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Miners Road Reserve Power Plant,
Llay Industrial Estate, Wrexham

INFORMATION TO SATISFY PLANNING CONDITIONS

ECOLOGY

Sirius Renewable Energy Limited
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MINERS ROAD RESERVE POWER PLANT, LLAY INDUSTRIAL ESTATE, WREXHAM

INFORMATION TO SATISFY PLANNING CONDITIONS - ECOLOGY

REPORT PREPARED FOR:

Sirius Renewable Energy Ltd.

SITE LOCATION:

Miners Road, Llay Industrial Estate, Llay, Wrexham, LL12 0PJ

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This report has been prepared in accordance with all relevant and current best practice guidance and advice, including the Chartered Institute of Ecology and Environmental Management's *Guidelines for Ecological Report Writing – Second Edition* (CIEEM 2017). It has also been prepared in accordance with CIEEM's *Code of Professional Conduct* (CIEEM 2013) and in compliance with *BS42020 Biodiversity – Code of Practice for Planning and Development.*

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1 INTRODUCTION

1.1 This report has been prepared to provide the information required to discharge three pre-commencement planning conditions relating to Great Crested Newts *Triturus cristatus* (GCN) at Miners Road Reserve Power Plant (referred to here as the Site). There are two sets of identical conditions relating to the following planning consents, as shown in Table 1:

Table 1 Planning permissions

Phase	Planning permission ref.	Relevant condition refs.
Phase 1	LLA P/2017/0937	12-14
Extension	LLA P/2018/0517	9-11

1.2 This document addresses all three pre-commencement ecology conditions for both permissions.

1.3 The Site is located on the south side of Miners Road, within Llay Industrial Estate, near Wrexham. A Location Plan is included as Appendix 1 (Drawing Ref. SRE1065 17 01).

1.4 Indicative Site Layout plans showing both developments are included in Appendix 2 (Drawing Ref. SRE1065 17 03 REV 3 + SRE1082 17 03).

1.5 A GCN Mitigation Strategy for the Site was prepared during the planning application process and approved by Natural Resources Wales (NRW) prior to the granting of the planning permissions. The Mitigation Strategy includes proposals for the provision of a terrestrial habitat compensation area, retention of existing habitat features and implementation of a licensed mitigation scheme. The Mitigation Strategy underpins the proposals presented in this document, which provides further details required to satisfy the three pre-commencement planning conditions for each permission.

1.6 This report has been prepared by Jan Wilkinson MCIEEM, an ecologist with more than 20 years' experience of undertaking ecological assessments, protected species surveys and licensed mitigation work including extensive experience of GCN mitigation projects.

2 PLANNING CONDITIONS

2.1 The wording of the two sets of conditions relating to the Phase 1 and Extension consents is identical. In the text that follows, conditions 12-14 relate to the Phase 1 permission (Ref. LLA P/2017/0937) and conditions 9-11 relate to the Extension permission (Ref. LLA P/2018/0517).

Condition 12/9 – Ecological Assessment

2.2 Condition 12 (LLA P/2017/0937) and 9 (LLA P/2018/0517) states:

No part of the development shall commence until an updated Ecological Assessment (Great Crested Newt) as carried out by a qualified ecologist has been submitted to and approved in writing by the Local Planning Authority. The report shall include an Ecological Method Statement demonstrating/identifying any measures of protection/ compensation/mitigation and demonstrate management in the short or long term. The recommendations as approved shall be implemented in strict accordance with timescales to be agreed before any part of the development commences on site.

2.3 Condition 12/9 is addressed in Section 3 of this report, which presents an updated Ecological Assessment for GCN together with an outline Ecological Method Statement (Annex 1) which will form the basis of an NRW GCN licence application.

Condition 13/10 – Conservation Management Plan

2.4 Condition 13 (LLA P/2017/0937) and 10 (LLA P/2018/0517) states:

Prior to commencement of development, a long term Conservation Management Plan shall be submitted to and approved in writing by the Local Planning Authority. The Plan shall demonstrate how existing features of ecological/wildlife interest will be protected, identify any areas of compensation and demonstrate management in the long term. The recommendations as approved shall be fully implemented in accordance with timescales to be agreed in writing by the Local Planning Authority.

2.5 Condition 13/10 is addressed in Section 4 of this report.

Condition 14/11 – Biosecurity Risk Assessment

2.6 Condition 14 (LLA P/2017/0937) and 11 (LLA P/2018/0517) states:

Prior to commencement of development, a Biosecurity Risk Assessment shall be submitted to and approved in writing by the Local Planning Authority. The Risk Assessment shall include appropriate measures to control any INNS on site and measures or actions that aim to prevent INNS being introduced to the site for the duration of the construction and operational phases of the scheme. The development shall be carried out in accordance with the approved details and thereafter retained for the lifetime of the development.

2.7 Condition 14/11 is addressed in Section 5 of this report.

3 ECOLOGICAL ASSESSMENT (GREAT CRESTED NEWT)

Introduction

3.1 This Section has been prepared to address Condition 12 of the Phase 1 consent (LLA P/2017/0937) and Condition 9 of the Extension consent (LLA P/2018/0517), which requires an updated Ecological Assessment for GCN to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of development.

3.2 The Ecological Assessment includes a description of the habitats within the Site and their potential value for GCN; assesses the potential impacts on GCN in the absence of mitigation measures; and outlines the mitigation measures which will be implemented under licence from NRW. Further details of the proposed mitigation scheme are provided in Annex 1 (Ecological Method Statement).

Legislation and licensing

3.1 Great crested newts (GCN) are fully protected under the Conservation of Habitats and Species Regulations 2017 ("The Habitats Regulations"), making the GCN a European Protected Species (EPS). The following activities would constitute an offence:

- Capturing, killing, disturbing or injuring GCN deliberately;
- Damaging or destroying a GCN breeding or resting place;
- Obstructing access to a resting or sheltering place (deliberately or by not taking enough care);
- Possessing, selling, controlling or transporting live or dead GCN, or parts of them.
- Taking GCN eggs.

3.2 "Disturbance" of an EPS includes any activity which is likely to impair their ability to survive, breed or reproduce; to hibernate or migrate; or to affect significantly the local distribution or abundance of the species.

3.3 GCN breed in ponds and other waterbodies but they occupy terrestrial habitats such as grassland, scrub, woodland and hedgerows for much of the year, and they may be found at distances of 250m or more from their breeding ponds. GCN may shelter and hibernate in natural or artificial habitats including tree roots, mammal holes, earth banks, rubble and wood piles and ground fissures. They are also often found sheltering under man-made surface debris. This means there is the potential for a wide range of development and ongoing operational activities to result in an offence under the Regulations. Each offence can lead to an unlimited fine and up to six months in prison.

Survey and site assessment

Existing information on GCN in the vicinity of the Site

3.4 There are no ponds or other waterbodies within the Site. However, there are known GCN populations to the north (Police Site) and south (Former Llay Colliery). The Miners

Road Site has the potential to act as a stepping stone between these two breeding populations, providing terrestrial habitat for foraging and migrating GCN.

3.5 GCN surveys are not required to inform the GCN mitigation scheme/licence application because no ponds will be impacted and existing survey data are available for the off-site populations to the north and south.

Site/habitat description

3.6 The information in this Section has been compiled following several site visits in January and February 2018. An updated survey was carried out on 18th September 2018 in order to identify any changes since the earlier assessments were carried out. Apart from the removal of some larger vehicles and pieces of stored machinery, no significant changes to the habitats on the Site were noted during the recent survey.

3.7 The Site comprises a 0.52 ha brownfield site located on the south side of Miners Road, Llay Industrial Estate. In recent years, the Site has been used for the temporary storage of vehicles, shipping containers and stockpiled materials.

3.8 The Site currently comprises the following habitats/land uses:

- An area of compacted hardcore and gravel in the north of the Site (0.17 ha). This is unfissured and contains no potential places of shelter for GCN. However, the topography allows shallow ephemeral puddles to form during wet weather and these may provide temporary refuges for GCN, for example during migration periods. A number of old vehicles and shipping containers were stored around the perimeter of the hard standing area, but these have now been removed.

- Several rubble piles of varying sizes, including a large area in the south of the Site (0.05 ha) and a smaller discrete pile in the north west. Parts of the larger rubble pile are long established and the rubble is partially covered in mosses and vegetation growth. These areas have a high potential to support sheltering/ hibernating GCN.

- The remainder of the Site, including the northern and western boundaries and the area to the south of the hardstanding, comprises a mix of short grass, ephemeral vegetation and scrub (0.29 ha). These areas could be used by GCN for foraging and/or migration.

3.9 The layout of the existing habitats on the Site is shown on Drawing Ref. SRE1065 17 03 REV 3 (Appendix 2).

Potential impacts on GCN

3.10 The Site has no potential to support breeding GCN as no ponds are present.

3.11 The compacted hardstanding area has very limited potential to provide habitat for GCN, apart from on an ad hoc basis during wet periods, on migration etc. GCN could use the longer established rubble piles, particularly the large pile in the south west

corner, for shelter and hibernation and the areas of grassland and scrub may be used for foraging purposes. No GCN have been found during terrestrial searches, but there is a risk that GCN could be present at the time of development or could enter the Site during construction or operation.

3.12 Table 2 summarises the potential impacts on GCN which could occur in the absence of appropriate avoidance, mitigation or compensation measures.

Table 2 Potential impacts on GCN

Impact type	Details/risk
Short term impacts: killing or injury	Individual newts could be killed or injured during construction work.
Short term impacts: disturbance	Site clearance could remove feeding, sheltering and hibernation habitats and disrupt dispersal corridors.
Long term impacts: site modification	Development of the Site could damage or destroy GCN resting places (sheltering or hibernation habitats), foraging habitats and/or dispersal corridors.
Long term impacts: fragmentation and isolation	Removal of rubble piles and vegetation could result in the loss of dispersal corridors/stepping stones which may result in fragmentation of the populations to the north and south of the Site.
Post-development interference impacts	There is a low risk of incidental killing, injury or capture during the operational phase. No gully pots are proposed.

3.13 In the absence of mitigation, the scale of the predicted impacts at site level is **High** as it will result in loss of resting places, fragmentation and potential killing/injury of GCN.

3.14 It is likely that the scale of the impacts at greater distances would be **Low** to **Medium**, particularly in terms of the loss of a stepping stone/dispersal corridor feature which could result in fragmentation of populations to the north and south of the Site.

Objectives of mitigation scheme

3.15 A mitigation/compensation scheme is required in order to minimise the potential impacts on GCN and to ensure that the development does not adversely affect the favourable conservation status of the GCN metapopulation.

3.16 The mitigation scheme needs to ensure that the potential impacts on GCN are minimised through the implementation of the mitigation hierarchy (avoid, mitigate or compensate), but at the same time it should be proportionate to the identified level of impact and the quality of the affected habitats.

3.17 In this instance, the Site is a previously developed brownfield site with a large proportion of the area to be developed being compacted gravel; the potential GCN

interest has only developed at the site margins as a result of the stockpiling of materials and the lack of recent active vegetation management.

3.18 The mitigation scheme will therefore focus on the retention of most of the longest established rubble piles, together with the provision of an area of compensation land designed to maintain the existing links between the northern and southern populations and avoid any fragmentation effects.

3.19 A GCN licence will be required to facilitate the exclusion and relocation of any GCN present within the development footprint during construction.

Mitigation/compensation scheme

3.20 The mitigation/compensation scheme will comprise the following key elements, as shown on Drawing Ref. SRE1065 17 03 REV 3 (Appendix 2):

1. Site design/layout has been designed to minimise the impacts on GCN habitat.

2. A peripheral compensation area (~0.1 ha) will be set aside and managed as GCN terrestrial habitat. This incorporates part of the larger rubble pile and areas of existing scrub and grassland.

3. The remainder of the large rubble pile and part of the ephemeral vegetation/ grassland habitats will be retained outside of the fenced compound.

4. A licensed mitigation scheme will be implemented to capture and translocate any GCN within the development footprint.

3.21 Further information on each of these elements is provided in the following paragraphs.

Site design/layout

3.22 The consented layout concentrates the footprint of the facility on the existing hardstanding, the area used for equipment storage and the ephemeral/short grass habitats in order to minimise the impacts on places of shelter potentially used by GCN.

3.23 Other design features which will avoid or minimise impacts on GCN include the following:

- Avoiding the use of gullypots.

- The Site will be permeable to GCN once construction is complete (open site design with gravel; all fences will be permeable to GCN).

- The Site will not contain any structures which could kill, injure or capture GCN.

- There will be no need for permanent exclusion fencing.

Compensation area

3.24 The ~0.1 ha compensation area will be located outside a 1.8m high wooden post and mesh fence in two linked strips along the western and southern boundaries. The location of the compensation area is designed to maintain connectivity between the northern and southern GCN populations and to avoid fragmentation impacts.

3.25 The compensation area currently comprises part of the large rubble pile and existing scrub and ephemeral/short grass vegetation.

3.26 The compensation area will be encouraged to develop additional scrub and dense vegetation naturally in order to provide enhanced habitat/shelter for GCN. The smaller rubble piles that lie within the development footprint will be relocated into the compensation area under the provisions of a derogation licence.

3.27 Further information on the proposed management of the compensation area is included in Section 4.

Retained habitats

3.28 The remainder of the large rubble pile will be retained outside the 2.4m high Paladin security fence. Part of the existing ephemeral/short grass vegetation will also be retained outside the security fence. These areas will be left undisturbed to provide continued terrestrial habitat and resting places for GCN.

Licensed mitigation scheme

3.29 A GCN mitigation licence will be applied for prior to the commencement of any development activities on the Site. A draft/outline Method Statement which will form the basis of the Licence Application Method Statement is included at Annex 1. A summary of the key elements included within the Method Statement is provided below:

- Full details of the development, including construction works, timescales and all activities requiring licensing.
- Status of the GCN populations (obtained from pre-existing survey data) and their relationship to the Site, supported by appropriate plans.
- Assessment of the potential short and long term impacts on GCN (as detailed in Table 2 above).
- Confirmation of mitigation and compensation provisions, as outlined above, including retention of the large rubble pile and the provision of a ~0.1 ha compensation area.
- Details of a trapping and translocation scheme to capture and move any GCN present within the construction footprint. This will include:

- Exclusion fencing.
- Pitfall traps/refugia.
- Minimum of 30 days trapping period in suitable weather conditions.
- Details of where captured animals will be released (i.e. into retained habitats).
- Relocation into the compensation area of smaller rubble piles within the construction footprint.
- Work schedule/timing of capture and exclusion.
- Maintenance and inspection of fencing, logging of captures etc.

- Long term provisions for management and security of retained and compensation habitats, including:
  - Management proposals, to include measures to maintain and enhance the structure of the habitats within the compensation area throughout the life of the development (25 years).
  - Monitoring of retained and compensation terrestrial habitats.
  - Aquatic habitat monitoring is not proposed, as all breeding ponds are off-site and not affected by the proposals.
- Biosecurity risk assessment, to include:
  - Appropriate measures to control any INNS found on site (NB none have been recorded to date); and
  - Measures or actions to prevent any INNS being introduced to/becoming established on the site during construction or operation of the scheme.
- Ecological compliance audit. This will identify Key Performance Indicators (KPIs) that will be used for the purposes of assessing and evidencing compliance with the agreed mitigation and compensation scheme.

3.30 Further information on the proposed management and monitoring of the retained and compensation habitats is included in Section 4 of this report.

3.31 A Biosecurity Risk Assessment is included in Section 5.

3.32 Details of the ecological compliance audit will be provided separately.

4 CONSERVATION MANAGEMENT PLAN

Introduction

4.1 This Section has been prepared to address Condition 13 of the Phase 1 consent (LLA P/2017/0937) and Condition 10 of the Extension consent (LLA P/2018/0517), which requires a long term Conservation Management Plan to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of development.

4.2 Once the construction work is complete, provisions need to be made for the post-development management and security of the retained and compensation habitats. This includes measures to protect, maintain, enhance and monitor the habitats throughout the 25 year life of the development.

4.3 The overall aim is to manage the retained and compensation habitats in a way that supports the terrestrial activities of GCN, in particular by providing opportunities for shelter, foraging, hibernation and dispersal and by maintaining connectivity across the Site for populations breeding in ponds located to the north and south.

Protection of existing features

4.4 The Reserve Power Plant will be surrounded by a 2.4m high paladin security fence. This will ensure that all activities related to the operation of the Power Plant will be confined within the security fence. The area outside the fence is divided into two parts:

- The retained habitats, comprising the majority of the existing large rubble pile and areas of short grass and scrub vegetation. This is to be left undisturbed and subject to low-key management to maintain its value as GCN terrestrial habitat.

- The ~0.1 ha compensation area, comprising a smaller part of the large rubble pile and existing areas of scrub and grassland, to be subject to management and enhancement (see following section).

4.5 A 1.8m high wooden post and mesh fence will be erected between the retained and compensation habitat areas (except across the existing rubble pile, where an alternative fencing arrangement may be required). The purpose of this is to delineate the boundary of the compensation area.

4.6 No operational or development related activities will be allowed to take place outside the paladin security fence surrounding the Reserve Power Plant, in order to protect the retained and compensation habitats and any GCN using them from disturbance. The only activities allowed to take place outside the security fence will be habitat management, maintenance and enhancement.

4.7 The external boundary of the compensation area will be protected by a 2.4m high palisade security fence. This will ensure that both the retained and compensation habitats will be protected from external disturbance or interference, whilst allowing the free passage of GCN into and out of the Site.

Habitat compensation provisions

4.8 The compensation proposals for Site comprise the following:

- Setting aside and fencing a ~0.1 ha compensation area, comprising existing terrestrial habitats of value for GCN (i.e. rubble piles, grassland and scrub).
- Implementation of ongoing management and monitoring during the 25 year life of the Reserve Power Plant.
- Maintenance of post-development connectivity across the Site and links to the wider landscape.

Habitat creation and management

4.9 This Section provides details of the management to be carried out within the retained and compensation areas.

Description and evaluation of features to be managed

4.10 Both the retained and compensation habitats currently comprise large piles of rubble, short grassland, ephemeral vegetation and patches of scattered to dense scrub. These features are valued for their potential to support the foraging, hibernation and dispersal activities of GCN breeding in off-site ponds to the north and south. The north-south connectivity along the western edge of the Site is of particular importance as it provides a potential movement and dispersal corridor for GCN.

4.11 The existing scrub habitats currently comprise mainly goat willow with some dog rose, bramble, gorse, hawthorn and non-native Firethorn (*Pyracantha* sp.). Early development woodland is also colonising in places, both over the spoil heaps and near the Site margins. Tree species present include silver birch, sessile oak and ash.

Habitat creation

4.12 In general terms, the aim is to retain and manage the existing mosaic of scrub, grassland and ephemeral vegetation to maintain a mosaic of habitat structures beneficial to GCN. Natural colonisation of scrub is already occurring in the least disturbed parts of the site, and this will be encouraged and managed as necessary to maintain a diverse age structure. However, a small amount of additional scrub planting may be carried out in selected areas to diversify the species composition. The requirement for additional planting will be assessed prior to completion of construction, once the security fences have been installed and the licensed GCN capture and release has been carried out. At this point, if additional planting is deemed necessary it will be carried out in the next available planting season.

4.13 A list of species that would be appropriate for inclusion in a planting mix to diversify the species composition at the Site and to provide habitat for a range of wildlife, including birds, is shown in Table 3.

Table 3 Species for native shrub planting

Common name	Scientific name
Dogwood	*Cornus sanguinea*
Guelder-rose	*Viburnum opulus*
Hawthorn	*Crataegus monogyna*
Hazel	*Corylus avellana*

Aims and objectives of management

4.14 The overall aim is to maintain and enhance the retained and compensation habitats to support the terrestrial activities of GCN, in particular by providing opportunities for shelter, foraging, hibernation and dispersal and by maintaining connectivity across the Site for populations breeding in ponds located to the north and south.

4.15 The habitats will also provide wider biodiversity benefits for birds, invertebrates and other wildlife but the focus of management will be on achieving the objectives for GCN, which are shown in Table 4.

Table 4 Compensation habitats: management objectives

Objective No.	Habitat/feature	Objective
1	Rubble piles	Retain undisturbed as GCN sheltering/hibernation habitat with cover of mosses & other vegetation.
2	Scrub	Maintain, enhance and manage a mosaic of scrub vegetation to provide foraging habitat and shelter for GCN.
3	Grassland & ephemeral	Maintain and manage a mosaic of open habitats to provide foraging and dispersal habitat for GCN.

Management prescriptions

4.16 The management requirements for the compensation area are low key, as there is already adequate shelter and foraging habitat. The key requirements in order to achieve the objectives for GCN will be retaining the areas of shelter and maintaining structural diversity within the scrub and grassland habitats. A summary of the likely management requirements is provided in Table 5 for each habitat.

4.17 The retained habitats that do not form part of the compensation area mostly support self-sustaining habitats, including a large rubble pile, open grassland/ephemeral vegetation growing on stone substrates, and scattered scrub. Minimal intervention will be required in these areas, the main requirement being the avoidance of disturbance. However, the retained habitats will be included in the monitoring programme and if a need for intervention is identified, they will be managed using the same prescriptions as given in Table 5 for the compensation area.

Table 5 Compensation habitats: management prescriptions

Objective	Management Prescriptions
(1) Retain rubble piles as GCN sheltering/hibernation habitat with cover of mosses and other vegetation.	No active management of the rubble piles is required, unless future monitoring identifies a need for specific maintenance or management.
(2) Maintain, enhance and manage a mosaic of scrub vegetation to provide foraging habitat and shelter for GCN.	Existing areas of scrub should be retained undisturbed. Shrubs may be coppiced on a rotational basis every 5-10 years, as necessary, in order to maintain a mosaic of age structures across the Site. Areas to be cut should be identified through monitoring. Coppicing should be carried out in winter and the prunings retained as habitat piles.
	Once established, newly planted areas of native shrubs will be allowed to grow tall and dense with minimal intervention until fully mature.
	Once mature (years 5-10+), shrubs may be coppiced on a rotational basis in winter, such that no more than 30% are cut in any one year. This will ensure that dense canopy cover is maintained to provide cover and shelter for GCN.
	Any prunings arising are to be retained on Site and used to create log piles to be allowed to rot down naturally over time. These will provide additional foraging and sheltering habitats for GCN.
(3) Maintain and manage a mosaic of open habitats to provide foraging and dispersal habitat for GCN.	The grassland/ephemeral vegetation has developed on gravel/stone substrates and currently appears to be self-maintaining. If future monitoring identifies a need for active management, these habitats can be cut every 2-3 years on a rotational basis. Cut in October to a height of 10 cm and remove the arisings.

Implementation, monitoring and remedial measures

Monitoring and review

4.18 Management and maintenance will be carried out for the duration of the development, which is anticipated to be 25 years. This management plan provides an outline to guide the principles of management required, but regular monitoring and review of the management objectives and prescriptions will be required over time as the new and retained habitats mature and respond to management activities. The management plan set out in this chapter will therefore be subject to ongoing review and will be updated as necessary to ensure that management and maintenance remains appropriate and relevant.

4.19 For the first five years following completion of the development, annual monitoring will be carried out to guide the specific work programme for the year and to identify any additional measures required in order to achieve the management objectives. From Year 6 onwards, monitoring will be reduced to every five years in order to identify any requirements for vegetation management. Monitoring activities will include the items in Table 6.

Table 6 Monitoring requirements

Objective	Monitoring requirements
(1) Retain rubble piles as GCN sheltering/hibernation habitat with cover of mosses & other vegetation.	Visual check of rubble piles to identify any management requirements.
(2) Maintain, enhance and manage a mosaic of scrub vegetation to provide foraging habitat and shelter for GCN.	Visual check of scrub growth in summer to identify any winter pruning requirements and to identify areas of dense scrub/ brambles to be retained.
(3) Maintain and manage a mosaic of open habitats to provide foraging and dispersal habitat for GCN.	Visual check of vegetation growth in summer to inform any autumn cutting or other management requirements.

4.20 A record of all monitoring findings will be kept by the operator and these will be used to inform any management and maintenance activities to be carried out in the following autumn/winter. Details of the monitoring and maintenance/management activities carried out shall be provided to NRW/WCBC upon request, as evidence of compliance with the ongoing requirement to implement the Conservation Management Plan.

Remedial measures

4.21 Depending on the findings of the monitoring inspections, remedial measures may be required in order to ensure the management objectives are met. Potential remedial measures could include, but are not restricted to:

- Additional planting to replace any failed compensation habitats.
- Changes to management prescriptions to achieve objectives, e.g. adjustments to cutting/pruning programme.
- Measures to control and remove any non-native invasive species found on site, including the ponds and terrestrial habitats.

4.22 Any remedial measures identified will be implemented as soon as possible.

4.23 The compensation area will remain under the control of the developer throughout the operational period of the Site, and all management identified in this document will be the responsibility of the developer.

5 BIOSECURITY RISK ASSESSMENT

Introduction

5.1 This Section has been prepared to address Condition 14 of the Phase 1 consent (LLA P/2017/0937) and Condition 11 of the Extension consent (LLA P/2018/0517), which requires a Biosecurity Risk Assessment to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of development.

5.2 The Biosecurity Risk Assessment shall include appropriate measures to control any Non-Native Invasive Species (INNS) on the Site and measures or actions that aim to prevent INNS being introduced to the Site for the duration of the construction and operational phases of the scheme.

Existing status of the Site

5.3 No ponds or other waterbodies are present on the Site, so there are no aquatic invasive plant species present and there is no risk of transferring amphibian diseases from other waterbodies.

5.4 No terrestrial INNS species have been identified on the site.

5.5 One non-native shrub species (*Pyracantha coccinea*) is present in small quantities. This has not been identified as an invasive species and its berries can provide useful autumn foraging for birds. It is currently proposed to monitor the extent of this species and take remedial action if necessary.

5.6 Table 7 (overleaf) provides an assessment of the risk of INNS being imported to the Site during construction or operational phases of the project. Potential pathways of introduction and operational mitigation measures to be implemented if any are found on Site are also identified.

5.7 The Biosecurity Risk Assessment will be appended to the contractor's Construction Method Statement.

Table 7 Biosecurity Risk Assessment

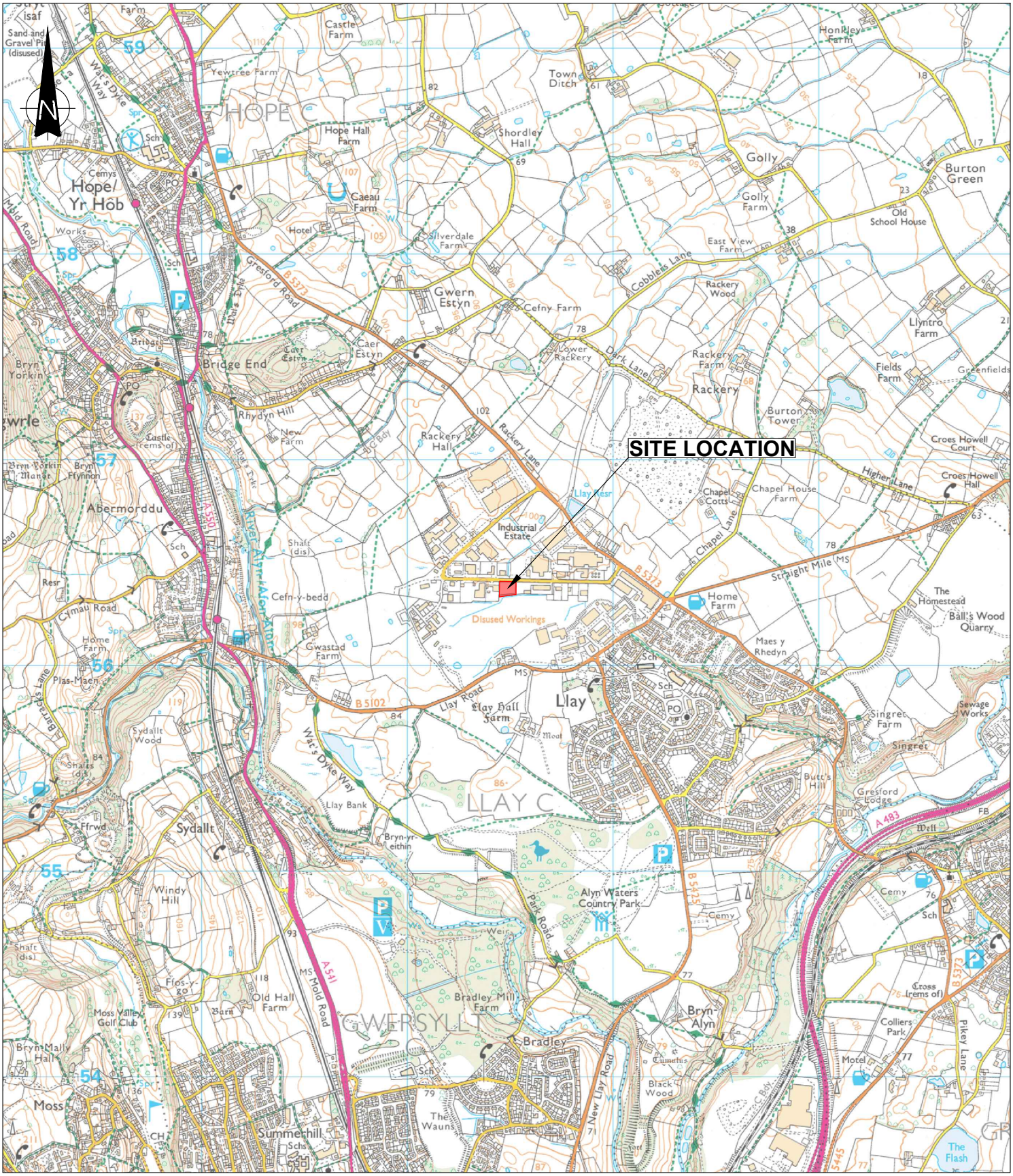
This Biosecurity Risk Assessment has been undertaken to minimise the risk of importing Invasive Non Native Species (INNS) to the Site. It lists species that have been identified as having the potential to be imported during the construction or operational phases of the project. Potential pathways of introduction and operational mitigation measures to be implemented if any are found on Site are also identified.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Himalayan balsam	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Himalayan Balsam is not currently present on the Site. Low. There are no requirements to import soil during construction or operation of the Site.	Ensure contractors know what Himalayan Balsam looks like. If any plants are identified these should be pulled up and left to dry before the seeds set (July/August).
Japanese knotweed	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Japanese knotweed is not currently present on site. Low. There are no requirements to import soil during construction or operation of the Site.	Ensure contractors know what Japanese knotweed looks like. If it is identified on site, refer to the Environment Agency's Japanese knotweed Code of Practice.
Garden escapes including *Pyracantha coccinea*	Spread of species via construction machinery/ movement of soil.	Low. Whilst this species has been identified on Site, it is located outside the area where construction will take place and is restricted to the retained/compensation habitat areas. Construction work is not expected to cause the spread of this species. It is not considered necessary to remove the established plants unless monitoring indicates they are spreading unacceptably.	Ensure contractor and operator is aware of location of *Pyracantha*. Annual monitoring visits to include a visual inspection of the location and spread of this species. If considered necessary, control measures will be implemented.

APPENDIX 1

Location Plan

Drawing Ref. SRE1065 17 01



CLIENT

SIRIUS Renewable Energy

SIRIUS Planning

4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

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JOB TITLE

MINERS ROAD RESERVE POWER PLANT

DRAWING TITLE

SITE LOCATION PLAN

REV	DESCRIPTION	DATE	BY

DRAWN	DATE	APPROVED	DATE
S.T	9/11/2017	J.B	9/11/2017

SCALE	SHEET	DRAWING NUMBER	REVISION
1:25,000	A4P	SRE1065/17/01	0

APPENDIX 2

Indicative Site Layouts

Phase 1: SRE1065 17 03 REV 3

Extension: SRE1082 17 03



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KEY

- EXISTING CONTOUR
- PROPOSED 2.4m HIGH PALASADE SECURITY FENCE
- PROPOSED 2.4m HIGH PALADIN SECURITY FENCE
- PROPOSED 1.8m HIGH WOODEN POST AND MESH FENCE
- PROPOSED POINT OF ELECTRICAL EXPORT CONNECTION CABLE ROUTE
- PROPOSED POINT OF GAS CONNECTION PIPE ROUTE TO GAS GOVERNOR
- EXISTING VEGETATION / TREES TO BE RETAINED
- EXISTING COMPACTED GRAVEL HARDSTANDING AREAS
- RELOCATED RUBBLE PILE
- EXISTING RUBBLE PILE TO BE RETAINED
- EXISTING SHORT GRASS / SCRUB VEGETATION
- MITIGATION COMPENSATION AREA
- AREA FOR POTENTIAL BATTERY STORAGE EXPANSION
- PROPOSED HARDCORE ACCESS TRACK
- PROPOSED GRAVELLED AREAS
- PROPOSED DNO SUBSTATION
- PROPOSED CUSTOMER SUBSTATION
- PROPOSED SWITCH / METER ROOM
- PROPOSED GAS GOVERNOR
- PROPOSED LV TRANSFORMER
- PROPOSED BATTERY STORAGE UNIT
- PROPOSED GENERATOR
- PROPOSED LUBE OIL CONTAINER

REV	DESCRIPTION	DATE	BY
3	ECOLOGY AREAS AND FUTURE BATTERY AREAS ADDED	18/4/18	S.T
2	BOUNDARY FENCE AMENDED. ADDITIONAL BATTERY UNITS ADDED. FUTURE BATTERY AREA ADDED.	8/12/17	S.T
1	AMENDED SITE ACCESS TRACK. AMENDED LUBE OIL TANK POSITION	8/12/17	S.T

CLIENT

sirius Renewable Energy

sirius Planning
4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

JOB TITLE

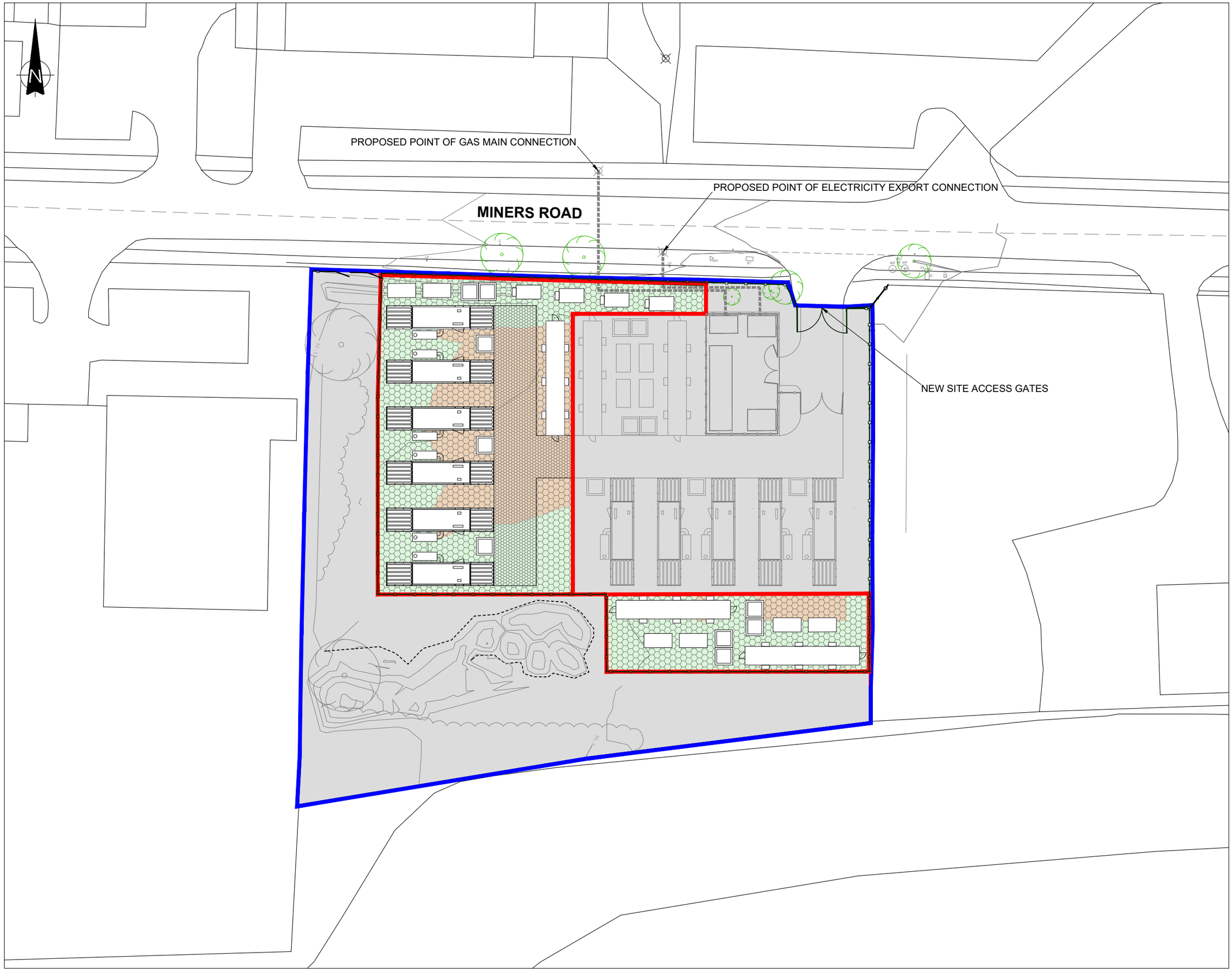
MINERS ROAD RPP FACILITY

DRAWING TITLE

INDICATIVE SITE LAYOUT

DRAWN	DATE	APPROVED	DATE
S.T	18/4/2018	J.B	18/4/2018

SCALE	SHEET	DRAWING NUMBER	REVISION
1:500	A3L	SRE1065/17/03	3



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KEY

- EXISTING CONTOUR
- LAND UNDER APPLICANT'S CONTROL
- APPLICATION BOUNDARY (1,725m²)
- CONSENTED 2.4m HIGH PALASADE SECURITY FENCE UNDER PERMISSION P/2017/0937
- CONSENTED 2.4m HIGH PALASADE SECURITY FENCE UNDER PERMISSION P/2017/0937
- PROPOSED 1.8m HIGH WOODEN POST AND MESH FENCE
- EXISTING COMPACTED GRAVEL HARDSTANDING AREAS
- EXISTING SHORT GRASS / SCRUB VEGETATION
- PROPOSED HARDCORE ACCESS TRACK
- PROPOSED GRAVELLED AREAS
- PROPOSED LV TRANSFORMER
- PROPOSED BATTERY STORAGE UNIT
- PROPOSED GENERATOR
- PROPOSED LUBE OIL CONTAINER

REV	DESCRIPTION	DATE	BY

CLIENT

sirius Renewable Energy

sirius Planning
4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

JOB TITLE

MINERS ROAD RESERVE POWER PLANT EXTENSION

DRAWING TITLE

INDICATIVE SITE LAYOUT

DRAWN	DATE	APPROVED	DATE
S.T	20/6/2018	J.B	20/6/2018

SCALE	SHEET	DRAWING NUMBER	REVISION
1:500	A3L	SRE1082/17/03	0

ANNEX 1

Ecological Method Statement (Outline)

WILKINSON ASSOCIATES
Environmental Consultants

Miners Road Reserve Power Plant,
Llay Industrial Estate, Wrexham

DRAFT GREAT CRESTED NEWT METHOD STATEMENT

Sirius Renewable Energy Limited
October 2018
Our Ref: A1801/MS v1 Draft

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MINERS ROAD RESERVE POWER PLANT, LLAY INDUSTRIAL ESTATE, WREXHAM

DRAFT GREAT CRESTED NEWT METHOD STATEMENT

REPORT PREPARED FOR:

Sirius Renewable Energy Ltd.

SITE LOCATION:

Miners Road, Llay Industrial Estate, Llay, Wrexham, LL12 0PJ

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Version control:

Date	Version	Comments
11.10.18	Draft v1	Draft for comment

This report has been prepared in accordance with all relevant and current best practice guidance and advice, including the Chartered Institute of Ecology and Environmental Management's *Guidelines for Ecological Report Writing – Second Edition* (CIEEM 2017). It has also been prepared in accordance with CIEEM's *Code of Professional Conduct* (CIEEM 2013) and in compliance with *BS42020 Biodiversity – Code of Practice for Planning and Development.*

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TABLES

Table 1 Potential impacts on GCN

FIGURES (to be included in final version of Method Statement)

Figure 1 Location Plan (Drawing Ref. SRE1065 17 01)
Figure 2 Indicative Site Layout – Phase 1 (Drawing Ref. SRE1065 17 03 REV 3)
Figure 3 Indicative Site Layout – Extension (Drawing Ref. SRE1082 17 03)

Background and Supporting Information

A EXECUTIVE SUMMARY

This document is a draft version of the Method Statement that will be submitted in support of an application for a Great Crested Newt (GCN) licence to permit the implementation of a mitigation scheme at Miners Road Reserve Power Plant (the Site).

The Site is located on the south side of Miners Road, within Llay Industrial Estate, near Wrexham.

The development is for the installation and operation of a Reserve Power Plant (RPP) with capacity to generate, store and deliver electricity to the Grid. The facility will provide balancing services to National Grid to ensure the future security of the country's electricity supply.

There are no ponds on the Site, and the development will not affect any GCN breeding sites. However, there are known GCN populations to the north and the south, and habitats suitable for foraging, shelter and hibernation are present around the periphery of the Site.

The activities requiring licensing are the capture, relocation and exclusion of GCN from the development footprint to retained and compensation habitats around the perimeter of the Site. This will include the installation of amphibian exclusion fencing, pitfall traps and refugia; capture of animals using standard terrestrial trapping techniques; and release to suitable terrestrial habitat outside the exclusion fence. All captures will be logged and recorded by accredited agents and audited by the named ecologist.

A Biosecurity Risk Assessment and Compliance Audit will be implemented, as required by planning conditions.

A Conservation Management Plan has been prepared to satisfy a planning condition and this will be implemented throughout the life of the development (25 years).

B INTRODUCTION

This Draft Method Statement sets out the approach that will be taken to avoid, mitigate and compensate for the predicted impacts on Great Crested Newts *Triturus cristatus* (GCN) at Miners Road Reserve Power Plant (referred to here as the Site).

This document will, in due course, form the basis of the GCN Method Statement which will accompany an application to Natural Resources Wales (NRW) for a European Protected Species licence for the development. Some of the information is currently presented in outline/draft form, but the final version will include all the information requested in Natural Resource Wales (NRW) guidance document entitled "Template Method Statement to be used within a Great Crested Newt Development Licence Application" (Amended February 2018).

In its current draft form, the Method Statement has been prepared as an Annex to a report providing information to discharge three pre-commencement planning conditions ("the Planning Conditions report". Condition 12 of the Phase 1 consent (LLA P/2017/0937) and Condition 9 of the Extension consent (LLA P/2018/0517) both state the following:

No part of the development shall commence until an updated Ecological Assessment (Great Crested Newt) as carried out by a qualified ecologist has been submitted to and approved in writing by the Local Planning Authority. The report shall include an Ecological Method Statement demonstrating/identifying any measures of protection/ compensation/mitigation and demonstrate management in the short or long term. The recommendations as approved shall be implemented in strict accordance with timescales to be agreed before any part of the development commences on site.

The Ecological Assessment forms Section 3 of the Planning Conditions report. This Method Statement is presented as Annex 1 to the Planning Conditions report.

A GCN Mitigation Strategy for the Site was prepared during the planning application process and approved by Natural Resources Wales (NRW) prior to the granting of the planning permissions. The Mitigation Strategy underpins the proposals presented in this document.

B.1 Background to development

The Site is located on the south side of Miners Road, within Llay Industrial Estate, near Wrexham. A Location Plan is included as Figure 1 (Drawing Ref. SRE1065 17 01).

The development is for the installation and operation of a Reserve Power Plant (RPP) with capacity to generate, store and deliver electricity to the Grid. The facility will provide balancing services to National Grid to ensure the future security of the country's electricity supply.

B.2 Details of proposed works

Planning consents and conditions

Planning consent for Phase 1 of the development was granted on 4th June 2018 (Ref. LLA P/2017/0937). Consent for an Extension to the RPP was granted on 16th August 2018 (Ref. LLA P/2018/0517). Indicative Site Layout plans showing both developments are included as Figure 2 (Drawing Ref. SRE1065 17 03 REV 3) and Figure 3 (SRE1082 17 03).

A report prepared to discharge three pre-commencement planning conditions has been submitted to the LPA for approval.

A separate report detailing the compliance audit proposals will be provided to satisfy planning condition 15 of the Phase 1 consent (LLA P/2017/0937) and Condition 12 of the Extension consent (LLA P/2018/0517).

Proposed works to be covered by a licence

Construction works at the Site could result in disturbing, killing or injuring GCN in the absence of mitigation and therefore need to be covered by a development licence. An outline of the construction proposals is given below:

- The construction of the RPP is expected to take approximately 4 months.
- During the construction phase a temporary construction compound will be needed to accommodate welfare facilities and plant and equipment storage.
- Construction of the internal service tracks would be the first works on site, along with the setting out of the temporary construction compound. The internal service road will be finished with compacted crushed stone.
- The site will be secured by a 2.4m paladin perimeter fencing, infra-red (non-visible at night), inward facing pole mounted CCTV cameras (2.5m in height) will also be provided at appropriate intervals along the boundary fence.
- The cabling / service connections required to transfer the energy from the generators to the transformers will be below ground with trench depths being 600mm.

Further details of the construction timetable, order or works and other information relevant to GCN mitigation will be provided in the final licence application document.

The operational phase of the development has been assessed as posing very little risk to GCN, and no gully pots are proposed. The operational phase will not therefore need to be covered by a licence.

B.2 Actions requiring licence

There are no ponds on the Site, and the development will not affect any GCN breeding sites. However, there are known GCN populations to the north and the south, and habitats suitable for foraging, shelter and hibernation are present around the periphery of the Site. There is therefore a risk that GCN could be present at the time of development or could enter the Site during construction work. In order to allow the permitted construction work to proceed, it is essential that any GCN present within the working area are captured and removed to a place of safety outside the affected area, and that GCN are prevented from entering the Site during construction works.

The activities requiring licensing are therefore to disturb, capture (using pitfall traps, refugia and hand searches), handle and translocate GCN; and to damage or destroy terrestrial habitat that may be used by GCN. NB the majority of habitat suitable for GCN is to be retained, but small areas of suitable habitat including scrub and smaller rubble piles will be affected.

The following actions that would require licensing are proposed:

- Installation of temporary amphibian exclusion fencing (TAF) around the construction site.
- Trapping and translocation of any GCN within the fenced area prior to site clearance and construction work commencing.
- Relocation of any captured GCN to the retained/compensation habitats outside the TAF.
- Destructive searches of features which could still be sheltering GCN once the capture period is complete – e.g. rubble piles and tree/shrub roots.
- Removal of the small amounts of vegetation within the construction area (which mainly comprises hardstanding).
- Maintenance of TAF throughout the construction phase in order to prevent GCN from entering the working area and being killed or injured.
- Removal of the TAF following completion of construction, once the risk of killing or injuring newts is past.

C SURVEY AND SITE ASSESSMENT

C.1 Existing information on GCN at the survey site

There are no ponds or other waterbodies within the Site. However, there are known GCN populations to the north (Police Site) and south (Former Llay Colliery). The Miners Road Site has the potential to act as a stepping stone between these two breeding populations, providing terrestrial habitat for foraging and migrating GCN.

GCN surveys are not required to inform the GCN mitigation scheme/licence application because no ponds will be impacted and existing survey data are available for the off-site populations to the north and south.

A summary of the most recent survey data for the Police Site and Former Llay Colliery will be included in the final version of the licence application Method Statement.

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

There are two statutory sites notified for GCN within 10 km of the Site:

- Stryt Las a'r Hafod SSSI, which forms part of Johnstown Newt Sites SAC. It lies 9.2 km to the south of the development site at its closest point.
- Buckley Claypits and Commons SSSI, which forms part of Deeside and Buckley Newt Sites SAC. It lies 8 km north east of the development site at its closest point.

C.3 Objectives of the survey

As discussed in Section C.1, GCN surveys are not required as part of this licence application as no ponds are present on the Site and adequate survey data already exists for the adjacent populations.

Surveys of the Site have been carried out with the objective of identifying terrestrial habitats of potential value for GCN; the findings of these surveys were used to inform the detailed design of the development and the agreed mitigation scheme.

C.4 Scaled plan/map of survey area

A Location Plan is included as Figure 1 (Drawing Ref. SRE1065 17 01).

Indicative Site Layout plans showing both developments are included as Figure 2 (Drawing Ref. SRE1065 17 03 REV 3) and Figure 3 (SRE1082 17 03).

A plan showing the locations of GCN ponds/habitats to the north and south of the Site will be included in the final version of the Method Statement.

C.5 Site/habitat description

The information in this Section has been compiled following several site visits in January and February 2018. An updated survey was carried out on 18th September 2018 in order to identify any changes since the earlier assessments were carried out. Apart from the removal of some larger vehicles and pieces of stored machinery, no significant changes to the habitats on the Site were noted during the recent survey.

The Site comprises a 0.52 ha brownfield site located on the south side of Miners Road, Llay Industrial Estate. In recent years, the Site has been used for the temporary storage of vehicles, shipping containers and stockpiled materials.

The Site currently comprises the following habitats/land uses:

- An area of compacted hardcore and gravel in the north of the Site (0.17 ha). This is unfissured and contains no potential places of shelter for GCN. However, the topography allows shallow ephemeral puddles to form during wet weather and these may provide temporary refuges for GCN, for example during migration periods. A number of old vehicles and shipping containers were stored around the perimeter of the hard standing area, but these have now been removed.

- Several rubble piles of varying sizes, including a large area in the south of the Site (0.05 ha) and a smaller discrete pile in the north west. Parts of the larger rubble pile are long established and the rubble is partially covered in mosses and vegetation growth. These areas have a high potential to support sheltering/ hibernating GCN.

- The remainder of the Site, including the northern and western boundaries and the area to the south of the hardstanding, comprises a mix of short grass, ephemeral vegetation and scrub (0.29 ha). These areas could be used by GCN for foraging and/or migration.

The layout of the existing habitats on the Site is shown on Drawing Ref. SRE1065 17 03 REV 3 (Figure 2).

C.6 Field surveys

As discussed in Section C.1, GCN surveys are not required as part of this licence application. A summary of the most recent survey data for the Police Site and Former Llay Colliery will be included in the final version of the licence application Method Statement.

C.7 Survey results

A summary of the most recent survey data for the Police Site and Former Llay Colliery will be included in the final version of the licence application Method Statement.

C.8 Interpretation/evaluation of survey results

The final version of the licence application Method Statement will include a summary of the status of the adjacent GCN populations including population size class assessment.

The development site itself does not support a breeding population of GCN as no ponds are present. However, it supports habitats that may be used by GCN for foraging, shelter and/or hibernation. The habitats of potential value to GCN are as follows:

- GCN could use the longer established rubble piles, particularly the large pile in the south west corner, for shelter and hibernation.
- The areas of grassland and scrub around the periphery of the Site may be used for foraging purposes.
- The compacted hardstanding area has very limited potential to provide habitat for GCN, apart from on an ad hoc basis during wet periods, on migration etc.
- The habitats within the Site may be of value as dispersal corridors or stepping stones between the breeding sites to the north and the south.

D IMPACT ASSESSMENT

Table 1 summarises the potential impacts on GCN which could occur in the absence of appropriate avoidance, mitigation or compensation measures.

Table 1 Potential impacts on GCN

Impact type	Details/risk
Short term impacts: killing or injury	Individual newts could be killed or injured during construction work.
Short term impacts: disturbance	Site clearance could remove feeding, sheltering and hibernation habitats and disrupt dispersal corridors.
Long term impacts: site modification	Development of the Site could damage or destroy GCN resting places (sheltering or hibernation habitats), foraging habitats and/or dispersal corridors.
Long term impacts: fragmentation and isolation	Removal of rubble piles and vegetation could result in the loss of dispersal corridors/stepping stones which may result in fragmentation of the populations to the north and south of the Site.
Post-development interference impacts	There is a low risk of incidental killing, injury or capture during the operational phase. No gully pots are proposed.

Further information on these potential impacts is provided in the following Sections.

D.1 Short term impacts: killing, injury and disturbance

Construction work could potentially lead to the direct killing or injury of individual newts, or newts could enter the working areas and become trapped in excavations.

Site clearance could remove feeding, sheltering and hibernation habitats, particularly the rubble piles and areas of scrub. This could disturb newts or result in injury or fatalities.

The movement of GCN between the off-site waterbodies and terrestrial habitats could be temporarily obstructed by construction works. This could potentially affect breeding success and migration/dispersal during the construction phase.

Temporary short-term impacts on GCN habitats could also occur, either through direct damage (e.g. by vehicle activity) or through indirect effects such as dust deposition or fuel/oil spills.

D.2 Long term impacts: site modification

Development of the Site could potentially damage or destroy GCN resting places (sheltering or hibernation habitats), foraging habitats and/or dispersal corridors. These include the large and long-established rubble piles, areas of scrub and grassland,

and the corridor along the western edge of the Site which may provide a valuable link between GCN populations to the north and south of the Site.

D.3 Long term impacts: site loss

The development will not result in the loss of any GCN breeding sites. However, in the absence of mitigation it may lead to the loss of valuable terrestrial habitat features including rubble piles and scrub which may be used for foraging and/or shelter and hibernation.

D.4 Long term impacts: fragmentation and isolation

Removal of rubble piles and vegetation could result in the loss of dispersal corridors and stepping stones which may affect GCN migration and dispersal and result in fragmentation of the populations to the north and south of the Site.

D.5 Post-development interference impacts

There is a low risk of incidental killing, injury or capture of GCN during the operational phase as there will be no activities at night, when GCN are active, and no features that could potentially kill, injure or trap GCN.

No gully pots are proposed within the development.

D.6 Predicted scale of impact

In the absence of mitigation, the scale of the predicted impacts at site level is **High** as it will result in loss of resting places, fragmentation and potential killing/injury of GCN.

It is likely that the scale of the impacts at greater distances would be **Low** to **Medium**, particularly in terms of the loss of a stepping stone/dispersal corridor feature which could result in fragmentation of populations to the north and south of the Site.

Delivery Information – Mitigation, Compensation and Monitoring

E WORKS TO BE UNDERTAKEN

Objectives of mitigation scheme

A mitigation/compensation scheme is required in order to minimise the potential impacts on GCN and to ensure that the development does not adversely affect the favourable conservation status of the GCN metapopulation.

The mitigation scheme needs to ensure that the potential impacts on GCN are minimised through the implementation of the mitigation hierarchy (avoid, mitigate or compensate), but at the same time it should be proportionate to the identified level of impact and the quality of the affected habitats.

In this instance, the Site is a previously developed brownfield site with a large proportion of the area to be developed being compacted gravel; the potential GCN interest has only developed at the site margins as a result of the stockpiling of materials and the lack of recent active vegetation management.

The mitigation scheme will therefore focus on the retention of most of the longest established rubble piles, together with the provision of an area of compensation land designed to maintain the existing links between the northern and southern populations and avoid any fragmentation effects.

A GCN licence is required to facilitate the exclusion and relocation of any GCN present within the development footprint during construction.

Key elements of the mitigation/compensation scheme

The mitigation/compensation scheme will comprise the following key elements, as shown on Drawing Ref. SRE1065 17 03 REV 3 (Figure 2):

- Site design/layout has been designed to minimise the impacts on GCN habitat.
- A peripheral compensation area (~0.1 ha) will be set aside and managed as GCN terrestrial habitat. This incorporates part of the larger rubble pile and areas of existing scrub and grassland.
- The remainder of the large rubble pile and part of the ephemeral vegetation/ grassland habitats will be retained outside of the fenced compound.
- A licensed mitigation scheme will be implemented to capture and translocate any GCN within the development footprint.

Further information on each of these elements is provided in the following Sections.

E.1 GCN capture and exclusion

A GCN trapping and translocation scheme will be implemented in order to capture and move any GCN present within the construction footprint prior to works commencing. Capture and exclusion methods will be based on widely accepted best practice techniques, as described in the Great Crested Newt Mitigation Guidelines (EN, 2001).

Full details of the methods to be implemented will be included within the final licence application Method Statement, including a programme of works and plans/diagrams etc. An outline of the anticipated scheme is provided below:

Installation of fencing, pitfall traps and refugia

- Temporary amphibian fencing (TAF) will be installed around the perimeter of the construction footprint, including the temporary construction compound. The TAF will be located to exclude all the retained and compensation habitats shown on Figure 2, which will be outside the fence line.
- Materials and specification for the TAF are to be confirmed but will follow standard best practice.
- The line of the exclusion fences will be checked for GCN by the named ecologist or an accredited agent prior to installation.
- Any trenches left open overnight during fence installation will be checked for GCN the following morning prior to work continuing. Trenches will not be left open for longer periods, e.g. over a weekend.
- A steel channel, newt grid or similar will be installed at the Site entrance to allow vehicles to enter/leave the Site whilst preventing GCN access.
- Pitfall traps and carpet tile refugia will be installed around the inside of the TAF (numbers and locations to be confirmed).
- Special arrangements may be needed where the fence line crosses existing compacted hardstanding, for example the fence may need to be secured to the ground rather than buried, and it may not be possible to install pitfall traps so the number of carpet tile refugia may need to be increased accordingly.
- Pitfall traps will be lidded square plastic buckets with a minimum depth of 25 cm. They will be installed so that their tops are flush with the ground and in close contact with the fencing. Each trap will be clearly and sequentially numbered with a permanent marker to facilitate accurate recording of captures.
- Drainage holes will be made in all pitfall traps except where the ground is likely to become waterlogged, in which case the traps will be pegged to the ground.
- A ‘raft’ of buoyant material (e.g. a small piece of wood) will be put into each trap as a refuge in case of flooding and to provide shelter from predators. Grass, hay

or other plant material will be put into the base of each trap and regularly replenished to provide shelter and cover for trapped animals. A mammal 'ladder', comprising a stout stick or plant stalk, will be inserted into each trap to provide a means of escape for small mammals such as shrews.

- Additional carpet tile refugia will be laid out across the interior of the exclusion area, which mainly comprises hardstanding.

Trapping protocols

- The daily searches will include the pitfall traps, carpet tile refugia and any remaining surface debris within the exclusion zone.

- All trapping will be carried out during the active season for GCN and when weather conditions are suitable for GCN terrestrial activities. Further details of the timing of capture efforts will be provided in the final licence application Method Statement.

- The pitfall traps will be opened on nights when weather conditions are suitable, i.e. when temperatures are 5°C or more but not during very hot and dry summer conditions. A site-based weather station may be used to demonstrate appropriate trapping conditions (details to be confirmed).

- The pitfall traps/refugia will be inspected once per day, before 11 am. If they are not going to be inspected for more than 24 hours (e.g. over weekends or during periods of unsuitable weather) the pitfall traps will be closed off securely, with tight-fitting lids weighed down with bricks or stones.

Receptor site

- Any captured animals will be released into the receptor site, which will comprise the retained and compensation habitats outside the TAF line. Newts will be released into or close to the large rubble pile.

- The smaller rubble piles within the construction footprint will be relocated into the compensation area, once they have been checked for GCN.

Record keeping

- A 'site log' will be filled in each day that translocation activities are carried out by the Accredited Agents undertaking the translocation work.

- The site log will be designed to facilitate accurate recording of GCN and other species caught by the methods described above, together with additional information including weather conditions, the condition of the amphibian fencing and other relevant site information. Accredited agents will receive full training from the named ecologist.

Fence maintenance and repair

- Any damage to newt fencing will be repaired as soon as possible following discovery.
- Minor damage will be repaired within 24 hours of discovery and more major damage will, wherever possible, be repaired within 48 hours.
- Particular care will be taken to repair damage as quickly as possible during the spring and/or autumn migration periods.

Trapping period and completion

- The standard minimum trapping period is normally 30 days in suitable weather conditions (as detailed above). However, in this case the area within the TAF mainly comprises hardstanding with very few locations where GCN may take shelter, apart from the smaller rubble piles which are to be relocated into the receptor site. It is likely that any GCN present within the area will be captured in a much shorter time period than 30 days.
- In view of the above, NRW will be consulted with regard to implementing a shorter minimum trapping period. The final licence application Method Statement will detail the agreed minimum trapping period.
- If at the end of the agreed minimum trapping period GCN are still being caught in pitfall traps or found under refugia, trapping will be continued until no GCN have been caught for 5 consecutive trapping nights.
- All the pitfall traps and refugia will be removed at the end of the capture period, under the supervision of the licensed ecologist or an accredited agent.

E.2 GCN habitat

E.2.1 Receptor site modification, enhancement or creation

The receptor site will include the ~0.1 ha compensation area plus the retained habitats outside the 2.4m high Paladin security fence.

The compensation area will be located outside a 1.8m high wooden post and mesh fence in two linked strips along the western and southern boundaries. The location of the compensation area is designed to maintain connectivity between the northern and southern GCN populations and to avoid fragmentation impacts. It currently comprises part of the large rubble pile and existing scrub and ephemeral/short grass vegetation.

The compensation area will be encouraged to develop additional scrub and dense vegetation naturally in order to provide enhanced habitat/shelter for GCN. The smaller rubble piles that lie within the development footprint will be relocated into the compensation area as described in Section E.1.

The remainder of the large rubble pile will be retained outside the security fence. Part of the existing ephemeral/short grass vegetation will also be retained outside the security fence. These areas will be left undisturbed to provide continued terrestrial habitat and resting places for GCN.

A Conservation Management Plan has been prepared as part of the Planning Conditions report. This details the protection of existing features, habitat creation and management to be carried out within the retained and compensation areas (i.e. the receptor site). Once approved, the details contained in that report will be included in the final licence application Method Statement. The Planning Conditions report also includes biosecurity provisions.

E.2.2 Temporary loss of breeding sites or resting places

No breeding sites will be lost.

The main resting places (rubble piles) will be retained and left undisturbed outside the TAF line, where they will continue to be available to GCN.

E.2.3 Destruction of existing breeding sites or resting places

The smaller rubble piles within the construction footprint will be checked for GCN and relocated into the receptor site, as discussed in Section E.1.

E.2.4 Scaled maps/plans

Appropriate plans will be included within the final licence application Method Statement. These will show all relevant features, including the locations of TAF, newt grids, the receptor site and habitat features including the existing rubble piles and scrub areas.

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

The Planning Conditions report which has been prepared to discharge the pre-commencement planning conditions sets out the commitment of the developer to ensuring the delivery of the approved mitigation and compensation scheme.

E.3.1 Measures to ensure compliance with this method statement

Condition 15 of the Phase 1 consent (LLA P/2017/0937) and Condition 12 of the Extension consent (LLA P/2018/0517) requires details of a compliance audit to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of development.

The purpose of an ecological compliance audit is to assess whether agreed avoidance, mitigation and compensation schemes have been implemented in accordance with planning conditions, development licences or other obligations.

A separate submission is to be made to discharge the above conditions. This will outline the compliance audit parameters and will take into account the Provisional Ecological Compliance Audit Guidance Note prepared by the former Countryside Council for Wales (Version 7, November 2012).

The following measures will be included within the scheme:

- A copy of the licence will be available on site at all times.
- All aspects of the licensed work will be overseen by the named ecologist.
- The named ecologist will conduct a toolbox talk to be attended by all contractors carrying out work under the licence. This will include Accredited Agents, Assistants, fence installation contractors and construction contractors.
- A daily log of all actions carried out under the licence will be kept, and the accredited agents carrying out the pitfall trap/refugia checks will sign the log form each day to confirm that all necessary measures to capture and protect GCN have been completed prior to works being allowed to commence in each area.
- The amphibian exclusion fencing will be checked daily during translocation periods by the ecologist, an accredited agent or a trained assistant.
- On completion of translocation, the TAF will be checked weekly during the construction period.
- Any damage or breaches of the fence will be reported immediately to the ecologist and developer and will be repaired within 24-48 hours wherever possible.
- The regular fence checks and any repairs will be logged, and the details will be provided to NRW upon request.

Once approved by NRW and WCBC the compliance audit scheme will be implemented, and the completed audit reports will be submitted to and approved in writing by WCBC after each phase of development as required by the planning condition.

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

The agreed compensation area comprises a ~0.1 ha area of existing terrestrial habitats of value for GCN (i.e. rubble piles, grassland and scrub). This area has been agreed with NRW and WCBC during the planning process, and it is shown on the drawing in Figure 2 (Drawing Ref. SRE1065 17 03 REV 3). The compensation area will be retained and managed throughout the life of the development, i.e. approximately 25 years.

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

The consented layout concentrates the footprint of the facility on the existing hardstanding and the ephemeral/short grass habitats in order to minimise the impacts on places of shelter potentially used by GCN.

Other design features which will avoid or minimise impacts on GCN include the following:

- No gullypots will be used.
- The Site will be permeable to GCN once construction is complete (open site design with gravel; all fences will be permeable to GCN).
- The Site will not contain any structures which could kill, injure or capture GCN.
- There will be no need for permanent exclusion fencing.

E.3.4 Provide sufficient resources

The compensation area will remain under the control of the developer throughout the operational period of the Site, and all management identified within the Planning Conditions report (Conservation Management Plan) will be the responsibility of the developer.

E.4 Mitigation contingencies

All foreseeable mitigation contingencies are included in the preceding sections.

E.5 Biosecurity risk assessment

A Biosecurity Risk Assessment covering the control of Non-Native Invasive Species (INNS) was included within the Planning Conditions report. This will be applied to both the mitigation and the construction works.

The Chytrid fungus has been identified at the Johnstown Newt Sites SAC. The risk of activities described in this Method Statement contributing to the spread of this fungus disease are considered to be minimal, as no waterbodies are present on the Site and any captured amphibians will be relocated immediately outside the fence. However, best practice measures will be implemented during the GCN capture programme to ensure that workers do not inadvertently transfer disease to or from other sites. The procedures will be based on the advice given in ARG-UK Advice Note 4 (Amphibian disease precautions: a guide for UK fieldworkers).

F POST-DEVELOPMENT SITE SAFEGUARD

F.1 Habitat/site management and maintenance

A Conservation Management Plan has been prepared as part of the Planning Conditions report. This details the management and maintenance to be carried out within the retained and compensation areas (i.e. the receptor site). Once approved, the details contained in that report will be included in the final licence application Method Statement.

F.2 Population monitoring

No population monitoring is proposed, as there will be no impacts on breeding sites.

Monitoring proposals for the retained and compensation habitats are included within the Planning Conditions report (see Section F.1).

F.3 Post-development mitigation contingencies

The Planning Conditions report details the contingency measures to be implemented in the event that monitoring identifies unfavourable conditions or the management objectives are not being met. Potential remedial measures could include, but are not restricted to:

- Additional planting to replace any failed compensation habitats.
- Changes to management prescriptions to achieve objectives, e.g. adjustments to cutting/pruning programme.
- Measures to control and remove any non-native invasive species found on site, including the ponds and terrestrial habitats.

Any remedial measures identified will be implemented as soon as possible.

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

The Planning Conditions report includes the following mechanism:

- A record of all monitoring findings will be kept by the operator and these will be used to inform any management and maintenance activities to be carried out in the following autumn/winter. Details of the monitoring and maintenance/ management activities carried out shall be provided to NRW/WCBC upon request, as evidence of compliance with the ongoing requirement to implement the Conservation Management Plan.

G TIMETABLE OF WORKS

A detailed timetable of works will be included within the final licence application Method Statement.

Once the capture and exclusion works have been successfully implemented, construction work will commence. An outline of construction activities is provided below (to be updated within final Method Statement):

- The construction of the RPP is expected to take approximately 4 months. During the construction phase a temporary construction compound will be needed to accommodate welfare facilities and plant and equipment storage.
- Construction of the internal service tracks will be the first works on site, along with the setting out of the temporary construction compound. The internal service road will be finished with compacted crushed stone.
- The site will be secured by a 2.4m paladin perimeter fencing, infra-red (non-visible at night), inward facing pole mounted CCTV cameras (2.5m in height) will also be provided at appropriate intervals along the boundary fence.
- The cabling / service connections required to transfer the energy from the generators to the transformers will be installed below ground with trench depths being 600mm.

H LAND OWNERSHIP – MITIGATION SITE/COMPENSATION SITE

H.1 Mitigation Site/Compensation Site Ownership

The compensation area is fully under the control of the developer. Written landowner consent will be included within the final licence application Method Statement.

H.2 Mitigation Site/Compensation Site Ownership post construction

The compensation area will remain under the control of the developer throughout the operational period of the Site (25 years), and all management identified in the Conservation Management Plan will be the responsibility of the developer.