ETIVE ECOLOGY
Ecological Services & Solutions

PROPOSED CABLE ROUTE
Cefn Park and Wrexham PV

Hedgerow Appraisal

1 Introduction

1.1 This document has been produced to inform a planning application for a proposed cable installation between the consented solar farm and battery storage at Little Llwyn Onn, Cefn Road (P/2022/0541) and the consented solar farm on Land north of Maelor Gas Works (P/2021/0676). Etive Ecology Ltd was commissioned by Novus / Innova to carry out a hedgerow survey of a roadside hedge crossed by the proposed cable route.

1.2 This document presents the findings of an ecological assessment undertaken of the existing hedgerow, confirmation of its status under the Hedgerow Regulations 1997, an appraisal of its protected species value and recommendations for mitigation / compensation. The survey area comprised ~110m of hedgerow west of Ffordd Sesswick within the red line boundary, plus an additional 10m length either side. The proposed cable is to be installed using trenchless techniques to avoid any impacts on the hedgerow. However, in the event that trenchless techniques cannot be utilised, it is likely that a 5m section of the hedgerow will be removed in order to install the cable using open-cut techniques.

1.3 The hedgerow assessment was carried out by graduate field ecologist Sophie Frost (BSc, Grad CIEEM).

2 Survey Results

2.1 Hedgerow Regulations 1997

2.1.1 Countryside hedgerows qualify for protection under the Hedgerows Regulations 1997 based on their length and location. As a general rule, a hedgerow is protected if it is more than 20m long, or if it is less than 20m long but is connected to another hedge at either end. To qualify as a hedge it must be less than 5m wide at its base. The hedgerow must be located on or next to farmland, common land, a protected site (e.g. SSSI), a public right of way or Crown land.

2.1.2 Additional protection is afforded to any hedgerow that qualifies as being 'important'. An important hedgerow is one that is at least 30 years old and meets one of the following criteria:

- Marks all of part of a parish boundary that existed before 1850.
- Contains an archaeological feature such as a scheduled monument.
- Is completely or partly in or next to an archaeological site listed on the Historic Environment Record.
- Marks the boundary of an estate or manor that existed before 1600.
- Is part of the field system that existed before the Inclosure Act (that is before 1845).
- Contains protected species listed in the Wildlife and Countryside Act 1981 (as amended).
- Contains species that are endangered, vulnerable and rare, and identified in the British Red Data books.
- Includes woody species and associated features as specified in the regulations.

2.1.3 The existing hedgerow within this assessment qualifies as a 'hedgerow' under the above regulations. It is at least 20m long and less than 5m wide at the base. To the west of the hedgerow is arable farmland.

2.2 Historic Criteria

2.2.1 Welsh Tithe Maps were accessed via The National Library of Wales. These maps indicate that:

- The hedgerow **does not** form part of the boundary between two historic townships or parishes.
- There is **no evidence to suggest** that the hedgerow formed the boundary of a pre-1600 estate or manor.
- There is **no evidence to suggest** that the hedgerow formed an integral part of a field system pre-dating the Inclosure Acts (pre-1845).

2.2.2 It is therefore concluded that the hedgerow under consideration does not appear to qualify as 'important' under the historical criteria of the Hedgerow Regulations 1997.

2.3 Ecological Criteria

2.3.1 The hedgerow is dominated by hawthorn (70%), with occasional dog rose, hazel, field maple and elder (northern half only). The hedge-bottom is comprised of broadleaved dock, common nettle, creeping thistle, hedge woundwort, false oat-grass and ragwort. There is also a 'post and rail' fence which marks the field boundary beneath the hedgerow vegetation.

2.3.2 Under Paragraph 7(3) of Schedule 1 to the Hedgerow Regulations 1997, as the length of the surveyed hedgerow exceeds 100m, but is less than 200m, to calculate the number of woody species present, the number of woody species present in the central 30m of each half of the hedgerow was counted and then divided by two.

2.3.3 This composition does not meet the qualifying criteria for 'woody species' as, following the Hedgerow Regulations, there are only between three and four 'woody species' on average within the surveyed section of hedgerow. The hedgerow however does have one 'associated feature' present; a bank which supports the hedgerow along at least half of its length. There are no rare or notable species of flora present.

2.3.4 During the various ecology surveys for the consented solar parks to the northwest and east of north of Ffordd Sesswick, a number of nesting birds of conservation concern were recorded. These species included bullfinch, cuckoo, dunnock, song thrush, linnet and yellowhammer, all of which are potential hedgerow nesting species. There is therefore the potential for the hedgerow to support nesting birds, which are protected under the Wildlife and Countryside Act 1981 (as amended). This means that **the hedgerow does qualify as 'important' under the Hedgerows Regulation 1997 on the basis of the species of wildlife it is likely to support**.

3 Mitigation Measures

3.1 In order to mitigate for the loss of a 5m section of 'important' hedgerow, it is proposed that hedgerow reinstated post-installation be of greater ecological value. The reinstated hedgerow will comprise:

- A mix of at least five native hedgerow species of local provenance, such as blackthorn, elder, hawthorn, hazel, and holly.
- Once established, the hedgerow shall be managed via an annual cut (outside of the nesting bird season), allowing it to grow to a height of at least 3m tall and 1.5m wide to match the existing hedgerow along the western boundary.
- The hedgerow should be protected from any future removal or replacement.

3.2 It is recommended that, if permitted, the removal of existing hedgerows be undertaken outside of nesting bird season, taken as March to August inclusive. This will ensure no active bird nests are adversely impacted.

4 Conclusion

4.1 This document has been produced by Etive Ecology Ltd to inform the planning application for the installation of a Cable Corridor Route for the consented solar farms at Cefn Park and the Former Maelor Gras Works, Wrexham.

4.2 A 110m length of hedgerow was assessed against the criteria within the Hedgerow Regulations 1997. The hedgerow does not appear to qualify as important on the basis of historical grounds and is also not considered to be species-rich, but it is likely to support nesting birds, which are protected under the Wildlife and Countryside Act

1981 (as amended). As a result of these findings, the hedgerow is considered to qualify as 'important' under the Hedgerow Regulations.

4.3 If trenchless techniques cannot be used for the installation of the cable, the proposal will result in the loss of 5m of hedgerow in order to install the cable via open cut. In this case, the hedgerow would be reinstated and would be subject to enhancement in the form of planting at least five native hedgerow species, to improve species-richness and overall biodiversity value of the hedgerow.

4.4 Provided these recommendations herein are adhered to in full, there should be no residual adverse impacts on the hedgerow posed by the scheme.

Prepared by; Sophie Frost Date; 12th October 2023

Reviewed by; Russell Grey Date; 16th October 2023

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Appendix A

Cable Route Plan

Maelor

Wilkinson
Business Park

Apex Centre

PV Array 2

PV Array 1

Little
Llwyn Onn

Glanrafon
Cottage

Substation
Area

Drain

Drain

PD

Wrexham Industrial Estate

Depot

Linden House

Ystad Ddiwydiannol Wrecsam
/ Wrexham Industrial Estate

Pum-Rhyd
Mill Cottage

Pipeline

Cyfnfan Five Fords /
Five Fords Roundabout

FB

FB

HM Pris

Track

Drain

Pum-rhyd

Parkey
Farm

Maelor
Abattoir

0 m 100 m 200 m 300 m 400 m 500 m

Scale Bar
1: 5000

KEY:

- Substation Location
- Planning Application Boundary
- Planned Cable Routes
- Customer Stations

novus

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