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# EAST YORKSHIRE SOLAR FARM

**East Yorkshire Solar Farm**  
**EN010143**

## **Environmental Statement**

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## Executive Summary

- ES1 A badger (*Meles meles*) survey was undertaken for the proposed East Yorkshire Solar Farm to ascertain the status of badger within the Site and relevant zones of influence to determine any potential impacts of the Scheme on badger.
- ES2 The survey was undertaken within and up to 50m from the Site boundary, where safe and where access was granted. The survey was undertaken over numerous visits, in conjunction with the Phase 1 habitat survey (as presented in **Appendix 8-3, ES Volume 2 [EN010143/APP/6.2]**), between April and September 2022 and between April and August 2023. Any evidence of badger activity that was noted whilst undertaking other ecology surveys of the Survey Area was also recorded.
- ES3 The results of the badger survey are presented in **Appendix 8-8: Badger Survey Report [CONFIDENTIAL ANNEX]**, which is provided separately to key stakeholders.

# 1. Introduction

## 1.1 Background

- 1.1.1 East Yorkshire Solar Farm Limited (hereafter referred to as ‘the Applicant’) commissioned a badger (*Meles meles*) survey for the East Yorkshire Solar Farm (hereafter referred to as the ‘Scheme’), to determine the potential impacts of the Scheme on badger, a species protected under the Protection of Badgers Act 1992 (Ref. 1).
- 1.1.2 The Scheme will comprise: the construction, operation (maintenance), and decommissioning of solar photovoltaic (PV) generating panels (the ‘Solar PV Site’), associated grid connection (comprising the ‘Interconnecting Cable Corridor’ and ‘Grid Connection Corridor’), access points (‘Site Accesses’) and ‘Ecology Mitigation Area’ – collectively referred to as the ‘Site’. The boundary of the Site is referred to as the ‘Order limits’.
- 1.1.3 Further information on the Scheme and Site is provided in **Chapter 2: The Scheme, ES Volume 1 [EN010143/APP/6.1]**.
- 1.1.4 In areas around the solar PV arrays and on other land within the Solar PV Site (i.e., Ecology Mitigation Area), opportunities for landscaping, biodiversity enhancements and habitat management have been explored.
- 1.1.5 The landscape features within the Site consist predominately of agricultural fields with areas of woodland, grassland and boundary features including hedgerows, tree lines and watercourses/ ditches. There are several woodlands located adjacent to the Site and surrounding area, including deciduous woodland priority habitat.

## 1.2 Aims and Objectives

- 1.2.1 The objective of the badger survey is to determine the presence and distribution of badger within and up to 50m from the Order limits and, if present, to identify any potential impacts of the Scheme on badger. Any mitigation that may be required is also included.
- 1.2.2 This report contains the following information:
- a. Relevant legislation;
  - b. Methods for desk and field-based assessments;
  - c. Limitations to the survey undertaken and any assumptions made as a result of incomplete data;
  - d. Survey results (**Appendix 8-8 [CONFIDENTIAL ANNEX]**); and
  - e. Conclusions (**Appendix 8-8 [CONFIDENTIAL ANNEX]**).
- 1.2.3 This report is a technical appendix to accompany **Chapter 8: Ecology, ES Volume 1 [EN010143/APP/6.1]**.
- 1.2.4 Owing to the confidentiality surrounding the reporting of locations of badger, the survey results, evaluation and conclusions have been redacted from this report and are included as a confidential annex (**Appendix 8-8 [CONFIDENTIAL ANNEX]**). This annex will be provided separately to

specific stakeholders only (i.e., local authority, county ecologists and Natural England).

## 1.3 Legislation

- 1.3.1 Badgers and their setts<sup>1</sup>, are protected under various legislation, drawn together under the Protection of Badgers Act 1992 (Ref. 1), which was introduced to combat the cruel ill-treatment and persecution to which badgers are sometimes subjected, and protects badgers from deliberate harm and injury. Restrictions under this Act, which apply to development, make it an offence to:
- a. Wilfully kill, injure, possess or cruelly ill-treat a badger, or attempt to do so;
  - b. Interfere with a sett by damaging or destroying it;
  - c. Obstruct access to, or an entrance of, a sett; or
  - d. Disturb a badger when it is occupying a sett.
- 1.3.2 This legislation prevents development on a site occupied by badgers without any mitigation being agreed and undertaken prior to the development commencing. If potential impacts are perceived on badger setts, such as disturbance or loss, then a licence to close a sett would be required from Natural England. It would also be necessary to undertake appropriate mitigation that comprises construction of artificial sett(s).
- 1.3.3 This report identifies the location of a number of badger setts and therefore to safeguard these animals, the report should be treated as confidential and not released into the public domain.

## 1.4 Local Biodiversity Action Plan

- 1.4.1 The Site is located within two counties: the East Riding of Yorkshire for the Solar PV Site and the Selby District of North Yorkshire for the Grid Connection Corridor. The Solar PV Site, Ecology Mitigation Area and Interconnecting Cable Corridor are solely located within the administrative area of East Riding of Yorkshire Council. The Grid Connection Corridor and Site Accesses are located within the administrative areas of East Riding of Yorkshire Council and the Unitary Authority of North Yorkshire Council.
- 1.4.2 The East Riding Biodiversity Action Plan (BAP) (Ref. 2) and Selby BAP (Ref. 3) provide the local nature conservation strategy for identifying threats to species within each of the counties and set out the action plans necessary to conserve them. These action plans provide context to inform identification of threatened or uncommon species within the district and, or county. The plans also identify priorities for conservation and enhancement but confers no particular legislative or policy protection to the species identified. However, in some cases this is provided through related legislation and local planning policy.

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<sup>1</sup> A sett is a badger's home (den), comprising a network of underground tunnels and entrance holes.

- 1.4.3 Neither the East Riding BAP Strategy or the Selby BAP mention badgers as a priority species or set out any action plans necessary to conserve them.

## 1.5 Licensing Requirements

- 1.5.1 Licences to permit otherwise prohibited actions can be granted under section 10 of the Protection of Badgers Act 1992 (Ref. 1) for various purposes. This includes licences to interfere with a badger sett for the purpose of 'development' as defined by section 55(1) of the Town and Country Planning Act 1990 (Ref. 4) (which is the same definition of 'development' as for the Nationally Significant Infrastructure Project [NSIP] regime, pursuant to section 32 of the Planning Act 2008 [Ref. 5]).
- 1.5.2 Licences may be granted by Natural England in order to close down setts, or parts of setts, prior to development or to permit activities close to a badger sett that might result in disturbance. A licence will be required if a sett is likely to be damaged or destroyed in the course of development or if the badger(s) occupying the sett will be disturbed.
- 1.5.3 Whilst a licence can be applied for at any time of year, any closure of a badger sett must be undertaken between 1 July and 30 November and can only be undertaken under a licence issued by Natural England, prior to the onset of works.
- 1.5.4 Any licence application must include a method statement that clearly describes how the proposed development work will interfere with the badger sett and also demonstrates how any mitigation work will be carried.
- 1.5.5 All licence applications must contain the following information:
- a. The likely status of the setts (whether main, subsidiary, annexe or outliers) and whether they are active or not. The number of entrance holes at each sett should be provided;
  - b. Indicate and specify which setts are to be disturbed, damaged, destroyed or obstructed. Specify any setts that will be re-opened at the end of the works;
  - c. Show the location of any mitigation work, e.g. artificial setts, new foraging habitat, water sources;
  - d. A detailed schedule for all proposed sett interference, stating how and when each badger sett will be affected and indicating the type of machinery or tools to be used and the distance from the sett(s). Explain the rationale for the necessary badger interference. The dates of any proposed mitigation work must also be included (if applicable);
  - e. Maintenance and monitoring procedures should also be clearly defined to ensure that badgers do not regain access to excluded setts before and during site clearance and sett destruction; and
  - f. The mechanisms for monitoring whether the proposed development work has ensured that all licence conditions are met.

## 2. Methodology

### 2.1 Desk Study

- 2.1.1 The North and East Yorkshire Ecological Data Centre (NEYEDC) was contacted in July 2022 and again in August 2023 to gain information on pre-existing ecological information. This included locations of non-statutory sites designated for nature conservation and records of protected, notable and invasive non-native species within 2 km (kilometres) of the Order limits, including badger.
- 2.1.2 Only records dated between 2012 and 2023 were considered within the assessment, as any records older than this are unlikely to be still representative of badger distribution in the local area.

### 2.2 Field Survey

- 2.2.1 A badger survey was undertaken within and up to 50m from the Order limits (hereafter referred to as the 'Survey Area'), where safe and where access was granted (see limitations). The survey was undertaken over numerous visits, in conjunction with the Phase 1 habitat survey (as presented in **Appendix 8-3, ES Volume 2 [EN010143/APP/6.2]**), between April and September 2022 and between April and August 2023. Furthermore, any evidence of badger activity that was noted whilst undertaking other ecology surveys of the Survey Area was also recorded.
- 2.2.2 During the survey, all accessible habitats were surveyed for evidence of badger activity, including:
- a. Setts entrances – holes marking the entrance to a sett which are frequently accompanied by other field signs and mounds of earth (spoil) when in use;
  - b. Footprints – usually distinctive and easily recognisable for being broader than they are long which can be seen in recently dug earth or soft mud;
  - c. Badger trails through vegetation – badgers will often use the same routes within their territory, so the paths are usually well worn and obvious, being at least 20 centimetres (cm) in width and often linking feeding grounds with the badger sett;
  - d. Dung pits – can be found along territory boundaries and near to inhabited setts and on average are 15cm across and 15cm deep;
  - e. Latrines – where dung pits are grouped together;
  - f. Excavations – badgers often create shallow depressions to pass under fencing or push the fencing up to open up commuting routes;
  - g. Badger hair – black and white and coarse hair which can become snagged when the badger slides under fencing or past thorny vegetation;
  - h. Scratch marks – found on scratching poles close to the sett entrance, with shredded or scored bark to a height between approximately 0.6-



0.9m, as well as sometimes seen on rocks in the spoil heap close to a sett entrance where they have been loosened by badgers;

- i. Snuffle holes – excavated depressions in areas of bare earth where the badger has been searching for worms or insects;
- j. Bedding and bedding trails – piles of old bedding (such as bracken, dead leaves and dry grass) in or near the entrance to a sett is a good sign that the sett is active or has been very recently and as badgers can gather bedding up to 100m away from the sett bedding can sometimes be seen along well-used badger trails; and
- k. Other signs – e.g., sightings of live badgers or the remains of dead badgers.

2.2.3 Where a badger sett is identified it can be classified as either active or disused based on the presence or absence of field signs (such as prints and hairs) in and around the immediate vicinity of the sett. Active setts are those which display signs indicating current use by badger, as defined in Natural England’s Guidance on Current Use in the definition of a Badger Sett (Ref. 6).

2.2.4 Setts can be further classed using nationally recognised sett classification criteria (Ref. 7) as a main, annex, subsidiary or outlying sett. Summary definitions for each of these categories are presented in **Table 1**.

**Table 1. Criteria used for badger sett classification**

Sett type	Description
Main setts (M)	Large (mean number of holes is 12), well established, often extensive and in continuous use. This is where the cubs are most likely to be born. There is only one main sett per social group of badgers.
Annex setts (A)	Occur in close association with the main sett, and are linked to the main sett by clear well-used paths. If a second litter of cubs is born, this may be where they are reared. Mean number of holes in a sett is five.
Subsidiary setts (S)	These are usually at least 50m from a main sett and do not have an obvious path connecting them with another sett. Mean number of holes in a sett is four.
Outlying setts (O)	Consists of one to two holes. Usually they have small spoil heaps indicating that underground they are not very extensive.

## 2.3 Limitations

2.3.1 The vegetation in some areas of the Survey Area was very dense and impenetrable, particularly the willow (*Salix* sp.) plantation in Solar PV Area 3c (**Figure 1-3, ES Volume 3 [EN010143/APP/6.3]**), and therefore could not be thoroughly searched for badger field signs. It is therefore recommended that as a precaution, any areas of dense vegetation that require removal are cleared in stages, under an ecological watching brief. Some areas of the 50m buffer were in accessible during the badger survey. These areas were

viewed as far as possible from adjacent accessible land; however, it cannot be guaranteed that no badger field signs are present in these areas. Nonetheless, good coverage was achieved overall within the 50m buffer.

- 2.3.2 An attempt to classify all setts found has been undertaken based on the criteria set out in **Table 1** on the number of entrance holes, size of spoil heaps, location, evidence of use and proximity to other setts. It should be noted, however, that sett classification is not always 'clear cut' and can sometimes be difficult to apply in the field.
- 2.3.3 The aim of a desk study is to help characterise the baseline context of a proposed development and provide valuable background information that would not be captured by site surveys alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. A lack of records for particular habitats or species does not necessarily mean that the habitats or species do not occur in the Study Area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the Scheme.

### 3. Results and Evaluation

- 3.1.1 The results of the badger survey are presented in **Appendix 8-8: Badger Survey Report [CONFIDENTIAL ANNEX]**, which will be provided separately to specific stakeholders (i.e., local authority, county ecologists and Natural England).

## 4. References

- Ref. 1 Protection of Badgers Act 1992. Available at:  
<https://www.legislation.gov.uk/ukpga/1992/51> [Accessed 27/09/23].
- Ref. 2 Selby Biodiversity Action Plan (2004). Available at:  
<https://www.northyorks.gov.uk/sites/default/files/2023-> [Accessed 27/09/23].
- Ref. 3 East Riding Biodiversity Action Plan (2010) Version 1.0. Available at:  
<https://www.eastriding.gov.uk/EasySiteWeb/GatewayLink.aspx?allId=105217>  
[Accessed 27/09/23].
- Ref. 4 The Town and Country Planning Act 1990. Available at:  
<https://www.legislation.gov.uk/ukpga/1990/8> [Accessed 27/09/23].
- Ref. 5 Planning Act 2008. Available at:  
<https://www.legislation.gov.uk/ukpga/2008/29> [Accessed 27/09/23].
- Ref. 6 Natural England (2009) Guidance on 'Current Use' in the definition of a Badger Sett.
- Ref. 7 Natural England (2011) Badgers and Development - A Guide to Best Practice and Licensing.

## Abbreviations

<b>Abbreviation/Term</b>	<b>Definition</b>
BAP	Biodiversity Action Plan
km	kilometres
m	metres
NEYEDC	East Yorkshire Ecological Data Centre
PV	Photovoltaic
(A)	Annex sett
(M)	Main sett
(O)	Outlier sett
(S)	Subsidiary sett

## Glossary of Frequently Used Terms

<b>Term</b>	<b>Definition</b>
Sett	Structure or place showing signs of use by a badger