BSG | ecology

Derrybrien Wind Farm Development Decommissioning Project

Bat Survey and Mitigation Report

BLANK PAGE

BSG | ecology

Issuing office

3 Brunel House | Hathersage Park | Station Approach | Hathersage | Derbyshire | S32 1DP
T: 01433 651869 | W: www.bsg-ecology.com | E: info@bsg-ecology.com

Client	ESB
Project	Derrybrien Wind Farm Development Decommissioning Project, Bat Survey and Mitigation Report
Version	FINAL
Project number	P22-408

	Name	**Position**	**Date**
Originated	Daniel Foster	Principal Ecologist BSG Ecology	18 September 2023
Reviewed	Rachel Potter	Principal Ecologist BSG Ecology	09 January 2024
Reviewed	Kate-Marie O'Connor	Senior Ecologist ESB	20 September 2024
Issued	Rachel Potter	Principal Ecologist BSG Ecology	25 September 2024

Contents

1 B Introduction

B1 Background to activity [location, ownership, type of and need for the proposed development, planning history, land allocation in Local Plan (or equivalent), etc]

Existing Derrybrien Wind Farm - Site Context

1.1 Derrybrien Wind Farm is owned and operated by Gort Windfarms Ltd, a wholly owned subsidiary company of ESB. The wind farm site is leased from a private landowner.

1.2 Construction of the Derrybrien Wind Farm Development was completed in 2006 and the wind farm had been generating renewable wind energy until early 2022.

1.3 Derrybrien Wind Farm is in County Galway in the northern part of the Slieve Aughty Mountains approximately 11 km due south of Loughrea, 12.7 km north northeast of Gort and 24 km west of Portumna. Galway City lies some 35 km to the northwest of the wind farm site. The wind farm site is in the south of the county approximately 4.6 km from the border with County Clare and 21 km from the border with County Tipperary in the southeast.

1.4 As illustrated in **Figure B1**, the existing Derrybrien Wind Farm Development includes the Derrybrien Wind Farm (including Derrybrien 110 kV substation), the Derrybrien to Agannygal 110 kV Overhead Line (OHL) and the Agannygal 110 kV Substation. A summary of these is provided below.

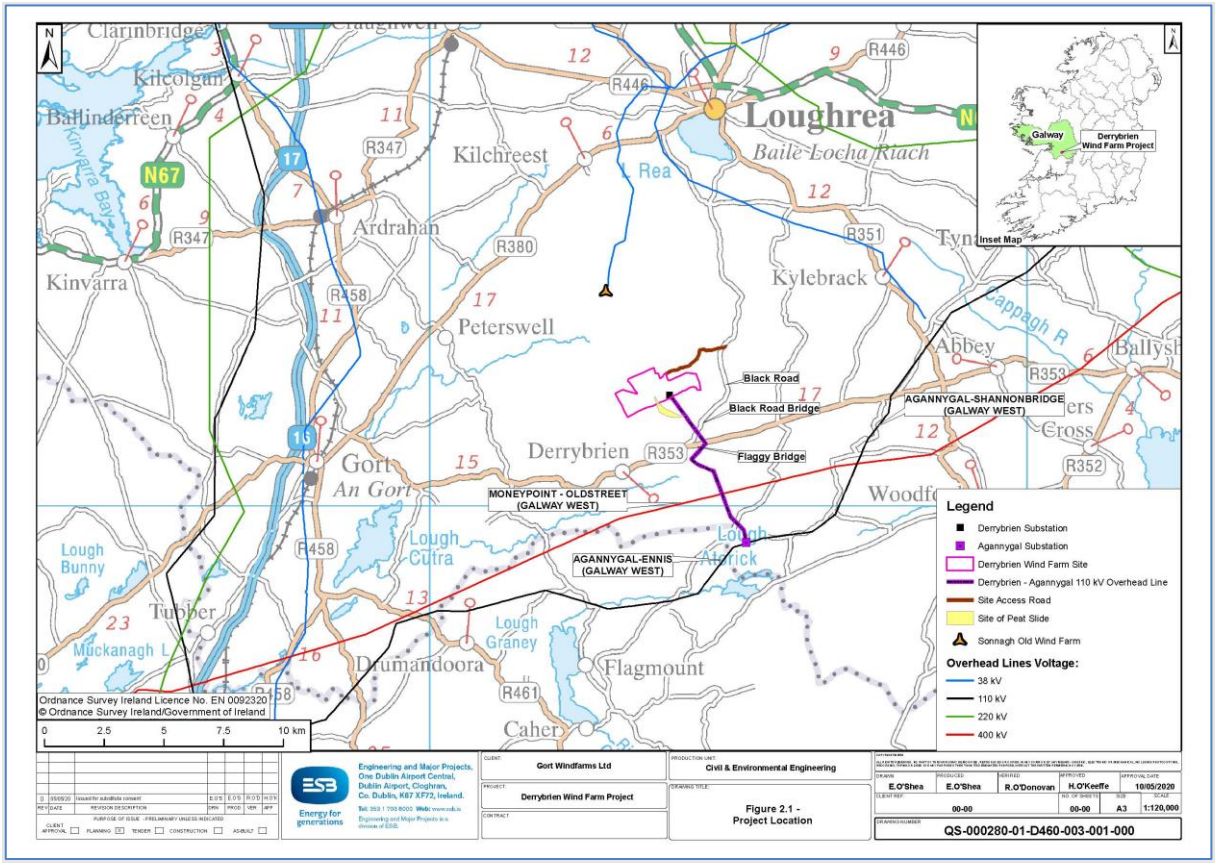


Figure B1 Site Location of Derrybrien Wind Farm

1.5 **Derrybrien Wind Farm Site:** The overall area of the wind farm site is approximately 344.5 ha, but the wind farm infrastructure occupies only a small proportion of this area (31.1 ha - approximately 9% of site). The wind farm site is accessed from a Coillte access road via a minor public road known as the Black Road (approximately 3.1 km from the wind farm to the Black Road/Coillte junction).

1.6 The main wind farm infrastructure comprises 70 turbines, crane hard standings, 17.5 km of access tracks within the site (including 14.6km of floating access tracks), drainage channels, borrow pits/quarries, on site material storage, the Derrybrien110 kV substation (including the control building), direct buried electric cables and anemometer masts.

1.7 **Derrybrien to Agannygal 110 kV Overhead Line:** The Derrybrien to Agannygal 110 kV Overhead Line (OHL) is the grid connection constructed for exporting the electricity generated at the wind farm to the national grid. It begins at the Derrybrien Substation (located within the Derrybrien wind farm site, ITM 559916E, 704736N) and ends at the Agannygal Substation (located to the south-east of the windfarm site, ITM 563118E, 698593N).

1.8 The grid connection comprises of c. 7.8 km 110 kV conductor, 34 no. double wood pole structures, 2 no. end masts, 5 no. angle masts and 1 no. intermediate mast. The OHL connects into the Ennis – Shannonbridge line at the Agannygal 110kV Substation. The Agannygal 110kV substation splits this line into two circuits: Agannygal - Shannonbridge (Galway West) and Agannygal - Ennis (Galway West).

1.9 **Agannygal 110 kV Substation:** The Agannygal 110kV substation (including the control building) is located within the townland of Loughatorick North and the approximate centre point of Agannygal Substation is at ITM co-ordinates 563118E, 698593N. The site is owned by Gort Windfarms Ltd.

1.10 The nearest villages to Agannygal 110kV substation are the following: Derrybrien – 5 km to the northwest of the site, Ballynakill – 8.7 km to the northeast, Woodford – 10 km to the east and Flagmount – 8.4 km to the southwest.

1.11 Access to the Agannygal 110kV substation and overhead line structures is from nearby roads and forestry tracks. The substation site is located within the townland of Loughatorick North.

Project Need

1.12 In 2019, pursuant to proceedings before the Court of Justice of the European Union (Case C-261-18), Ireland was found to have failed to take measures necessary to fulfil a number of obligations arising from the Environmental Impact Assessment (EIA) Directive.

1.13 On foot of that judgment and the legislative provisions set out under section 177B of the 2000 Act, on 23rd July 2020, Galway County Council directed Gort Windfarms Ltd to seek substitute consent for the development, described in the relevant notice as: '*the development of a windfarm, including ancillary development which includes service roadways, control house, transformer compounds and anemometer mast and associated development of a grid connection at Derrybrien West, Derrybrien East, Derrybrien North, Toormacnevin, Bohaboy, Caheranearl and Boleyneendorrish, all in the County of Galway, more particularly described in the grant of planning permission as set out in Schedule 2*', with Schedule 2 specifying the relevant Galway County Council planning references as 973470, 973652, 992377, 004581, 023560, 035637, 05317 and 05316.

1.14 Accordingly, an application was submitted to An Bord Pleanála (ABP) in August 2020 for substitute consent (reg. ref. ABP-308019-20) – relating to the retention and continued operation of the subject development, until its eventual decommissioning.

1.15 In February 2022, ABP refused the application for substitute consent made by Gort Windfarms Ltd in relation to the Derrybrien Wind Farm Development. As a consequence of the refusal of substitute consent, the development is now deemed to be unauthorised development,

1.16 On 29th August 2024 an enforcement notice was issued by Galway County Council requiring Gort Windfarms Ltd to '[decommission] and where appropriate in terms of possible environmental impacts on the environment at this location, [to remove] the unauthorised windfarm and associated ancillary structures'.

1.17 If the decommissioning works do not proceed it would not be possible for Gort Windfarms Ltd to comply with the stated requirements of Galway County Council as set out in the enforcement notice

EN23/235 – namely to decommission and, where appropriate in terms of possible environmental impacts on the environment at this location, remove the unauthorised windfarm and associated ancillary structures, subject to the applicable consent(s) / permissions(s) from the appropriate authority or authorities.

Alternatives Considered as part of the EIA Process

1.18 In relation to the Derrybrien Wind Farm Development, An Bord Pleanála have refused an application for substitute consent which would have authorised the continued operation of the windfarm and ancillary development (ABP-308019-20). The development is now unauthorised and is the subject of an enforcement notice that requires the decommissioning and removal of the unauthorised wind farm and unauthorised ancillary structures.

1.19 The only alternatives that can be considered relate only to its decommissioning and removal. The 'decommissioning alternatives' that have been considered are listed and summarised below:

- Alternative 1 - "Do-Nothing"
- Alternative 2 – Remove all development associated with the Derrybrien Wind Farm Development.
- Alternative 3 – 'Practicable Restoration' i.e. remove and alter existing structures on the site and, restore the site in so far as is practicable, while minimising risks to safety and the environment.

1.20 Alternative 1 "Do-Nothing" whereby all features associated with the existing Derrybrien Wind Farm Development would remain in situ in their current state – i.e., an unauthorised windfarm development that ceased commercial electricity generation in February 2022.

Alternative 1 does not facilitate the removal of the unauthorised windfarm and associated ancillary structures and is therefore in direct contravention of the enforcement notice. If the steps specified in the Enforcement Notice are not taken within a period of 36 months from the date of service of the Enforcement Notice, or an extended period as the planning authority may allow, Galway County Council may enter on the land and take such steps, including the removal, demolition, or alteration of any structure, and recover the expenses it has incurred from Gort Windfarms Ltd. Under section 156 of the 2000 Act it is an offence not to comply with an enforcement notice. Due to these legal ramifications for Gort Windfarms Ltd, the Do-Nothing scenario is not a feasible alternative.

1.21 Alternative 2 includes the total removal of all development at the Derrybrien Wind Farm Development. A breakdown of the works included in Alternative 2 is included below:

Derrybrien Windfarm including the Derrybrien 110kV Substation

- Controlled dismantling and removal of 70no. wind turbines (blades, nacelle, and tower) including their reinforced concrete foundations. Backfilling of the open excavations with suitable source of glacial till and peat to blend the area into the surrounding blanket bog.
- Controlled dismantling and removal of Derrybrien 110kV Substation including any reinforced concrete foundations within the substation compound. Backfilling of the open excavations with suitable source of glacial till and peat to blend the area into the surrounding blanket bog.
- Controlled dismantling and removal of 2no. anemometer masts including their reinforced concrete foundations and backfilling of the open excavations with suitable source of glacial till and peat to blend the area into the surrounding blanket bog.
- Removal of de-energised underground Electrical and communication cables. Note: It is physically possible to remove the underground cables by excavating open trenches along the cable routes using low ground bearing pressure tracked excavators working directly on the peat. However, this is considered a high-risk activity with regards to peat stability.
- Excavation and removal of c.17.5km access tracks network within the Derrybrien Wind Farm Site including those reconstructed after the peat slide (T68 and between T23-T70). Subsequent landscaping to match adjoining areas.

- Excavation and removal of 70no. hardstand areas and re-profiling of the adjacent areas and covering with 0.5 -1.0m of vegetated peat to blend into the surrounding blanket bog.
- Removal of naturalised peat repositories area.
- Reinstatement of the 3no. Borrow Pits / queries through infilling with material from removed access tracks and hardstands.
- Site restoration works, subsequent landscaping and bog rehabilitation measures through active drain blocking (where feasible) is also included.

Derrybrien to Agannygal 110 kV OHL and Agannygal 110kV Substation

- Destringing of the overhead line conductor
- Removal of the overhead line infrastructure (34 no. double wood pole structures and 8 no. masts)
- Controlled removal of Agannygal substation and demolition of control building
- Controlled removal of standby generator (bunded) and diesel tank, external lighting poles, lightning mast
- Removal of palisade fencing
- Removal and reinstatement of the reinforced concrete foundations for the control building and compound hardstand areas.
- Removal and reinstatement of hardcore surfaced access track
- Reinstatement of the Ennis-Shannonbridge 110kV Line.

Off-site Features constructed in response to the peat slide

- Extensive vegetation clearance and the construction of new haul routes to enable access to each offsite feature. Construction of temporary compound for the duration of the works.
- In-stream works to remove Barrage No.1 and Coillte forestry access track followed by riverbank reinstatement works.
- Infilling of minor borrow pit adjacent to Barrage No. 1 through using material removed from Barrage No.1 and other imported material if required.
- In-stream works to remove Barrage No.2 and Coillte forestry access track followed by riverbank reinstatement works.
- Removal of naturalised peat repository area adjacent to Barrage No. 2 and offsite disposal of material.
- In-stream works to remove Barrage No. 3 followed by riverbank reinstatement works.
- Removal of naturalised peat repository area adjacent to Barrage No. 3 and offsite disposal of material.
- In-stream works to remove Barrage No. 4 followed by riverbank reinstatement works.
- Removal of naturalised peat repository area at the Black Road Bridge adjacent to Barrage No. 3 and offsite disposal of material.
- Reinstatement of naturalised drainage diversion works.
- Repair works to Black Road Bridge, Flaggy Bridge and Unnamed Bridge C would remain in-situ.
- Removal of temporary haul routes and temporary compounds followed by ground reinstatement.

This alternative would involve significant civil engineering works to remove roads, reinforced turbine foundations, demolition and removal of the concrete foundations and surface buildings, etc. The works would likely be carried out mechanically using hydraulic excavators, rock breakers and earthmoving transport vehicles similar to the equipment that was used during the project construction phase.

This alternative complies with the enforcement notice as it achieves the removal of the unauthorised structures within the Derrybrien Wind Farm Development. However, it carries significant environmental, geotechnical and safety risks. For example, the intensive earthworks operations, large excavations in the peat and glacial subsoils, hydraulic breaking of reinforced concrete and the movements of fully laden heavy earthmoving trucks across access tracks – of a similar level to the original construction have the potential to give rise to peat instability increasing the risk of a future peat slide. Due to these significant risks, Alternative 2 is not a feasible alternative.

1.22 Alternative 3 'Practicable Restoration' includes the removal of the above ground structures only, leaving below ground features in situ. Alternative 3 includes the removal of the 70 turbines structure, the Derrybrien substation, the overhead line and the Agannygal Substation. The following below ground structures would remain in situ:

Derrybrien Windfarm including the Derrybrien 110kV Substation

- Reinforced concrete foundations for 70no. wind turbines.
- Reinforced concrete foundations of structures within the Derrybrien Substation compound.
- Reinforced concrete foundations of 2no. Anemometer masts.
- Approx. 17.5km of access tracks and 70no. hardstand areas
- Underground Electrical and communications cabling.
- 3no. Borrow Pits / Quarries
- Naturalised Peat Repository areas
- Onsite Drainage Infrastructure.

Derrybrien to Agannygal 110 kV OHL and Agannygal 110kV Substation

- Concrete foundations for 34no. double wooden pole sets.
- Reinforced concrete foundations for 2no. end masts.
- Reinforced concrete foundations for 5no. angle masts.
- Reinforced concrete foundations for 1no. intermediate mast.
- Reinforced concrete foundations of structures within the Agannygal Substation compound.

Off-site Features constructed in response to the peat slide

- Barrage 1 and Coillte Access Track.
- Barrage 2 and Repository Area.
- Barrage 3 and Repository Area.
- Barrage 4.
- Repository Area at the Black Road Bridge.
- Minor repairs work to instream structures/bridges – at Black Road Bridge, Flaggy Bridge, the Farmer's Track / Culvert, Crooked Bridge and Stepping Stones.
- Minor borrow pits used to source material.
- Drainage works.

The alternative complies with the enforcement notice as it achieves the removal of the unauthorised structures within the Derrybrien Wind Farm Development and significant reduces the level of ground disturbance as a means of lowering the geotechnical risk and potential impacts to the environment in general. As such it is considered to be the only feasible alternative.

Derrybrien Wind Farm Development Decommissioning Project

1.23 To comply with the enforcement notice and to minimise environmental risks on the site, Gort Windfarm Ltd are proceeding with Alternative 3 which includes the following:

Derrybrien Wind Farm (including the Derrybrien 110kV substation)

All above ground structures will be removed, leaving the wind turbine foundations, underground LV cables, meteorological mast foundations and substation foundations in situ. Any protruding foundations or structures will be cut to below ground level and infilled and levelled to match adjoining areas. Works would be confined to areas within the control of Gort Windfarms Ltd.

Derrybrien to Agannygal 110 kV Overhead Line (OHL) and Agannygal 110kV Substation

All overhead line pole sets and masts will be cut at c.300mm below ground level and removed from site. The reinforced concrete bases for angle masts would be left in situ. All above ground structures would be removed from the Agannygal 110kV substation. The palisade fencing surrounding the substation would be dismantled and removed from site. The reinforced concrete base and the platform for the substation would be left in-situ. Once the Derrybrien-Agannygal 110 kV OHL and Agannygal substation is removed, the Ennis-Shannonbridge 110kV OHL would be reinstated.

Work Area Offsite ancillary works associated with peat slide (2003)

No development works would be carried out to decommission the offsite ancillary works associated with the peat slide in 2003. All features associated with the peat slide 2003 (Barrages 1 – 4, peat repositories and the minor borrow pit adjacent to Barrage 1) which have naturalised and become heavily vegetated over the past 20 years and are virtually imperceptible today, will remain in situ. There will be no requirement for vegetation clearance, construction of temporary compounds and haul routes to access the works areas and there be no requirement for instream works to remove any items.

1.24 In order to comply with the enforcement notice, Gort Windfarms Ltd are seeking Prospective Development Consent and Substitute Consent for the decommissioning of the Derrybrien Wind Farm Development

- "Prospective Development" - the carrying out of decommissioning works to remove the majority of above-ground features from the site – including all turbines, masts, electrical plant, overhead lines etc; and enable the final decommissioning of the site (the "prospective development" and "prospective works"); and

- "Retained Development" - the 'retention' in situ and in perpetuity of part of the existing development – including at-ground and below-ground structures such as turbine and other foundations; and development associated with historic peat slide events that occurred during construction such as barrages, peat repositories, on-site borrow pits / quarries etc.

1.25 The "Prospective Development" planning application will be submitted along with its Environmental Impact Assessment Report, while the "Retained Development" substitute consent application will be submitted along with its remedial Environmental Impact Assessment Report.

Land allocation in Local Plan (or equivalent).

The lands are un-zoned.

B2 Full details of proposed works on site that are to be covered by the licence (including a site plan at Section E7). The site may be inspected by an NPWS representative, so the details given should clearly reflect the extent of the project and leave no room for doubt. This information will be used to compare site conditions with the Method Statement.

1.26 Derrybrien Substation supports a day roost of common pipistrelle *Pipistrellus pipistrellus* bat. Agannygal Substation supports day roosts of common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared *Plecotus auritus* bats. As already noted, the enforcement notice issued by Galway County Council requires the removal of the unauthorised windfarm and associated ancillary structures'. This includes both substation buildings which will result in the destruction of the bat roosts.

1.27 Prior to demolition works commencing bat boxes will be installed in two locations (near Derrybrien Wind Farm substation and near Agannygal Substation). These will act as receptor sites to relocate any bats found during works, and as long-term mitigation for the destroyed roosts. The confirmed roosts, and other potential roost areas on the buildings, will be carefully dismantled by hand under ecological supervision. Bats encountered during this work will be captured and transported from these roosts to the bat boxes.

2 C Survey and site assessment

C1 Pre-existing information on species at survey site

2.1 Bat surveys were undertaken between 2011 and 2023 within the wider Derrybrien Wind Farm site. All work completed during and after 2016 has been completed by BSG Ecology. This work included nocturnal activity surveys (driven transects and static bat detectors) and bat fatality searches using specialist search dogs. Species recorded during the activity surveys within the wider Derrybrien Wind Farm include common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus*, Nathusius's pipistrelle *Pipistrellus nathusii*, *Myotis* species, brown long-eared bat and Leisler's bat *Nyctalus leisleri*. Roost records obtained during this work are reported separately within Sections C2 – C10 of this document.

C2 Status of the species in the local/regional area

2.2 Bat Conservation Ireland (BCI) data was initially obtained for a 10 km search area around the Derrybrien Wind Farm site in 2012 (Wilson, 2012). Two lesser horseshoe *Rhinolophus hipposideros* bat roosts were identified at Thor Ballylee and Cloonbeg (both in County Galway) 9.3 km and 10 km west of the site respectively. In addition, roosts of brown long-eared bat, soprano pipistrelle and *Myotis* species were identified at a location approximately 10 km to the east of the site.

2.3 Updated data from BCI was obtained for a 10 km search area around the site in 2024. This included an additional brown long-eared and Natterer's bat roost approximately 3.1 km south west of the site, and a second brown long-eared roost approximately 7.1 km south west of the site.

2.4 A review of bat records from the National Biodiversity Data Centre and BCI data from 2024 indicates that common pipistrelle, soprano pipistrelle, Nathusius's pipistrelle, lesser horseshoe bat, Leisler's bat, brown long-eared bat, Daubenton's bat *Myotis daubentonii*, whiskered bat *Myotis mystacinus*, and Natterer's bat *Myotis nattereri* have been recorded within 10km of the site. The information obtained from BCI (Wilson, 2012) reflects these findings, with no other species recorded.

C3 Objective(s) of survey

2.5 The objectives of the bat survey work at Derrybrien Substation and Agannygal Substation were to determine the presence / likely absence of roosting bats, and characterise the roosts present.

C4 Survey area

2.6 The majority of bat survey work at the Derrybrien Wind Farm Site has been completed since 2016. Initially surveys were conducted to inform the remedial EIAR for the Site, and latterly (following refusal of the application) the decommissioning EIAR. The purpose of the surveys was originally to inform the Remedial EIA by characterising the bat community of the Site, assessing the impacts of the construction and operation of the wind farm, and subsequently to inform the decommissioning of the non-operational wind farm.

2.7 As part of an initial appraisal, habitats at the turbine locations and their proximity to features (such as pools and forest edge) were categorised. This informed the scope of sampling using static detectors; representative locations were selected and sampling undertaken over several years. Initially (in 2016) driven transects with stopping points were also completed; however subsequent changes in guidance removed the need for transect survey. Dog searching for bat carcasses was also completed at varying intensity prior to and post the implementation of a curtailment regime. Latterly, to inform the decommissioning EIAR, assessments were made of the potential of trees and buildings within and close to the project footprint to support roosting bats.

2.8 Derrybrien Substation is located within Derrybrien Wind Farm, close to its southern boundary at ITM 559915 704730. Agannygal Substation is located approximately 6.8 km south of the main Derrybrien Wind Farm at Irish Grid Reference ITM 563095 698604.

C5 Habitat description [based on daytime visit(s); to include the roost and surrounding area for context]

Derrybrien Substation (Photographs 1 to 4)

2.9 Derrybrien Substation comprises a hardstanding area approximately 70 m by 40 m in size. The substation infrastructure is located on the hardstanding and includes a control building, and various electrical transformers enclosed by a metal security fence. The substation control building is constructed from concrete rendered blocks, is approximately 25 m long by 10 m wide, and is single-storey up to 4.5 m in height at the ridge. There are external security flood lights fitted to the building. The roof is pitched with gables and covered with slate tiles which are in good condition with no potential bat access points observed. The roof eaves are overhanging and boxed with uPVC soffits, fascia and barge boards; these are typically well-sealed although there are small gaps under the gable apexes at the soffits. The roof is supported on modern timber trusses that form a cluttered loft void up to 2 m in height to the ridge. The roof tiles are underlined with type 1F bituminous underfelt which is in good condition. During the internal / external building surveys, no evidence of roosting bats was recorded. The building was considered to have low potential for roosting bats.

2.10 The habitat surrounding Derrybrien Substation offers suitable bat foraging and commuting habitats 75 m west and 90 m south where there are extensive areas of coniferous woodland, and 85 m east where there are sparser areas of coniferous trees. Habitats to the north of the substation are more open with few trees and are considered to be of limited value for foraging or commuting bats.

2.11 There are wind turbines located to the north, west and east of the building; the nearest is 97 m southwest.

Agannygal Substation (Photographs 5 to 7)

2.12 Agannygal Substation comprises a hardstanding area approximately 70 m by 50 m. The substation infrastructure is located on the hardstanding and includes a control building, and various electrical transformers which are enclosed by a metal security fence.

2.13 The substation control building is constructed from concrete rendered blocks, is approximately 15 m long by 10 m wide, and is single-storey up to 4.5 m in height at the ridge. There are external security flood lights fitted to the building. The roof is pitched with gables and covered with slate tiles which are in good condition with no potential bat access points observed. The roof eaves are overhanging and boxed with uPVC soffits, fascia and barge boards; these are typically well-sealed although there are small gaps under the gable apexes at the soffits. The roof is supported on modern timber trusses that form a cluttered loft void up to 2 m in height to the ridge. The roof tiles are underlined with type 1F bituminous underfelt which is in good condition. Approximately 15 bat droppings were found in the loft space of Agannygal Substation during the internal survey on 16 August 2022; the building was therefore noted to be a confirmed bat roost.

2.14 The habitat surrounding Agannygal Substation offers suitable bat foraging and commuting habitats 180 m south where there are extensive areas of coniferous woodland, and 85 m east where there are sparser areas of coniferous trees with woodland blocks beyond further east. Habitats to the north and west of the substation are more open with few trees and are considered to be of limited value for foraging or commuting bats.

C6 Field survey (including methods, timings, weather conditions, personnel)

2.15 Survey work was managed by Rachel Potter (Principal Ecologist at BSG Ecology) and comprised personnel as shown in Tables 1 and 2. Surveyors marked with a * hold a current National Parks & Wildlife Service bat survey licence. Surveys were undertaken with reference to Bat Conservation Trust survey guidance (Collins, 2016), which were the most up to date guidance at the time of the surveys. All surveyors are experienced in undertaking bat surveys and an Irish licenced surveyor (Caroline Shiel) was present during all surveys.

Preliminary bat roost assessment

2.16 To determine the suitability of buildings for roosting bats, a preliminary ground-level assessment of all buildings at the Derrybrien Wind Farm, including those at Derrybrien and Agannygal Substations was undertaken. Table 1 below presents a summary of the survey details.

2.17 During this survey, the interior and exteriors of the buildings at Derrybrien and Agannygal Substations were inspected for evidence of bats and to identify potential bat access points.

2.18 Externally, a search was made for potential roost features suitable for roosting bats or those giving access into the interior of the structure, such as gaps at the roof tiles, weep holes, cracks / cavities in the exterior walls, and gaps within the roof structure or between roof structure and walls. External evidence of roosting bats such as droppings, staining or feeding remains was also searched for.

2.19 To further determine the suitability of the buildings for roosting bats and search for evidence of roosts, an internal inspection of the buildings was undertaken. Where safe access allowed, the roof space of the buildings was accessed and a search made for potential roost features, and also for any evidence of roosting including live or dead bats, feeding remains, droppings, and staining.

2.20 Binoculars, torches and an endoscope were used to aid this survey as necessary, and a note was made of any signs that might indicate the presence of bats.

Table 1: Details of the preliminary bat roost assessment bat survey timings and personnel

Date	Survey type	Buildings surveyed	Survey personnel
15/08/22	Internal and external building inspection	Derrybrien Substation	Caroline Shiel* (survey licence reference DER/BAT 2023-35), Rachel Potter
16/08/22	Internal and external building inspection	Agannygal Substation	Caroline Shiel*, Rachel Potter
19/07/23	External building inspection	Agannygal Substation	Caroline Shiel*, Maurice Connolly
20/07/23	External building inspection	Derrybrien Substation	Caroline Shiel*, Maurice Connolly

Nocturnal bat survey

2.21 Nocturnal bat surveys were undertaken on the buildings at Derrybrien and Agannygal Substations to determine the presence / likely absence of roosting bats, and characterise the roosts present.

2.22 During the nocturnal surveys, surveyors were positioned so that full visual coverage could be gained of the target building and, in particular, any potential bat roost access points, which had been previously identified.

2.23 The dusk emergence bat surveys were started 15 to 30 minutes prior to sunset in order to ensure that early emerging bat species (Collins, 2016 Table 3.3), such as pipistrelle species, were detected. The surveys were generally undertaken up to 1.5 hours after sunset in order to ensure that later emerging bat species, such as brown long-eared *Plecotus auritus* bats and *Myotis* bat species were detected. The dawn roost re-entry surveys commenced from 2 hours prior to sunrise until 10 minutes following sunrise.

2.24 Echometer Touch Pro and Pettersson D240X bat detectors were used to aid bat identification in the field and record bat calls. Both surveyors recorded calls so that species could later be confirmed by studying sonograms with appropriate computer software. A Guide Pro 19 thermal imaging scope was used as a night vision aid to identify bat roost locations and roost counts.

Table 2: Details of nocturnal bat survey timings, personnel and weather conditions

Date	Survey type	Buildings surveyed	Survey times (local sunset / sunrise time)	Weather during survey	Survey personnel
15/08/22	Dusk emergence	Derrybrien Substation	20:50 to 22:35 (21:05)	Rain: none Cloud: 8/8 oktas Wind: 2 Beaufort Temp: 15°C	Caroline Shiel*, Rachel Potter
16/08/22	Dusk emergence	Agannygal Substation	20:48 to 22:33 (21:03)	Rain: none Cloud: 2/8 oktas Wind: 1-2 Beaufort Temp: 14°C dropping to 13°C	Caroline Shiel*, Rachel Potter
08/09/22	Dusk emergence	Agannygal Substation	19:40 to 21:45 (20:05)	Rain: none Cloud: 7/8 oktas clearing to 1/8 by the end of survey. Wind: 2 Beaufort Temp: 14°C	Caroline Shiel*, Maurice Connolly
09/09/22	Dawn re-entry	Derrybrien Substation	05:30 to 07:10 (06:58)	Rain: none Cloud: 8/8 oktas, foggy. Wind: 1 Beaufort Temp: 10°C	Caroline Shiel*, Maurice Connolly
26/09/22	Dusk emergence	Derrybrien Substation	19:40 to 21:45 (20:05)	Rain: none Cloud: 8/8 oktas Wind: 3-4 Beaufort Temp: 11°C dropping to 10°C	Caroline Shiel*, Maurice Connolly
19/07/23	Dusk emergence	Agannygal Substation	21:20 to 23:00 (21:47)	Rain: none Cloud: 8/8 oktas Wind: 1 Beaufort Temp: 16°C	Caroline Shiel*, Maurice Connolly
20/07/23	Dawn re-entry	Derrybrien Substation	04:00 to 05:55 (05:31)	Rain: none Cloud: 3/8 oktas Wind: 1 Beaufort Temp: 10°C	Caroline Shiel*, Maurice Connolly

Limitations to method

2.25 There were no perceived limitations to the surveys.

C7 Results (to include raw data, any processed or aggregated data, and negative results as appropriate)

Derrybrien Substation

Preliminary bat roost assessment

2.26 No evidence of roosting bats was recorded internally or externally at the Derrybrien Substation building during any of the surveys.

Nocturnal surveys

2.27 The nocturnal surveys recorded one bat roost at the Derrybrien Substation building; this was a single common pipistrelle bat roosting at the gable apex on the east building elevation. The roost location is presented on **Figure C9b**. Table 3 provides a summary of the nocturnal survey results.

Table 3: Derrybrien Substation nocturnal survey results summary

Date	Roosting bats recorded	Non-roosting bats recorded
15/08/22 (dusk)	One common pipistrelle emerged from a gap at the gable apex of the east elevation (roost reference R1).	No other bat activity was recorded.
09/09/22 (dawn)	No bat activity recorded.	
26/09/22 (dusk)	No bat activity recorded.	
20/07/23 (dawn)	One common pipistrelle returned to roost at the gable apex of the east elevation (roost reference R1).	No other bat activity was recorded.

Agannygal Substation

Preliminary bat roost assessment

2.28 Approximately 10-15 common pipistrelle and brown long-eared bat droppings (confirmed by DNA analysis - see Appendix 1) were found in the loft space of Agannygal Substation building (roost reference R4). No external evidence of roosting bats was recorded during the survey.

Nocturnal surveys

2.29 The nocturnal surveys recorded two species of bat roosting at the Agannygal Substation building; common pipistrelle bats (peak count on one survey of seven bats) roosting at the gable apexes on the northern and southern building elevations and one soprano pipistrelle bat roosting at the southern elevation gable apex. The roost location is presented on **Figure C9d**. Table 4 provides a summary of the nocturnal survey results.

Table 4: Agannygal Substation nocturnal survey results summary

Date	Roosting bats recorded	Non-roosting bats recorded
16/08/22 (dusk)	Two common pipistrelle bats emerged from a gap at the gable apex of the northern elevation (roost reference R2).	One common pipistrelle was recorded briefly at 22:18, but the bat was not seen.
08/09/22 (dusk)	Four common pipistrelle bats emerged from a gap at the gable apex of the northern elevation (roost reference R2). Three common pipistrelle bats emerged from a gap at the gable apex of the southern elevation (roost reference R3).	No other bat activity was recorded.
19/07/23 (dusk)	Seven common pipistrelle bats emerged from a gap at the gable apex of the northern elevation (roost reference R2). One soprano pipistrelle bat emerged from a gap at the gable apex of the southern elevation (roost reference R3).	No other bat activity was recorded.

Other structures associated with the Derrybrien Wind Farm

2.30 Three stone bridges are present near the Derrybrien Wind Farm. These were inspected in August 2022 and found to support very limited roosting features and capacity to support bats. All features could be fully inspected, and no bats or evidence of bat use was recorded. Each of the bridges has low roost potential, and no further survey is recommended (the features were fully inspected and absence of bats was confirmed).

C8 Interpretation and evaluation (including presence/absence, population size class assessment, site status assessment and factors influencing survey results)

2.31 Preliminary bat roost assessment and nocturnal bat surveys have confirmed bat roosts within two buildings at the Derrybrien Wind Farm site, within a building at Derrybrien Substation and a building at Agannygal Substation. Table 5 presents a summary of the bat roosts recorded, an assessment of the roost type and their conservation significance.

Table 5: Interpretation / evaluation of survey results

Roost ref.	Bat roost evidence and interpretation	Roost type[1]	Conservation significance	Consideration of seasonal use
Derrybrien Substation				
R1	Common pipistrelle bat: one bat recorded during two of the four survey occasions (15/08/22 and 20/07/23) roosting in a small crevice at the gable apex on the eastern elevation of the building (Photograph 4). Roost likely used by non-breeding individual / small numbers of bats on an occasional basis.	Day	Low	Occasional use throughout active season. Low suitability for hibernation.
Agannygal Substation				
R2	Common pipistrelle bat: between two and seven bats recorded roosting in this location during each of the three nocturnal surveys, The roost location is in a small crevice at the gable apex on the northern elevation of the building (Photograph 5). Roost likely used by non-breeding individual / small numbers of bats on an occasional basis.	Day	Low	Occasional use throughout active season. Low suitability for hibernation.
R3	Common pipistrelle: three bats recorded roosting during one of the three survey occasions (08/09/22) in a gap at the gable apex on the southern elevation of the building (Photograph 6). Likely used by individual / small numbers of bats on an occasional basis.	Day	Low	Occasional use throughout active season. Low suitability for hibernation.
	Soprano pipistrelle: one bat recorded roosting during one of the three survey occasions (19/07/23) in a gap at the gable apex on the southern elevation of the building (Photograph 6). Likely used by individual / small numbers of bats on an occasional basis.	Day	Low	Occasional use throughout active season. Low suitability for hibernation.
R4	Brown long-eared bat: 10-15 brown long-eared bat droppings recorded within the loft void (Photograph 7) of the building (confirmed by DNA analysis). No brown long-eared bats recorded roosting during nocturnal surveys. Likely used by individual / small numbers of bats on an occasional basis.	Day	Low	Occasional use throughout active season. Low suitability for hibernation.

2.36 The buildings have some intrinsic / low suitability for individual / low numbers of hibernating bats within the roof structure tiles. Hibernation surveys have not been undertaken as it would not be practical or effective to inspect the crevices that could be potentially used without dismantling them. The works with the greatest likelihood of encountering bats will be completed outside of the hibernation period and the risk of encountering hibernating bats is considered to be low. Specific hibernation survey is considered to be unnecessary.

[1] With reference to
Collins, J. (ed.) (2023*) Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition).
The Bat Conservation Trust, London.

2.37 The surveys undertaken have recorded small numbers of common pipistrelle bats roosting at Derrybrien Substitution and small numbers of common pipistrelle, soprano pipistrelle and brown long-eared bat (based on the presence of small numbers of droppings only) at Agannygal Substation. The surveys have been undertaken at an optimal time of year, and with no significant limitations, which has allowed a robust characterisation of the roosts to be made.

C9 Map(s) of survey area (with habitat description, marking structures or features examined; summary of survey results marked on map if appropriate. Map should show area on an Ordnance Survey (or similar) base-map)

2.38 Refer to Section 8 of this report for all figures.

C10 Cross-referenced photographs of key features (if appropriate)

2.39 Refer to Section 10 of this report for all photographs.

3 D Impact assessment

D1 Pre- and mid-activity impacts

3.1 Any bats present during the works could be disturbed, injured or killed. There are a number of elements of the work that could lead to short / mid-term (the duration of the works) impacts on bats if such impacts are not mitigated, as follows:

- An increase in noise, vibration and dust and increased human presence at the roost buildings may disturb bats in proximity to the works. This is likely to result in a minor negative impact at site level.
- Removal of roof tiles may disturb bats if either uncovered or roosting in adjacent areas during the strip. This is likely to result in a major negative impact at site level.

D2 Long-term impacts [roost or habitat loss, modification, fragmentation, etc.]

3.2 Common pipistrelles are common in Ireland, and together with soprano pipistrelles are the most frequently recorded species (Schofield & Mitchell-Jones, 2011). The population in Ireland is thought to be stable and is estimated to comprise 1-2 million mature individuals (Marnell *et al.*, 2019). Results from Bat Conservation Ireland's car-based bat monitoring scheme suggests populations of common pipistrelle increased between 2003 and 2009 (Roche *et al*., 2011). The mammal red list for Ireland 2019 lists the species as of 'least concern' in Ireland (Marnell *et al.*, 2019). Common pipistrelle feed in a wide range of habitats including woodland, hedgerows, grassland, farmland, suburban and urban areas (Dietz *et al*., 2009; Schofield & Mitchell-Jones, 2011, Dietz & Keifer, 2016). Maternity roosts are mainly found in buildings, with males roosting in buildings and trees during the summer (Collins, 2016). Common pipistrelle bats have also been recorded roosting in bridges in Ireland (Masterson *et al.*, 2008). The relative abundance of common pipistrelle is considered to be **Common** in Ireland.

3.3 Soprano pipistrelles are common in Ireland, and together with common pipistrelles are the most frequently recorded species (Schofield & Mitchell-Jones, 2011). The population in Ireland is thought to be stable, and is estimated to comprise 0.54-1.2 million mature individuals (Marnell et al., 2019). Results from Bat Conservation Ireland's car-based bat monitoring scheme suggest populations of soprano pipistrelle species increased between 2003 and 2009 (Roche et al., 2011). The mammal red list for Ireland 2019 lists the species as of 'least concern' in Ireland (Marnell *et al*., 2019). Soprano pipistrelles typically feed in wetland habitats, for example over lakes and rivers, but also occur around woodland edge, along tree lines and hedgerows, and in suburban gardens and parks (Dietz *et al.,* 2009; Schofield & Mitchell-Jones, 2011; Dietz & Keifer, 2016). Soprano pipistrelle maternity roosts are mainly found in buildings (typically forming larger roosts than common pipistrelle), with males roosting in buildings and trees during the summer (Collins, 2016). Soprano pipistrelles have also been recorded roosting in bridges in Ireland (Masterson *et al.,* 2008). The relative abundance of soprano pipistrelle is considered to be **Common** in Ireland.

3.4 Brown long-eared bats are common and widespread in Ireland (Schofield & Mitchell-Jones, 2011). The population is thought to be stable, and is estimated to comprise 64,000-115,000 mature individuals (Marnell *et al.,* 2019). Results from Bat Conservation Ireland's Brown Long-eared Bat Roost Monitoring Scheme also suggest the population in Ireland is stable (Aughney *et al.,* 2011; BCI, 2019a). The mammal red list for Ireland 2019 lists the species as of 'least concern' (Marnell *et al*., 2009). Brown long-eared bats typically forage in woodlands, and roost in buildings and trees (Schofield & Mitchell-Jones, 2011). They have also been recorded roosting in bridges (BCI, 2010). Studies suggest that brown long-eared bats spend most of their time foraging within 500 m to 1 km of their roosts, and flight distances are typically under 10 km (Dietz *et al.,* 2009, Hundt *et al*., 2012). The relative abundance of brown long-eared bats is considered to be **Rarer** in Ireland.

3.5 The demolition of the building at Derrybrien Substation will result in the loss of one non-breeding roost of common pipistrelle bat. The demolition of the building at Agannygal Substation will result in the loss of non-breeding roosts of common pipistrelle, soprano pipistrelle and brown long-eared bats.

3.6 Taking account of all of the above, the following impact assessment has been made:

- The demolition of the building at Derrybrien Substation will result in the loss of one non-breeding roost of common pipistrelle bat (R1) which, without mitigation, could result in injury or killing of individual / small numbers of common pipistrelle bat. There are few other suitable roost buildings or trees within the wider wind farm site, or nearby, that could provide alternative roosts for displaced bats.
- The demolition of the building at Agannygal Substation will result in the loss of two non-breeding roost of common pipistrelle bat (R2 and R3), one non-breeding roost of soprano pipistrelle bat (R3) and one non-breeding roost of brown long-eared bat (R4) which, without mitigation, could result in injury or killing of individual / small numbers of these bat species. There are few other suitable roost buildings or trees within the wider wind farm site, or nearby, that could provide alternative roosts for displaced bats.
- The demolition of the two substations has the potential to result in a significant impact on common pipistrelle, soprano pipistrelle and brown long-eared bat at the local level. There are very limited roosting opportunities on site, and use of habitats around the substations by foraging common pipistrelle in the late summer and autumn, and by brown long-eared bat over their active season may decrease as a result.

3.7 However, given the low number of non-breeding bats roosting at Derrybrien and Agannygal Substations, the demolition works are unlikely to result in an adverse effect on the favourable conservation status of common pipistrelle, soprano pipistrelle or brown long-eared bats.

3.8 There will be no roost modification and the roosts will be destroyed.

3.9 Fragmentation impacts are not anticipated. Direct loss or degradation of foraging habitat will be temporary and localised in nature. Where working areas around turbines are required for decommissioning, these will be allowed to revegetate following work being completed. Localised clearance of conifers in a dynamic, commercially-managed landscape is typical of what is already occurring on a large scale. Effects will be temporary in nature and are unlikely to be significant at the site level for any bat species.

3.10 The above considered, the actions permitted by a derogation licence would not be detrimental to the maintenance of the populations of the species to which the Habitats Directive relates at a favourable conservation status in their natural range as is required under Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended.

D3 Post-activity interference impacts [disturbance etc.]

3.11 There are no impacts expected in the absence of mitigation as the substations will be cleared and no lighting or other potential sources of interference proposed.

D4 Other impacts

3.12 Not applicable.

D5 Summary of impacts at the site level

3.13 Refer to D2 above.

D6 Summary of impacts in a wider context

3.14 Refer to D2 above.

D7 Plans or maps to show impacts (clear indication of which areas would be affected and how)

3.15 Refer to Section 8 of this report for all figures.

4 E Alternative solutions examined

E1 List of alternative solutions examined.

4.1 A summary of the 'decommissioning alternatives' that have been considered for the Derrybrien Wind Farm Development Decommissioning Project as part of the EIA process are included in Section B of this report. As outlined above the rationale for retaining certain at and below ground structures is a means of reducing the significant environmental, geotechnical and safety risks that are associated with peat stability and potential peat slides. As no such rationale exists for retaining the substation buildings at Derrybrien and Agannygal, the only alternative that can be considered for the purposes of this derogation licence application is Alternative 1 Do-Nothing. Under the Do-nothing scenario, all features associated with the wind farm (including the Agannygal and Derrybrien substations) would remain in situ in their current state – i.e., an unauthorised windfarm development that ceased commercial electricity generation in February 2022.

E2 details of each alternative and how it addresses the impacts described in Section D. Include any residual impacts which the solution does not address

4.2 Under Alternative 1 "Do Nothing", no decommissioning works would be undertaken. All features associated with the Derrybrien Wind Farm Development would remain in-situ in their current condition. The infrastructure would continue to degrade over time. Under Alternative 1 the existing bat roosts (as described in Section C7) remain unaffected.

E3 Feasibility of each alternative in the context of the overall development

4.3 Alternative 1 Do-Nothing: As described above in section B1, the Derrybrien Wind Farm Decommissioning Project (including the two control buildings where the bat roosts are located) is an unauthorised development under section 177O(5) of the PDA. In August 2024 an enforcement notice was issued by Galway County Council under section 154 of the PDA requiring Gort Windfarms Ltd. to decommission the unauthorised Derrybrien Wind Farm and associated ancillary structures subject to the applicable consent(s)/ permission(s) from the appropriate competent authority or authorities. Under the "Do Nothing" scenario, the two unauthorised substation buildings would remain in place and thereby Gort Windfarms Limited would be acting in direct contravention of the enforcement notice. If the steps specified in the Enforcement Notice are not taken within a period of 36 months from the date of service of the Enforcement Notice, or an extended period as the planning authority may allow, Galway County Council may enter on the land and take such steps, including the removal, demolition or alteration of any structure, and recover the expenses it has incurred from Gort Windfarms Ltd. Under section 156 of the 2000 Act it is an offence not to comply with an enforcement notice. Due to these legal ramifications for Gort Wind Farms Ltd, the Do-Nothing scenario is not a feasible option.

E4 Reasons for accepting/rejecting each alternative solution

4.4 The "Do Nothing" scenario is rejected because the two substation buildings are unauthorised development and if they were to remain in place, Gort Windfarms Ltd would be acting in contravention of the enforcement notice, and committing an offence under section 156 of the PDA. As such, there are no satisfactory alternative solutions to the proposed demolition of the two substation buildings.

4.5 This bat derogation licence application qualifies under Regulation 54(2)(c) of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended as set out below:

In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment

4.6 It is of overriding public interest that the 2000 Act, as amended, and the enforcement notice issued by Galway County Council under it is abided by.

5 F Mitigation

F1 Mitigation strategy (overview of how the impacts will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status)

5.1 The following method statement addresses potential impacts on bats to ensure that the favourable conservation status of the bat species at site level is maintained. This will ensure that no bats are injured or killed during demolition works, and that compensatory roost locations are provided to replace those lost.

F2 Replacement roost site selection (including existing species status; location, ownership and status; and habitat description, size, boundaries)

5.2 Two locations have been selected to install roost replacement features:

- The Derrybrien Substation roost replacement will be located at approximately ITM 559779 705609 which is 890 m to the north of the existing roost. A pole mounted bat roost box will be installed at this location prior to the commencement of demolition / roost destruction works. This will provide mitigation for the loss of the common pipistrelle day roost (R1). The box will be placed at a height of at least 5m from the ground and will be of this specification or an available equivalent (Pole Mounted Bat Box | The Nestbox Company or Shop - Eire Ecology). This location is adjacent to suitable bat foraging / commuting habitat with a waterbody immediately to the south, and extensive areas of woodland within 200 m to the east.
- The Agannygal Substation roost replacements will be located at approximately ITM 563072 698604, which is within 10 m to the west of the existing roost . Three pole mounted bat roost boxes will be installed at this location prior to the commencement of demolition / roost destruction works. These will provide mitigation for the loss of the common pipistrelle day roosts, soprano pipistrelle day roost and brown long-eared bat day roosts (R2, R3 and R4). The boxes will be placed at a height of at least 5 m from the ground and will be of this specification or an available equivalent (Pole Mounted Bat Box | The Nestbox Company or Shop - Eire Ecology)

5.3 The bat boxes are to be located in areas of high foraging suitability with good habitat connectivity. Irish bat mitigation guidelines (Marnell *et al*., 2022) suggest that bat boxes may be used as suitable compensation for roosts of low compensation significance, where the species affected are known to use bat boxes. Common and soprano pipistrelles are accepted as using crevice and hollow type bat boxes. Brown long-eared bats are accepted as using hollow type bat boxes. The pole mounted boxes provided above will include suitable box types for all species, on a variety of aspects (to allow for roost movement with changing weather conditions / season.

5.4 There are few potential roost locations in the local area due to the absence of suitable buildings, and because coniferous tree species present do not typically develop natural roost cavities on a regular basis. It is therefore considered that there is a high likelihood of bats roosting within the bat boxes.

5.5 Gort Windfarms Ltd. will own and be responsible for the bat boxes and their maintenance.

F3 Habitat creation, restoration and/or enhancement (as appropriate)

5.6 Not applicable.

F4 Capture and exclusion

F4.1 Timing, effort, methods, capture/exclusion methods

5.7 Prior to works being undertaken which will affect the existing roosts within Derrybrien and Agannygal Substations, the pole-mounted bat boxes will be installed as detailed in section F2, to relocate any bats found during works in to and provide long-term mitigation for the loss of the roosts.

5.8 Works to render the Derrybrien and Agannygal Substation buildings unsuitable for roosting bats are proposed to be undertaken upon receipt of the licence and following erection of the bat boxes. The

buildings are not considered to support a maternity roost and therefore works, if undertaken during the spring / summer / autumn, will not impact upon pregnant females or dependant young or hibernating bats.

5.9 Prior to the commencement of works, all site contractors will be inducted by a licenced bat ecologist to make them aware of the potential presence of bats and the correct working methods to be employed. Copies of the method statement and good practice works will be clearly displayed on site and summary documents will be supplied to each contractor detailing the programme of works. Once the licenced ecologist is satisfied that contractors are suitably briefed, works may commence.

5.10 A thorough internal inspection by a licenced bat worker / named ecologist will be undertaken each day of bat related works.

5.11 Following the tool-box talk and the internal inspection, the first stage of demolition will be completed which will comprise the careful removal, by hand, of the tiles on all buildings with identified roosts. This will be directly supervised by a licenced bat ecologist. Works will require removal of the ridge tiles and 1m of roof tiles down from the ridge and removal of tiles from the eaves (including the gable apexes and verges) and 1m up from the eaves. Each tile must be checked both sides for attached bats. The areas of tile removal will be extended if considered appropriate by the supervising ecologist. Any other suitable areas such as soffits, barge boards or fascias or flashing which form a potential access point will also be removed by hand as carefully as possible and any material removed will be checked prior to disposal. Any bat found will be moved into the bat boxes by the licensed ecologist.

5.12 Safe and suitable access to the roof must be provided in order to carry this process out both safely and with consideration to removing the tiles as carefully as possible. Suitable access may include scaffolding or mechanical platforms (cherry picker or MEWP).

5.13 Once all of the tiles/other features are removed, the timber roof frame and top wall plates will be checked by the ecologist to confirm no bats are present. If bats are found within these it may not be possible to remove them by hand. In this instance works will stop immediately and the animal(s) will be allowed to disperse naturally over a period of 24 hours. At this stage roosting conditions should be unsuitable which will encourage the animal(s) to disperse. After the 24 hour period has elapsed, given that all bat roost sites will have been removed in the previous operations, this demolition will not require ecologist supervision.

5.14 In the unlikely event that a bat is discovered during unsupervised works, all operations should cease on that building and the licensed ecologist contacted for further advice. Such advice would include carefully replacing the removed roost feature if it is feasible without potential injury to the bat. Contractors would not be advised to capture the bat.

5.15 If a non-licensed species is encountered during works, demolition of the relevant building will be delayed until a licence amendment is sought and approved.

F5 Post-development site safeguard

F5.1 Roost management and maintenance (either set out details here, or if complex then give outline here and give details as an annexed stand-alone plan)

5.16 The roost will be owned and maintained by Gort Windfarms Ltd. Checks will be made annually for 10 years to ensure that the box remains in position and suitable for use by bats. Checks for presence of bats will not be completed.

F5.2 Population monitoring

5.17 Given the low conservation significance of the roosts to be affected, no post-works monitoring is proposed, this is in line with guidance given in Bat Mitigation Guidelines for Ireland – V2 (Marnell, *et al.*,2022)

F5.3 Mechanism for ensuring delivery (who will undertake the work and reporting details)

5.18 Delivery will be conditioned as part of planning permission. Gort Windfarms Ltd. will be responsible for commissioning a suitable consultant to supervise demolition works and bat box placement. Gort Windfarms Ltd. will be responsible for reporting actions undertaken under the licence and the annual maintenance survey of the bat boxes.

F6 Timetable of works (phasing diagram to include all works associated within section F and to indicate construction works timing)

5.19 The proposed demolition works will be carried out from the 1st July 2027 to the 31st December 2027, subject to planning permission.

F7 Site plan to show all work covered by the licence

5.20 Refer to Section 8 of this report for all figures.

F8 Map to show the extent of each parties interest on site (if appropriate)

5.21 Not applicable.

F9 Map to show location of receptor site in relation to development site

5.22 Refer to Section 8 of this report for all figures.

F10 Map to show habitat creation, restoration and/or enhancement

5.23 Not applicable.

F11 Map to show post activity management (if appropriate)

5.24 Not applicable.

F12 Diagram to show exclusion apparatus (only required if non-standard techniques are proposed)

5.25 Not applicable.

6 G Summary

G1 Summary of development and mitigation (NB to include overall consideration of the three main licensing criteria: effect on conservation status, purpose, and alternatives)

6.1 The project is the decommissioning of Derrybrien Wind Farm. This existing Derrybrien Wind Farm Project includes the Derrybrien Wind Farm (including Derrybrien 110 kV substation), Derrybrien to Agannygal 110 kV Overhead Line (OHL) and the Agannygal Substation.

6.2 Derrybrien Wind Farm Site comprises 70 turbines, crane hard standings, 17.5 km of access tracks within the site (including 14.6km of floating access tracks), drainage channels, borrow pits/quarries, on site material storage, the Derrybrien110 kV substation (including the control building), direct buried electric cables and anemometer masts. Derrybrien to Agannygal 110 kV Overhead Line exports the electricity generated at the wind farm to the national grid. Agannygal Substation splits this line into two circuits before connecting into the grid and includes a control building.

6.3 Survey completed as part of the Derrybrien Wind Farm Development Decommissioning Project identified that bats were roosting in both Derrybrien Substation and the Agannygal Substation. At Derrybrien Substation a single common pipistrelle was recorded roosting in the eastern gable end of the substation. At Agannygal Substation three species were recorded; brown long-eared bats (dropping only), soprano pipistrelle (one bat from gable end) and seven common pipistrelle (from both gable ends during the same survey).

6.4 The only alternative to the removal of the bat roosts is the “Do Nothing”. Under this alternative no decommissioning works would be undertaken and all features associated with the Derrybrien Wind Farm Development (including the two unauthorised substation buildings) would remain in-situ in their current condition. Under this alternative Gort Windfarms Limited would be acting in direct contravention of the enforcement notice. Under section 156 of the 2000 Act it is an offence not to comply with an enforcement notice. Due to these legal ramification for Gort Wind Farms Ltd, the Do-Nothing alternative is not a feasible option.

6.5 Given the low number of non-breeding bats roosting at Derrybrien and Agannygal Substations, the demolition works are unlikely to result in an adverse effect on the favourable conservation status of common pipistrelle, soprano pipistrelle or brown long-eared bats.

6.6 Four pole mounted roost boxes will be installed. One box will be near to the substation location and high quality foraging habitat on the Derrybrien Wind Farm Site, and three will be installed in good quality foraging habitat near Aganygal substation. Irish bat mitigation guidelines (Marnell *et al*., 2022) suggest that bat boxes may be used as suitable compensation for roosts of low compensation significance, where the species affected are known to use bat boxes. Common and soprano pipistrelles are accepted as using crevice and hollow type bat boxes. Brown long-eared bats are accepted as using hollow type bat boxes. The pole mounted boxes provided above will include suitable box types for all species, on a variety of aspects (to allow for roost movement with changing weather conditions / season).

6.7 Works will be completed under a method statement, with a qualified bat ecologist on site during works to areas that bats could roost in. This safeguards against the unintentional killing or injuring of bats.

6.8 Given the low conservation significance of the roosts to be affected, no post-works monitoring is proposed, this is in line with guidance given in Bat Mitigation Guidelines for Ireland – V2 (Marnell, *et al*.,2022)

7 H References

Aughney, T., Langton, S. and Roche, N. (2012) All Ireland Daubenton's Bat Waterway Monitoring Scheme 2006-2011. *Irish Wildlife Manuals*, No. 61. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Ireland.

Bat Conservation Ireland. (2012). Wind Turbine/Wind Farm Development Bat Survey Guidelines, Version 2.8, December 2012. [online] https://www.batconservationireland.org/wp-content/uploads/2013/09/BCIreland-Wind-Farm-Turbine-Survey-Guidelines-Version-2-8.pdf.

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.).* The Bat Conservation Trust, London.

Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).* The Bat Conservation Trust, London.

Dietz, C., Helversen, O. & Nill, D. (2009). Bats of Britain, Europe and northwest Africa. A&C Black Publishers ltd. ISBN 9781408105313.

Dietz, C. & Keifer, A. (2016) Bats of Britain and Europe. Bloomsbury. ISBN 978-1-4729-2202-1

Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland

Marnell., F., Kingston, N. & Looney, D. (2009) *Ireland Red List No. 3: Terrestrial Mammals*. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.

Marnell, F., Looney, D. & Lawton, C. (2019) *Ireland Red List No. 12: Terrestrial Mammals*. National Parks and Wildlife Service, Department of the Culture, Heritage and the Gaeltacht, Dublin, Ireland.

Masterson, M., Buckley, D., O'Brien, M. & Kelleher, C. (2008) *An investigation into bridge usage by bats within the Sullane & Laney River Catchments, County Cork*. Cork County Bat Group.

Roche, N., Langton, S., Aughney, T., Russ, J.M., Lynn, D. and Catto, C. (2011) A car-based monitoring method reveals new information on bat populations and distributions in Ireland. *Animal conservation*. 14: 642–651

Schofield, H. W. and Mitchell-Jones A. J. (2011) *The Bats of Britain and Ireland*. Vincent Wildlife Trust, London.

Wilson, F. (2012). Derrybrien Wind Farm Bat Assessment. Provided to ESB International Consulting Engineers in draft.

8 J Annexes

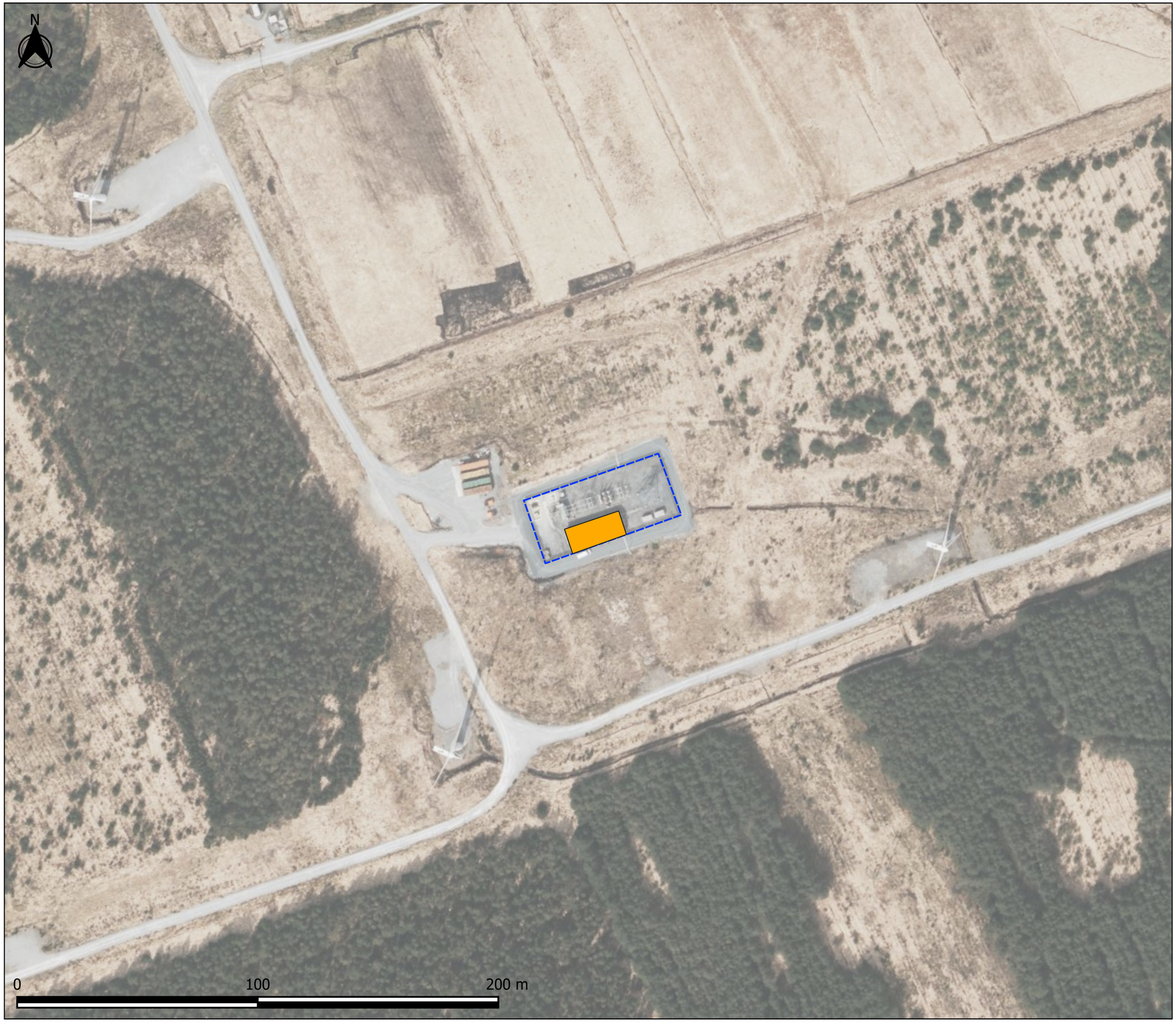
J1 Management and maintenance plan

8.1 Annual maintenance of bat boxes for 10 years.

J2 Pre-existing survey report(s)

9 Figures

(overleaf)



Legend

- Substation building
- Substation boundary

BSG | ecology

OFFICE: DERBYSHIRE
T: 01433 651869

JOB REF: P22-408

PROJECT TITLE

DERRYBRIEN WIND FARM DECOMMISSIONING PROJECT

DRAWING TITLE

Figure C9a: Derrybrien Substation Survey Area

DATE: 01/08/2023 CHECKED: DF SCALE: 1:1,500

DRAWN: CS APPROVED: DF VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 04125

Legend

- Substation building
- Substation boundary

BSG | ecology

OFFICE: DERBYSHIRE
T: 01433 651869

JOB REF: P22-408

PROJECT TITLE

DERRYBRIEN WIND FARM DECOMMISSIONING PROJECT

DRAWING TITLE

Figure C9b: Derrybrien Substation Summary Results

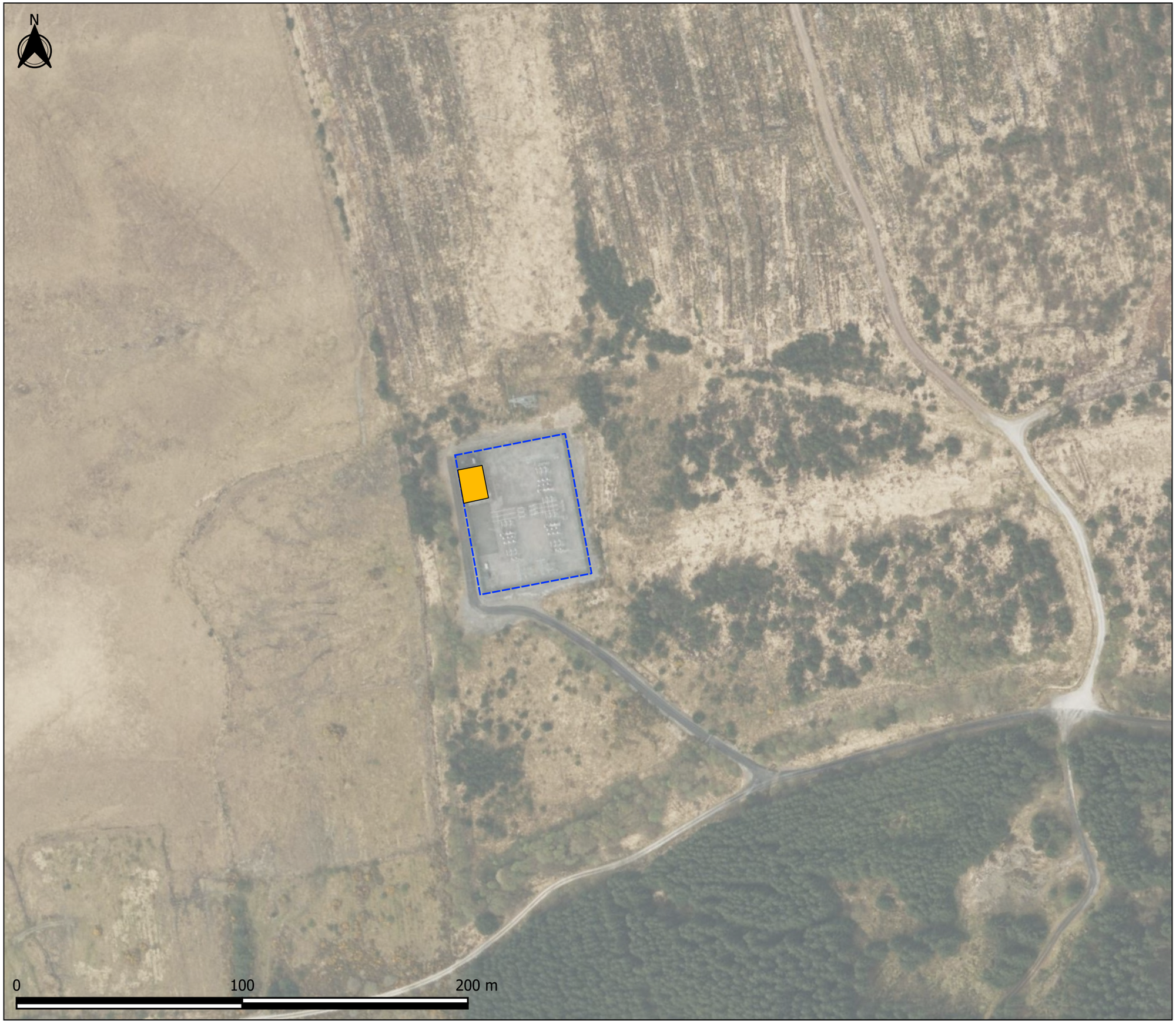
DATE: 01/08/2023 | CHECKED: DF | SCALE: 1:500

DRAWN: CS | APPROVED: DF | VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 04126



Legend

- Substation building
- Substation boundary

BSG | ecology

OFFICE: DERBYSHIRE
T: 01433 651869

JOB REF: P22-408

PROJECT TITLE

DERRYBRIEN WIND FARM DECOMMISSIONING PROJECT

DRAWING TITLE

Figure C9c: Agannygal Substation Survey Area

DATE: 01/08/2023 CHECKED: DF SCALE: 1:1,600

DRAWN: CS APPROVED: DF VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 04127

Legend

- Substation building
- Substation boundary

BSG | ecology

OFFICE: DERBYSHIRE
T: 01433 651869

JOB REF: P22-408

PROJECT TITLE

DERRYBRIEN WIND FARM DECOMMISSIONING PROJECT

DRAWING TITLE

Figure C9d: Agannygal Substation Summary Results

DATE: 01/08/2023 CHECKED: DF SCALE: 1:400

DRAWN: CS APPROVED: DF VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 04128

Legend

- Substation building
- Substation boundary
- Common pipistrelle bat day roost to be destoyed

BSG ecology

OFFICE: DERBYSHIRE
T: 01433 651869

JOB REF: P22-408

PROJECT TITLE

DERRYBRIEN WIND FARM DECOMMISSIONING PROJECT

DRAWING TITLE

Figure Da: Derrybrien Substation Impacts Plan

DATE: 01/08/2023 CHECKED: DF SCALE: 1:500

DRAWN: CS APPROVED: DF VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 04129

Legend

- Substation building
- Substation boundary
- Common / soprano pipistrelle day roost to be destroyed
- Brown Long-eared bat day roost to be destroyed

BSG ecology

OFFICE: DERBYSHIRE
T: 01433 651869

JOB REF: P22-408

PROJECT TITLE

DERRYBRIEN WIND FARM DECOMMISSIONING PROJECT

DRAWING TITLE

Figure Db: Agannygal Substation Impacts Plan

DATE: 01/08/2023 CHECKED: DF SCALE: 1:400

DRAWN: CS APPROVED: DF VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

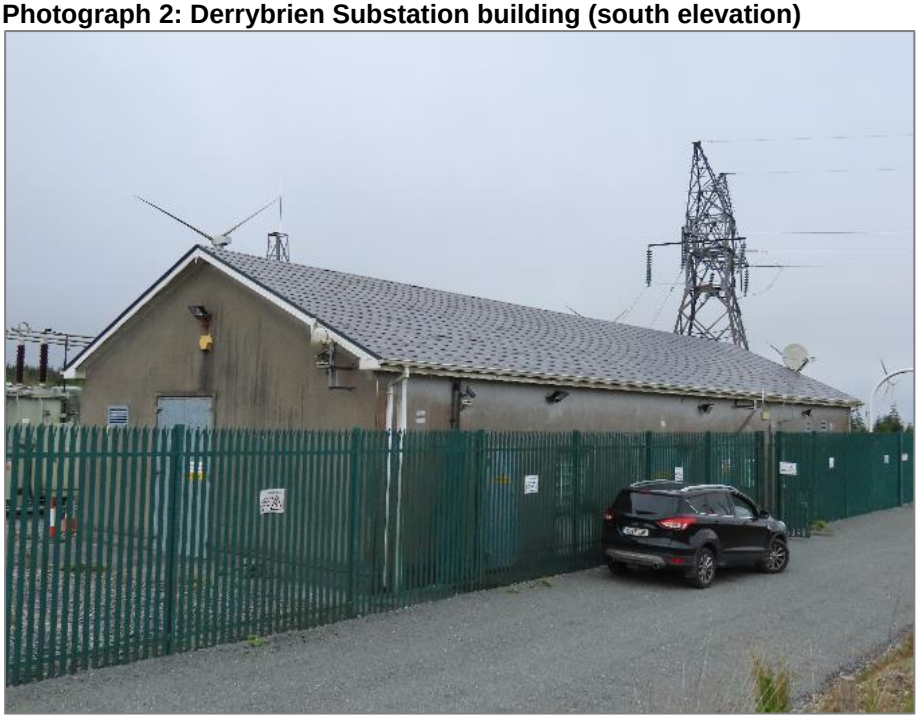
Sources: BSG Ecology survey data

Graphics Ref. No.: 04130

10 Photographs

Photograph 1: Derrybrien Substation showing building and transformers (west elevation)

Photograph 2: Derrybrien Substation building (south elevation)

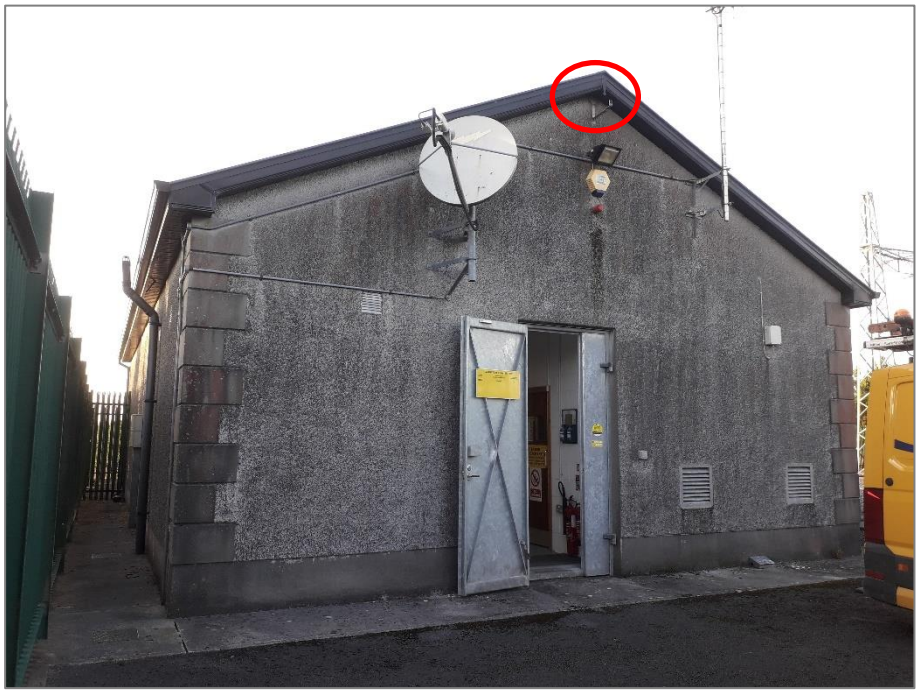


Photograph 3: Loft space within the Derrybrien Substation building

Photograph 4: Roost R1 (common pipistrelle day roost) location at Derrybrien Substation. The bat access point is highlight by the red arrow.

Photograph 5: Agannygal Substation building (north elevation). Roost R2 (common pipistrelle day roost) location circled red.

Photograph 6: Agannygal Substation building (south elevation). Roost R3 (common pipistrelle and soprano pipistrelle day roosts) location circled red.



Photograph 7: Loft space within the Agannygal Substation building. Roost R4 (brown long eared and common pipistrelle day roosts) are present within the loft.

11 Appendix 1 – eDNA results

Order Number: 1493 Swift Ecology R.Potter@bsg-ecology.com

Samples submitted

Sample Code	Multi-species?	Sample Type	Date Sample Found	Species Group	Site postcode/ post town /grid ref	Site description / comments (Optional)	Suspected identity of species
SEL-1493-1	Yes	Faecal	16/08/2022	Bats	Newport		Common pipistrelle (Pipi)

Analysis Results

Sample Code	DNA Extraction Code	Species Identified	ID Method	Ct value	% match
SEL-1493-1	EG-2022-0949	Pipistrellus pipistrellus (Common pipistrelle bat) and Plecotus auritus (Brown long-eared bat)	qPCR	21/20	

Company No. 6233860. Registered in England and Wales.
VAT Reg No. 901 5587 33

Page 2 of 4

11.1

Order Number: 1493 Swift Ecology R.Potter@bsg-ecology.com

What do my results mean?

DNA extraction code - this identifies the DNA extraction sample within our laboratory so that it can be revisited if necessary. We keep these extractions for a minimum of 3 months.

ID method: *qPCR* - These results are obtained using species specific qPCR tests. A positive result indicates the presence of DNA from the species reported.

ID method: *DNA sequencing* - where qPCR fails or is not possible, standard DNA sequencing will be performed. Sequences are then matched against a database.

Ct value - This is a relative measurement of the amount of species DNA in the sample, derived from the qPCR data. The lower the value the more DNA present in the reaction. This helps to predict the abundance of one species relative to another **in the sample**. Note: this relative abundance is not directly transferable to the site the samples were collected from.

% match - this value is the percentage match of sequences derived from DNA sequencing compared to the database. Due to differences in DNA sequence between individuals within a species this match may not always be exactly 100%.

Company No. 6233860. Registered in England and Wales.
VAT Reg No. 901 5587 33

Page 3 of 4

11.2 f