



Drumlins Park Wind Farm

Annex 5.5:  
Grid Connection Option G3

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## Introduction

Three grid connection route options have been put forward and are assessed in this chapter; however, it is noted that only one of these options will be built. This annex for grid connection Option G3 provides supplemental baseline ecology information for this route. The biodiversity chapter assesses both the proposed wind farm site and the three grid connection route options.

The information provided below forms part of the assessment and outlines baseline ecology data for grid connection Option G3 as supplemental information for the biodiversity chapter. Additionally, Ecological Feature Maps are provided to illustrate the habitats present and the ecological features along grid connection route Option G3.

## Assessment

### Designated Areas

There are no designated sites located within the footprint of grid connection Option G3. There are no Natural Heritage Areas within the footprint of the grid connection route or within 5km. The closest NHA to the grid connection route is the Eshbrack Bog NHA (001603), situated some c. 20km north.

There are no proposed Natural Heritage Areas within the footprint of the grid connection route. This grid connection route is located just outside the site boundary of the proposed wind farm. It consists of a new substation with minimal cabling required resulting in a small footprint. Therefore the closest pNHAs are therefore similar to those given for the proposed wind farm site in the biodiversity chapter. Dromgole Lough pNHA is c. 3.3km east, Drumcor Lough pNHA is c. 7.3km south-west and Lisabuck Lough pNHA is c. 5.4km north-west. There are no Ramsar sites or other protected sites on the route. The closest Ramsar Site is Lough Oughter (Ramsar Site No. 853), which is also a SAC and a SPA. Following this the Magheraveely Marl Loughs is also noted as a Ramsar Site (No. 1717), which is also a SAC. A Natura Impact Statement has been prepared for the proposed development, including all three grid connection route options.

### Habitats and Flora

Grid connection Option G3 is located just south of the proposed wind farm site. It involves internal cabling from south of proposed turbine 7, running to a proposed new substation, which will include an electrical compound and strain towers. The footprint of this grid connection route is very small and the only habitats present consist of Improved Agricultural Grassland, Hedgerows, Treelines and Buildings and Artificial Surfaces. Most of the cabling is noted to follow an existing road, i.e. buildings and artificial surfaces, with the exception of c. 55m at the end of the route to the south-east which is located over an improved agricultural grassland field. The substation is located on improved agricultural grassland, hedgerows and wet grassland. No protected habitats are present within the footprint of Option G3. This grid connection route option does not involve the crossing of any watercourses.

### Fauna

#### Non-volant Mammals

The National Biodiversity Data Centre online maps hold records for non-volant mammals within the 10km grid square H52, within which the grid connection option will be located. **Table 1** below details the recorded species within the 10km grid square H52 in Co. Monaghan. Option G3 is located just south of the proposed wind

farm site and therefore the mammal surveys conducted on the wind farm site also apply to the footprint of this route option.

Although no evidence of foxes was found on the site, it is considered very likely that foxes use this area. However, no dwellings were found. It is considered that the soil / digging conditions on the site are poor due to compaction and areas of wet grassland. No dwellings were found on the site. No badger setts were present during the current surveys. Hares are present on the site in low numbers, and also may breed on the site. Pine martens were also present during the current surveys but again no dwellings were recorded. It is noted that the poultry farms on the site and in the wider study area are likely to sustain the pine marten and fox populations in the area. Fallow deer were also recorded on the site during the trail camera surveys.

Species Group	Species	Record Count	Date of last record	Title of Dataset	Designation
Terrestrial Mammal	European Otter <i>Lutra lutra</i>	2	27/08/2010	Atlas of Mammals in Ireland 2010-2015	Protected Species: EU Habitats Directive >> Annex II    Protected Species: EU Habitats Directive >> Annex IV    Protected Species: Wildlife Acts
Terrestrial Mammal	Red Fox <i>Vulpes vulpes</i>	8	06/07/2010	Road Kill Survey	-
Terrestrial Mammal	Pine Marten <i>Martes martes</i>	3	05/05/2013	Atlas of Mammals in Ireland 2010-2015	Protected Species: EU Habitats Directive >> Annex V    Protected Species: Wildlife Acts
Terrestrial Mammal	Irish Stoat <i>Mustela erminea</i> subsp. <i>hibernica</i>	4	02/10/2008	Road Kill Survey	-
Terrestrial Mammal	Irish Hare <i>Lepus timidus</i> subsp. <i>hibernicus</i>	17	23/07/2018	Mammals of Ireland 2016-2025	-
Terrestrial Mammal	Feral Ferret <i>Mustela furo</i>	2	25/02/2007	National Feral Ferret ( <i>Mustela putoris furo</i> ) Database	Invasive Species: Invasive Species    Invasive Species: Invasive Species >> High Impact Invasive Species
Terrestrial Mammal	Eurasian Badger <i>Meles meles</i>	86	31/12/2015	Irish National Badger Sett Database	Protected Species: Wildlife Acts
Terrestrial Mammal	Eastern Red Squirrel <i>Sciurus vulgaris</i>	8	01/10/2015	Atlas of Mammals in Ireland 2010-2015	Protected Species: Wildlife Acts

**Table 1: Mammal records from the 10km Grid Square H52, within which grid connection Option G3 will be located (NBDC online maps).**

### Bats

Grid connection route Option G3 passes through two areas that have been evaluated for their potential bat habitat suitability. **Tables 2 to 3** below give the bat

suitability index along the grid connection route for the upper and lower sections. It is noted that this grid connection route option has a much smaller footprint than the two other options. The upper section of this grid option has a low overall rating of 26. The species with the highest ratings are those that are common all over Ireland, such as the common pipistrelle, Leisler's bat and soprano pipistrelle. The lower section of the route however has a higher overall rating of 30.11. This is likely to be due to the lake habitats and scattered sections of woodland south of this grid route option. It is noted that Option G3 is only present within this area for c. 540m.

Common name	Scientific name	Suitability index	Irish red list status
All bats		26	
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	42	Least Concern
Leisler's bat	<i>Nyctalus leisleri</i>	42	Near Threatened
Natterer's bat	<i>Myotis nattereri</i>	31	Least Concern
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	41	Least Concern
Brown long-eared bat	<i>Plecotus auritus</i>	31	Least Concern
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	3	Least Concern
Whiskered bat	<i>Myotis mystacinus</i>	8	Least Concern
Daubenton's bat	<i>Myotis daubentonii</i>	27	Least Concern
Nathusius's pipistrelle	<i>Pipistrellus nathusii</i>	9	Least Concern

**Table 2: Suitability of the upper section of grid connection Option G3 for the bat species recorded previously (based on the NBDC data). Irish Red list status also indicated (based on Marnell et al., 2009).**

Common name	Scientific name	Suitability index	Irish red list status
All bats		30.11	
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	46	Least Concern
Leisler's bat	<i>Nyctalus leisleri</i>	46	Near Threatened
Natterer's bat	<i>Myotis nattereri</i>	41	Least Concern
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	44	Least Concern
Brown long-eared bat	<i>Plecotus auritus</i>	38	Least Concern
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	4	Least Concern
Whiskered bat	<i>Myotis mystacinus</i>	8	Least Concern
Daubenton's bat	<i>Myotis daubentonii</i>	38	Least Concern
Nathusius's pipistrelle	<i>Pipistrellus nathusii</i>	6	Least Concern

**Table 3: Suitability of the lower section of grid connection Option G3 for the bat species recorded previously (based on the NBDC data). Irish Red list status also indicated (based on Marnell et al., 2009).**

### Birds

No regular flight routes for any birds of conservation concern were identified during the surveys. No Hen harriers were recorded during the surveys. Whooper Swans were recorded in low numbers on rare occasions and were noted to be flying high. The majority of birds recorded during the surveys were common passerine and corvid species. Rooks and Wood Pigeons were the most frequently recorded birds in the study area. The most common birds of prey recorded were Buzzards, with some occasional recordings of Sparrowhawks and Kestrels.

### Aquatic Ecology

Grid connection Option G3 does not cross any watercourses and would not lead to any impacts on aquatic ecology.

### *Reptiles and Amphibians*

There are no ponds or drainage ditches identified along the grid connection route which may provide suitable habitat. There are also no suitable rocky or upland habitats that may be suitable for reptiles. Additionally, there are no NBDC records for smooth newt or common lizard along the footprint of the grid connection route. There is a 10km grid square record from 1979 for common frog but, again, no suitable habitat is present within the footprint of this route option.

### *Terrestrial Invertebrates*

There are no records of protected terrestrial invertebrates along the grid connection route. There is no suitable Marsh Fritillary habitat along the route and no records of this protected butterfly are present in the study area. It is considered that the terrestrial invertebrate community present along the grid connection route comprises common and widespread species

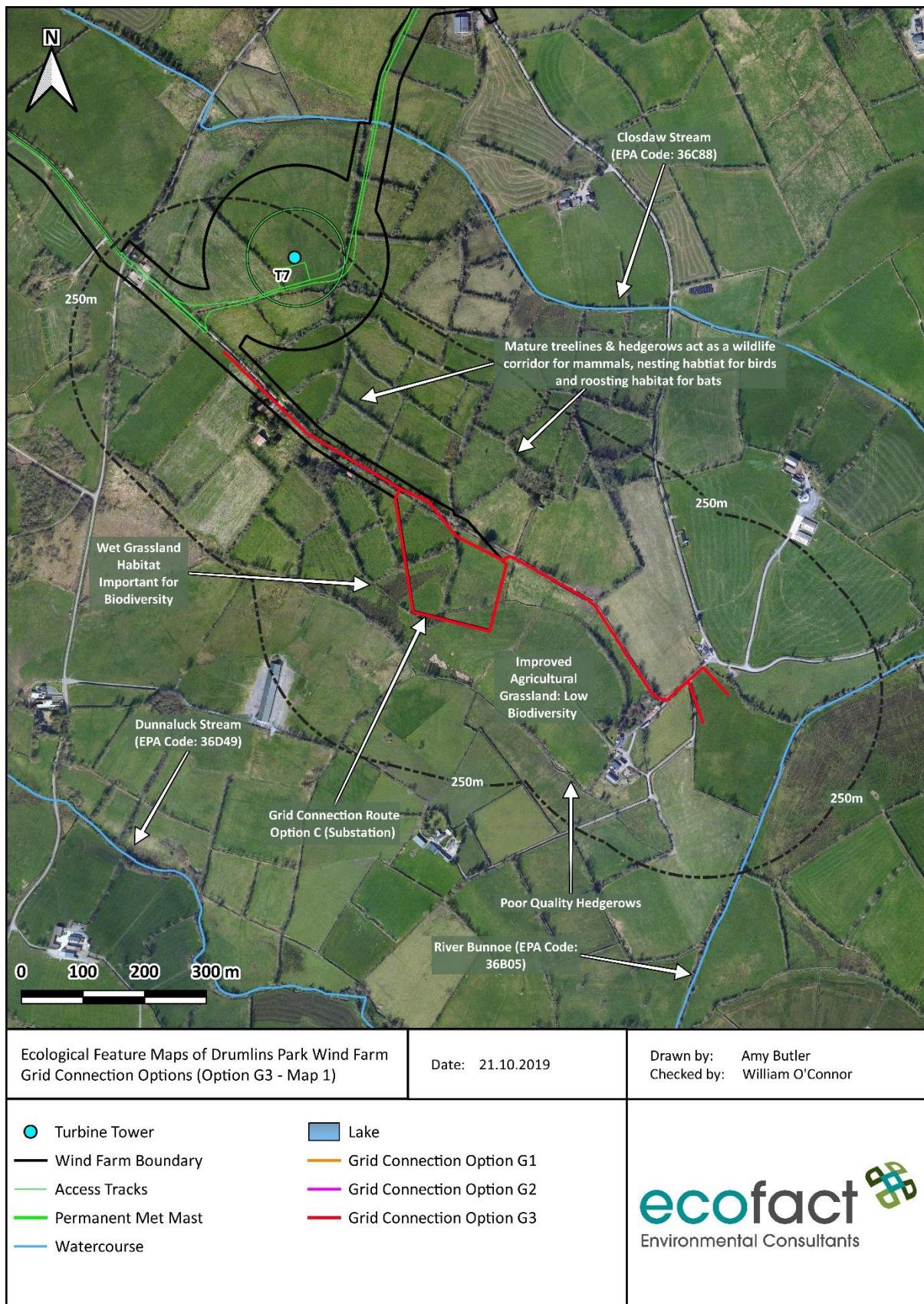
### **Conclusions**

There are no designated sites located within the footprint of grid connection Option G3. A Natura Impact Statement has been carried out which assesses all three grid connection route options, including Option G3, for their potential to cause effects on Natura 2000 sites. No Natural Heritage Areas are located along the route or within 5km of the route. There are also no pNHAs along the route, and the closest pNHA is located c. 3.3km east: Drumgole Lough pNHA. There are no Ramsar sites or other protected sites on the route.

The majority of the habitats along grid connection Option G3 are those that are typical of the Co. Monaghan countryside, and the same as those found on the wind farm site. These consist of Improved Agricultural Grassland, Hedgerows, Treelines and Buildings and Artificial Surfaces. Most of the cabling is noted to follow an existing road. The substation is located on improved agricultural grassland, hedgerows and wet grassland. No protected habitats are present within the footprint of the route. This grid connection option does not involve the crossing of any watercourses. It is considered that any localised impacts can be easily avoided with the provision of some basic mitigation.

It is considered that the same mammals that are using the proposed wind farm site are using the footprint of Option G3 due to proximity. No mammal dwellings were recorded within the footprint of this grid route option. Any mammals recorded are common throughout Ireland and potential impacts on these species can be easily mitigated against, should this option be constructed. Bat usage typically consists of common species and hedgerows and treelines within the footprint of this option would be used for foraging. Birds recorded are the same as those recorded on the proposed wind farm site and any impacts on birds would be minimal. It is envisaged that any of the minor impacts on fauna resulting from this grid connection option would be easily mitigated against.

Overall, it is considered that any minor adverse impacts affecting flora and fauna that may arise from Option G3 can be easily mitigated against. Basic mitigation that is outlined in the biodiversity chapter is considered to be sufficient to avoid potential impacts. It is noted that due to the small footprint of this option and the fact it does not cross over or near any watercourses, Option G3 would have the least potential for impacts on flora and fauna when compared with the other two route options.



**Figure 1: Ecological feature maps of Drumlins Park Wind Farm Grid Connection Options (Option G3).**

