

Appendix 8.6

Breeding Bird Survey Report

Abergelli Power Project Breeding Bird Survey Report

Abergelli Power Limited
November 2017

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1. Breeding Bird Survey Report

1.1 Introduction

- 1.1.1 AECOM was commissioned to undertake a suite of ecological survey work to inform the Abergelli Power Project (the “Project”), and support the Preliminary Environmental Impact Report (PEIR).
- 1.1.2 The Project Site is located near to the village of Felindre, Swansea, as shown in Figure 1, and the central grid reference for the Project Site is SN65280143. A full description of the development is provided in Chapter 3 (Project and Site Description).
- 1.1.3 The Preliminary Ecological Appraisal Report (AECOM, 2017) identified that surveys for breeding birds were required at the Project Site.
- 1.1.4 This baseline report describes the status of breeding birds within the breeding bird survey area and makes initial indications of potential effects and outlines initial recommendations for further surveys, mitigation and enhancement.
- 1.1.5 The breeding bird survey area encompasses all suitable and accessible areas of woodland, hedgerows and scrub within proximity of and within the Project Site boundary, as shown on Figure 1.
- 1.1.6 Previous surveys have been undertaken by BSG Ecology is provided in the PEIR Appendix 8.16.

a) Objectives of the Study

- 1.1.7 The objectives of this study were:
- To identify any designated nature conservation sites within or in the vicinity of the Project Site boundary that have the potential to support notable breeding bird species or assemblages;
 - To identify any known records of breeding birds in the vicinity of the Project Site boundary;
 - To record and map evidence of breeding bird activity;
 - To make an initial ecological assessment of the value of the Project Site to breeding birds;
 - To highlight any initial potential ecological constraints related to breeding birds;
 - To outline further survey work that may be required; and,
 - To make initial suggestions for mitigation, compensation and enhancement of the natural features identified within the Project Site with respect to the breeding bird assemblage.

1.2 Legislation

1.2.1 There are several different acts of legislation and regulations which refer to the protection of wildlife. Legislation with particular relevance to birds is outlined below.

1.2.2 This is a brief summary of the legislation and is not to be regarded as a definitive legal opinion. When dealing with individual cases, the client is advised to consult the full texts of the relevant legislation and obtain further legal advice.

b) Statutory Legislation

1.2.3 Key legislation for birds in the UK includes:

- Council Directive 79/409/EEC on the conservation of wild birds (the EC Birds Directive); and,
- Wildlife and Countryside Act 1981 (as amended) [WCA].

1.2.4 Annex 1 of the EC Birds Directive lists rare and vulnerable species of regularly occurring or migratory wild birds that are subject to special conservation measures. The Directive also provides for the designation of SPAs for the protection of these species, which form part of the Natura 2000 network of sites protected by European wildlife legislation.

1.2.5 Part 1 of the WCA sets out how the provisions of the Convention on the Conservation of European Wildlife and Natural Habitats (the 'Bern Convention'), the EC Birds Directive and the EC Habitats Directive are implemented in Great Britain. Under Part 1, Section 1 of the WCA it is an offence to:

- Kill, injure or take any wild bird intentionally;
- Take, damage or destroy the nest of any wild bird while that nest is in use or being built; and,
- Take or destroy the egg(s) of any wild bird.

1.2.6 Schedule 1 of the WCA lists a number of species which, in addition to the provisions listed above, are protected by special penalties at all times, including against disturbance when breeding.

1.2.7 The WCA requires the prosecuting authority to prove that an offence was intentional, however the Countryside and Rights of Way (CROW) Act 2000 strengthens the provisions of the WCA by introducing an additional offence of "reckless" disturbance, which means that ignorance of the presence of a protected species cannot be used as a reliable defence should a breach of the WCA be committed. The Natural Environment and Rural Communities (NERC) Act 2006 strengthens the WCA further with respect to the protection of the nests of certain birds listed on Schedule Z1A, even when they are not in use. The NERC Act also offers additional protection to birds released into the wild as part of a repopulation programme and provides minor amendments to the WCA with respect to captive birds.

1.2.8 The Environment (Wales) Act 2016 strengthens the duty previously applied under the Natural Environment and Rural Communities Act (2006) placed on planning authorities to have due regard to biodiversity when making decisions. A number of species of bird are listed on the Environment (Wales) Act 2016 Section 7 Priority Species. These are the species found in Wales which were identified as requiring action under the UK Biodiversity Action Plan (BAP) and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. As such, it is targeted for measures necessary to support its conservation status in the UK.

c) Non Statutory Policy

1.2.9 The RSPB (2009) and Eaton *et al.* (2009) have published lists of Birds of Conservation Concern (BoCC). Red List species are those whose breeding population or range is rapidly declining (50% or more in the last 25 years), recently or historically, and those of global conservation concern. Amber List species are those whose breeding population is in moderate decline (25 – 49% in the last 25 years), rare breeders, internationally important and localised species and those of unfavourable conservation status in Europe.

1.2.10 These lists confer no legal status; however they are useful when assessing the significance of predicted impacts and determining the level of mitigation that may be required when birds are affected by development or any other activity. Furthermore, inclusion on the Red List is a factor in determining the species which may be added to the list of species of principal importance under the Environment (Wales) Act.

1.3 Quality Assurance

1.3.1 This survey and subsequent report was undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification to the international standards BS EN ISO 9001:2008 and 14001:2004 and BS OHSAS 18001:2007. In addition, our IMS requires careful selection and monitoring of the performance of all sub-consultants and contractors.

1.3.2 All AECOM Ecologists who worked on this project are members of (at the appropriate level) the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct (CIEEM, 2013) when undertaking ecological work.

1.4 Methodology

a) Desk Study

1.4.1 The objective of the desk study is to review the existing information available in the public domain concerning species and habitats to identify the following:

- Internationally and nationally designated sites for birds, up to 2 km from the Project Site using the Multi Agency Geographic Information for the Countryside (MAGIC) website (NE, 2017);
- Bird records and records of locally designated sites for breeding birds up to 2 km from the Project Site, using the South East Wales Biodiversity Records Centre (SEWBRcC);
- Bird species within the Section 7 list of Principal Importance for Conservation of Biological Diversity in Wales;
- Features of ecological interest surrounding the Project Site, nearby areas of ecological interest and features connecting these habitats (hedgerows, watercourses, railway lines) using aerial photographs and Ordnance Survey (OS) maps.

1.4.2 The reports of previous surveys undertaken by BSG Ecology were provided by the client and were reviewed (PEIR Appendix 8.16).

b) Breeding Bird Survey

1.4.3 The Project Site was visited on two occasions to identify the presence and status of breeding birds within the Project Site. Surveys were undertaken paying due regard to guidance provided in Breeding Bird Survey (BBS) methodology. All parts of the Project Site were visited on foot to within 50 m where visibility extended or closer where visibility was needed for example in woodlands or behind hedgerows. Surveys were carried out on days with little or no wind, rain or mist in order to maximise the potential for detection of birds and to avoid the possibility of bird activity being suppressed by inclement weather conditions. Surveys were completed by personnel with experience of the likely species assemblage for this geography and habitat type. Survey dates, personnel and weather conditions are shown in Table 1.1.

1.4.4 Species were identified by sight or sound and details of behaviour and activity was recorded. A range of optical equipment including binoculars and telescope were used as required and to minimise disturbance to potentially breeding species. A species list of common passerine birds was compiled for the site; details of activity and behaviour were made. The results were analysed to assess the status of the birds on site as one of the following:

- Non-breeding – Flyover or species observed within unsuitable breeding habitat;
- Possible breeding – Species observed in breeding season in suitable nesting habitat;
- Probable breeding – Pair observed in suitable nesting habitat in breeding season, territorial behaviour observed on at least two occasions, courtship and display observed, observed visiting probable nest site, agitated behaviour or anxiety calls from adults or nest building observed; or
- Confirmed breeding – Used nest or eggshells, distraction display/injury feigning observed, recently fledged young, adults on nest, adult carrying faecal sac or food, nest containing eggs or nest with young seen/heard.

Table 1.1: Survey Dates, Times, Personnel and Weather Conditions

| Survey date and times | Survey Personnel | Weather Conitions |
|-----------------------------|------------------|--|
| 17 May 2017 19.00 – 21.25 | Kevin Webb CEcol | Clear with no rain, wind speed 12mph SW and temperature at start of survey 11 ⁰ C |
| 18 May 2017 04.55 – 11.05 | Kevin Webb CEcol | Clear with no rain, wind speed 8mph W and temperature at start of survey 10 ⁰ C |
| 14 June 2017 17.25 – 22.40 | Kevin Webb CEcol | Clear with no rain, wind speed 6mph S and temperature at start of survey 17 ⁰ C |
| 15 June 2017 04.10 – 04.45* | Kevin Webb CEcol | Clear with no rain, wind speed 2mph SW and temperature at start of survey 14 ⁰ C |

* see Section 1.5: Limitations

1.5 Limitations

- 1.5.1 BBS methodology was not followed in its entirety; species and activity were recorded on a base map and species list and locations and behaviours recorded. This gave a broad assessment of species present, potential for breeding and potential ornithological constraints at the site. Territory mapping was not undertaken since the surveys started in the later part of the breeding season and many species had fledged and were recorded through the presence of dependent (or recently independent) young as breeding.
- 1.5.2 The second survey visit on 14 June included an evening survey of the northern part of the Site followed by a dusk walkover of marshy grassland in the south of the Project Site looking for evidence of crepuscular species. The intention was to complete the survey of the remainder of the Project Site the next morning (15 June) from dawn onwards but the survey was unable to be completed due to a persistent threat to surveyor safety.
- 1.5.3 There is potential for some birds to be missed or to go unnoticed due to the nature of breeding bird surveys and possibility of birds not vocalising and/or being present in dense vegetation. When combined with previous surveys and given the relatively simple nature of habitats it is considered that the current BBS provides an accurate assessment of the ornithological value of the Project Site to breeding birds.
- 1.5.4 There were no further limitations to this survey.

1.6 Baseline Environment

a) Desk Study Results

1.6.1 The designated habitats, sites and features within proximity to the site that are relevant to breeding birds are listed in Table 1.2 below.

Table 1.2: Desk Study Results

| Designation / Feature | Description |
|---|---|
| <p>Nationally and Internationally Designated Sites relevant to breeding birds within 2 km</p> | <p>Nant Y Crimp Site of Special Scientific Interest (SSSI)</p> <p>Distance and Direction: Approximately 1.3 km west</p> <p>Description: Nant y Crimp is of special interest for its wet pastures, species-rich neutral grasslands and semi-natural woodland as well as associated scrub, which are host to several uncommon plant species.</p> <p>Although not mentioned on the citation the site is known to support breeding lapwing <i>Vanellus vanellus</i>.</p> |
| <p>Locally Designated Sites within 2 km relevant to breeding birds</p> | <p>Felindre Grasslands Site of Nature Conservation Interest (SNCI)</p> <p>Distance and Direction: Adjacent to the west of the Project Site boundary.</p> <p>Description: Native wet woodland, lowland mixed deciduous woodland, structurally-diverse and species-rich gorse scrub, and purple moor-grass and rush pasture; and a number of Section 7 listed invertebrate and bird species, and the Schedule 1 listed birds barn owl <i>Tyto alba</i> and Northern goshawk <i>Accipiter gentilis</i>.</p> <p>Rhos Fawr SNCI</p> <p>Distance and Direction: Adjacent to the northern Project Site boundary</p> <p>Description: Supporting the habitats: woodland containing ancient woodland indicator species, structurally-diverse and species-rich scrub, species-rich neutral grassland, purple moor-grass and rush pasture, and watercourse with exposure/erosion features; and a number of Section 7 listed bird species.</p> <p>Rhyd-Y-Pandy Valley and Grasslands SNCI</p> <p>Distance and Direction: Approximately 50 m east</p> <p>Description: Supporting the habitats: native wet woodland, woodland containing ancient woodland indicator species, gorse stands, lowland meadow, species-rich neutral grassland, structurally-diverse and species-rich scrub, purple moor-grass and rush pasture, reedbeds, and watercourse with exposure/erosion features; and a number of Section 7 listed bird species, and the Schedule 1 listed birds barn owl and red kite <i>Milvus milvus</i>.</p> <p>Waun Garn Wen SNCI</p> |

| Designation / Feature | Description |
|-----------------------|--|
| | <p>Distance and Direction: Approximately 200 m west</p> <p>Description: Supporting the habitats: native wet woodland, structurally-diverse and species-rich scrub, purple moor-grass and rush pasture, and watercourse with exposure/erosion features; and a number of Section 7 listed bird species.</p> <p>Pant Lasau SNCI</p> <p>Distance and Direction: Approximately 250 m south</p> <p>Description: Supporting the habitats: native wet woodland, lowland mixed deciduous woodland, gorse stands, lowland fen, structurally-diverse and species-rich scrub, purple moor-grass and rush pasture, and watercourse with exposure/erosion features; and a number of Section 7 listed bird species.</p> <p>Cefn Forest Stream SNCI</p> <p>Distance and Direction: Approximately 300 m south west</p> <p>Description: Supporting the habitats: woodland containing ancient woodland indicator species, upland mixed ash woodland, native wet woodland, lowland mixed deciduous woodland, lowland meadow, species-rich neutral grassland, structurally-diverse and species-rich scrub, degraded lowland heath, lowland fen, purple moor-grass and rush pasture, ponds, and watercourse with exposure/erosion features; and a number of Section 7 listed bird species, and the Schedule 1 listed bird barn owl.</p> <p>Lower Lliw Reservoir SNCI</p> <p>Distance and Direction: Approximately 700 m north</p> <p>Description: Supporting the habitats: woodland containing ancient woodland indicator species, gorse stands, species-rich bracken, structurally-diverse and species-rich scrub, purple moor-grass and rush pasture, and watercourse with exposure/erosion features; and a number of Section 7 listed invertebrate and bird species, and the Schedule 1 listed birds kingfisher <i>Alcedo atthis</i>, merlin <i>Falco columbarius</i> and red kite.</p> <p>Cefn Forest Stream SNCI</p> <p>Distance and Direction: Approximately 300m south west</p> <p>Description: Supporting the habitats: woodland containing ancient woodland indicator species, upland mixed ash woodland, native wet woodland, lowland mixed deciduous woodland, lowland meadow, species-rich neutral grassland, structurally-diverse and species-rich scrub, degraded lowland heath, lowland fen, purple moor-grass and rush pasture, ponds, and watercourse with exposure/erosion features; and a number of Section 7 listed bird species, and the Schedule 1 listed bird barn owl.</p> |

| Designation / Feature | Description |
|---|--|
| Bird records from the last 10 years within 2 km | <p>The following bird species have been recorded within 2 km of the Project Site within the last ten years: Lesser redpoll <i>Acanthis cabaret</i>, goshawk, skylark <i>Alauda arvensis</i>, kingfisher, tree pipit <i>Anthus trivialis</i>, little ringed plover <i>Charadrius dubius</i>, ringed plover <i>Charadrius hiaticula</i>, black-headed gull <i>Chroicocephalus ridibundus</i>, cuckoo <i>Cuculus canorus</i>, lesser spotted woodpecker <i>Dendrocopos minor</i>, yellowhammer <i>Emberiza citronella</i>, reed bunting <i>Emberiza schoeniclus</i>, merlin, peregrine <i>Falco peregrinus</i>, hobby <i>Falco subbuteo</i>, kestrel <i>Falco tinnunculus</i>, pied flycatcher <i>Ficedula hypoleuca</i>, linnet <i>Linaria cannabina</i>, grasshopper warbler <i>Locustella naevia</i>, common crossbill <i>Loxia curvirostra</i>, common scoter <i>Melanitta nigra</i>, red kite, spotted flycatcher <i>Muscicapa striata</i>, curlew <i>Numenius arquata</i>, osprey <i>Pandion haliaetus</i>, house sparrow <i>Passer domesticus</i>, wood warbler <i>Phylloscopus sibilatrix</i>, willow tit <i>Poecile montana</i>, marsh tit <i>Poecile palustris</i>, dunnock <i>Prunella modularis</i>, bullfinch <i>Pyrrhula pyrrhula</i>, starling <i>Sturnus vulgaris</i>, redwing <i>Turdus iliacus</i>, song thrush <i>Turdus philomelos</i>, fieldfare <i>Turdus pilaris</i>, barn owl and lapwing.</p> |
| Priority Species – Listed on The Environment Act (Wales) 2016 Section 7 | <p>Fifty one species are listed on Section 7 of which nineteen are of potential relevance to the Project Site: tree pipit, lesser redpoll, linnet, cuckoo, lesser spotted woodpecker, yellowhammer, reed bunting, kestrel, pied flycatcher, grasshopper warbler, yellow wagtail <i>Motacilla flava</i>, spotted flycatcher, house sparrow, dunnock, willow tit, marsh tit, bullfinch, skylark, wood warbler, turtle dove, <i>Streptopelia turtur</i>, starling, song thrush and lapwing.</p> |
| Surrounding Land Use | <p>The Project Site is located to the north of Junction 46 of the M4 Motorway close to the village of Felindre, Swansea.</p> <p>The Project Site has agricultural fields to the east, south and north. Areas of woodland are located to the south, east and west of the Site. Areas of the National Grid Compound with associated roads and buildings are partially within and adjacent to the Project Site boundary. A water treatment works is located in the north west outside of the Project Site boundary.</p> |
| Previous Surveys undertaken by BSG Ecology | <p>The client provided AECOM with the reports of previous surveys undertaken in 2014 by BSG Ecology within the Site (PEIR Appendix 8.16). The red line boundary included within these reports is different to the 2017 Project Site boundary.</p> <p>It was noted that the 2017 Project Site boundary is smaller than the red line boundary used by BSG Ecology in 2014. However, the current Project Site boundary is within the same area as the 2014 red line boundary provided to BSG Ecology and therefore the surveys undertaken would have captured the current Project Site area.</p> <p>The 2014 BSG Ecology Breeding Bird Survey Report identified 30 species of birds breeding within the Project Site and an additional 23 species using the Project Site or flying over. The surveys were</p> |

| Designation / Feature | Description |
|-----------------------|---|
| | undertaken on three dates between April and June under suitable weather conditions (Appendix 8.16). |

b) Breeding Bird Survey Results

1.6.2 A breeding bird survey was conducted at the Project Site on two occasions during May and June 2017. The results are summarised in Table 1.3. Birds were considered to be confirmed breeding if either direct evidence of nesting was found (active nest or adult bird carrying food or faecal pellet) or if males were observed displaying territorial behaviour (singing, calling or aggression) in suitable habitat for breeding on each visit. An assemblage of common birds typical of the habitats on Project Site was recorded. No Annex 1 or Schedule 1 birds were recorded.

1.6.3 Out of a total of 45 species recorded only swift was definitely not breeding within the Project Site boundary. Twelve species listed on Section 7 were recorded all of which may have been breeding within the Project Site boundary or immediate surrounds: bullfinch, cuckoo, dunnock, house sparrow, lapwing, lesser redpoll, linnet, reed bunting, skylark, song thrush, starling and tree pipit. Ten species are also listed on the BoCC Red list: cuckoo, house sparrow, lapwing, lesser redpoll, linnet, mistle thrush, skylark, song thrush, starling and tree pipit. Eight further species were recorded which are listed on the BoCC Amber List: bullfinch, dunnock, meadow pipit, redstart, reed bunting, swift, tawny owl and willow warbler.

Table 1.3: Summary of Birds and Behaviour recorded during Breeding Bird Survey

| Species | Number Recorded | | Summary | Breeding Status | Species Designation |
|--------------|-----------------|---------------|--|---------------------|---------------------------|
| | Visit 1 | Visit 2 | | | |
| Barn swallow | 4 | 7 | Hunting throughout the Site on each visit, may breed in farm buildings | Possible breeding. | |
| Blackbird | 9 | 9 (5 juv) | Up to seven pairs may have bred but breeding confirmed of at least two pairs. | Confirmed breeding | |
| Blackcap | 12 | 17 | Up to 8 singing males recorded and fledged young recorded on second visit. | Confirmed breeding. | |
| Bullfinch | 3 | 6 | Recently fledged young recorded on second visit. | Confirmed breeding | Section 7 BoCC Amber List |
| Blue tit | 24 | 16 (inc. juv) | Common throughout woodland and mature hedgerows. Up to 12 pairs likely to have bred. | Confirmed breeding | |
| Carrion crow | 34 | 9 | One active nest found on first visit and common throughout. Up to 6 pairs | Confirmed breeding | |

| Species | Number Recorded | | Summary | Breeding Status | Species Designation |
|--------------------------|-----------------|---------|--|--------------------|---------------------------|
| | Visit 1 | Visit 2 | | | |
| | | | likely to breed. | | |
| Chiff-chaff | 15 | 10 | Peak count of 15 singing males on first visit indicative of likely number of pairs. | Probable breeding | |
| Chaffinch | 16 | 9 | Up to 16 singing/calling males recorded with 4 family parties on second visit. Likely to be up to 12 pairs breeding. | Confirmed breeding | |
| Collared dove | 2 | | One pair observed on first visit only. | Possible breeding | |
| Common buzzard | 2 | 2 | Pair soaring over site on both visits likely to be breeding within site or locally. | Probable breeding | |
| Cuckoo | 2 | 1 | Male heard calling from close to substation on first visit and outside of site further west | Possible breeding | Section 7 BoCC Red List |
| Dunnock | 8 | 4 | Common across the Site with up to 8 pairs likely to breed | Probable breeding | Section 7 BoCC Amber List |
| Garden warbler | 2 | 1 | Two males singing from close to substation on visit 1 and one male in the same location on visit 2 | Probable breeding | |
| Goldcrest | 4 | 5 | Four singing males recorded first visit and fledged young seen in family party on second visit. | Confirmed breeding | |
| Goldfinch | 23 | 3 | Up to six singing/calling males on first visit and small feeding groups. Up to 6 pairs likely to have bred. | Probable breeding | |
| Great spotted woodpecker | | 1 | One flying over south of site on visit two | Possible breeding | |
| Great tit | 9 | 2 | Up to five pairs likely to breed in woodland. | Probable breeding | |
| Greenfinch | 5 | 1 | Up to 3 singing/calling males and two with associated females recorded on first visit | Probable breeding | |
| House | 31 | 4 | Present around farm | Probable | Section 7 |

| Species | Number Recorded | | Summary | Breeding Status | Species Designation |
|--------------------|-----------------|---------|---|--------------------|-------------------------|
| | Visit 1 | Visit 2 | | | |
| sparrow | | | buildings just outside Site. Up to 12 pairs likely to breed locally. | breeding | BoCC Red List |
| Jackdaw | 14 | | Feeding flock observed on first visit only. May breed locally | Possible breeding | |
| Jay | 2 | | Two birds heard calling from substation area on first visit | Possible breeding | |
| Lapwing | 3 | | Up to two pairs may breed in fields to the north of the Project Site although only recorded immediately outside of Project Site boundary chasing corvids. | Possible breeding | Section 7 BoCC Red List |
| Lesser redpoll | 6 | | Three pairs heard calling in flight on first visit | Possible breeding | Section 7 BoCC Red List |
| Lesser whitethroat | 1 | 3 | One pair bred on site in mature hedgerow in southern part of the Project Site. Observed feeding young on second visit. | Confirmed breeding | |
| Linnet | 5 | | Small feeding party observed in northern part of the Project Site | Possible breeding | Section 7 BoCC Red List |
| Long tailed tit | | 6 | Family party observed on second visit only near the Project Site boundary in west. | Probable breeding | |
| Meadow pipit | 8 | 11 | Commonly occurring and presumed breeding in marshy grassland across the Site with up to 5 pairs likely. | Probable breeding | BoCC Amber List |
| Mistle thrush | 4 | 2 | Small family party seen in field at northern part of the Project Site on first visit and two juveniles on second survey in same area. | Probable breeding | BoCC Red List |
| Nuthatch | 1 | | One bird heard calling on first visit close to substation. | Possible breeding | |
| Pied wagtail | 2 | | One pair seen carrying food near the centre of | Confirmed breeding | |

| Species | Number Recorded | | Summary | Breeding Status | Species Designation |
|--------------|-----------------|---------|---|--------------------|---------------------------|
| | Visit 1 | Visit 2 | | | |
| | | | the Site on first visit. | | |
| Raven | 1 | | Single bird flying over on first visit. | Possible breeding | |
| Robin | 18 | 11 | Common breeder with adults and young observed on each survey. Likely to be up to 15 pairs breeding. | Confirmed breeding | |
| Rook | 45 | 19 | Seen feeding in fields with sheep to the south of the Site on each visit. | Possible breeding | |
| Redstart | 3 | 1 | Three alarm calling males observed on first visit likely to be indicative of breeding of up to three pairs. | Probable breeding | BoCC Amber List |
| Reed bunting | 3 | | Two males one definitely paired observed in marshy grassland. | Probable breeding. | Section 7 BoCC Amber List |
| Skylark | 4 | 4 | Four singing males observed on each visit three from south and one in north of Site. | Probable breeding. | Section 7 BoCC Red List |
| Song thrush | 8 | 2 | Eight singing males recorded on first visit although survey commenced late in season so probably under-recorded. Up to 12 pairs likely to breed. | Probable breeding. | Section 7 BoCC Red List |
| Stonechat | 2 | 2 | One pair observed close to the centre of the Site and a pair observed along the northern boundary on the second survey. Rookery on site. | Probable breeding. | |
| Starling | 13 | 2 | Small feeding flock on first visit and two fledged juveniles recorded on second visit. Likely to breed in farm buildings within or close to Project Site. | Confirmed breeding | Section 7 BoCC Red List |
| Swift | 16 | | Hunting over marshy grassland at dusk on first visit. | Not breeding | BoCC Amber List |
| Tawny owl | | 1 | Male heard calling on second visit only in | Possible breeding | BoCC Amber List |

| Species | Number Recorded | | Summary | Breeding Status | Species Designation |
|----------------|-----------------|--|--|--------------------|-------------------------|
| | Visit 1 | Visit 2 | | | |
| | | | woodland south of the Project Site boundary. | | |
| Tree pipit | 4 | 1 | Adults only observed in south of the Project Site on both visits. | Probable breeding | Section 7 BoCC Red List |
| Whitethroat | 13 | 5 | Up to eight pairs likely to breed. Common in scrub and mature hedgerows across the Project Site. | Probable breeding | |
| Wren | 21 | 7 | Common breeding species throughout the Site with up to 15 pairs likely. Juveniles being fed observed on second visit | Confirmed breeding | |
| Willow warbler | 24 | 9 (including juveniles recently fledged) | Common breeder throughout the Project Site. Up to 20 pairs likely. | Confirmed breeding | BoCC Amber List |

1.7 Conclusions

1.7.1 The Site supports a varied assemblage of breeding birds typical of the size, habitat types and regional location. The surveys undertaken in both 2014 and 2017 produced very similar results which is unsurprising considering that the habitats and management practices have changed little between the two surveys.

1.8 Preliminary Recommendations

a) Recommendations for Further Surveys

1.8.1 A full assessment of required further surveys has been made during EclA and reported in the PEIR. At this stage it is anticipated that further surveys should be undertaken in early 2018 in order to fully assess the assemblage of species using the Project Site earlier in the season.

b) Recommendations for Mitigation

1.8.2 A full series of recommendations for further surveys and mitigation at construction and operation has been undertaken for the EclA. Mitigation should focus on avoiding removal of habitat within the bird breeding season of March – August inclusive and to ensure that replacement landscape planting seeks to provide alternative habitat for those species present.

1.8.3

c) Recommendations for Biodiversity Enhancement

1.8.4 A full series of recommendations for biodiversity enhancement has been made during the EclA and reported in the PEIR. At this stage the following preliminary recommendations have been made for general biodiversity enhancements:

- Provide nesting boxes in woodland and buildings for a range of species including house sparrow, starling and tawny owl; and,
- Improve the availability of breeding and foraging habitat within the Project Site by planting new scrub, hedgerows, and infilling current gaps in hedgerows with whips and creating green corridors. It is recommended to use native species.

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Figure 1 Phase 1 Habitat Map

Project Title:

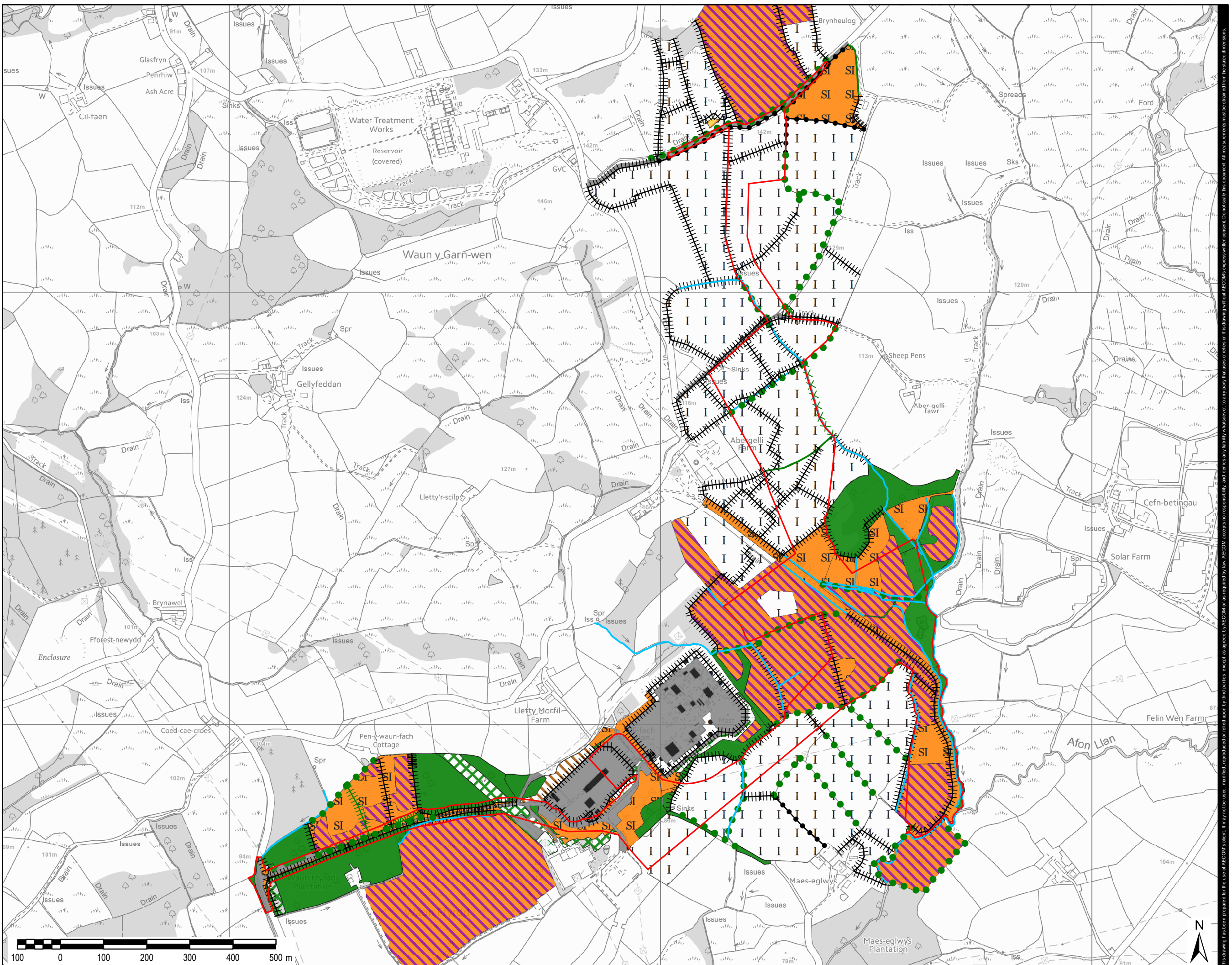
ABERGELLI POWER STATION

Client:

ABERGELLI POWER LTD.

LEGEND

- Project Site Boundary
- Phase 1 Habitat Linear Features**
- X Scrub - Scattered
- Row of trees - broadleaved
- Running Water
- Intact Hedge - Species-Poor
- - Defunct Hedge - Species-Poor
- W Hedge with Trees - Native Species-Rich
- |||| Hedge with Trees - Species-Poor
- |||| Fence
- Earth Bank
- Phase 1 Habitat Areas**
- Broadleaved woodland - semi-natural
- Broadleaved woodland - plantation
- Dense/Continuous scrub
- Scattered scrub
- Semi-improved - neutral grassland
- Improved grassland
- Marsh/marshy grassland
- Tall ruderal - herb and fern
- Dry heath/acid grassland mosaic
- Buildings
- Bare ground
- Hard standing



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PHASE 1 HABITAT MAP

Scale at A3: 1:8,000

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