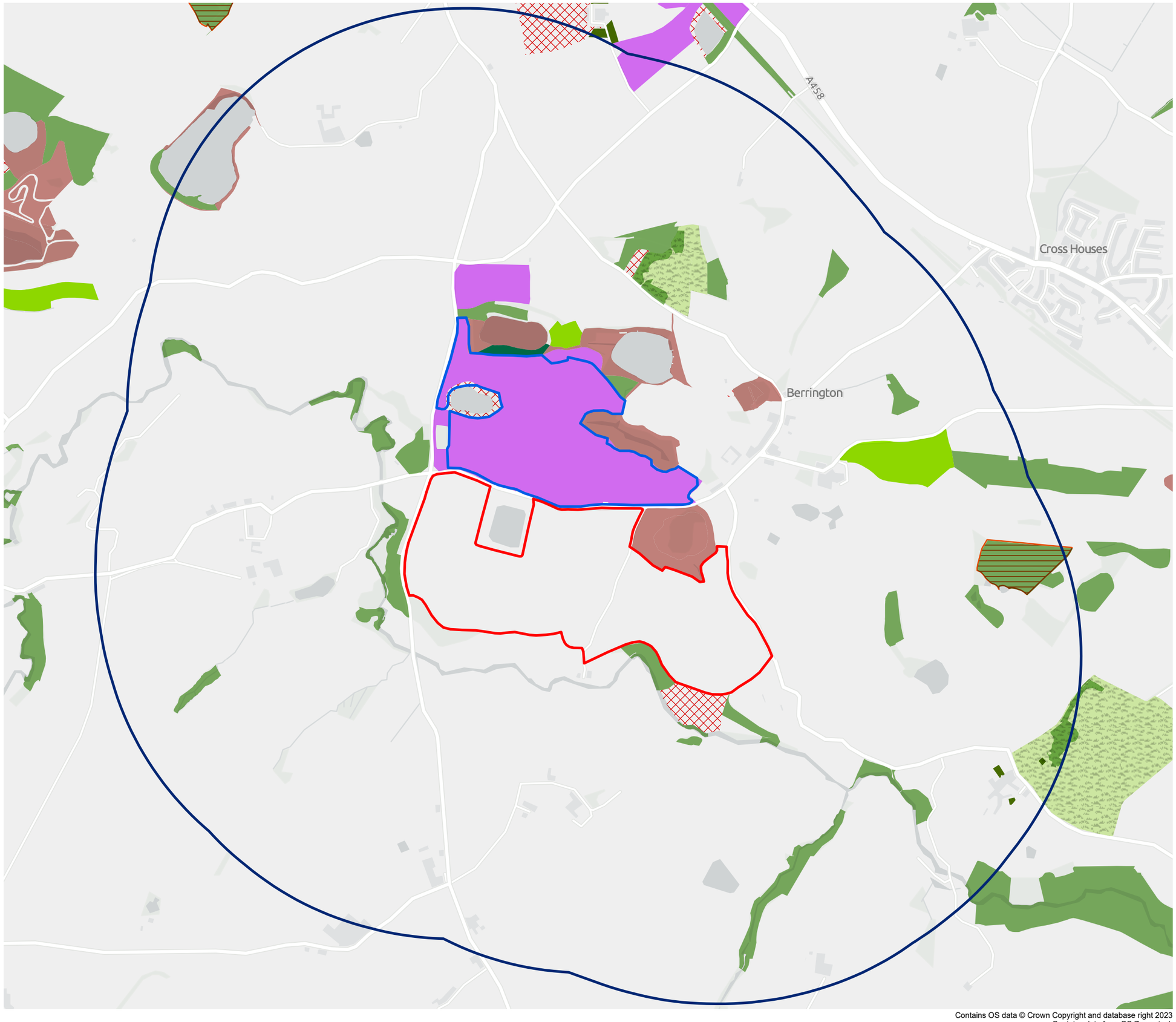

Indicative Proposed Solar Farm to the west of Berrington (22/04355/FUL)

Indicative Mitigation Field Boundary

1km Search Area

Ancient Woodland © Natural England

Ancient Replanted Woodland

Priority Habitats Inventory (England) © Natural England

Priority Habitat Inventory - Deciduous Woodland (England)

Priority Habitat Inventory - Good quality semi-improved grassland (Non Priority) (England)

Priority Habitat Inventory - Lowland Fens (England)

Priority Habitat Inventory - Lowland Meadows (England)

Priority Habitat Inventory - No main habitat but additional habitat exists (England)

Priority Habitat Inventory - Reedbeds (England)

Priority Habitat Inventory - Traditional Orchards (England)

Woodpasture and Parkland BAP Priority Habitat (England)

N

0 50 100 200 300 400 500 m

Project Details	WIE20615-100: Berrington Solar Farm
Figure Title	Figure 3: Priority Habitat Mapping from Desk Study
Figure Ref	20615100-WAT-XX-XX-GS-N-750003
Date	January 2024
File Location	N:\Projects\WIE20615-100\9_GIS\WIE20615-100_GIS_EC

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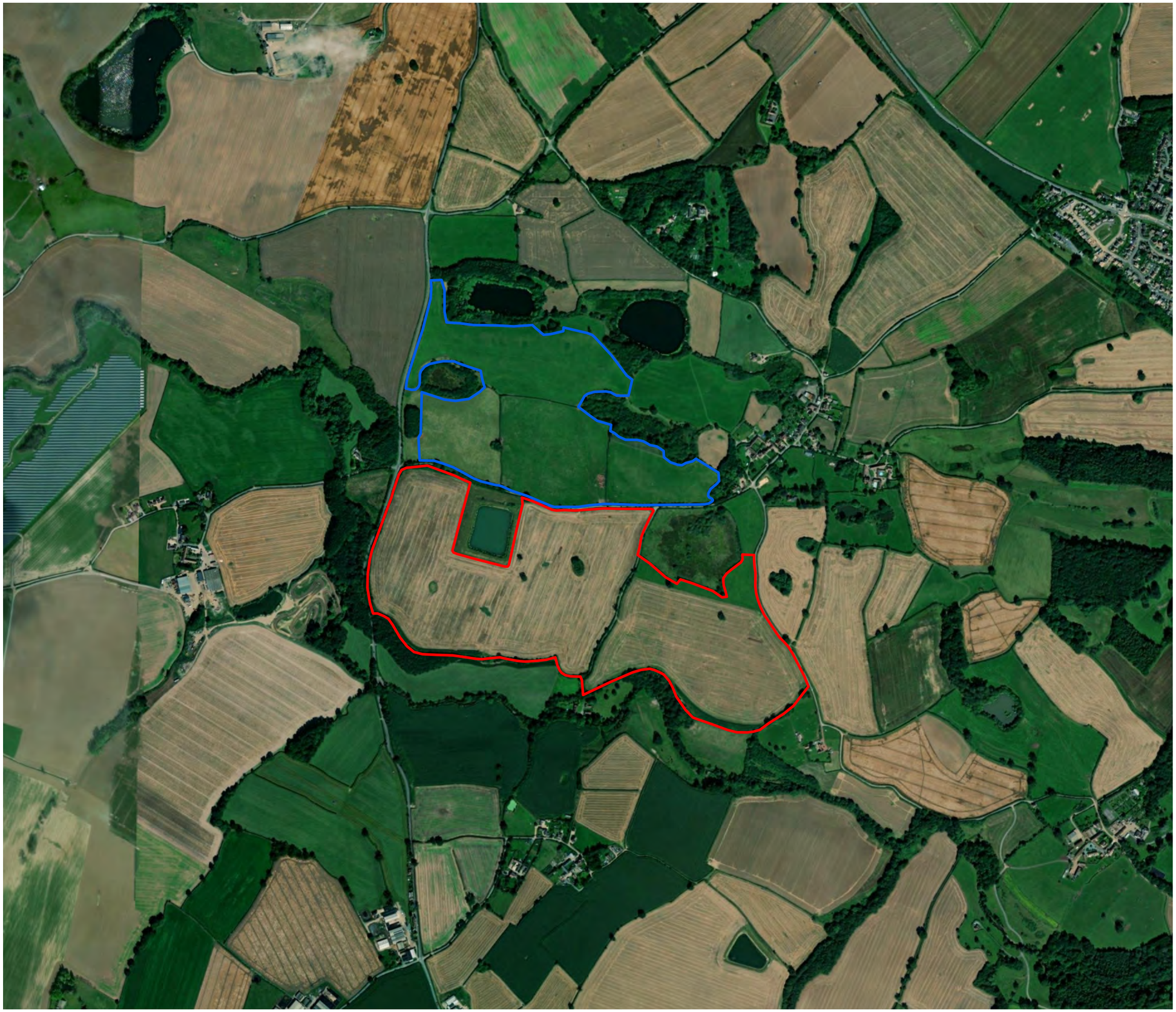

Indicative Proposed Solar Farm to the west of Berrington (22/04355/FUL)

Indicative Mitigation Field Boundary

Source: Site boundaries taken from ADAS Planning report ref BRT69105-1173 (00), May 2023).

N

0 50 100 200 300 400 500 m

Project Details	WIE20615-100: Berrington Solar Farm
Figure Title	Figure 4: Aerial View
Figure Ref	20615100-WAT-XX-XX-GS-N-750004
Date	January 2024
File Location	N:\Projects\WIE20615-100\9_GIS\WIE20615-100_GIS_EC

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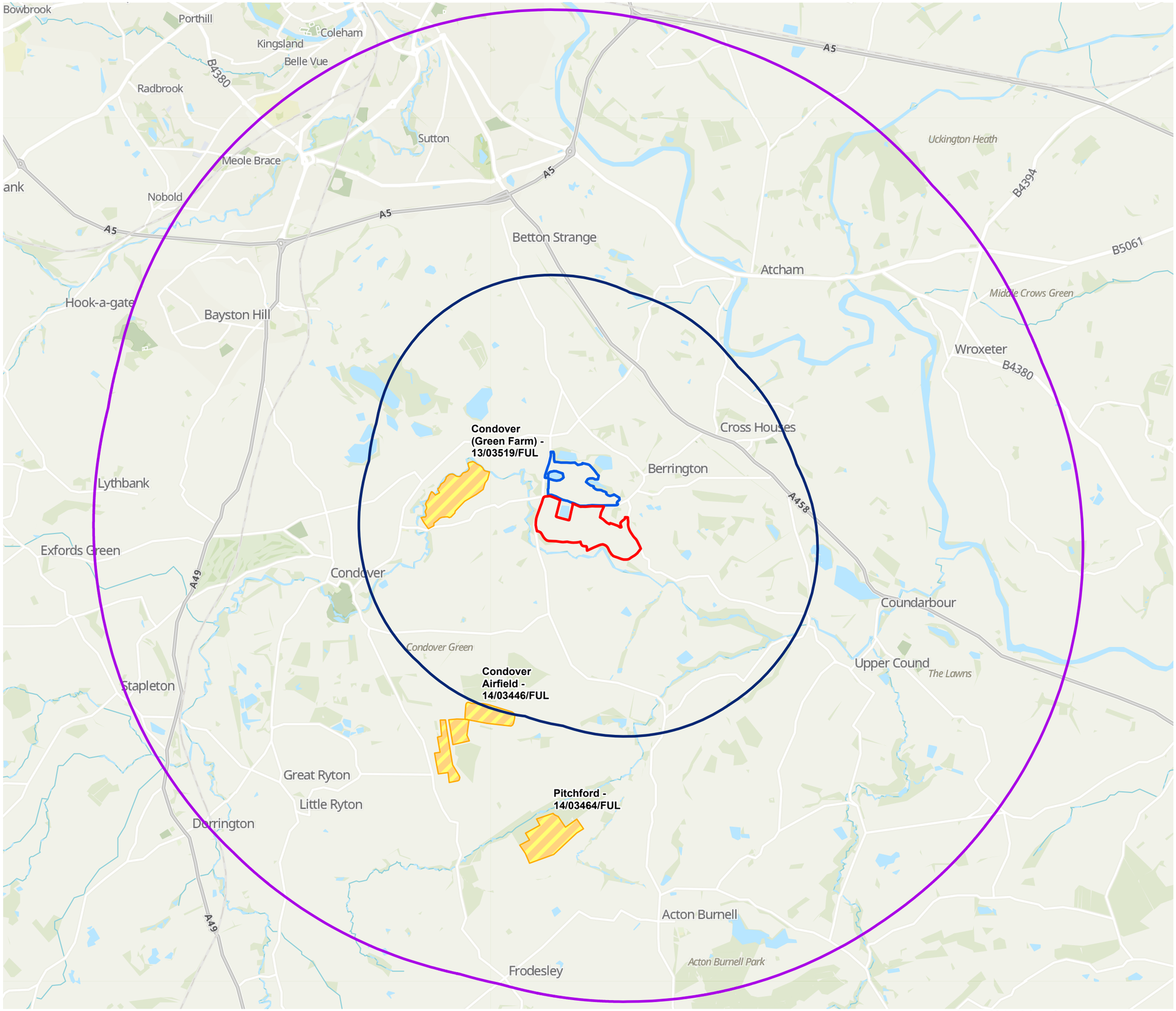

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- Indicative Proposed Solar Farm to the west of Berrington (22/04355/FUL)
- Indicative Mitigation Field Boundary
- 2km Search Area
- 5km Search Area
- Other Solar Farms

Source: Site boundaries taken from ADAS Planning report ref BRT69105-1173 (00), May 2023). Solar Farm information received from the Shropshire ecologist.

N

0 0.5 1 2 km

Project Details	WIE20615-100: Berrington Solar Farm
Figure Title	Figure 5: Other Solar Farms in proximity to the Proposed Berrington Solar Farm
Figure Ref	20615100-WAT-XX-XX-GS-N-750005
Date	January 2024
File Location	N:\Projects\WIE20615-100\9_GIS\WIE20615-100_GIS_EC

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APPENDICES

A. Breeding Birds Survey Figures (reproduced from Appendix 7 of the Ecological Impact Assessment, July 2022 (CD1.25) and January 2023 (CD1.23)

Econergy International Ltd

Solar PV Development,
Berrington Farm, Shropshire

Breeding Birds Survey
Red Listed

- Site boundary
- GF - Greenfinch
- Li - Linnet
- MT - Mistle Thrush
- S. - Skylark
- Y. - Yellowhammer

Drawn by Paul Taylor 17/07/2022, Verified by Daniel Watson 17/07/2022

0 50 100 150 200
Metres

Scale 1:4,250 at A3 size

Features digitised from Microsoft Virtual Earth
(Bing) via ArcGIS software, July 2022

ADAS, Unit 14, Newton Court, Pendeford Business Park,
Wolverhampton. WV9 5HB. Tel +44(0)1902 271300

1051263

352000

352500

WR

D.

WR

WT

WR

WT

WT

D.

RB

WR

WT

WP

SD

WR

D.

WT

WR

SD

352000

352500

© RSK ADAS Ltd

Econergy International Ltd

Solar PV Development,
Berrington Farm, Shropshire

Breeding Birds Survey
Amber Listed

- Site boundary
- WR - Wren
- D. - Dunnock
- RB - Reed Bunting
- SD - Stock Dove
- WP - Woodpigeon
- WR - Woodpigeon
- WT - Whitethroat

Drawn by Paul Taylor 17/07/2022, Verified by Daniel Watson 17/07/2022

0 50 100 150 200

Metres

Scale 1:4,250 at A3 size

Features digitised from Microsoft Virtual Earth
(Bing) via ArcGIS software, July 2022

ADAS, Unit 14, Newton Court, Pendeford Business Park,
Wolverhampton. WV9 5HB. Tel +44(0)1902 271300

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352500

Econergy International Ltd

Solar PV Development,
Berrington Farm, Shropshire

Breeding Birds Survey
Skylark Territories

Site boundary

S. - Skylark

Drawn by Paul Taylor 17/07/2022, Verified by Daniel Watson 17/07/2022

0 50 100 150 200

Metres

Scale 1:4,250 at A3 size

Features digitised from Microsoft Virtual Earth
(Bing) via ArcGIS software, July 2022

ADAS, Unit 14, Newton Court, Pendeford Business Park,
Wolverhampton. WV9 5HB. Tel +44(0)1902 271300

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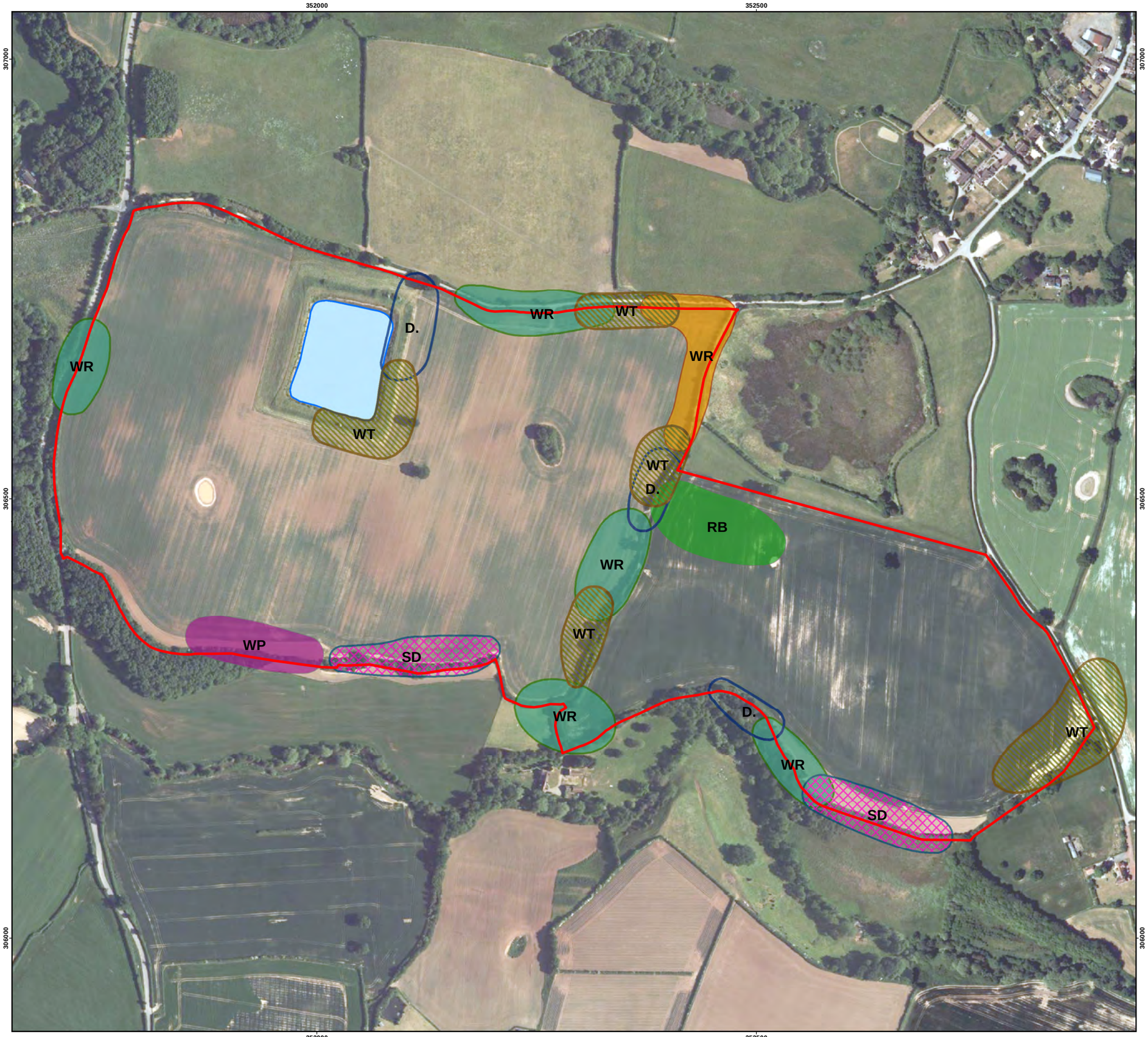


Econergy International Ltd

Solar PV Development,
Berrington Farm, Shropshire

Breeding Birds Survey
Amber Listed

- Site boundary
- WR - Wren
- D. - Dunnock
- RB - Reed Bunting
- SD - Stock Dove
- WP - Woodpigeon
- WR - Woodpigeon
- WT - Whitethroat

Drawn by Paul Taylor 17/07/2022, Verified by Daniel Watson 17/07/2022

N
W E
S

0 50 100 150 200
Metres

Scale 1:4,250 at A3 size

Features digitised from Microsoft Virtual Earth
(Bing) via ArcGIS software, July 2022

ADAS, Unit 14, Newton Court, Pendeford Business Park,
Wolverhampton. WV9 5HB. Tel +44(0)1902 271300

ADAS

1051263

B. Figure 2 and 5 Extracts of the Berrington Solar Park Agricultural Production Assessment (CD 1.20)

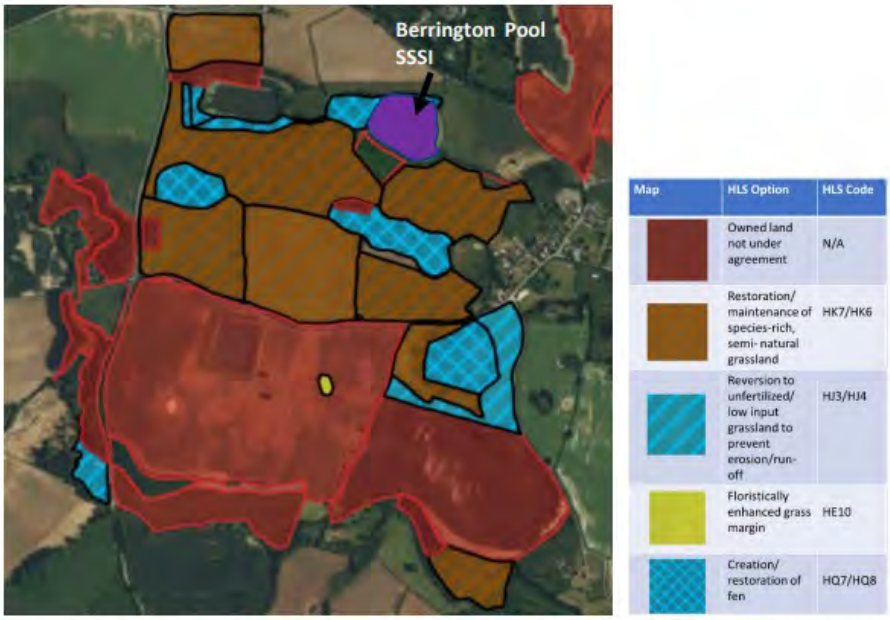


Figure 2. Map of farmed land highlighting the land in the High-Level Stewardship Agreement (1/3/12- 28/02/22)

Figure 2 shows the area of land which was previously included in the Higher-Level stewardship scheme and the land that was not in it. The land in the stewardship scheme is much more undulating than the land not in the scheme and as a result would not be suitable as a site for the solar panels as some of it is also north facing.

1.7 Predicted Agricultural Production

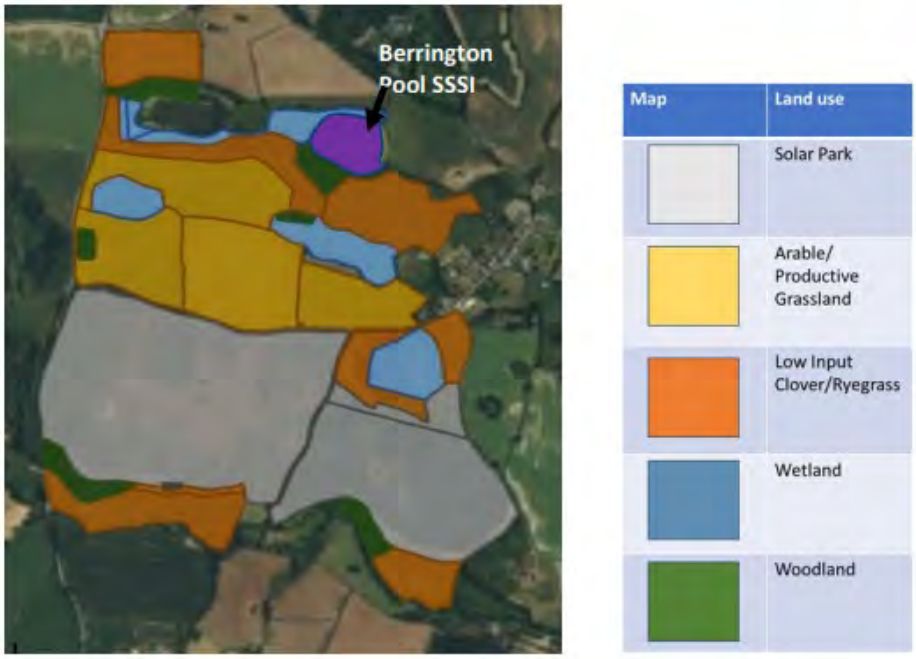
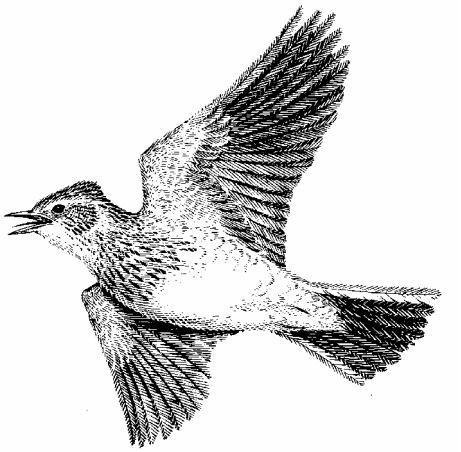


Figure 5. Plan 1 - Future land use and field boundaries

C. Shropshire Biodiversity Action Plan – Farmland Birds (Shropshire Biodiversity Partnership, 2008)

Farmland Birds



October 2008 – This plan was previously called 'Farmland Seed Eating Birds' but has been expanded to include a number of species recently added to the UK BAP list. The main text of this plan needs review in line of the fact that there are new species covered by this plan since the 2007 UK BAP list review.

A number of seed-eating farmland birds have undergone significant declines since 1975. This group of birds includes tree sparrow, reed bunting, corn bunting, yellowhammer, linnet, house sparrow, bullfinch and skylark. Many of these are familiar and popular birds of open countryside that are still perceived as common and widespread. However skylark, for example, declined nationally by 75% between 1972 and 1996. The BTO Breeding Bird Survey shows that Skylark populations have continued to decline, by around 10% between 1994 and 2004, and most of the other species of seed-eating farmland birds have also continued to decline over this period. Some short term slight increase is apparent for some species, eg Tree Sparrow, but this increase is from an extremely low starting point and time will tell if it is the start of a long term trend.

All of these species are seed-eaters in the winter and feed on invertebrate food during the spring and summer, but have slightly different habitat requirements within the farmed environment. Traditional mixed farming, with grazed pastures, hay fields, areas of rough grass margins and hedges, and spring-sown cereals with over-wintered stubbles, provide the variety of conditions necessary for supporting these birds. The increased specialisation and intensification of farming, encouraged by a system of production support payments, has reduced the suitability of large areas of farmland for these birds, but it is hoped that the new Environmental Stewardship Scheme will help reverse these trends.

The Shropshire Targets for 2005 set in the previous edition of the BAP (2002) have not been achieved, and many of the Actions were not implemented, so concerted action is needed to achieve the targets set for 2010.

1 Objectives and Targets

1.1 Objectives

A. Maintain existing populations and range of farmland birds in Shropshire.
B. Reverse the decline in farmland birds.
C. Establish and maintain a comprehensive understanding of the distribution, status and ecological requirements of farmland birds in Shropshire through research, survey and monitoring.
D. Promote communication, education and awareness of the status and needs of farmland birds.

1.2 Targets

- Increase the populations of farmland birds in Shropshire by 50% (as recorded by the Breeding Bird Survey (BBS)) by 2010.
- Increase by a further 50% the number of farmland birds in Shropshire between 2010 and 2015.

2 Current Status

2.1 Importance

Tree sparrow, reed bunting, corn bunting, linnet and skylark are priority species under the UK Biodiversity Programme and national species action plans have been written. These 5 species are also on the *Red List* of *Birds of Conservation Concern 2002-2007*. Yellowhammer is now also Red Listed, and is a Species of Conservation Concern in the UK Biodiversity Programme. Some of these species, such as skylark and yellowhammer, are familiar and popular birds with many people. Farmland birds have been included by the Government in its "Quality of Life" indicators and restoring the populations of 20 specified species, including many of those covered by this Action Plan, are a Defra target in their PSA agreement with the Treasury.

2.2 Trends

The British Trust for Ornithology (BTO) Common Bird Census shows that the UK population of these species declined very significantly between 1972 and 1996, and the Breeding Bird Survey shows this decline has continued for most species since 1994:

Comment: New species have been added to this plan which need recognition in the text

Species	Change 1972-96 (CBC)	Change 1994-2004 (BBS)
Tree sparrow	- down 76%	- up 48%

Reed bunting	- down 40%	- up 4%
Corn bunting	- down 74%	- down 24%
Linnet	- down 40%	- down 14%
House sparrow	- down 64%	- down 3%
Skylark	- down 75%	- down 10%
Yellowhammer	- down 37%	- down 22%
Bullfinch	- down 62%	- down 9%

(Shropshire BBS figures to be added where sample sizes are large enough)

2.3 Population and Distribution

These species are generally distributed across Shropshire. However reed bunting and corn bunting both show a strong preference for the north-eastern quarter of the county, around the Shropshire Plain from Telford north to Market Drayton.

3 Current Factors Affecting these Species

- Increased specialisation and intensification of farmland leading to:
  - loss of mixed farms;
  - loss of rough grass margins, hay meadows and extensively grazed pasture;
  - loss of hedgerows and adjacent field margins, rough corners etc.;
  - switch from spring sown to autumn sown cereals;
  - loss of over-wintered stubbles;
  - increased use of pesticides, which removes weed and invertebrate food for birds.

4 Current Action

4.1 Policy and Protection

- All eight species receive protection under the UK Wildlife and Countryside Act, 1981.
- All are on the *Red List* of *Birds Of Conservation Concern 2002-2007*
- Tree sparrow, reed bunting, corn bunting, yellowhammer, and skylark are all Target Species in at least one of the Joint Character Assessments (JCAs) which cover Shropshire, and which set the priorities for the Defra / RDS Environmental Stewardship. They provide guidance on the land management options that should be included in ES applications.
- Tree sparrow, reed bunting, corn bunting, linnet, yellowhammer, and skylark are all included amongst 20 species on Defra's Farmland Bird Index. Defra is committed to reversing the long term decline in these species, as part of its Public Service Agreement with the Treasury. Annual monitoring reports are published by Defra

4.2 Management, Survey and Research

- Defra / RDS Environmental Stewardship has both Entry Level and Higher level schemes which encourage farmers to manage their land to provide environmental benefits, including habitat enhancement for these birds. This includes options such as winter stubbles, spring-sown cereals and wild bird cover
- In 2002 options from the pilot Arable Stewardship Scheme were introduced into the Countryside Stewardship Scheme (CSS). These were closely targeted at known seed eating bird (and lapwing) hotspots, based on data provided by SOS and RSPB.
- Many farms still have CSS agreements, which include measures such as management of hedgerows and arable field margins, provision of beetle banks, reversion of arable land to grassland, extensive management of pasture and provision of fenced grass margins within intensive grasslands. Areas of set-aside of high conservation status can also be managed under the Scheme. Elements of the pilot Arable Stewardship are also included within some CSS agreements.
- Under the set-aside scheme, land can be managed to provide rotational stubbles, or permanent rough grass cover, and the scheme also includes the option to sow a wild bird cover mix. The recent multi-annual set-aside option can be used to deliver targeted benefits over a 5 year period.
- Most farms in the Shropshire Hills and the Clun Hills are still covered by Environmentally Sensitive Area (ESA) schemes. Grant-aid is available for the management of hedgerows and conservation headlands.
- The RSPB has a Shropshire-based research project studying the use of grassland systems by farmland birds.
- The RSPB established an intervention project, targeted at key sites for tree sparrows and corn buntings. The project will aim to monitor the effectiveness of providing winter food such as seed or particular crops to increase the winter survival of these populations. Several sites included in this national project were in Shropshire.
- In 2004, the Shropshire Ornithological Society carried out a sample survey of tetrads that were found to be occupied 1985-90 during fieldwork for *The Atlas* (1992), to supplement the regular records sent to the County Bird Recorder. The results suggest some decline in population and range since 1990, but the trend cannot be quantified.

5 Key Habitats

- Mixed farmland
- Field and rough grass margins
- Spring-sown cereals and over-wintered stubbles
- Hedgerows

6 Complementary Plans

UK Corn Bunting SAP
UK Linnet SAP

UK Reed Bunting SAP
UK Skylark SAP
UK Tree Sparrow SAP
Shropshire Field Margins HAP
Shropshire Floodplain Grazing Marsh HAP
Shropshire Hedgerows HAP
Shropshire Reedbeds HAP
Shropshire Semi-Improved Upland Rough Grassland HAP

7. Actions

Habitat / Species	Action Code	Action text	Location of action	Start Date	End Date	Lead
Birds Plan	SHR BRD AP 02	Establish monitoring arrangements to record the population, population change, breeding success and habitat usage for all BAP and PSA Target Bird Species on all farms covered by any Agri-environment scheme in Shropshire, and measure the effectiveness of such schemes.	Shropshire	2006	2007	NE
Birds Plan	SHR BRD AP 03	Monitor population, population change, breeding success and habitat usage for all BAP priority bird species on all CSS & ESA Farms in Shropshire until 2015.	Shropshire	2006	2015	NE
Birds Plan	SHR BRD CA 01	Provide specific management guidelines to all ESS Higher Level Scheme applicants	Shropshire	2006	2015	NE
Birds Plan	SHR BRD FR 06	Seek the necessary resources to implement all the above actions.	Shropshire	2006	2015	SC
Farmland Birds	SHR FSB CA 01	Provide DEFRA with details of hotspot areas for effective targeting of the Countryside Stewardship Scheme	Shropshire	2002	-	RSP
Farmland birds	SHR FSB CA 02	Publicise the support of DEFRA and NE for the conservation of farmland seed-eating birds, and creating suitable habitat for them, amongst farmers and landowners until 2015.	Shropshire	2006	2015	SWT
Farmland birds	SHR FSB CP 01	Produce general publicity and education materials, to raise the profile of Farmland birds, and publicise their habitat requirements amongst farmers in the Shropshire Hills AONB until 2015.	Shropshire Hills AONB	2006	2015	AON

Farmland Birds	SHR FSB FR 01	Ensure that agri-environment schemes are appropriately targeted to include measures to benefit farmland birds.	Shropshire	2002	-	NE
Farmland birds	SHR FSB FR 02	Aim to target the Environmental Stewardship at areas known to be farmland bird 'hot-spots' such as the Shropshire Plain, Weald Moors, and Severn-Vyrnwy confluence area until 2015.	Shropshire	2006	2015	SWT
Farmland birds	SHR FSB HS 01	Actively encourage farmers to maintain and increase the area of suitable winter feeding habitat (including creative use of Set-aside), good quality hedges, grass field margins and extensive pasture in arable systems, through all agri-environment schemes, and monitor progress	Shropshire	2006	2015	SWT
Farmland birds	SHR FSB ID 01	Provide SWT & Natural England with details of hotspot areas for effective targeting of the Environmental Stewardship Scheme until 2015.	Shropshire	2006	2015	SOS
Farmland birds	SHR FSB SU 01	Ensure adequate coverage of the Breeding Bird Survey in Shropshire to monitor farmland seed-eating birds annually until 2015.	Shropshire	2006	2015	BTO
Farmland birds	SHR FSB SU 02	Ensure that bird recording in the county continues to highlight key sites until 2015.	Shropshire	2006	2015	SOS

N.B

1. The above Actions are specific to this species. In addition, the "Actions for All Bird Species", listed in the generic bi undertaken for this species.
2. Implementation of the Actions listed under the final Action, "Seek resources", is conditional on the resources being s some organisations is conditional partly on these further resources being secured, and partly on the continuing availabi

KEY TO ORGANISATIONS

AONB	Shropshire Hills AONB (Area of Outstanding Natural Beauty) Partnership
BTO	British Trust for Ornithology
FWAG	Farming and Wildlife Advisory Group
LSP	LongStones Partnership
NE	Natural England
RS	RuralScapes
SBP	Shropshire Biodiversity Partnership
SC	Shropshire Council
SOS	Shropshire Ornithological Society
SWT	Shropshire Wildlife Trust
UOWG	Upper Onny Wildlife Group

Plan Author: Leo Smith (2002)
Plan last revised: November 2008 by Fran Lancaster (Biodiversity Support Officer, Shropshire Council
Pdf correct on 17.03.2009

D. Great Crested Newt Figure (CD 1.7)

Econergy International Ltd

Solar PV Development,
Berrington Farm, Shropshire

Map of ponds within 500m of site

Site boundary

250m buffer

Pond location

Drawn by Paul Taylor 23/09/2021, Verified by Joseph Dyson 23/09/2021

N
W E
S

0 100 200 300
Metres

Scale 1:7,750 at A3 size

ADAS, Titan 1 Offices, Coxwell Avenue,
Stafford Road, Wolverhampton, WV10 9RT
Tel +44(0)1902 271300, Fax +44(0)1902 785574

1051263

Document Path: C:\aa_Covid_19\Renewables\Solar\1051263_Berrington_SolarFarmA3L_Berrington_Solar_Pond_Map_250m_buffer.mxd

E. BTO Breeding Status Codes

Breeding Status Codes

Non-breeding	
F	**F**lying over
M	Species observed but suspected to be still on **M**igration
U	Species observed but suspected to be s**U**mmering non-breeder
Possible breeder	
H	Species observed in breeding season in suitable nesting **H**abitat
S	**S**inging male present (or breeding calls heard) in breeding season in suitable breeding habitat
Probable breeding	
P	**P**air observed in suitable nesting habitat in breeding season
T	Permanent **T**erritory presumed through registration of territorial behaviour (song etc) on at least two different days a week or more part at the same place or many individuals on one day
D	Courtship and **D**isplay (judged to be in or near potential breeding habitat; be cautious with wildfowl)
N	Visiting probable **N**est site
A	**A**gitated behaviour or anxiety calls from adults, suggesting probable presence of nest or young nearby
I	Brood patch on adult examined in the hand, suggesting **I**ncubation
B	Nest **B**uilding or excavating nest-hole
Confirmed breeding	
DD	**D**istraction-**D**isplay or injury feigning
UN	**U**sed **N**est or eggshells found (occupied or laid within period of survey)
FL	Recently **FL**edged young (nidicolous species) or downy young (nidifugous species). Careful consideration should be given to the likely provenance of any fledged juvenile capable of significant geographical movement. Evidence of dependency on adults (e.g. feeding) is helpful. Be cautious, even if the record comes from suitable habitat.
ON	Adults entering or leaving nest-site in circumstances indicating **O**ccupied **N**est (including high nests or nest holes, the contents of which can not be seem) or adults seen incubating
FF	Adult carrying **F**aecal sac or **F**ood for young
NE	**N**est containing **E**ggs
NY	**N**est with **Y**oung seen or heard

F. Extract from Shropshire Bird Report (2022) report

The Shropshire Bird Report 2022

Shropshire Ornithological Society

This edition of the Shropshire Bird Report
is dedicated to the memory of
Geoffrey Edward Holmes

The first fledglings out of the nest
record until the end of the month w
recorded at the Wyre Forest, Reabı
and Porth-y-waen between 28-31 M

The nestbox schemes at Eardingto
Newcastle-on-Clun both returned

Scheme	Great Tit nests	No. Eggs Laid	Av. Clu Size
Eardington NR 2022	4	26	6.5
Newcastle-on-Clun (R. Clun and Folly Brook) 2022	43	291	6.7 (4-1
All above sites (2021)			
Other Sites			
Craig Sychtyn 2021	8	45	5.6

Great Tit nestbox r

The highest count submitted this
Mar. Thirty or more were reporte
Edge trails on 19 Sep. 38 and 30
Shavington Park on 27 Oct and 1

Mimicry is common in Great Tits but the only reference this year is one giving an excellent rendition of a Marsh Tit at Chelmarsh on 1 Feb.

SKYLARK *Alauda arvensis*

Shropshire Status:	Common resident
National Conservation Status:	Red List
Shropshire Conservation Status:	Green List
Author:	Glenn Bishton
Number of Records:	1,201 (BT=830, CR=23, eB=348)

A total of 1,201 records were received, up from 1,165 in 2021; recorded in every month of the year.

There were no exceptionally large flocks in the first winter period, though 30 fed in an oil-seed rape field at Ercall Heath on 8 Jan, 40 in cereal at Buildwas on 18 Jan and 50 in stubble at Eyton on Severn on 22 Feb.

Territorial song was first noted on 28 Jan at Cantlopgrove when some males in a small flock of 15 gave bursts of song. This was followed by further snatches of song at Uppington and Starvecrow, 1 Feb, VP on 2 Feb, Homer and Bridgnorth 3 Feb and Sheinton on 9 Feb. Additional song was recorded from individuals within flocks at: Cantlopgrove on 12 Mar (30 individuals), from Upper Longwood 5 Mar (thirteen birds), and from Brown Clee on 23 Mar (18 birds). Fourteen individuals were recorded singing on the Long Mynd on 14 Apr.

Breeding activity was first noted at Stapley Hill on 27 Mar, with possible nest-building, followed by further records of potential nest-building at Westcott, 4 May, and at Wall Farm on 9 May. Breeding was confirmed at Magpie Hill, 29 May, Mitchell's Fold, 15 Jun, Cantlopgrove, 23 Jun, Howlett Hall, 7 Jul and Titterstone Clee 21 July.

Movements south from Scotland and northern and western Europe augment resident Skylark numbers in autumn and was well documented with records of Skylark flying over and calling. Two were noted at Whixall Canal Floods (Sinker's Fields), 23 Sep, one at Aston, 28 Sep, 66 Cantlopgrove, 30 Sep, and at least 10 at Titterstone Clee, 1 Oct, with some "attempting song". A substantial 340 were recorded heading mainly southwest at Cantlopgrove on 2 Oct and 300 were there on 9 Oct, "250 of which flew southwest". Fifty-two at VP on 11 Oct headed mainly south and west and 200 were noted at Hollywaste on 16 Oct. Further movements at Cantlopgrove comprised 70 on 25 Oct, 130 on 31 Oct, 75 on 1 Nov and 80 on 12 Nov. Approximately 30 headed south at Whixall Moss NR on 25 Oct but by early November fewer movements occurred. The largest flocks in this winter period comprised 150 at Downton Hall on 20 Nov and 150 at Cressage on 15 Dec.

SAND MARTIN *Riparia riparia*

Shropshire Status:	Fairly common summer visitor
National Conservation Status:	Green List
Shropshire Conservation Status:	Amber List
Author:	Tom Wall
Number of Records:	230 (BT=147, CR=25, eB=58)

The average date for the first sighting over the last 30 years is 16 Mar, so the first, one at Wood Lane on 10 Mar, was quite an early bird. The next was at VP on 12th, where there were records of 1-3 on subsequent dates, but the highest March counts were 40 at Crosemere on 21st, and 30 at The Mere, Ellesmere on 31st. Subsequent monthly maxima were 170 at White Mere in April; 100 at Bridgwalton Quarry, near

BirdTrack migration blog (Mid-April - May)

12 April 2022 | *Be the first to comment*

With winter behind us, spring migration has begun to gather pace over the last few weeks. Summer migrants are arriving, while winter visitors depart for their breeding areas.

Spring 2022 has so far seen periods of warm weather interspersed with blasts of much colder air, with snow even falling in some parts of the country. This change in weather invariably has an impact on birds migrating northwards for the summer months.

The traditional early summer migrants such as Chiffchaff and Black Redstart seemed to arrive in bumper numbers, no doubt helped by the warm winds in late March. **Garganey** especially arrived in good numbers, with some suggesting that the winter droughts and resulting low water levels in areas of Spain such as the Donana could be responsible for more birds arriving further north.

Scott Mayson

BirdTrack Organiser

Scott's role includes the day-to-day running of BirdTrack: updating the application, assisting county recorders by checking records and corresponding with observers.

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