

Technical Note 03

Project: Wickham Hall Solar Farm, Uttlesford

Date: 01/03/2024

Skylark Mitigation Strategy

1 Introduction

- 1.1 Aspect Ecology has been commissioned by Endurance Energy Wickham Hall Ltd to prepare a Skylark Mitigation Strategy in respect of the proposed development of land at Wickham Hall Estate, Uttlesford, centred at grid reference TL 46829 23231, hereafter referred to as 'the site'.
- 1.2 The Applicant proposes a Skylark Mitigation Strategy to provide continued opportunities for Skylark within the local area, post-development. This Technical Note details the purpose of, and methodology for, the proposed mitigation measures to be implemented.

2 Skylark Ecology

- 2.1 Skylark *Alauda arvensis* is a medium-sized passerine species, typically associated with farmland habitats. Within such areas it is often associated with cultivated land, especially set-aside, ungrazed grassland and large arable fields, often without hedges and other cover, albeit it also breeds on open grasslands in uplands, on heaths and on coastal marshes. Skylark feed on both plant and animal material, including small invertebrates, grains, seeds and leaves of a wide variety of plants, including Nettles *Urtica* sp. and Docks *Rumex* sp.
- 2.2 Skylark can raise up to three broods in a season, with nesting beginning in late March or April. Skylark nests are located on the ground amongst short vegetation, typically in a shallow depression lined with grass.
- 2.3 Nesting density varies depending on habitat and crop type, although is typically between 0.05 and 0.1 territories per ha within grassland and arable habitats, increasing to 0.3 territories per ha within set-aside land¹.
- 2.4 Skylark has experienced a substantial decline in breeding populations across the UK, by over 50% in the last 25 years². This is largely thought to be due to changing farming practices including a move to autumn sown cereals (resulting in spring growth that is too dense for nesting), few winter stubble fields, increase in pesticide use, increased grazing pressures and early cutting of grass (often for silage). As a result, Skylark is included on the Red List under Birds of Conservation Concern³ and is a Priority Species within England under the Natural Environment and Rural Communities Act 2006.

¹ Donald, P.F. and Vickery, J.A. (2000). 'The importance of cereal fields to breeding and wintering Skylarks *Alauda arvensis* in the UK.' Ecology and Conservation of Lowland Farmland Birds p140-150.

² Holden, P. and Cleaves, T. (2002). *RSPB Handbook of British Birds*.

³ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win I. (2021). 'The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain.' *British Birds* 114, p.p. 723-747.

3 Baseline Site Conditions and Assessment of Proposals

- 3.1 The site predominantly comprises an arable field approximately 32.3ha in size, with additional habitats including hedgerows, trees, improved grassland field margins, tall ruderal and a hardstanding farm track. A total of 13 Skylark breeding pairs were recorded within the site during breeding bird survey work undertaken in 2023.
- 3.2 Under the proposals, the existing arable land will be subject to the development of a solar farm with wildflower grassland created beneath the solar panels. In addition, new hedgerow planting will surround the development, with areas of scrub and a pond within the east of the site and a belt of deciduous woodland planted at the southern site boundary.
- 3.3 Whilst the newly created wildflower grassland will provide foraging opportunities for Skylark, Place Services has advised the addition of solar panels has the potential to reduce the suitability of these areas for nesting and has requested that additional foraging habitat be provided to support the local Skylark population. Accordingly, it is proposed that off-site mitigation is provided in the form of Skylark plots, as described below.

4 Mitigation Scheme

Objectives

- 4.1 The objective of the mitigation scheme is to create suitable foraging habitat for Skylark in the locality of the site, compensating for the potential loss of Skylark territories within the development area.

Overview

- 4.2 To provide enhanced Skylark habitat to offset losses within the site, it is proposed that 26 Skylark plots are established within adjoining land, identified on Plan 5940/SM1. The number of plots has been calculated on a 2:1 ratio, as requested by Place Services, based on the presence of 13 Skylark breeding pairs within the site.
- 4.3 The mitigation area comprises intensively farmed arable land located south of the application site (see Plan 5940/SM1). The area can be readily enhanced through Skylark plot provision, with RSPB guidance⁴ noting that on average, nests in fields containing Skylark plots produce more chicks than those in conventional fields. Skylark chicks that fledge in fields with Skylark plots are also heavier, suggesting they are better fed and more likely to survive the winter.
- 4.4 Consideration has been given to both RSPB and Government guidance^{4,5} which indicates that fields supporting Skylark plots should be more than 5ha in size if they have an open aspect (or >10ha if bounded by trees or woodland), whilst plots should be located at least 24 - 50m from field boundaries or margins.
- 4.5 The mitigation area comprises two fields each >10ha in size, which will provide sufficient area to accommodate the 26 Skylark plots required, based on a ratio of two plots per hectare, as per the guidance.

⁴ RSPB (undated). 'Farming for Wildlife: Skylark Plots.'

⁵ Rural Payments Agency and Natural England (2024). 'AB4: Skylark plots.' Available at: <https://www.gov.uk/countryside-stewardship-grants/skylark-plots-ab4>

Creation of Skylark Plots

- 4.6 To enhance the suitability of the existing arable land for Skylark, a total of 26 Skylark plots will be provided within the off-site mitigation area. Skylark plots are created by switching off the drill (or lifting it up) during crop sowing, to create undrilled patches at least 3m wide.
- 4.7 Skylark plots created within the mitigation area will be no less than 3m in length and width (9m²) and no more than 12m in length and width (144m²), with the ideal target area for each plot to be 3m x 6m (18m²). Plots will be located midway between tramlines, with a minimum 50m buffer between any plots and any vegetated field boundary.
- 4.8 Once created, plots will not be mechanically weeded between April and harvest. In accordance with RSPB guidance, the plots can however receive the same sprays and fertiliser applications as the surrounding crops⁴.
- 4.9 Plots will be provided in annual rotation to prevent succession and thereby maximise their importance as a foraging resource for Skylark. The plots will provide uncultivated ground which will establish with arable weeds to provide suitable foraging for Skylarks, which (as described above) has been shown to increase breeding success of local populations.

Monitoring

- 4.10 To check the implementation of the above management prescriptions and monitor whether these have been successful in terms of providing suitable Skylark habitat, monitoring surveys will be undertaken by a suitably qualified ecologist in years 2, 5 and 10 following implementation of the scheme. This will comprise a single visit each monitoring year during the peak breeding season (April to June) with a walkover of the mitigation areas to record any Skylarks and note habitat management. The management strategy will be reviewed following each monitoring visit, and any required actions will be notified to the landowner / farmer.

5 Summary & Conclusions

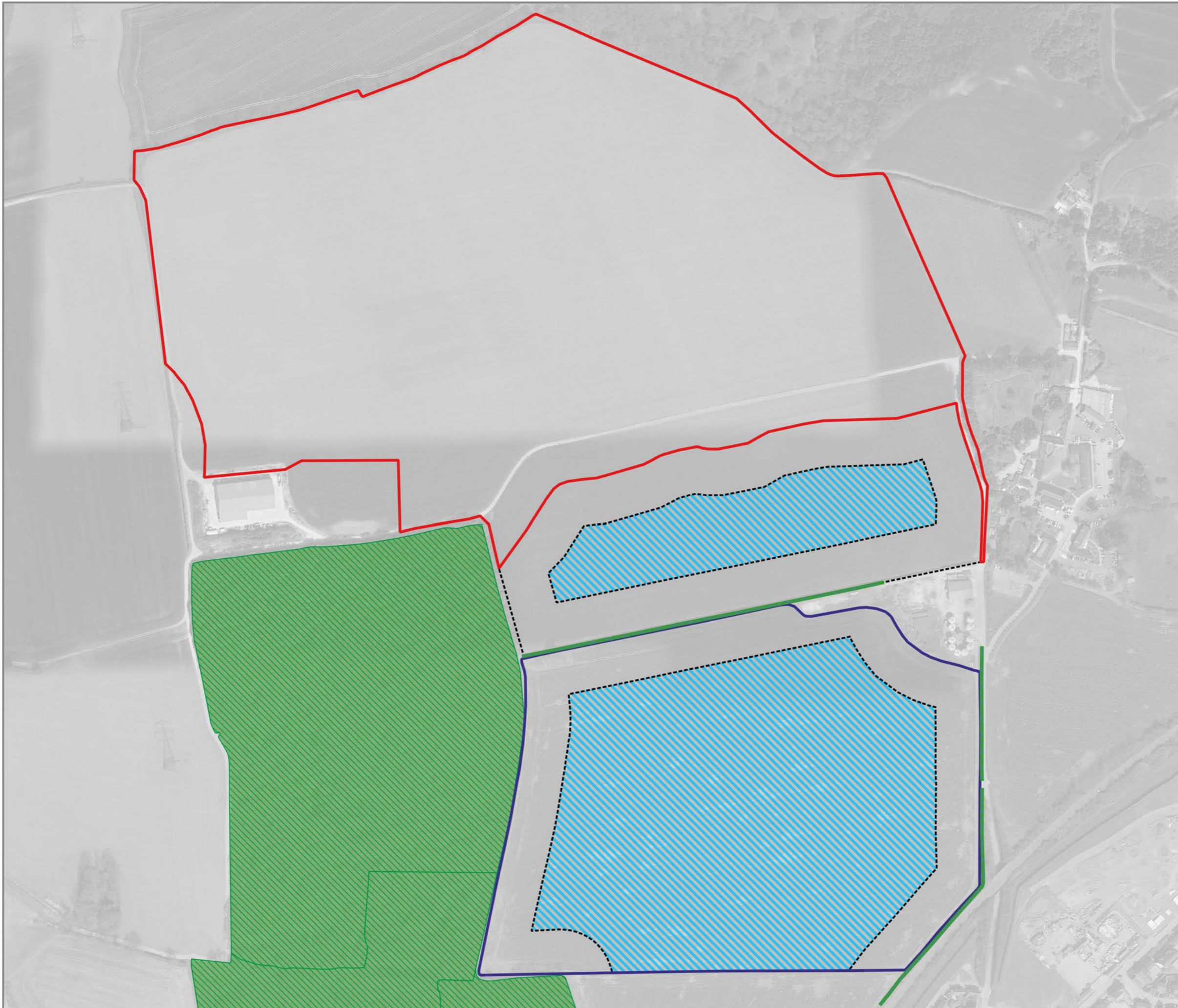
- 5.1 Aspect Ecology is advising Endurance Energy Wickham Hall Ltd in respect of ecological matters relating to the proposed development of land at Wickham Hall Estate, Uttlesford.
- 5.2 This note sets out details of the offsite mitigation strategy which is proposed in relation to Skylark, to compensate for loss of potential breeding habitat within the site as a result of the development.
- 5.3 The mitigation scheme involves the provision of Skylark plots within off-site arable fields located to the south of the site, providing additional opportunities for foraging Skylark. Following implementation of the measures detailed within this note, it is concluded that this scheme will provide appropriate mitigation for the loss of Skylark habitat associated with the proposed development.

Enclosed:

Plan 5940/SM1 – Skylark Mitigation Plan

Plan 5940/SM1:

Skylark Mitigation Plan



- Key:
-  Site Boundary
 -  Skylark Mitigation Land
 -  Hedgerow
 -  Woodland
 -  50m Hedgerow & Woodland Buffer
 -  Area for Skylark Plots



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Wickham Hall Estate,
 Bishops Stortford
 Skylark Mitigation Plan

5940/SM1



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ecology • landscape planning • arboriculture



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