

Biodiversity and Ecology

Introduction

To inform the Energy Park proposals, a comprehensive suite of ecological surveys and assessment work has been undertaken by Ecology Solutions Limited, which started in 2021. This included a desk study exercise, extended Phase 1 habitat surveys, and specific work in respect of Badgers, bats, birds (wintering and breeding), Great Crested Newts and reptiles. Work has been undertaken over a number of seasons to provide a robust and detailed baseline understanding of the site. The survey work has considered potential effects and been used to inform a strategy for the proposals based on avoidance, mitigation and enhancement measures.

Baseline Conditions

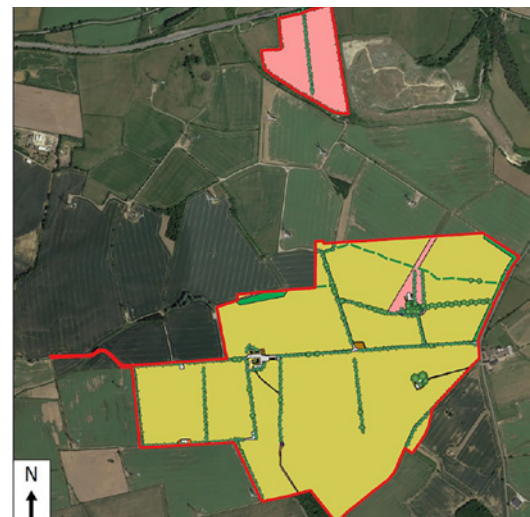
There are no statutory designated sites of nature conservation interest located within or adjacent to the site. Whilst there is a Site of Special Scientific Interest (SSSI) situated partly within the site boundary (Cranford St John SSSI), this has been designated on account of its geological interest. This site is, however, afforded non-statutory designation, as the Cranford St John Quarry Local Wildlife Site (LWS).

The extended Phase 1 survey identified that the vast majority of the site is of very limited botanical interest. The site primarily comprises intensively managed arable fields with narrow, species-poor semi-improved grassland margins. Other habitats present within the site boundary include improved grassland, broadleaved plantation woodland, hedgerows, scrub, ruderal vegetation and ponds.

Specific survey work undertaken at the site has identified the following:

- The site is utilised by foraging and commuting bats, with activity recorded of *Barbastella barbastellus*.
- The site is utilised by Golden Plover and Lapwings during the winter period, these species are associated with the nearby Upper Nene Valley Gravel Pits SPA / Ramsar Site.
- Great Crested Newts are present within an offsite pond situated approximately 147 metres west of the site boundary, but there are no water bodies present within site that accommodate Great Crested Newts. The majority of the site also provides sub-optimal terrestrial habitats for this species.

The presence of these faunal groups has been carefully considered and has informed the design of the Energy Park proposals. Existing habitats of importance are retained, and specific avoidance, mitigation and enhancement measures are proposed to not only avoid adverse effects, but to provide opportunities for significant enhancements for faunal species compared to the existing situation. These enhancement measures are proposed to provide a net gain in biodiversity.



-  Application site boundary
-  Arable
-  Improved Grassland
-  Plantation woodland
-  Pond
-  Ruderal
-  Scrub
-  Bareground
-  Hardstanding
-  Building
-  Hedgerow
-  Hedgerow with ditch
-  Treeline
-  Tree

Biodiversity Net Gain

In developing the proposals, early consideration has been afforded to opportunities to secure Biodiversity Net Gain which is being co-ordinated with the landscape strategy for the Energy Park. First Renewables is committed to ensuring that the proposals not only offset unavoidable biodiversity losses, but delivers significant, long-term enhancements compared to the existing situation. National Legislation requires a minimum Biodiversity Net Gain of 10% and the intention is that this is bettered where possible and efforts are being made to see if a target of 15% can be met. The final net gain figure for the Energy Park will depend upon further detailed assessment and calculation work that come to the site, so it is not possible at this stage to fix to a firm figure, and why a target is appropriate at this stage.

Further calculation and assessment work in relation to BNG will be undertaken at the detailed stage of the design, using the relevant assessment metric and guidance provided by the UK Government through DEFRA.

Ecology & Biodiversity Enhancement

A comprehensive biodiversity strategy has been developed for the Energy Park, which will enhance the diversity and species-richness of habitats present within the site and promote new and improved opportunities for faunal species. The strategy extends throughout the new development and includes the provision of a network of broad biodiverse green corridors in addition to more extensive areas designed and managed specifically for ecological enhancement.

The strategy will:

- Enhance a large 40 acre grassland field to the north of the site to improve the diversity of grassland and better support biodiversity (identified as the BNG mitigation area)
- Retain and enhance a 7 acre area of land specifically for Golden Plover and Lapwing – following discussions with Natural England and extensive liaison with the project ecologist
- Provide species-rich native wetland and wildflower grassland habitats
- Secure long-term management of the site and BNG mitigation area as a fundamental element of the Energy Park
- Provide greater diversity of habitats within the new development
- Provide increased support for key faunal groups such as amphibians (including Great Crested Newts), invertebrates and nesting birds.
- Provide replacement and improved opportunities for bats to forage and commute through, using species rich habitat corridors with dense planting
- Adopt a sensitive lighting strategy using control systems (such as demand activation and timers) to minimise light spill and provide dark zones for foraging and commuting at the site.

