



Craig y Perthi Solar Farm

Environmental Statement

Appendix 6.5 Water Vole Survey Report

Prepared for



JBM Solar Projects 25 Limited

July 2023
3312-01-TA06-005



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Water Vole Survey

Craig Y Perthi Solar Farm

June 2023

A report by

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Report details

Central grid reference: ST 392 876
Report date: 3rd June 2023
Report review: Colin Hicks BSc (Hons) MCIEEM

Report reference: CYP_WV_3841_030623

Declaration of compliance

BS 42020:2013

This study has been undertaken in accordance with British Standard 42020:2013 Biodiversity, Code of Practice for Planning and Development.

Code of Professional Conduct

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Validity of survey data and report

The findings of this report are valid for 24 months from the date of survey. If work has not commenced within this period, an updated survey by a suitably qualified ecologist will be required.

Revisions

| Date | Report no: | Comment |
|---------------------------|--------------------|-----------------|
| 3 rd June 2021 | CYP_WV_3841_030623 | Original report |
| | | |
| | | |

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1. Introduction

Western Ecology has been commissioned to complete a Water Vole survey on an area of land for Craig Y Perthi Solar, Bishton near Newport.

1.1. Survey aims

The aim of this survey is to ascertain whether Water Voles are present within the assessment site.

Where appropriate, the survey will provide the information required to determine the appropriate level of mitigation required to ensure compliance with wildlife legislation and relevant planning policy.

2. Methodology

2.1. Desktop survey

The data search collated existing biological records of Water Voles within 5km that are held by South East Wales Biodiversity Records Centre.

This data was examined, and an assessment was then made, based on known habitat preferences, as to whether these species may be present within the assessment site and how they may be affected by the proposal.

2.2. Field survey

All areas within 10 metres of watercourses associated with the assessment site were carefully searched for field signs of Water Vole by an ecologist who meets the required competency level for Water Vole surveys (CIEEM, 2016).

Field signs include;

- Burrows - holes along the waters edge, and in the bank above, that are wider than high with a diameter of 4-8cm,
- Latrines - collections of droppings that are 8-12mm long, 4-5mm wide, cylindrical with blunt ends, green/brown/black and have no odour,
- Grazed lawns - nursing females on the nest graze vegetation around the burrow entrance short to form a 'lawn',
- Feeding remains - neat piles of chewed lengths of vegetation up to 10cm long and with 45 degree cuts to their ends,
- Runways in vegetation - low runs or tunnels 5-10cm wide pushed through the vegetation leading to the water's edge, burrow entrances or favoured feeding areas,
- Water Voles sightings.

The survey was completed on 26th April 2021 and updated on 25th May 2023 in suitable weather conditions. The report also included information provided by the ornithologist from observations in April 2023.

2.3. Survey constraints

All areas of the assessment site were readily accessible. The optimal survey period for Water Vole is between April and late September.

3. Results

3.1. Desktop survey

There are 1605 records for Water Vole within 5km.

Records are associated with Ridings Reen which runs through the assessment site along the road from Bishton to Wilcrick.

It is very likely that Water Vole are present within this area.

3.2. Habitat Assessment

The assessment site is predominantly comprised of agricultural grasslands and arable with negligible value for Water Vole. However, the field margins in the south comprise a network of reens and drainage ditches that are fringed with semi-natural vegetation comprising Bulrush *Typha* sp., Common Reed *Phragmites australis*, Soft Rush *Juncus effusus*, Bramble *Rubus fruticosus* agg., Hawthorn *Crataegus monogyna*, sedges and common grasses. Some ditches in the far east of the assessment site are heavily wooded and are not considered optimal, whilst dry ditches were also present.

3.3. Field survey

The extent of the Water Vole surveys is shown on Map 1.

During an initial survey in August 2021 no evidence of Water Vole was identified.

Following reports of water vole entrances in April 2023, an update was completed in May 2023 during which time water vole burrows were found at two locations (Map 1). However, the overgrown nature of the reens and their steep sides made it difficult to safely access the watercourses in some areas.

For the purposes of this report and the EclA, water vole areas identified during the ornithological surveys and the May 2023 survey will be considered (Map 1).

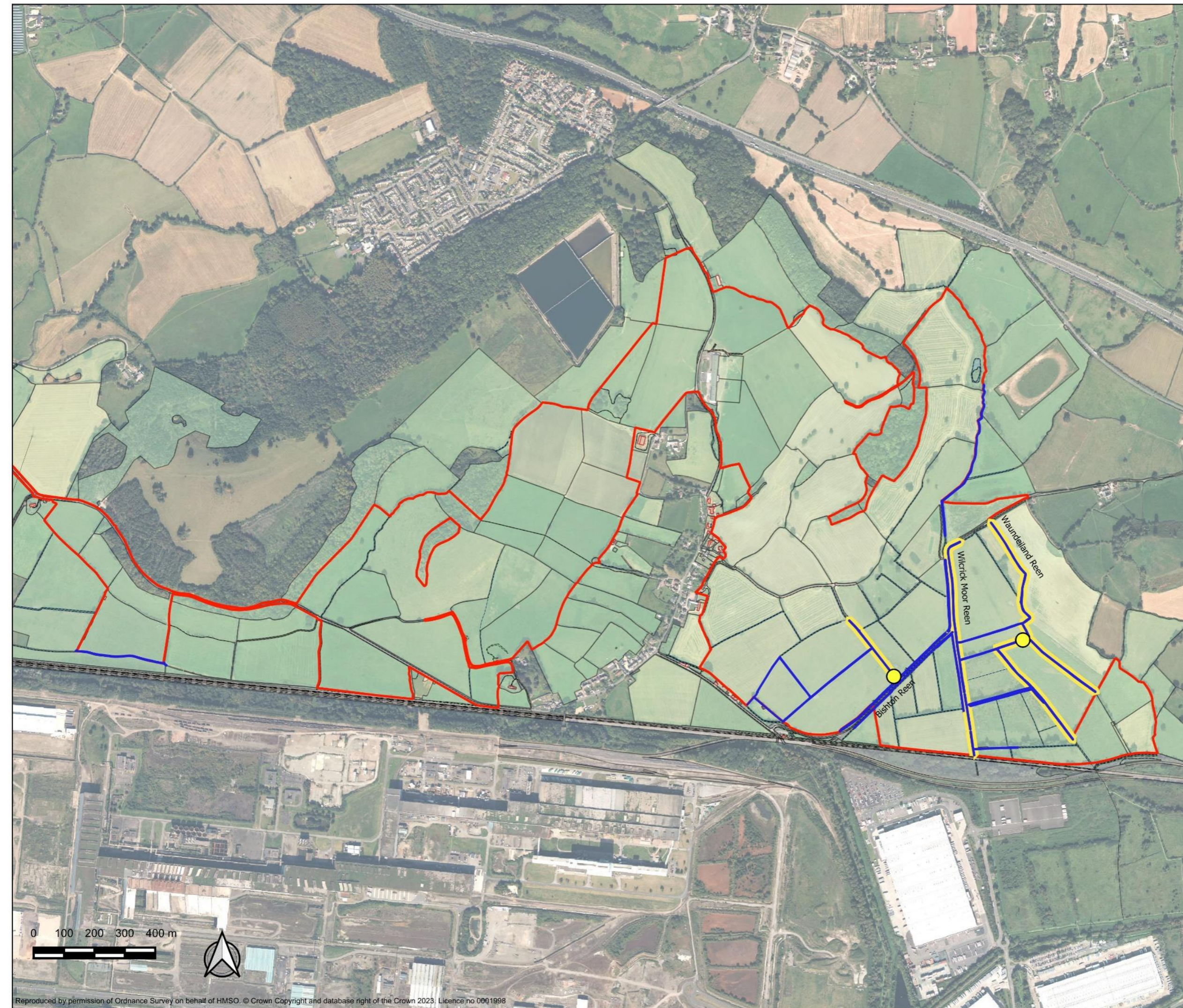
Recent evidence of Water Vole was recorded within the east of the assessment site associated with Wilcrick Moor Reen, Waundeiland Reen and in a ditch leading from Ridings Reen. Potential burrows were recorded these areas with characteristically grazed vegetation also noted.

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Legend

- Assessment site
- Watervole survey area
- Water Vole presence note during ornithology surveys
- Water Vole burrows recorded in May 2023



Title: Map 1. Field survey results

Project: Craig Y Perthi Solar Farm

Checked by: CDH Version: 01
Date: 03/06/2023

0 100 200 300 400 m



4. Water Voles and the Law

Water Vole is protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under the Act it is an offence to:

- intentionally capture, kill, disturb or injure Water Voles (on purpose or by not taking enough care);
- destroy or block access to their places of shelter or protection;
- possess, sell, control or transport live or dead bats, or parts of them.

Water Vole are listed under Section 7 of the Environment (Wales) Act 2016.

5. Conservation strategy

5.1. Assessment of potential impacts

Although some of the assessment site lacked recent evidence of Water Vole, areas associated with larger watercourses in the east exhibited field signs of recent activity during wintering bird surveys in April 2023, and water vole surveys in May 2023.

Water Vole are known to be in the local area, and as the reens are generally well connected across the assessment site, it is safe to conclude that Water Vole are present across the wider site.

Existing access tracks and reen crossings will be used during the construction and operation phases.

During the construction phase, the primary pathway of adverse effect would be through impacts to reens and ditches, such as direct habitat loss and damage, and changes in water quality and water levels. There is also potential for direct harm or injury and mitigation should be adopted during the construction phase.

During the operational phase, the primary pathway of effect would also be through impacts to reens and ditches. However, this will be a positive benefit to this animal with improved water quality associated with reduced management pressures on land that is currently an intensively managed grassland habitat, and the creation of additional grassland habitats that is currently in arable rotation will minimize chemical/nutrient inputs and sediment transfer to watercourses.

There will also be a benefit associated with the ditch management plan in the Gwent Levels - Redwick and Llandeenny SSSI during the operational phase. Casting and scrub removal associated with this plan is very unlikely to affect Water Vole as they would not be present within ditch habitats to be re-habilitated. Once ditches are opened up and can support emergent and bankside vegetation, this will create additional Water Vole habitat.

It is likely that the operational phase will have a positive effect on local Water Vole habitats.

5.2. Protective measures to minimise impacts

Protective measures will be adopted during the construction phase to avoid damage to reens and ditches. This will comprise exclusion zones of 12.5 metres from reens and 7 metres from ditches delineated by a suitable fence. There will be no access, storage of materials, ground disturbance, burning or contamination within the fenced areas.

Measures to protect water quality and avoid accidental pollution during the construction phase are detailed within the CEMP and include sediment and silt control, waste management, fuel/chemical storage and controlling run-off.

This will protect Water Vole habitat from physical damage during the majority of construction operations.

Cable routes will pass beneath reens by HDD drilling. Siting of HDD drilling rigs will be informed by pre-construction Water Vole surveys to ensure they will not harm Water Vole nor damage their holes. These surveys will be completed by the ECoW.

5.3. Compensatory habitats

There will no loss of Water Vole habitat and no compensatory habitat is required.

5.4. Timings of Water Vole conservation measures

Construction will need to take account of activities detailed in this conservation strategy.

Table 1. Timing of Water Vole conservation measures

| Phase | Activity | Comments |
|------------------|---|---|
| Pre-construction | CEMP adopted | |
| Pre-construction | Exclusion zones established to reens (12.5 metres) and ditches (7 metres) | Delineated by a suitable fence and maintained for the construction and operation phases of the development. |
| Pre-construction | Updated Water Vole surveys in locations of HDD | To allow informed siting of HDD drilling rigs |

5.5. Long-term monitoring

No long-term monitoring of Water Vole is required for this development.

6. Ecological compliance audit

Table 2 provides measures to ensure ecological compliance is maintained. At each stage measures will be checked and sign-off by the Site Manager or Ecological Clerk of Works and will be submitted to competent authorities, if requested.

Table 2. Ecological compliance audit form

| Phase of development | Timing (Year following completion of development) | Measure | Name | Date | Signature |
|----------------------|---|---|------|------|-----------|
| Pre- construction | Y0 | Exclusion zones established to reens (12.5 metres) and ditches (7 metres) | | | |
| Pre- construction | Y0 | Updated Water Vole surveys in locations of HDD | | | |

6. References

BSI, 2013. *British Standard 42020: 2013. Biodiversity – Code of practice for planning and development*. British Standards Institution, London.

CIEEM, 2016. Technical Guidance Series. Competency for species survey: Water Vole. Downloaded on 03/11/2016 from http://www.cieem.net/data/files/Resource_Library/Technical_Guidance_Series/CSS/CSS_-_WATER_VOLE_April_2013.pdf