

Finding of no significant effects report:

Name of project or plan:

EirGrid– Foreshore Licence application for geotechnical and environmental site investigations (FS006811).

Name and location of Natura 2000 site

The project is not located within a Natura 2000 site. There are 5 Natura 2000 sites located within 10Km of the proposed survey area. These sites include:

- **Ballycotton Bay SPA (Site Code 004022)** – The Ballinwilling landfall survey corridor is circa 1.25Km from this site.
- **Ballymacoda (Clonpriest and Pillmore) SAC (Site Code 000077)** – The Redbarn / Claycastle landfall corridor is circa 1.5Km from this site and the Ballinwilling landfall survey corridor is circa 7.9Km (by sea) from this site
- **Ballymacoda Bay SPA (Site Code 004023)** - The Redbarn landfall survey corridor is immediately adjacent to this site, the Claycastle landfall corridor is circa. 1 Km from this site while the Ballinwilling landfall survey corridor is circa 5Km by land from this site.
- **Blackwater River (Cork / Waterford) SAC (Site Code 002170)** – The Claycastle landfall corridor is circa 1Km from this site, the Redbarn landfall survey corridor is circa 1.5Km from this site.
- **Blackwater estuary SPA (Site Code 004028)** - The Claycastle landfall corridor is circa 2.5Km from this site while the Redbarn landfall survey corridor is circa 3Km from this site.

The Conservation Objectives for the Ballycotton Bay SPA are¹:

¹ NPWS (2014) Conservation Objectives: Ballycotton Bay SPA 004022. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

- To maintain the favourable conservation condition of Teal in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Ringed Plover in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Golden Plover in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Grey Plover in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Lapwing in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Black-tailed Godwit in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Bar-tailed Godwit in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Curlew in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Turnstone in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Common Gull in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Lesser Black-backed Gull in Ballycotton Bay SPA
- To maintain the favourable conservation condition of the wetland habitat in Ballycotton Bay SPA as a resource for the regularly occurring migratory birds that utilise it.

The Conservation Objectives for the Ballymacoda (Clonpriest and Pillmore) SAC are²:

- To maintain the favourable conservation condition of Estuaries in Ballymacoda (Clonpriest and Pillmore) SAC,

² NPWS (2015) Conservation Objectives: Ballymacoda (Clonpriest and Pillmore) SAC 000077. Version 2. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Ballymacoda (Clonpriest and Pillmore) SAC
- To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in Ballymacoda (Clonpriest and Pillmore) SAC
- To maintain the favourable conservation condition of Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) in Ballymacoda (Clonpriest and Pillmore) SAC

The Conservation Objectives for the Ballymacoda Bay SPA are³:

- To maintain the favourable conservation condition of Wigeon in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Teal in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Ringed Plover in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Golden Plover in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Grey Plover in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Lapwing in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Sanderling in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Dunlin in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Black-tailed Godwit in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Bar-tailed Godwit in

³ NPWS (2015) Conservation Objectives: Ballymacoda Bay SPA 004023. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Ballymacoda Bay SPA

- To maintain the favourable conservation condition of Curlew in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Redshank in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Turnstone in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Black-headed Gull in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Common Gull in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Lesser Black-backed Gull in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of the wetland habitat in Ballymacoda Bay SPA as a resource for the regularly occurring migratory birds that utilise it.

The Conservation Objectives for the Blackwater River (Cork / Waterford) SAC are⁴

- To restore the favourable conservation condition of the Freshwater Pearl Mussel in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of White clawed Crayfish in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation condition of Sea Lamprey in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Brook Lamprey in the Blackwater River (Cork/Waterford) SAC,
- To maintain the favourable conservation condition of River Lamprey in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation

⁴ NPWS (2012) Conservation Objectives: Blackwater River (Cork/Waterford) SAC 002170. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

condition of Twaite Shad in the Blackwater River (Cork/Waterford) SAC

- To maintain the favourable conservation condition of Atlantic Salmon in the Blackwater River (Cork/Waterford) SAC,
- To maintain the favourable conservation condition of Estuaries in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Perennial vegetation of stony banks in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in the Blackwater River (Cork/Waterford) SAC,
- To restore the favourable conservation condition of Atlantic salt meadows (*Glauco Puccinellietalia maritima*) in the Blackwater River (Cork/Waterford) SAC,
- To restore the favourable conservation condition of Otter in the Blackwater River (Cork/Waterford) SAC,
- To maintain the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Killarney Fern in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche Batrachion* vegetation in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation condition of Old sessile oak woods with *Ilex* and *Blechnum* in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation condition of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno Padion*, *Alnion incanae*, *Salicion albae*) in the Blackwater River (Cork/Waterford) SAC,

The Conservation Objectives of the Blackwater Estuary SPA are:⁵

- To maintain the favourable conservation condition of Wigeon in Blackwater Estuary SPA
- To maintain the favourable conservation condition of Golden Plover in Blackwater Estuary SPA
- To maintain the favourable conservation condition of Lapwing in Blackwater Estuary SPA,
- To maintain the favourable conservation condition of Dunlin in Blackwater Estuary SPA
- To maintain the favourable conservation condition of Black tailed Godwit in Blackwater Estuary SPA,
- To maintain the favourable conservation condition of Bar tailed Godwit in Blackwater Estuary SPA,
- To maintain the favourable conservation condition of Curlew in Blackwater Estuary SPA
- To maintain the favourable conservation condition of Redshank in Blackwater Estuary SPA,
- To maintain the favourable conservation condition of the wetland habitat in Blackwater Estuary SPA as a resource for the regularly occurring migratory water birds that utilise it

Description of the project or plan

Geotechnical and environmental site investigation surveys on the foreshore along 2 No. routes off the south coast of Ireland with landfall at Ballinawilling Strand, Redbarn Beach and Claycastle Beach, Co. Cork.

The surveys will be carried out seaward of the three landfalls within two survey corridors which converge with the previous survey corridors close to the 12nm limit. The survey routes are

⁵ NPWS (2012) Conservation Objectives: Blackwater Estuary SPA 004028. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

shown on the Drawing submitted by the applicant entitled:

- “Celtic Interconnector Foreshore Licence Map 1 Redbarn Beach and Claycastle Beach”, dated December 20th 2017
- “Celtic Interconnector Foreshore Licence Map 2 Ballinwilling Strand”, dated December 20th 2017
- “Celtic Interconnector Foreshore Licence Map 3 Offshore Survey Area”, dated December 20th 2017

The works would be carried out in the following areas:

- Intertidal survey - from 50m landward of the high water mark (HWM) to the charted low water mark (LWM) at each landfall site
- Shallow water survey - from the LWM seawards to first 10m Lowest Astronomical Tide (LAT) water depth
- Offshore survey - seawards to first 10m (LAT) water depth to the 12nm limit.

The survey corridors will be nominally 250m wide for the land/intertidal and shallow water survey works (approximately 100m – 200m from landfall within a 1000m wide area to allow for flexibility in the location of the final land/intertidal survey corridor) and 500m wide for the offshore survey works. The total length of the survey area (two survey corridor to the 12nm limit) is approximately 65.84km.

Details of the proposed Geotechnical and Environmental works are set out in the document entitled “Schedule of Survey Works”, submitted by the applicant as Appendix A of the application form. The works will include

- Drilling of a total of 9 bore holes and / or excavation of 9 trial pits in the intertidal area at the landfall locations. The maximum depth of the boreholes and trial pits would be 5m and 3m respectively.

The trial pits will typically be 3m x 1m in size whilst bore hole will be approximately 10cm in diameter. The trial pits will be backfilled using only native material and the borehole will not be backfilled but instead will re-fill naturally. Thermal resistivity / conductivity testing would be carried out at these locations.

- Vibrocoreing and Cone Penetration Testing (CPT) at approximately 1000m intervals in the area from the LWM to the 10m LAT depth contour. It is anticipated that a minimum of 7 vibrocores and 7 CPTs would be collected in this area. The cores would have a nominal diameter of 75mm with a maximum depth of 5m. The penetrometer would have a maximum depth penetration of 5m. In the event of a failure to achieve sample recovery using Vibrocoreing or Cone Penetration Testing methodology a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site of any failed sampling. In the shallow water survey area, rock coring may be performed using a drilling rig deployed upon a Jack up barge which would typically have an operating water depth limit of 16m. Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical shallow water survey. Grab sampling and still / video photography will also be carried out in this area at a total of 3 locations. Grab samples will be collected as required for aiding side scan sonar interpretation
- Vibrocoreing and Cone Penetration Testing (CPT) at approximately 1500m intervals in the area from the 10m LAT depth contour to the 12nm limit. It is estimated that a total of 39 vibrocores and 39 CPTs would be collected in this area. In the event of a failure to achieve sample recovery using Vibrocoreing or Cone Penetration Testing methodology a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site

of any failed sampling. In this survey area any rock coring may be performed using a compensated drilling rig operating from a dedicated vessel or by way of a seabed drilling rig. Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical offshore survey. Grab sampling at approximately 15 – 20Km intervals will also be carried out in this area at a total of 6 locations.

Indicative locations for Vibrocoring, Cone Penetration Testing (CPT), borehole drilling and trail pit excavation are shown in the following drawings submitted by the applicant

- “Celtic Interconnector Foreshore Licence Map 1 Redbarn Beach & Claycastle Beach”, dated 20/12/2017
- “Celtic Interconnector Foreshore Licence Map 2 Ballinwilling Strand”, dated 20/12/2017
- “Celtic Interconnector Foreshore Licence Map 3 Offshore Survey Area”, dated 20/12/2017

It is anticipated that the site investigations would be completed within approximately 30 days, subject to suitable weather conditions.

Is the project or plan directly connected with or necessary to the management of the site (provide details)?

No.

Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)?

No

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.

The works could potentially;
Cause disturbance to species listed as qualifying interests of the adjacent Natura 2000 sites as a

result of the physical presence of personnel / equipment/ vessel during the survey

- Cause disturbance to species listed as qualifying interests of the adjacent Natura 2000 sites and species listed in Annex IV of the Habitats Directive as a result of the introduction of noise to the marine environment from the survey techniques
- introduce pollutants into the water column during the course of the survey

Explain why these effects are not considered significant.

None of the survey activity will take place within a Natura 2000 site. The survey activity will take place outside the adjacent SPAs and SAC and thus will not have a direct impact on any habitats within these sites. There will not be significant disturbance to key habitats or species. Additionally there will be no habitat or species fragmentation and the overall integrity of the sites will not be affected.

There may be disturbance to birds visiting from the SPAs along the survey route. Such disturbance would be localised and of very short duration.

There will be no direct discharge of pollutants into the environment during the works and water quality will not be affected.

Full compliance with the requirements set out in Section 4.3.4 of the NPWS (2014) "Guidance to Manage the Risk to Marine Mammals from Man-made Sound sources in Irish Waters" will minimise any interactions with marine mammals in the survey area.

Considering the location and short duration of the survey activity significant adverse impacts on migratory fish species including salmon and lamprey species using the Blackwater Estuary are not considered likely.

On the basis of the above it is considered that there will be no significant adverse effects as a result of the geotechnical and environmental site investigations as proposed , on the 'qualifying interests' or the 'conservation objectives' of the adjacent Ballycotton Bay SPA, Ballymacoda (Clonpriest and Pillmore) SAC, Ballymacoda Bay SPA, the Blackwater River (Cork / Waterford) SAC or the Blackwater estuary SPA

Who carried out the assessment?

Barry Mc Donald M.Eng. , MLVC, May 11 2018.