



Template Method Statement to be used within a Great Crested Newt Development Licence Application

This template Method Statement is to be used to form part of your Licence Application for a European Protected Species Development Licence. It will be used to determine the impact of the application on the favourable conservation status of the species concerned (Regulation 55(9) (b) of the Conservation of Habitats and Species Regulations 2017). It must be prepared by a consultant ecologist or other suitably qualified person. You are strongly advised to refer to the **Great Crested Newt Mitigation Guidelines**¹. Please submit your Application and supporting Method Statement electronically to the contact details provided below.

Please note as of the 1st March 2018 the declaration box found at the end of this template must be included on any Method Statements submitted in support of a licence application, and must be signed and dated by the applicant and ecologist. Any application containing a Method Statement without this declaration will be rejected.

Contact Details

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Method Statement Title:	Solar Farm & Battery Storage Facility (P/2021/0676)
Method Statement Version Number:	1
Method Statement Issue Date:	03/01/2024
Site Address:	Land North East of Maelor Gas Works, Marchwiel, Wrexham, LL13 0UN

¹ Great Crested Newt Mitigation Guidelines (NEWT1) available from Natural England website

Background and Supporting Information

A Executive Summary.

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The site of:

- Land northeast of the Maelor Gas Works, Marchwiel, Wrexham, LL13 0NU

Has been granted full planning permission for:

- Erection of Solar Farm and Battery Storage Facility (P/2021/0676).

The following ecological surveys have been completed for the site:

- Extended Phase 1 Habitat Survey – 26/05/2020 (Corylus Planning and Environmental Ltd)
- Night time torch survey – 19/04/2021 (Smart Ecology Ltd)
- Night time torch survey – 14/06/2021 (Smart Ecology Ltd)

These surveys concluded the presence of Great Crested Newt (GCN) in the immediate vicinity of the development footprint.

The proposed scheme will result in the immediate disturbance to the existing semi-natural habitats on site. Any GCN present within these habitats will be subject to disturbance and likely harm.

B Introduction

B.1 Background to activity/development

Include a brief summary of what the proposed activity is and why it is necessary.

The proposed scheme is for the erection of a solar farm and battery storage facility. The Environment Act (Wales) set a target of 70% of the country's electricity consumption to be sourced from renewable sources by 2030 as a response to the Paris Agreement which was signed by the UK in 2016, a global agreement to reduce global warming. This development will contribute to meeting the National Grid's renewable energy needs for producing green electricity and reducing reliance on fossil fuels which produce harmful greenhouse gases. Solar Technology is proven to be a source of safe, locally produced and sustainable power.

There is capacity within the National Grid network in the vicinity of the site and the applicant has secured the use of an existing Point of Connection into the National Grid which has been the driving force behind the selection of this site for a solar farm.

B.2 Full details of proposed works on site that are to be covered by the licence

Please ensure sufficient detail is provided on the proposed works e.g. construction of buildings, roads, fences etc. Include current status of planning permission or other consents (if applicable) and any outstanding conditions/reserved matters. Include timescales and order of work.

There are two distinct elements to the proposed development: 1. Solar photovoltaic panels and associated infrastructure; and 2. A battery storage facility.

The proposed solar park, although adjacent to an existing solar park, would be operated separately from it. For the purposes of the consideration of the application, it is not considered to be an "extension".

The proposed solar park would have a maximum export capacity of 5.7MWp. The battery storage facility would have an import/export capacity of 16MWh. The proposed PV panels would be very similar in size and appearance to the units installed within the existing solar park, but each PV panel would have an increased generation capacity of 560-580kW.

The panels would be mounted on frames with a maximum height of 3.1m supported by a single stanchion. They would be arranged in rows facing south to maximize energy generating potential. The layout has been designed

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to retain the second world war brick buildings, trees and hedgerows, along with additional planting and enhancements for biodiversity.

Within the proposed development, the battery modules would be stored within the container type structures, arranged within a racking system with an internal cabling and a fire suppression system. Each container would have a heating, ventilation and air cooling (HVAC) unit.

The applicant has reconsidered the proposed access route into the site and due to the constraints associated with travelling through the existing solar park for construction purposes, an alternative access route is now proposed to the east of the site. This access route will follow an un-named road from the B5130 which leads on to a private lane.

The following ecological elements are included within the approved scheme:

- Development of Fields 1A, 1B, 1C, and Field 2 as separate solar panel compartments with four access gates.
- Creation of maintenance access roads to Fields 1A, 1B, 1C and Field 2.
- Creation of one native woodland block and hibernacula in Field 1A.
- Creation of a shallow ditch, an attenuation swale area, a hibernacula, translocation of a hedgerow, and a main access gate within Field 1B.
- Creation of a soil bund, two hibernacula, a pond, a battery storage, and ancillary infrastructure within Field 1C.
- Creation of a series of shallow scrapes, soil bunds and grass heaps in land adjacent to the north of Fields 1A and 2.
- Management of the retained and enhanced habitats for their biodiversity for the duration of the operational period (anticipated to be 40 years) with monitoring and site wardening. This includes both the grassland beneath the panels and the adjacent off-site grassland area.

The current time scale for the whole development is:

- The development hereby permitted shall be commenced before the expiry of five years from the date of the Decision Notice for application no. P/2021/0676 – dated 07/11/2022.
- It is anticipated that construction works will commence from April 2024 and will be completed within 12 months.

There is one relevant planning condition:

- No development shall commence until a GCN Conservation Plan has been submitted to and approved in writing by the Local Planning Authority. The GCN Conservation Plan should include but not necessarily be limited to:
 - i. Submission of details and associated plans concerning GCN avoidance and mitigation measures including, but not limited to: fence design, specifications and proposed locations; consideration of access issues across fence lines (including PROW if applicable); fence monitoring and maintenance requirements; and supervised removal of barrier fences. Submission to include proposed timescales and reporting requirements;
 - ii. Submission of a long term site management plan (not less than 25 years) that includes defined aims and objectives together with current and favourable conservation status of the local population of GCN; habitat management prescriptions; contingency measures if fish or invasive non-native species (INNS) are detected; proposals that are capable of being implemented in the event of failure to undertake or to appropriately undertake identified or contingency actions;
 - iii. Site liaison and wardening, licensing requirements for undertaking habitat management and surveillance;
 - iv. Current and any proposed changes to tenure of the dedicated ecology area to the satisfaction of the LPA (we advise tenure to accord with the definition of "responsible" body under Section 7 of the Environment Act 2021); persons or bodies responsible for undertaking management and surveillance together with required skills and competencies; reporting requirements; and proposed dates for updating or revising the management plan;
 - v. Detail of the skills and competencies required by those undertaking management and maintenance works, surveillance or activities. The detail shall also specify requirements for European Protected Species licenses for each of the specified activities;
 - vi. Provision for periodic review mechanism for the Conservation Management Plan;
 - vii. Contingency measures that are capable of being implemented in the event of failure to undertake or appropriately implement identified management or surveillance prescriptions;

- viii. Submission of details concerning the installation and maintenance of an amphibian friendly surface water management system that does not include gully pots;
- ix. Details of timing, phasing and duration of construction activities and conservation measures;
- x. Timetable for implementation demonstrating that works are aligned with the proposed development;
- xi. Ecological Compliance Audit, including key performance indicators;
- xii. Persons responsible for implementing the works;
- xiii. Post construction monitoring plan. Monitoring plan to include:
 - Methodology: The Wales Great Crested Newt Monitoring Scheme shall be used with surveys being carried out annually for the first 5 years thereafter on a biennial basis from year 6. However, monitoring shall be carried out on an annual basis if fish or invasive non-native species are detected;
 - Duration: timescale to accord with operational and decommissioning phases of the proposal
 - Surveys shall be abundance counts and habitat quality assessments using Habitat Suitability Index (HSI) scores;
 - Identification of individuals/bodies being responsible for monitoring and reporting results;
 - Each water body shall be individually numbered on site.

It is intended that this planning condition will be discharged prior to submission of the GCN license. This MS will be submitted to the LPA to address the condition for a Conservation Management Plan, along with a Habitat Management Plan (HMP), as it contains all of the necessary information.

B.3 Actions requiring licensing

E.g. disturb, capture, translocate, damage or destroy breeding site or resting place (terrestrial and/or aquatic), kill. Briefly explain why these actions are necessary.

The development of the site will involve the following licensable actions:

- Capture of GCN within the working area.
- Translocation of GCN from the working area into receptor sites (Ponds 1, 2 and 3 within the existing Wrexham Solar Park).

C Survey and site assessment

C.1 Existing information on great crested newts at the survey site.

Provide records from local environmental records centres, predictive modelling, local herpetile groups, previous survey work by the applicant or others. Include records from within 2km.

A COFNOD data search conducted by Corylus Planning and Environmental Ltd during the PEA (ref no. 258/PEA) identified 256 records of GCN between a 0km and 1.9km radius.

C.2 Statutory sites notified for the species (SSSIs or SACs) within 10km

The following statutory sites (SSSI / SAC) within a 10km radius of the development site were checked for GCN notifications. Where GCN form part of the reason for designation, further detail is provided:

- Afon Dyfrdwy (SSSI)
- Chwarel Singret (SSSI)
- Cloy Brook Pastures (SSSI)
- Dee Cliffs, Farnon (SSSI)
- Gatewen Marsh (SSSI)
- Johnstown Newt Site (SAC) - designated for supporting a breeding population of over 300 GCN which is considered to be either stable or increasing.
- Llay Bog (SSSI)
- Marford Quarry (SSSI)
- Old Pulford Brook Meadows (SSSI)
- River Dee and Bala Lake (England) (SAC)
- River Dee and Bala Lake (Wales) (SAC)
- Shell Brook Pastures (SSSI)
- Sontley Marsh (SSSI)
- Stryt Las a'r Hafod (SSSI) - notified for supporting one of the largest known breeding populations of GCN in Great Britain, along with the presence of many other amphibian species.

- Vicarage Moss (SSSI)
- Well Rough and Long Plantation (SSSI)

C.3 Objectives of the survey

E.g. to determine presence/absence of all sub-populations of great crested newts likely to be affected, an estimate of population size and their usage of site (e.g. breeding, hibernation, and foraging).

To determine the presence / absence of all sub populations of GCN likely to be affected, and to estimate the size of the population and usage of the site.

To comply with the monitoring requirements of the development license for the previous solar farm installation and related works on the land adjacent to the application site (P/2015/0463).

C.4 Scaled plan/map of survey area

This should be of appropriate scale and orientation with integral or separate location map at 1:50,000 or 1:25,000 scale and aerial photographs.

C.4 Attached.

C.5 Site/habitat description (relevant to great crested newts)

This should be based on day-time visits (to include description of site and habitat relevant to great crested newt ecology). Include annotated photographs if applicable.

The aquatic habitat within the application site comprises a small section of the Afon Clywedog. No ponds are present within the application site boundary. However, there have been 21 ponds identified within 500m of the application site, including three ponds created on the existing solar site in October 2021 to the southwest of the proposed site. The Afon Clywedog acts as a barrier between the site and six of these ponds to the north bringing the number of accessible ponds down to 15.

The terrestrial habitat within the application site predominantly comprises improved grassland, with occasional scattered scrub around buildings and along a small section of the eastern red line boundary. Tall ruderal vegetation is located along the riverbank to the north of the site, and there are two small areas of semi-natural broadleaved woodland also located along the riverbank. To the east of the site are a number of hedgerows along the red line boundary and running east to west central to the east of the site, comprising sections of species-rich and species-poor hedgerows. A number of rubble piles were located within the application site.

Overall, suitable GCN habitat was identified;

- 15 accessible ponds within 500m of the application site, including three within the existing solar site.
- Improved grassland.
- Tall ruderal.
- Hedgerow.
- Rubble piles.
- Concrete bases of buildings.

The terrestrial habitat within the application site was considered suitable to support GCN, despite the sub-optimal management of the existing grassland. The tall ruderal vegetation and hedgerows provide ecological corridors in and out of the site. The rubble piles and concrete bases of buildings offer suitable refugia and hibernacula for GCN.

There are no ponds within the red-line boundary, therefore the site itself does not support any GCN breeding sites.

C.6 Field survey(s).

Include survey method (night counts, bottle trapping, egg surveys, site inspections), timings (day/evening), weather conditions (wind, rain, air and water temperature – tabulated for multiple

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survey visits), personnel involved (provide individual licence numbers, if held) and details of experience/competence in this type of work, and equipment used (type and power of torch). Also record any occurrence of non-native invasive plant species or fish, and structures or features that may cause incidental capture or killing, e.g. gulley pots. Also include any constraints and justifications for departures from best practice.

Survey methods included:

- Extended Phase 1 Habitat Survey of the application site (26/05/2022)
- Night time torch survey of the existing ponds on the existing solar site adjacent to the application site (19/04/2021 & 14/06/2021)

The initial Extended Phase 1 Habitat Survey was carried out by Corylus Planning and Environmental Ltd on the 26th May 2022. The night time torch surveys which also provided GCN data for this application were implemented to comply with the monitoring requirements of the NRW development license on the existing site (S087171/2) and were carried out by Robert Dunn (NRW survey licence reference: S089899/1).

Extended Phase 1 Habitat Survey

- The Extended Phase 1 Habitat Survey was undertaken by Corylus Planning and Environmental Ltd in May 2020. This considered the suitability of both the terrestrial and aquatic habitats on site for GCN so that the ecological impact of the development on the GCN population could be assessed, and both appropriate mitigation and compensation strategies could be considered.

Night time torch surveys

- The survey effort comprised of two torch surveys of each of the three newly created ponds within the existing solar site in April and June 2021.
- A high-powered torch (Clulite 1 million candle power) was used to search for GCN.
- The surveyor walked slow around Ponds 1, 2 and 3 and shone the torch across the water surface to look for newts. Any newts seen were identified to species level and sexed (where possible).

C.7 Survey Results.

Summarise findings in table form (if appropriate); provide clear, annotated and cross-referenced maps/plans/photographs to show locations of breeding sites, and habitat maps. Raw data to be appended.

During the Extended Phase 1 Habitat Survey, the majority of the terrestrial habitat comprising improved grassland, tall ruderal vegetation along the riverbank, small pockets of semi-mature broadleaved woodland and hedgerows, providing both ecological corridors and shelter. The rubble piles and buildings with concrete bases were also present on site. There was no aquatic habitat within the application site boundary. The Phase 1 Habitat Map is provided within the PEA Report (Corylus, PEA Report, 04/02/21).

A summary of the night-time torch survey results are detailed below in Table C.7. Full details of the survey effort are presented in the GCN Survey Report (Smart Ecology Ltd, GCN Monitoring Report, 14/09/21):

Pond	Central Grid Reference	National	Great crested newt	Smooth newt	Palmate newt	Smooth or palmate newt	Common frog	Common toad
Survey 1; 19th April 2021								
1	SJ 38315 48288		0	-	-	Yes	-	-
2	SJ 38174 48314		2	Yes	Yes	Yes	Yes	-
3	SJ 37704 48124		0	-	-	Yes	-	-
Survey 2; 14th June 2021								
1	SJ 38315 48288		0	-	-	Yes	-	-
2	SJ 38174 48314		0	Yes	Yes	Yes	-	-
3	SJ 37704 48124		0	-	-	Yes	-	-

C.8 Interpretation/evaluation of survey results (Great crested newt Mitigation Guidelines section 5.8)

Provide count/estimate of great crested newt numbers, status of site (e.g. breeding, foraging, resting or hibernating), population significance, constraints on survey (e.g. time of year, cold weather, access problems – justify as necessary).

- The terrestrial habitats within the application site comprising improved grassland, tall ruderal vegetation and hedgerows were assessed as being of moderate value to GCN during their terrestrial phase as they offer both shelter and protection, as well as acting as an ecological corridor between sites including the adjacent existing solar farm with ponds. Furthermore, the rubble piles and concrete bases of the buildings were identified as providing suitable hibernacula for GCN.
- Based on the night-time torch survey effort, it was concluded that there is a small GCN population present within the immediate vicinity of the proposed solar site. It is acknowledged that this small population may well form part of a wider medium-sized meta-population. NRW have indicated that the site should be considered as part of the surrounding Wrexham Industrial Estate meta-population, which is a medium-large sized population. Therefore, given the scale of which the impacts are anticipated, a medium-sized population has been assumed.

D Impact assessment – potential impact of proposed works in absence of mitigation/compensation. See Great Crested Newt Mitigation Guidelines (section 6.2)

D.1 Short-term impacts: disturbance

E.g. artificial light, restricting access to feeding or breeding sites, sheltering habitats and dispersal corridors.

Without mitigation, the construction of the scheme will result in immediate disturbance of the existing semi-natural habitat on site, comprising improved grassland, tall ruderal and hedgerows. Any GCN present within these habitats will also be subject to disturbance and likely harm. These impacts would be significant at the Local level given the assumed presence of small-medium numbers of GCN within the site.

During the construction phase (c 16 weeks) of the development, there would also be a risk that GCN may disperse onto site from adjacent land and therefore could be disturbed, injured or harmed.

D.2 Long-term impacts: site modification

E.g. destruction or damage of part of breeding site or preferential sheltering/foraging habitats. Note that impacts can be positive or negative as this is in absence of mitigation.

The proposed scheme will retain grassland beneath the solar panels, but the grassland will be significantly modified through a change in management with beneficial impacts to GCN. The site will no longer be subject to an intensive grazing regime with sheep. Instead, it is intended that grazing with sheep will be significantly reduced to a short spell during the core growing season, with conservation livestock densities. Therefore, the long-term impact of site modification will be beneficial to GCN through the development of a more suitable grassland habitat covering the ~7ha of the site. A significant positive impact at the Local level.

Land lying to the north of Field 1A and Field 2 will be subjected to habitat enhancements for GCN and other biodiversity interests (~1.3ha). These measures will include the creation of three shallow scrapes (~10m x 5m elliptical footprints), three soil bunds and three grass cutting heaps. These areas will be subject to long-term conservation management, resulting in the long-term modification of the site, with a positive impact to GCN and other biodiversity interests at the Local level.

D.3 Long-term impacts: site loss

Impact on different sub populations to be taken into account at 2km, 10km, local, regional, and national level.

The proposed development will result in the loss of a small area of semi-natural habitat loss, where site access roads and new buildings (inverter, battery storage unit) will be installed. These areas account for ~0.05ha of habitat loss. This loss is considered to be minor at the Site level only.

D.4 Long-term impacts: fragmentation and isolation

E.g. loss of ponds or terrestrial habitat including stepping stones and linear features such as hedges, tree lines, severance of migration routes by roads.

The site would become temporarily fragmented during construction, with grassland habitat subject to impacts from site vehicles and panel installation. However, long-term, there would be no significant fragmentation impacts due to the retention of the majority of grassland and reinforcement of existing boundary vegetation through planting. Additionally, all site boundaries (security fences) will be permeable to GCN.

D.5 Post-development interference impacts

E.g. gully pots or other features that could effect incidental capture or killing, predation, disturbance, including those associated with recreation and human pressure,.

Post-development, routine maintenance of the site has the potential to disturb GCN, specifically by grassland, pond and hedgerow management. However, pond and hedge management tasks would normally be carried out over the winter period to avoid nesting bird impacts and the grassland is already subject to grazing impacts. The grassland beneath the panels and in adjacent land to the north is to be subject to a very light grazing regime post-development, thereby reducing the interference impacts associated with grassland management. The impact of post-development interference is therefore considered to be negligible.

D.6 Predicted scale of impact

Include impacts on species status at the site, 2km, 10km, local, county, regional and country levels.

Prior to mitigation, the short-term disturbance to GCN would be significant at the 2km (Local) level. The long-term loss of approximately ~0.05ha of semi-natural habitat would be significant only at the Site level.

The short-term fragmentation of habitat within the site would be significant at the Site level, with no long-term fragmentation impacts.

The long-term site modifications are designed so as to be beneficial to GCN. Habitat enhancement and long-term conservation management will result in a significant positive impact at the 2km (Local) level.

Delivery Information - Mitigation, compensation and monitoring

Description of how the impacts will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

E Works to be undertaken

Please identify which works will be undertaken or supervised by a licensed ecologist

E.1 Great Crested Newt capture and exclusion (if applicable).

Timings, effort, methods to be employed, reasonable avoidance schemes or measures for great crested newts (fencing, fence maintenance, logging captures, inspection and maintenance of fences), locations of receptor sites etc. Include diagrams to show locations of draft and exclusion fencing, pitfall trap design and trap density. State if site based weather stations are used to demonstrate appropriate trapping conditions

The capture and exclusion of GCN from the construction site will be carried out prior to the commencement of works.

A line of perimeter fencing will be installed, according to best practice standards, around the working area as shown in Figure E.1. One internal drift fence will be installed within each field to assist trapping operations. All fencing will comprise upright temporary amphibian fencing (TAF). Alternative pitfall traps and refugia will be installed every 10m along the inside of the fence line to help capture GCN, and any other amphibian species.

The standard trapping period for a medium-sized GCN population is a minimum of 60 consecutive days and a minimum of 5 consecutive days non-capture at the end of that period. However, given the relatively low value

of the grassland that forms the majority of the site area, it is proposed that a minimum of 30 days capture be undertaken, with 14 consecutive days of non-capture (of GCN) required to end the trapping effort.

Artificial refugia (carpet tiles or similar) will be laid between pitfall traps and checked daily to improve trapping efficiency. Once the trapping period is complete the area will be deemed clear of GCN. Newt grids will be installed where site access roads cross perimeter GCN fencing. These will follow standard designs of a steel grid, allowing GCN to fall into a shallow gully which directs them outside of the GCN perimeter fence line. Retained boundary corridors will be protected during the construction phase to ensure continued use by GCN and other amphibians.

All amphibians caught during the trapping effort will be translocated into the terrestrial habitats surrounding Ponds 1, 2 or 3 within the existing solar park. The pond closest to the point of capture will be selected for release.

Once the construction zone has been cleared of GCN, the internal drift fencing will be removed under ecological supervision (outside of the hibernation period) and the perimeter fence will remain in situ for the duration of construction works.

All industry standard protocols as described in the GCN Mitigations Guidelines will be fully adhered to. These include checking of traps by GCN licensed ecologists or accredited agents, trapping only during suitable weather conditions and ensuring that traps are set-up to provide shelter for amphibians and a means of egress for small mammals. Trapping effort will be undertaken during the period March to October inclusive. Acceptable trapping nights will be those where the overnight low temperature does not fall below 5°C. Upon completion of trapping effort, weekly checks of the TAF will be undertaken by a competent ecologist until such time as the construction works are completed and the fence can be removed. If the fence remains in place over the hibernation period (November to February inclusive) then the fence checks can drop to a monthly frequency. Any damage or issues with the fence will be recorded and will be fixed within 48 hours.

The perimeter GCN fencing will only be removed upon completion of all works and outside of the hibernation period. Fence removal will be supervised by a GCN-licensed ecologist.

E.2 Great Crested Newt habitat

E.2.1 Receptor site modification, enhancement or creation.

Include details of new breeding sites and resting places e.g. pond creation- design, layout, number, planting schemes, water supply and hydrology regimes, terrestrial habitat diversification or creation – design, habitat type, planting schemes, provenance of imported plants, consideration of biosecurity impacts.

GCN and other amphibian captures will be removed to the terrestrial habitat immediately surrounding Ponds 1, 2 and 3. These ponds were created under license associated with the existing solar farm and are managed with GCN as the target species. These areas will sit outside of the GCN exclusion fencing and will therefore prevent returns to site until all construction works have been completed.

Ponds 1, 2 and 3 sit within the existing solar park, which lies outside of the red line application boundary and under the ownership of a separate landowner. However, permission has been granted by the landowner for the applicant to use these ponds as receptor sites for the translocation of GCN from the working area. A copy of the grant of permission is provided separately.

The following on-site habitat enhancements will be implemented under this license:

- Field 1A; a small area of native scrub planting in the eastern boundary and hibernacula.
- Field 1B; creation of one hibernacula, a new pond and adjacent soil bund within a fenced area, a swale for water attenuation along the southern boundary, a shallow ditch running northwards across the field to connect the swale to an existing drainage network and a small length of translocated hedgerow.
- Field 1C; a pond will be created at the southern end of the field in a fenced-off area together with two hibernacula and a vegetated soil bund. The eastern hedgerow will be subject to hedgerow planting to form a ~300m long and 1m wide corridor for improved habitat connectivity.

- Field 2; no specific GCN enhancement measures are proposed.
- Land North of Field 1A and Field 2; creation of three shallow scrapes, three soil bunds (using inverted turves taken from the scrapes), three grass cutting heaps and long-term conservation management of the area (two cuts per year or low-intensity grazing, to be confirmed).

E.2.2 Temporary loss of breeding sites, resting places

Provide details of all reasonable avoidance measures to be undertaken throughout the period of works

N/A - no breeding sites or resting places will be temporarily lost.

E.2.3 Destruction of existing breeding sites, resting places

Full project programme including dewatering schemes (including filter specifications), programmes of terrestrial searches, fencing location and construction, transport methodologies, void infilling.

A GCN-licensed ecologist will be present on site for the following activities that will result in the destruction of GCN habitat:

- Installation of GCN exclusion fencing
- Removal of any section of hedgerow
- Topsoil stripping or access track formation
- Removal of GCN fencing

Prior to the commencement of these activities, the licensed ecologist will undertake hand-searches of the working areas to search for GCN. Any animals found would be translocated to the identified receptor sites. It is acknowledged that even once trapping has been completed, there remains a residual risk of GCN being present within suitable habitat on site, thus the need for ecological supervision.

E.2.4 Scaled maps/plans

To show proposals for mitigation outlined above in relation to existing and proposed habitat features and in relation to the proposed development outline. A GIS data layer may be included with your application to illustrate locations of habitats in E.2.1 to E.2.3

See Figure E.2.

E.3 Mechanisms for ensuring delivery of mitigation and compensation measures

E.3.1 Measures to ensure compliance with this method statement.

This may require appointment of an external auditing scheme including audit key performance indicators, for medium, large scale or long term schemes e.g. residential development, pipeline construction or maintenance, way leaves for utilities, quarrying and mineral extraction.

NRW and Wrexham CBC have indicated that an Ecological Compliance Audit will be required for this scheme, to ensure that the mitigation/compensation is delivered. A copy of the ECA template, detailing the ECA requirements, has been appended to this document.

Planning Condition 6 of the Decision Notice for Application no. P/2021/0676 means that it is a condition of planning to implement this GCN license in full. Failure to implement the mitigation and compensation measures detailed herein would represent a breach of planning consent.

The supervision of the work will be arranged immediately with the client on receipt of the GCN license. Etive Ecology Ltd will report any failure to implement the license to NRW.

E.3.2 Ensure that sufficient land has been acquired for compensation purposes

Provide scaled maps/plans

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Compensation measures are detailed within the approved drawings and on Figure E2 attached. The measures include new ponds, scrapes or long-term grassland management. All of these features lie within the existing land-ownership boundary.

See Figure E.2 for details.

E.3.3 Ensure that designs of subsequent development are newt friendly

Do not include features likely to result in incidental capture or killing

No features of the development are anticipated to pose a risk to GCN during the operational phase.

E.3.4 Provide sufficient resources

To ensure effective site management and associated wardening and monitoring where relevant.

Planning Condition 6 of the Decision Notice for Application P/2021/0676 means that this is a condition of planning and to implement this GCN license in full. Failure to provide sufficient resources for site management, associated wardening, and monitoring would be a breach of the Decision Notice. Mindful of this, the applicant and license holder has allocated sufficient funds to implement the long-term habitat management of the site, as detailed within the planning application and the GCN License MS.

E.4 Mitigation contingencies

Describe any contingency proposals including circumstances when the contingencies will be instigated.

If more than 100 GCN (a large population) are captured during the pre-construction trapping efforts, NRW will be consulted, the license will be revised, and trapping efforts will be extended.

If 5 consecutive days of none-capture is not achieved at the end of the 60 days, then the trapping efforts will be extended until 5 days none-capture is achieved.

If there are delays to the proposed programme for delivery, NRW will be contacted and the license will be updated to reflect the necessary changes. The site will be secured in terms of GCN exclusion.

E.5 Biosecurity risk assessment

Consider presence of non-native species and disease on site and actions to be undertaken that will prevent their spread onto or off the site

No known biosecurity risks have been identified for the development.

Standard good practise in terms of biosecurity will be followed when handling and relocating GCN.

Himalayan balsam and Japanese knotweed were both identified during the site walkover in 2021 in patches along the riverbank within the red line boundary. However, the red line boundary was revised prior to the HMP being written, and both invasive non-native species now lie just out of the red line boundary.

Prior to mitigation, it is probable that the Proposed Development will result in a medium magnitude impact at the site scale due to the risk of spreading INNS. Mitigation will comprise a pre-commencement INNS survey, appropriate timing of works (during the Spring / Summer season) and the creation of a method statement detailing biosecurity arrangements and treatment options. INNS will be included within the Habitat Management Plan (HMP) including the future control of INNS within the site boundary. An INNS Risk Assessment will be completed as part of the GCN License MS.

F Post-development site safeguard

F.1 Habitat/site management and maintenance

The Conservation of Habitats and Species Regulations 2017

Include ongoing land management proposals, details of who will be responsible for management and maintenance, on going running costs, site/structure ownership and monitoring development of new habitats.

- The retained, enhanced, and newly created habitats will be managed for their biodiversity value over the duration of the operational period of the solar park (anticipated to be 40 years). A draft Habitat Management Plan (HMP) has been prepared for the GCN License (Etive Ecology Ltd, 2022). The HMP includes annual maintenance and management of the newly created ponds, the hibernaculum, scrapes and areas of enhancement planting. Management of these habitats and features is targeted at creating high quality breeding, foraging, dispersal and sheltering opportunities for GCN and other amphibians.
- The retained grassland habitat beneath the new solar panels will be managed specifically for GCN by reducing the grazing levels and thereby improving the structure and density of the sward. Sheep will be grazed at a density of 0.5 LSU/ha (~3 sheep per ha) during June / July for a four-week period annually. The aim is to reduce the grassland to a sward height of ~150mm during this period, before allowing it to re-grow again towards the late summer and early autumn, so that it offers excellent over-wintering habitat and connectivity. It would also be possible to carry out grassland management mechanically if required, with a single cut (and collection) to 150mm during the June / July period.
- The adjacent grassland areas to the north will be cut twice in the first year, once in March and again at the end of August. The cut will be to ~100mm sward height and all cuttings will be collected and heaped or removed from site. The ongoing management will remain the same as the first year.
- A 1-2m wide corridor of grassland along the western boundary of Field 1B and 1C will be fenced off from grazing in the first year to establish a thick and dense vegetation sward, as to facilitate direct connectivity between the two newly created ponds in the first year. Ongoing management comprise cutting my arm-slung strimmer to a sward of ~300mm immediately prior to the period of grazing, with cuttings allowed to fall and disperse naturally.
- The rough grassland banks on the drainage ditches to Field 1B will be cut alternately to a height of ~100mm in April and July.
- All newly planted and translocated hedgerows will be checked twice within the first year to ensure successful establishment. Management and maintenance in Year 1 will involve frequent watering and feeding, with any damaged or failed stock relaced on a like-for-like basis. It will be fenced to prevent grazing from livestock. The retained hedgerows will be subject to significant trimming works to reduce the height of hedge species to ~1.5m to create a hedge structure that is widest at the base and narrower at the top. All cuttings will be retained and used to replenish the hedge-bottom. On-going management of all hedgerows include trimming once a year in January – February before the nesting bird season and after wintering birds have fed on the berry crop. They will be cut in a way that will created hedgerows approximately 1.5m high, 1-2m wide at the base and approximately 0.5-1m wide at the crown. On-going management will also include also will include the following good practice measures:
 - All plants shall be watered adequately to ensure healthy growth.
 - Plants which have become loosened, lifted up or out of the ground will be set upright and re-firmed by treading.
 - All litter from site shall be removed.
 - Straggling stems, over-vigorous shoots, suckers and dead, misshapen or broken branches will be removed from trees and shrubs by pruning back with a clean smooth cut to the main stem, or a sound and living outward growing lateral.
 - Where plants are missing, have died, or have failed to make satisfactory growth, these shall be replaced in the first two months of the next scheduled planting season.
- Hibernaculum shall be restored if they are found in a sub-optimal condition during annual checks.
- Annual management of the newly created ponds will comprise:
 - Litter / detritus picking.
 - Control and removal of vegetation, aiming for ~75% margin cover.
 - Control and removal of emergent vegetation, aiming for ~50% pond coverage.
 - Control and removal of over-shading vegetation, aiming for <50% of the margins to be shaded.
 - Control and removal of any INNS.

The Conservation of Habitats and Species Regulations 2017

- First year management of the newly created scrapes aim to remove and litter and detritus and to review the establishment of the scrapes and how well they hold water. Annual management will comprise:
 - Litter / detritus picking.
 - Cutting of all vegetation to 100m height (as per grassland management).
 - Control and removal of INNS.

All of these habitat and site management actions will be the responsibility of the license holder. It is anticipated that they will appoint a suitably experienced ecological contractor to implement the ongoing management of the site. The contractor will have previous experience of management of similar ecological/GCN sites. A contract arrangement will exist between the license holder and the ecological contractor.

F.2 Population monitoring

Include details of monitoring effort and timing, personnel involved and equipment to be used.

As part of the licencing requirements, there will be a schedule of monitoring to assess the efficacy of habitat enhancement and management works. In accordance with NRW's requirements, monitoring will extend for the operational life of the solar park, anticipated to be 40 years. The GCN ponds and all terrestrial habitats will be assessed annually for the five years post-development, and then every other year thereafter, unless fish or INNS are discovered, in which case the habitats will continue to be monitored annually. Any necessary alterations to the management regime will be advised and reported appropriately.

Population monitoring will take the form of egg-searches and 2 x torch surveys. These will be undertaken by a GCN-licensed ecologist during the period mid-March to mid-June, with at least two of the torch surveys undertaken in the period mid-April to mid-May.

F.3 Post-development mitigation contingencies

Describe the action that you will take if monitoring results are unfavourable.

If monitoring results are unfavourable, there will be a review of the habitat suitability of the site, including a review of operational activities. Where habitat is found to be in a sub-optimal condition, remedial actions will be undertaken immediately to return the habitat to optimal condition. Similarly, if site activities are identified to be the cause of low population results, a review of site activities will be undertaken.

NRW and WCBC will be consulted throughout this process.

F.4 Mechanism for ensuring delivery of post-development works

As appropriate e.g. Section 106 Agreement, to include details of who will undertake the work and reporting details, other covenants, contractual agreements or wardening schemes.

Planning Condition 6 of the Decision Notice for Application P/2021/0676 means that this is a condition of planning and to implement this GCN license in full. Failure to undertake post-development works detailed herein would represent a breach of planning consent.

Post-development monitoring will be undertaken by an experienced ecologist, who will also be a member of CIEEM and bound by their code of professional conduct. Monitoring will be reported annually to NRW/WCBC and any failure to report on the monitoring will immediately flag a failure to implement this GCN License and the associated planning condition.

A contract arrangement will exist between the license holder and the ecologist responsible for undertaking the monitoring.

F.5 Financial Arrangements

As appropriate e.g. Section 106 Agreement, to include details of who will undertake the work and reporting details, other covenants, contractual agreements or wardening schemes. State funding mechanism, eg commuted sum or index linked ground rent service charges

Have long term funding mechanisms been incorporated into the provisions of the overall scheme?	Yes
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If Yes, state mechanism	The implementation of the management as detailed within this MS and within the HMP will be funded by the site owner(s). The management of the site will be funded through the revenues generated by the solar development. These funds will be used to employ a suitably experienced contractor to undertake the management described herein and within the HMP.
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F.5.1 Long Term Funding arrangements

Please confirm long term funding arrangements type of funding arrangements	
☒ Contract	☐ Management Agreement
☐ Bond	☐ Other: Please specify
Comments	

F.5.2 Duration of funding agreement

Please confirm projected duration of long-term funding agreements.

Duration of Funding agreement		
☐ One off Payment;	☐ 5 Years	☐ 10 Years
☐ 21 Years	☐ 25 Years	☐ Perpetuity
☒ Other: Please specify	Until the site is decommissioned in 40 years' time.	
Comments		

F.5.3 Financial Regulatory Framework

Please confirm the regulatory framework for financial matters.

Regulatory Framework for Payments	
☐ Planning Condition	☐ Planning Obligation If yes, state type ☐ Planning Obligation ☐ Planning Obligation
☒ Management Agreement	☐ Licence
☐ Community Infrastructure Levy	☐ Other: Please specify _____
Comments: payments will be made based on actions being undertaken in line with the HMP.	

G Timetable of works

Include timings of all capture, development activities and mitigation measures, monitoring and other post development works

Table G.1 Outline Programme of Works

Year	Activity	Responsibility
2023	Apply for GCN License from NRW	GCN-licensed ecologist.
	Installation of GCN fencing and pitfall traps on Site, including creation of newt friendly vehicle access point with newt grids.	Suitably experienced GCN fencing contractor.
	Minimum 60 days pitfall trapping. GCN License Report submitted to NRW.	GCN-licensed ecologist.
2024	Complete any remaining trapping days left from 2023.	GCN-licensed ecologist.
	Removal of internal drift fencing under ecological supervision.	Suitably experienced GCN fencing contractor. GCN-licensed ecologist.
	Construction Phase. Habitat creation and landscaping within GCN fencing.	Principal Contractor. Suitably experienced landscape contractor.
2025	Removal of GCN fencing under ecological supervision. GCN License Report submitted to NRW.	Suitably experienced GCN fencing contractor. GCN-licensed ecologist.
	2 x GCN monitoring surveys & habitat assessments.	GCN-licensed ecologist.
	GCN License Report submitted to NRW.	GCN-licensed ecologist.

H.1 Mitigation Site/Compensation Site Ownership during construction/development phase

If mitigation is to be undertaken at a location not owned by the applicant, you must provide the written consent of the relevant land owner(s). You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement, transfer of legal interest).

Site	Tenure / Legal Interest of mitigation land during construction	Type of Organisation	Timescales for completion of changes of legal interest of land
On site mitigation Site	☐ Freehold Owner ☐ Leasehold Owner ☐ Prospective Purchaser ☐ Tenant ☒ Licensee ☐ Other	☐ Local authority ☐ Specialist third Sector body ☐ Non specialist third sector body ☐ Other public body ☐ Utility ☒ Private Sector ☐ Other	N/A Land will remain in the ownership of the applicant/licensee for the foreseeable future. Any change to this situation and NRW will be notified.

Site	Tenure / Legal Interest of mitigation land during construction	Type of Organisation	Timescales for completion of changes of legal interest of land
Off Site mitigation Site	☒ Freehold Owner ☐ Leasehold Owner ☐ Prospective Purchaser ☐ Tenant ☐ Licensee ☐ Other	Individual – land is owned by a local farmer.	N/A The land will remain in the ownership of the farmer.

If you have no legal interest in the mitigation or compensation land, please state how you will be able to implement proposed species-specific conservation measures	Written consent will be provided by the farmer to the Licensee confirming that they consent to allow the habitat enhancements and long-term management / monitoring to be undertaken. There will be a contractual agreement in place between the farmer and the Licensee guaranteeing long-term management of this land.
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H.2 Mitigation Site/Compensation Ownership post construction

If the ownership of the mitigation site will change after construction please confirm the identity of the prospective owners/occupiers together with timescales associated with transfer of occupancy or other forms of legal interest. You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement).

H.2.1 Ownership/occupancy of mitigation/compensation site on completion of development

Site	Legal interest in land post construction	Type of body	Timescale for completion of proposed changes of legal interest
On site Conservation Site	☐ Freehold Owner ☐ Leasehold Owner ☐ Prospective Purchaser ☐ Tenant ☒ Licencee ☐ Other	☐ Local authority ☐ Specialist third Sector body ☐ Non specialist third sector body ☐ Other public body ☐ Utility ☒ Private Sector ☐ Other	N/A Land will remain in the ownership of the applicant/licensee for the foreseeable future. Any change to this situation and NRW will be notified.
Off site Conservation Site	☒ Freehold Owner ☐ Leasehold Owner ☐ Prospective Purchaser ☐ Tenant	☐ Local authority ☐ Specialist third Sector body ☐ Non specialist third sector body	N/A Land will remain in the ownership of the local farmer for the foreseeable future.

	☐ Licensee ☐ Other	☐ Other public body ☐ Utility ☒ Private Sector ☐ Other	Any change to this situation and NRW will be notified.
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H.2.2 Timescales associated with transfer of legal interest of land including contingency arrangements if proposed timescale is not achieved.

N/A

**H.2.4 Please confirm the body responsible for the long-term legal interest in the compensation land has the required skills, competencies and licences for carrying out land management. If not, how will these issues be addressed? Does the identified body have a suitable 'winding up' policy?
If so, please confirm the details of this policy.**

Confirmation of skills and competencies of long-term owner / occupier	The Licensee does not personally have the required skills, competencies and licenses to implement the HMP and long-term monitoring. However, they intend to appoint a suitably experienced ecological contractor to undertake the management activities and a suitably licensed ecologist to undertake the monitoring. Thus, the necessary skills and competencies will be contracted into the project to meet this requirement.
'Winding Up' policy	☒ Yes ☐ No

H.2.6 How will long-term tenure and management issues be addressed in the event of closure, take over, bankruptcy or insolvency?

That situation is unlikely as the project will generate revenue for the next 40 years. In any case, the ongoing management would be a requirement of the project sale if required.

H.2.7 If you have no legal interest in the mitigation or compensation land , please state how you will be able to implement proposed species conservation measures?

N/A

Please state the body responsible for the compensation area in the long term. Please confirm their suitabilities and competencies required for surveillance and management including licensing requirements.

Details of the appointed contractor and ecologist will be provided to NRW following the grant of the GCN License.

H.3 Other Mitigation. Off-setting or Compensation Mechanisms or Arrangements

If mitigation is to be undertaken at a location not owned by the applicant, you must provide the written consent of the relevant landowner(s). You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement, transfer of legal interest).

A letter of consent has been attached to this document, from the existing landowner of the off-site land. This letter confirms that permission has been granted for the off-site habitat enhancements to be undertaken and that long-term habitat management and monitoring will be permitted in line with the approved HMP. The relationship between the Licensee and the landowner is secured by a contractual agreement.

H.4 Duration of Compensation Area

If the ownership of the mitigation site will change after construction please confirm the identity of the prospective owners/occupiers together with timescales associated with transfer of occupancy or other forms of legal interest. You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement).

N/A – there is no intention for the land ownership of any part of the site to be changed following the completion of construction works. If this situation changes, NRW will be informed by the licensee.

I Declaration

I declare that should a licence be granted, the work as proposed in this Method Statement will be strictly adhered to. I understand that any deviation from the works as proposed in this Method Statement without agreement from NRW would result in a breach of the licence. NB. Applicants should note that it is an offence under regulation 59 of the Conservation of Habitats and Species Regulations 2017 to knowingly or recklessly provide false information in order to obtain a licence.			
Signature of the Applicant	Heiko Geithner	Date	03/01/24
<i>For electronic submissions please insert an electronic signature above or place an x in the box opposite to confirm agreement with the declarations above.</i>			X
Full name in BLOCK LETTERS	OSCAR GALLARDO PEREZ		
Signature of the Ecologist	Russell Edward Grey	Date	03/01/24
<i>For electronic submissions please insert an electronic signature above or place an x in the box opposite to confirm agreement with the declarations above.</i>			X
Full name in BLOCK LETTERS	RUSSELL EDWARD GREY		

J References

Credits for source information.

K Annexes

K.1 Pre-existing survey reports

K.2 Raw survey data