

All Ecology Ltd,
Rose Cottage,
Haw Street,
Coaley,
Dursley,
Gloucestershire,
GL11 5AY
Tel: 01453 861210
Mob: 07833 665084
Email: info@allecology.co.uk
Web: www.allecology.co.uk

Francis Lane, Wrexham

Great Crested Newt Method Statement

July 2015

Notice to readers:

This report has been prepared by All Ecology with all reasonable skill, care and diligence, within the terms of the contract with the client. The production of the report was undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management (www.cieem.org.uk).

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

Contents

Contents	1
1.0 Introduction	2
Background	2
Site Location	3
2.0 Legislation and Status	4
3.0 Survey and Site Assessment	5
Great Crested Newts	5
4.0 Impacts	6
5.0 Mitigation Strategy	7
Summary of Mitigation Strategy	7
Habitat Creation, Restoration and/or Enhancement	7
Exclusion and Pre-works Survey	8
Special Precautions	8
Care and Vigilance During Works	9
Mechanism for Ensuring Delivery	9
Timing of Works	9
6.0 References	10
7.0 Plans	11
8.0 Appendices	13

1.0 Introduction

Background

- 1.1 All Ecology was commissioned by TGC Renewables Ltd to produce a method statement detailing reasonable avoidance measures, a precautionary method of working, and long term conservation proposals with regard to Great Crested Newts for a potential solar farm development on an area of land to the south of Francis Lane, Wrexham. The site is approximately 9 ha in size, located immediately south of Francis Lane. The site comprises two arable fields surrounded and divided by species-poor hedgerows, some with mature trees. A single pond is also present on site. The site is surrounded by open fields of mainly arable farmland; areas of woodland and other semi-natural habitats are scarce in the vicinity of the site.
- 1.2 The site is the subject of a planning application for a new solar farm, which would cover the majority of the two fields with arrays of freestanding solar panels. The solar panels would be arranged in south facing rows with a gap of approximately 5.7 m between the rows. The proposed panels would be 0.8 m in height at their lower edge and up to 3 m in height i.e. angled to maximise insolation (see Appendix 1 for the full specification) The proposals include the mounting of the panels on a ground based racking system, power inverter stations, transformer stations, security fencing and security cameras. A new access track would also be created, formed by the use of compacted stone over geotextile base layer.
- 1.3 During a previous Extended Phase I Habitat Survey carried out by Ecosulis in June 2014 a single pond was identified on site. This was subject to the Great Crested Newt Habitat Suitability Index (HSI) assessment and was rated as 'good' for its suitability to support Great Crested Newts. Given the presence of ponds both on site and in the surrounding area, as well as the existence of several records of Great Crested Newts within 2 km of the site, the nearest being 750 m from the site, it was concluded that there is high potential for this species to be present on site using the ponds and hedgerows. The arable fields do not provide suitable habitat but there is potential for newts to cross these in order to move between ponds and terrestrial habitat in the surrounding area.
- 1.4 The proposals for the site may require the widening of the entrance by removing up to 2 m of hedge, but in general would not result in the loss of any terrestrial habitat and the pond would not be affected by the development. It was therefore concluded that full Great Crested Newts surveys or eDNA testing of the pond would be unnecessary provided the proposed works on site are carried out in accordance with this method statement for the protection retained habitat and individual Great Crested Newts, which are known to be present in the area and almost certainly present on site. As part of the development a number of measures for the enhancement of the site are also proposed, the majority of which will also directly benefit newts; these enhancements are also detailed here.

Site Location



2.0 Legislation and Status

2.1 As Great Crested Newts are listed on Schedule 5 of The Wildlife and Countryside Act (1981), they receive protection under Section 9 of this Act. The Act has been amended several times, most recently by the Countryside and Rights of Way Act 2000 which added 'or recklessly' to Section 9(4)(a) and (b). Thus, it is an offence to:

- intentionally kill, injure or take a Great Crested Newt
- possess or control any live or dead specimen or anything derived from a Great Crested Newt
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a Great Crested Newt
- intentionally or recklessly disturb a Great Crested Newt while it is occupying a structure which it uses for that purpose
- transport for sale or exchange, or offer for sale or exchange a live or dead Great Crested Newt or any part of a Great Crested Newt.

2.2 The Conservation of Habitats and Species Regulations 2010 make it an offence to:

- deliberately capture or kill a Great Crested Newt
- deliberately disturb a Great Crested Newt
- deliberately take or destroy the eggs of a Great Crested Newt
- damage or destroy a breeding site or resting place of a Great Crested Newt
- keep, transport, sell or exchange or offer for sale any Great Crested Newts or anything derived from this species.

2.3 The Great Crested Newt is a UK BAP Priority Species (JNCC, 2015).

3.0 Survey and Site Assessment

Great Crested Newts

- 3.1 Detailed presence/absence surveys have not been carried out on site but the results of a data search carried out as part of the Extended Phase I Habitat Survey of the site show that newts are present in the surrounding area and a HSI Assessment of the pond on the present site, as well as a pond on the adjacent application site, indicates that both are potentially suitable for Great Crested Newts. A number of ponds are also present in the surrounding area in close proximity to the site. This being the case it has been concluded that it is likely that this species is present on site. The pond on site, as well as the hedgerows, have been classed as Great Crested Newt habitat. It may be necessary to remove up to 2 m of hedge at the site entrance, but apart from this no loss of these habitats is proposed and works will only take place within arable fields shortly after harvesting, which are not considered to be permanent suitable habitat. These will be converted to grazing pasture and as such any impacts to newts are only likely to arise during the construction phase of the development if there is accidental damage to suitable habitats, or if individual newts stray into the working areas.



Figure 1. Pond Location Plan

4.0 Impacts

- 4.1 In the absence of mitigation, the following impacts with respect to Great Crested Newts have been identified.

Aquatic Habitat

- 4.2 No aquatic habitat is to be affected by the proposed development; accidental damage could occur from pollution or machinery but a Construction Environmental Management Plan, to be secured by condition, will be implemented to ensure these habitats are protected.

Terrestrial Habitat

- 4.3 There is to be permanent loss of arable fields and the creation of new grassland for grazing in its place, the impact significance of which is considered to be negligible.
- 4.4 Loss of up to 2 m of hedgerow to widen an exiting entrance. Minor loss of terrestrial habitat the impact significance of which is considered to be negligible.
- 4.5 Works are to take place in the vicinity of the pond, which could support Great Crested Newts and individuals of this species may seek refuge under stored materials or become trapped in open trenches resulting in injury or death.

Habitat Fragmentation

- 4.6 Habitat fragmentation and interruption of dispersal patterns are not predicted, as the development will not introduce any barriers to the movement of newts. The new access track and sub-stations would not be a barrier.

Long-term Impacts

- 4.7 The long-term use of the site as a whole will continue to provide suitable conditions for newts. New field margins of tall grassland are to be created and the long-term management of the hedgerows will improve the structure of the hedges and allow for a denser understory to develop, further enhancing the site for newts and other wildlife. No long-term negative impacts are predicted.

Post-development Interference Impacts

- 4.8 The long-term use of the site will remain agricultural and any maintenance of the solar arrays is expected to require minimal infrequent visits; no post development interference impacts are predicted.

Other Impacts

- 4.9 No other impacts are perceived.

5.0 Mitigation Strategy

Summary of Mitigation Strategy

- 5.1 There is one pond on site but the terrestrial habitat is limited to the boundary hedgerows and pond margins. The main aims of the mitigation strategy on site are to reduce short-term impacts to any individual amphibians that may stray into the working areas, and the protection of terrestrial and aquatic habitats currently present on site. The proposed works are considered to be low impact, the main concerns being the removal of up to 2 m of hedgerow, digging of minor trenches and foundations for sub-stations, access tracks etc. and the tracking of vehicles. Prior to commencement of any works on site, a site induction talk will be delivered to contractors by the appointed Ecological Clerk of Works outlining the purpose of the mitigation strategy, details of exclusion/protection zones, identification of species, and what to do in the event any individuals are discovered during the works. The ECoW will check the terrestrial habitats *i.e.* a hand search of the hedgerow section to be removed, vegetation around the pond and any left over debris after the final harvest of the arable field where construction works are proposed immediately prior to works commencing.
- 5.2 Measures for the enhancement of the site are also included.

Habitat Creation, Restoration and/or Enhancement

- 5.3 The areas of optimal habitat on site are confined to the boundary hedgerows and small area of marginal vegetation around the pond. The loss of habitat will be restricted to arable farmland which will be converted to grazing pasture and up to 2 m of hedgerow. The following measures are to be implemented as part of the development:
- Creation of 5 m wide ungrazed field margins between hedges and security fencing, which will be seeded with a wildflower/grass mix of local provenance and allowed to develop. This is in line with Natural England guidelines for solar farms and would be also be appropriate here, with the benefit of being a significant gain over the existing field margins, which are currently minimal. These will be maintained with a suitable mowing regime by carrying out a cut in late July onwards to allow plants to set seed. The arisings would be removed in order to reduce the nutrient levels in the soil and hopefully allow a higher botanical diversity to develop. However, the cut will not be less than 20cm in order to allow tussocky grassland to develop, which will be of greater benefit to newts.
 - Enhancement of existing hedgerows by laying/managing the hedgerows to encourage denser low down growth. Currently close-cropped sections of hedgerows will be allowed to develop, trimming only every three years or less if possible, and maintaining them at a minimum height of three metres.
 - 10 m buffer around existing pond. Stock proof fencing to be erected around this to prevent grazing/poaching by livestock. Sufficient gap to be left to allow access by native wildlife such as Badgers.
 - Provision of a log piles within hedgerows to provide a potential refuges/hibernacula for amphibians.

Exclusion and Pre-works Survey

- 5.4 No exclusion of newts or pre-works survey are proposed. The risk of harm to a resident Great Crested Newt population, if present, will be minimal when the following special precautions are implemented and care and vigilance during works employed.

Special Precautions

- 5.5 Contractors must not stray into areas of marginal vegetation around the pond, and the hedgerows, which are also terrestrial habitat, will require protection for this reason as well as standard root protection. During the site induction talk the ECoW will detail the importance of avoiding these areas but they will also be protected to ensure vehicles or personnel do not damage these habitats. Permanent security fencing will provide this protection around the majority of the site, and temporary Heras type fencing will be erected around the pond prior to the installation of stock fencing.
- 5.6 Immediately prior to initial site works, a licensed ecologist will inspect the proposed working areas and hand searches will be carried out. Any suitable features that could act as refuges for newts, such as logs, will be removed by hand and placed in the protected area around the pond to provide suitable refuges. A licensed ecologist would be present to oversee the removal of the section of hedge at the site entrance.
- 5.7 All excavations and working areas will be subject to daily pre-works searches for amphibians. Vegetation is expected to be minimal in the working areas and the likelihood of amphibians being present almost negligible. A licensed newt worker will therefore not be required day to day and instead all contractors will be briefed during the site induction talk on the identification of amphibians.
- 5.8 Any trenches and other excavations will be either back-filled before nightfall or if left open small piles of vegetation (loose grass and/or leaves) will be added to provide shelter for any newts that might fall in, and subject to a pre-works inspection before works re-commence the following day. Any discovered animals will be captured and relocated as described in paragraph 5.10. Stored materials (that might act as temporary resting places) will be stored off the ground, e.g. on pallets, and none will be stored within 50 m of the pond.
- 5.9 The following measures will also be implemented to ensure the protection of aquatic habitats both on and off site through the implementation of a Construction Environmental Management Plan, secured by an appropriate planning condition:
- During the construction phase of the project no unsecured chemicals, including vehicle fuels or lubricants will be left on site at night where they might be accessed by accident or deliberately (e.g. vandals) resulting in spillage either directly, or as run off, in to aquatic habitats.
 - Contractors will have in place secure storage facilities and an agreed pollution prevention plan. Appropriate pollution control equipment will be available at the site to control spillages if they do occur.

Care and Vigilance During Works

- 5.10 Other species of amphibians, as well as Great Crested Newts could still be found on site. Any contractors on site will therefore be advised to carry out all work with care and vigilance for these species. The ECoW will give full details during the site induction talk but in summary if amphibians are found during works, then with the contractor wearing gloves, they would be moved out of harm's way into the boundary hedgerows. This will provide them with temporary protection before they relocate of their own accord. Should any Great Crested Newts be found during works, then works in that area will cease and a licensed Ecologist consulted before works continue.

Mechanism for Ensuring Delivery

- 5.11 Upon completion of the works a report will be produced detailing and confirming the works carried out. Species of amphibians or other animal species discovered during the works will be recorded in the following way:
- Location captured
 - Species
 - Sex
 - Estimate of age
 - Date of capture
 - Weather conditions and temperature on day of capture.
- 5.12 A long-term management plan will be produced and secured by a suitable planning condition formalising the ecological enhancement measures and maintenance of the site, including the habitats to be created that will be suitable for newts detailed above.

Timing of Works

- 5.13 A formal timetable for works has not yet been devised. The best time to carry out the works would be from November to February when newts are most likely to be hibernating and unlikely to be active on site. However, works may proceed at any time the only restriction being that they should commence shortly after the final harvest. Habitats on site should not be left unmanaged and allowed to become overgrown. If habitats do become overgrown it may be necessary to devise a new method statement, which could entail more stringent measures.

6.0 References

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

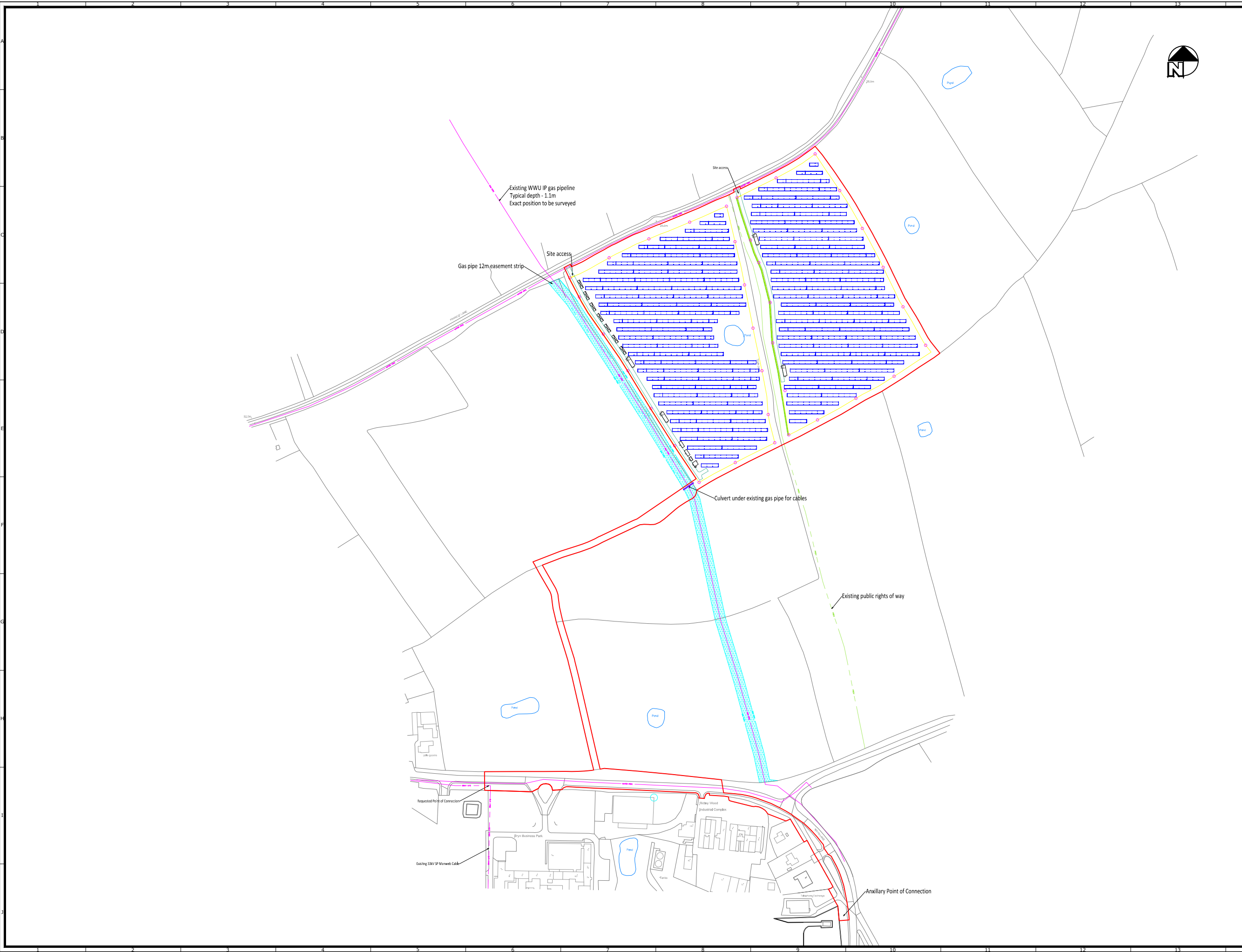
Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Joint Nature Conservation Committee (2015). *UK BAP Priority Species*. [Online]. Available at: <http://jncc.defra.gov.uk/page-5717> [accessed on 4th July 2015]

Natural Environment and Rural Communities Act 2006, (c.16), London: HMSO.

Wildlife and Countryside Act 1981 (and amendments). (c.69), London: HMSO.

7.0 Plans



TGC-SITE-DESIGN

GENERAL NOTES

A. DO NOT SCALE FROM THIS DRAWING

B. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.

System Info:

Module Rating:

280Wp

320Wp

System Size*:

4.03MWp

4.61MWp

Area Bounded by Fence:

7.9ha

Area of Site:

10.2ha

*Precise module rating cannot be specified at this stage and will be selected based on market availability post consent. Site capacity above shows system size based on typical low and high panel rating specification being used. Range of panel ratings are achieved with the same physical panel dimensions given above.

Legend:

Existing Services

Grid Balancing Equipment Container

Inverter Cabin

33kV Substation

Switchgear Housing

Comms Building

4m CCTV Poles

Site Boundary

80 PV Modules

40 PV Modules

20 PV Modules

Fence

Track

Public Rights of Way

Gas Easement Area

New/Enhanced Landscaping

0m

120m

TGC

renewables

Designed by TGC Renewables

Project Title

226-01-PV Francis Lane

Drawing Title

Site Design

Drawing Path

Drawn

NM

Checked

JJ

Approved

RA

Scale

1:4000

Paper Size

A3

Status

Draft

Date

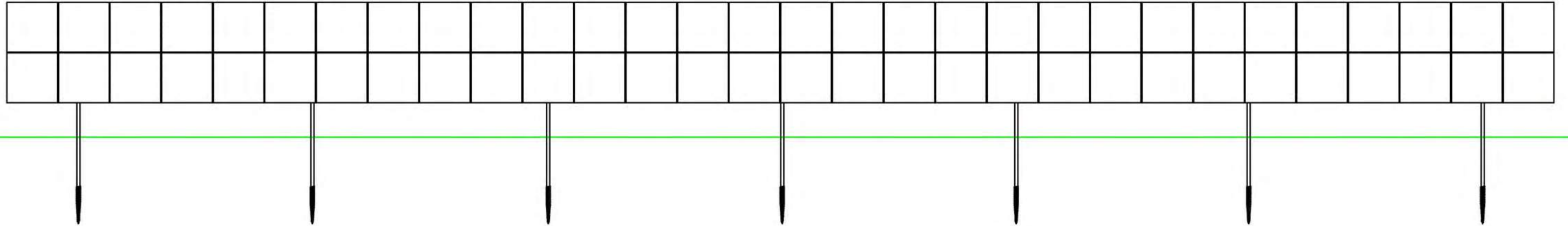
5/18/2015 1:04 PM

Rev.

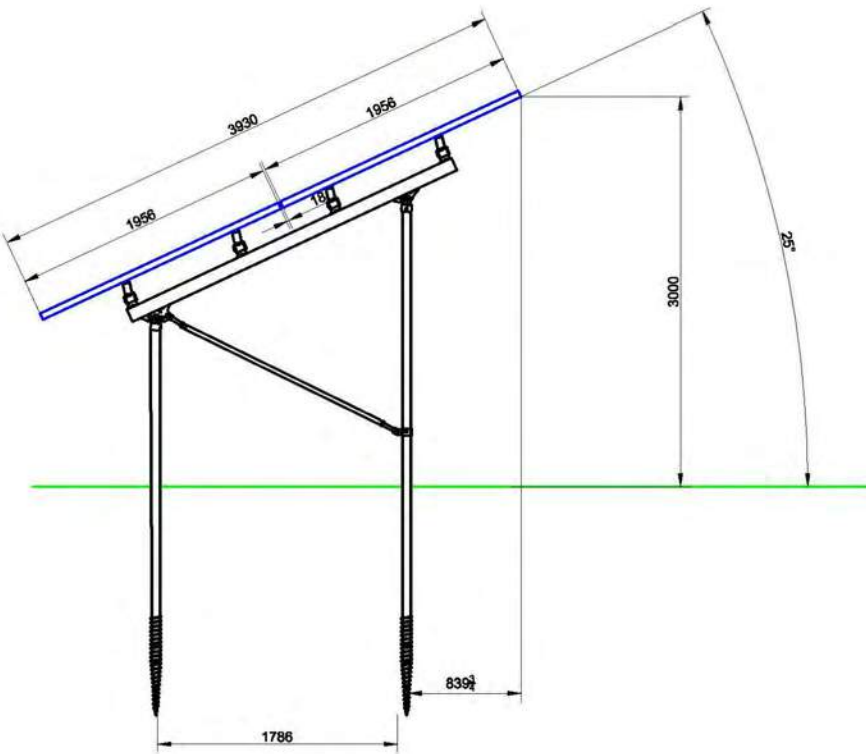
A6

8.0 Appendices

Appendix 1 – Solar Panel Specification



INDICATIVE IMAGE: SIDE AND PARTIAL FRONT ELEVATION



Pld Date : 10/08/2012 12:28:37
File Name : UVALEXSOLAR FARMS\PROJECTS\RACKING 30 20 SC DEG

			Project	TGC Solar Farm	Drawing Title	Solar Farm 2V, 40 Module Racking	Purpose of issue Planning Drawing					Drawing Number 2V Racking System		Rev Rev 2	TGC RENEWABLES LTD TGC HOUSE DUCKMOOR ROAD BRISTOL BS3 2BJ www.tgcrenewables.com	
							Designed AR	Drawn AR	Checked SR	Approved SR	Date 02/07/2012					
IMAGERY ADDED	TM RA	17/07/13	R2				Suitability									
Revision Details	By Check	Date	Suffix				Scale @ A3 NOT TO SCALE									