

**Cork County Council****Planning and Development Act 2000 (as amended)****Planning and Development (Strategic Infrastructure) Act 2006**

Planning Authority submission on further information received by An Bord Pleanála.

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| <b>An Bord Pleanála Ref. No:</b>   | ABP Ref. 312606-22  |
| <b>Applicant:</b>                  | Ballinagree Wind DAC  |
| <b>Agents:</b>                     | Fehily Timoney  |
| <b>Site Location:</b>              | Within the townlands of Annagannihy, Aughinida, Ballynagree East, Ballynagree West, Bawnmore, Caherbaroul, Carrigagulla, Carrigduff, Clonavrick, Derryroe, Drishane More, Dromagh, Drominahilla, Dromskehy, Finnanfield, Inchamay South, Kilberrihert, Knocknagappul, Rahalisk and Tullig, Co. Cork.  |
| <b>Description of Development:</b> | <ul style="list-style-type: none"> <li>• Construction of 20 no. wind turbines with a blade tip height range from 179m to 185m, a hub height range from 102.5 to 110.5m and a rotor diameter range from 149m to 155m;</li> <li>• Construction of turbine foundations and crane pad hardstanding areas including associated drainage infrastructure;</li> <li>• Construction of new permanent site tracks and associated drainage infrastructure - 14.4 km of new internal access tracks will be required;</li> <li>• Upgrading of existing tracks and associated drainage infrastructure - 11.1 km of internal access tracks will be required to be upgraded as part of the project;</li> <li>• Upgrade of 2 no. existing forestry and agricultural access junctions for construction and operational access from 1) the Local Roads L2750-0/L1123-62 in the townlands of Finnanfield and Ballynagree East and 2) from the Local Road L7461-0 in the townland of Ballynagree West, Co. Cork;</li> <li>• Upgrade of 2no. existing forestry access junctions for temporary construction access from the Local Road L7461-17 in the townland of Knocknagappul, Co. Cork;</li> <li>• Use of 1 no. existing forestry and agricultural access junction for operational access only from the Local Road L-7461-44 in the townland of Knocknagappul, Co. Cork;</li> <li>• Installation of new permanent watercourse and drain crossings and the reuse and upgrade of existing internal watercourse and drain crossings to include 1) the replacement of an existing stone bridge structure with a new clear span concrete bridge structure along the Local Road L-7461-0 in the townland of Ballynagree West and 2) a new clear span concrete bridge structure along a proposed new track in the townland of Carrigagulla, Co. Cork;</li> <li>• 3 no. on site borrow pits and associated ancillary drainage within the townlands of Carrigagulla and Knocknagappul, Co. Cork;</li> <li>• 2 no. Temporary construction site compounds and associated ancillary infrastructure including parking within the townlands of Ballynagree West and Carrigagulla, Co. Cork;</li> </ul> |

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|  | <ul style="list-style-type: none"> <li>• Use of proposed wind farm access tracks and existing forestry and agricultural tracks as permanent recreational amenity trails for community use including the installation of associated signage and information boards and; the partial reinstatement and re-purposing of the proposed temporary construction compound as a permanent trail head car park and picnic area including associated landscaping within the townland of Ballinagree West. Overall, 15.05 km of tracks will be made available as recreational amenity trails for community use;</li> <li>• Construction of 1 no. permanent on-site 110kV electrical substation including control buildings, electrical plant and equipment, welfare facilities, carparking, water and wastewater holding tanks, security fencing, lightening protection and telecommunications masts, security cameras, external lighting and, all associated infrastructure within the townland of Ballinagree East, Co. Cork;</li> <li>• Installation of medium voltage underground electrical and communication cabling connecting the wind turbines to the proposed on-site substation and associated ancillary works;</li> <li>• Installation of permanent high voltage 110kV underground electrical and communication cabling between the proposed on-site substation within the townland of Ballinagree East to the boundary of the existing Clashavoon substation within the townland of Aughinida, Co. Cork. The cabling will be laid primarily within the public road in the townlands of Knocknagappul, Ballinagree East, Ballinagree West, Bawnmore, Clonavrick, Derryroe, Rahalisk, Kilberrihert, Caherbaroul and Aughinida, Co. Cork.</li> <li>• Associated works including the installation of 15 no. pre-cast joint bays and communication chambers; and horizontal directional drilling under 4 no. watercourse crossings in the townlands of 1) Knocknagappul, 2) Knocknagappul and Rahalisk, 3) Rahalisk and Bawnmore and 4) Bawnmore and Clonavrick;</li> <li>• Tree felling to accommodate the construction and operation of the proposed development. Area of replant lands has not been specified;</li> <li>• Erection of 2no. meteorological masts with a height of 100m above existing ground levels for the measuring of metrological conditions within the townlands of Ballinagree East and Carrigagulla, Co. Cork. A lightning rod will extend above the masts by 4 meters;</li> <li>• Temporary accommodation works at 6 no. locations adjacent to the public roads to facilitate delivery of turbine components to site within the townlands of Dromagh, Dromskehy, Liscahane, Tullig, Drominahilla, Finnanfield and Ballinagree East, Co. Cork. These works will primarily relate to trimming of trees and hedgerows, temporary lowering of boundary walls, temporary removal of boundary walls, temporary ground reprofiling and installation of temporary stone hard standing;</li> <li>• Installation of a temporary off-site staging area for turbine components within the curtilage of Drishane Castle which is a Recorded Protected Structure (00319) and National Monument (296), within the townland of Drishane More. The works will include removal of a masonry wall and installation of temporary stone hard standing area and associated access track and entrances to and from the public road R583;</li> <li>• All related site works and ancillary development including landscaping and drainage.</li> </ul> |
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**(i) Summary**

This project involves the construction of 20 turbines with 110kv electrical substation and all related site works and ancillary development. The proposed windfarm is located in the townlands of Annagannihy, Aughinida, Ballynagree East, Ballynagree West, Bawnmore, Caherbaroul, Carrigagulla, Carrigduff, Clonavrick, Derryroe, Drishane More, Dromagh, Drominahilla, Dromskehy, Finnanfield, Inchamay South, Kilberrihert, Knocknagappul, Rahalisk and Tullig.

An Environmental Impact Assessment Report (EIAR) has been prepared in respect of the overall project. It is considered that An Bord Pleanála is the “competent authority” for the purposes of assessing the adequacy of the EIAR. An Appropriate Assessment Screening (AA) and a Natura Impact Statement (NIS) have also been prepared in respect of the proposed development.

This application was made directly to An Bord Pleanála as ‘Strategic Infrastructure Development’ (SID) under the provisions of Section 37E of the Planning and Development Act 2000 as amended.

Cork County Council submitted a report to An Bord Pleanála on March 2022. The key points arising from the original assessment by Cork County Council of the proposal were:

- The proposed development complies with the objectives of the County Development Plan 2014 and specifically policy objectives ED 1-1 (energy) and ED 6-1 (electricity).
- The proposal is consistent with the aims/ objectives of the draft County Development Plan 2022.
- The proposed development is fully justified, having regard to European, National, Regional and Local energy and infrastructural policy.
- The proposed layout is likely to need material amendments/ revisions on the basis of internal reports/assessments. In particular, Ecology considers that four turbines be omitted (T2, T3, T13 and T 17); and County Archaeologist recommends the omission of two turbines (T9 and T8).

It was considered view of Cork County Council that based on the information submitted and the assessment of same that further information should be sought by the Bord in the first instance to enable a full (or further) assessment of the application to determine the acceptability or otherwise of the proposed development.

On 2 May 2023, An Bord Pleanála sought Further Information on a number of points in relation to a Strategic Infrastructure Development (SID) application. This request was made in accordance with Section 37(F)(1) of the Planning and Development Act, 2000 (as amended).

Fehily Timoney and Company (FT) have provided An Bord with a response on behalf of the applicant Ballinagree Wind Farm DAC.

An Bord have invited the Planning Authority to make a submission on the further information received in relation to this application by 25<sup>th</sup> March 2024.

This planning report sets out the assessment of the further information response received in relation to the proposed Wind Farm Development (and all associated works). For ease of reference to be referred to as the Ballinagree windfarm.

## 1. Introduction

On 28<sup>th</sup> January an application was made to An Bord Pleanála of a ‘Strategic Infrastructure Development’ (SID) under the provisions of Section 37E of the Planning and Development Act 2000 (as amended) for the construction of 20 turbine windfarm with 110kv electrical substation and all related site works and ancillary development, to be referred to as the Ballinagree windfarm. An Environmental Impact Assessment Report (EIAR), an Appropriate Assessment Screening (AA) and a Natura Impact Statement (NIS) has been prepared.

An Bord Pleanála informed Cork County Council in a letter dated 1<sup>st</sup> February 2022, of their receipt of the strategic infrastructure development application and the requirement of Cork County Council to submit a Chief Executive’s report setting out the views of the Planning Authority on the effects of the proposed development on the environment and the proper and sustainable development of the area. In addition, An Bord Pleanála requested that the Chief Executive address in his report, all the issues identified in their “guidelines for Planning Authorities” in respect of Strategic Infrastructure Developments.

In accordance with the requirements of Section 37E (4) of the 2000 Act, a report setting out the views of the Planning Authority on the effects of the proposed development on the environment and on the proper planning and sustainable development of the area was submitted to An Bord Pleanála.

On 2 May 2023, An Bord Pleanála sought Further Information on a number of points in relation to the Strategic Infrastructure Development (SID) application. This request was made in accordance with Section 37(F)(1) of the Planning and Development Act, 2000 (as amended).

Fehily Timoney and Company (FT) have provided An Bord with a response on behalf of the applicant Ballinagree Wind Farm DAC. An Bord have invited the Planning Authority to make a submission on the further information received in relation to this application by 25th March 2024.

This planning report sets out the assessment of the further information response received in relation to the proposed Wind Farm Development (and all associated works).

## 2. Description of Development

The proposal involves the construction of 20 turbines with 110kv electrical substation and all related site works and ancillary development. The project includes for the:

- Construction of 20 no. wind turbines with a blade tip height range from 179m to 185m, a hub height range from 102.5 to 110.5m and a rotor diameter range from 149m to 155m.
- Construction of turbine foundations and crane pad hardstanding areas including associated drainage infrastructure.
- Construction of new permanent site tracks and associated drainage infrastructure.
- Upgrading of existing tracks and associated drainage infrastructure.
- Upgrade of 2 no. existing forestry and agricultural access junctions for construction and operational access from 1) the Local Roads L2750-0/L1123-62 in the townlands of Finnanfield and Ballynagree East and 2) from the Local Road L7461-0 in the townland of Ballynagree West, Co. Cork;
- Upgrade of 2no. existing forestry access junctions for temporary construction access from the Local Road L7461-17 in the townland of Knocknagappul, Co. Cork.
- Use of 1 no. existing forestry and agricultural access junction for operational access only from the Local Road L-7461-44 in the townland of Knocknagappul, Co. Cork.
- Installation of new permanent watercourse and drain crossings and the reuse and upgrade of existing internal watercourse and drain crossings to include 1) the replacement of an existing stone bridge structure with a new clear span concrete bridge structure along the Local Road L-7461-0 in the townland of Ballynagree West and 2) a new clear span concrete bridge structure along a proposed new track in the townland of Carrigagulla, Co. Cork;
- 3 no. on site borrow pits and associated ancillary drainage within the townlands of Carrigagulla and Knocknagappul, Co. Cork.
- 2 no. Temporary construction site compounds and associated ancillary infrastructure including parking within the townlands of Ballynagree West and Carrigagulla, Co. Cork.
- Use of proposed wind farm access tracks and existing forestry and agricultural tracks as permanent recreational amenity trails for community use including the installation of associated signage and information boards and; the partial reinstatement and re-purposing of the proposed temporary construction compound as a permanent trail head car park and picnic area including associated landscaping within the townland of Ballynagree West;

- Construction of 1 no. permanent on-site 110kV electrical substation including control buildings, electrical plant and equipment, welfare facilities, carparking, water and wastewater holding tanks, security fencing, lightening protection and telecommunications masts, security cameras, external lighting and, all associated infrastructure within the townland of Ballynagree East, Co. Cork;
- Installation of medium voltage underground electrical and communication cabling connecting the wind turbines to the proposed on-site substation and associated ancillary works.
- Installation of permanent high voltage 110kV underground electrical and communication cabling between the proposed on-site substation within the townland of Ballynagree East to the boundary of the existing Clashavoon substation within the townland of Aughinida, Co. Cork. The cabling will be laid primarily within the public road in the townlands of Knocknagappul, Ballynagree East, Ballynagree West, Bawnmore, Clonavrick, Derryroe, Rahalisk, Kilberrihert, Caherbaroul and Aughinida, Co. Cork. Associated works including the installation of 15 no. pre-cast joint bays and communication chambers; and horizontal directional drilling under 4 no. watercourse crossings in the townlands of 1) Knocknagappul, 2) Knocknagappul and Rahalisk, 3) Rahalisk and Bawnmore and 4) Bawnmore and Clonavrick;
- Tree felling to accommodate the construction and operation of the proposed development.
- Erection of 2no. meteorological masts with a height of 100m above existing ground levels for the measuring of metrological conditions within the townlands of Ballynagree East and Carrigagulla, Co. Cork. A lightning rod will extend above the masts by 4 meters.
- Temporary accommodation works at 6 no. locations adjacent to the public roads to facilitate delivery of turbine components to site within the townlands of Dromagh, Dromskehy, Liscahane, Tullig, Drominahilla, Finnanfield and Ballynagree East, Co. Cork. These works will primarily relate to trimming of trees and hedgerows, temporary lowering of boundary walls, temporary removal of boundary walls, temporary ground reprofiling and installation of temporary stone hard standing.
- Installation of a temporary off-site staging area for turbine components within the curtilage of Drishane Castle which is a Recorded Protected Structure (00319) and National Monument (296), within the townland of Drishane More. The works will include removal of a masonry wall and installation of temporary stone hard standing area and associated access track and entrances to and from the public road R583.
- All related site works and ancillary development including landscaping and drainage.

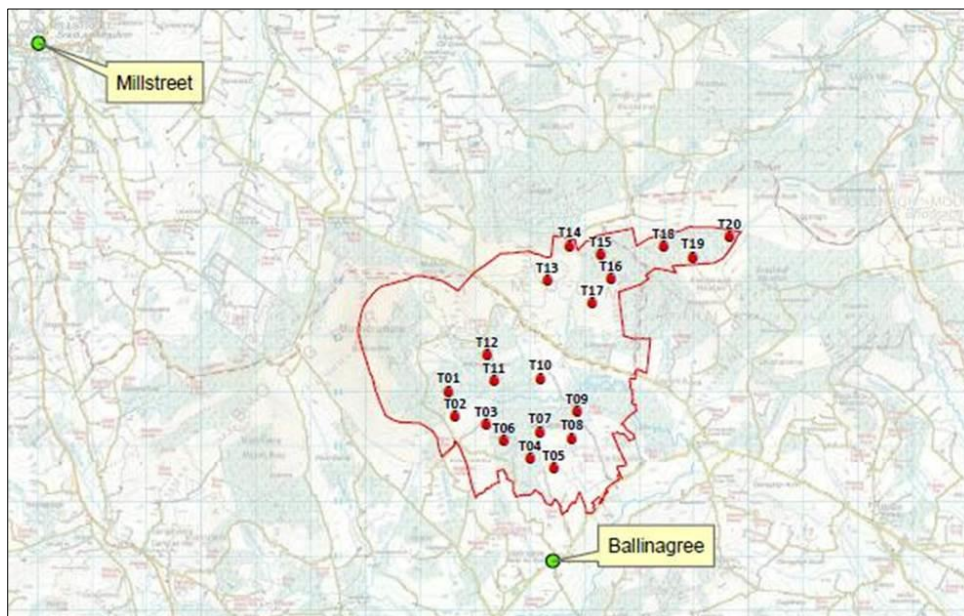
- A 35-year operational life from the date of commissioning of the entire wind farm is being sought.

It is stated that the plans and particulars submitted with this application for consent are precise and provide specific dimensions for the turbine structures which incorporates a small range in dimensions. The turbine specifications will have a blade tip height range from 179m to 185m, a hub height range from 102.5 m to 110.5m and a rotor diameter range from 149m to 155m. The documents go on to request that the following three fixed dimensions for turbines are consented:

- Tip height of 185m, hub height of 107.5m, rotor diameter of 155m
- Tip height of 185m, hub height of 110.5m, rotor diameter of 149m
- Tip height of 180m, hub height of 102.5m, rotor diameter of 155m

It is stated that each of these 3 no. fixed dimensions within the proposed range have been fully assessed as part of the assessment of the full range proposed as part of the EIA and AA process.

The map below illustrates the geographical context of the proposed development in County Cork.



In relation to Construction Phase Activities, it is expected that the construction phase, including civil, electrical and grid works, and turbine assembly will take between approximately 18 - 24 months.

Permission is sought for a 35-year operation period commencing from full operational commissioning of the wind farm.

Submission on further information received by An Bord Pleanála.



#### **4. Further Information Response**

This section provides the Planning Authority's response in relation to the further information received. This should be read in conjunction with the original Chief Executive report previously submitted to An Bord.

The Further Information response was referred to relevant internal departments within Cork County Council. A copy of each of the internal department reports is attached as Appendix A. The issues raised in relation to the further information is provided as follows:

##### **(i) Archaeology, Architectural and Cultural Heritage**

The response to the RFI was compiled by John Cronin and Associates (JCA) at the request of Fehily Timoney in relation to the Archaeology Report included as an Appendix to the Cork County Council (CCC) submission on the proposed Ballinagree Wind Farm development (Ref. ABP 312606-22).

##### **Turbine Delivery Route (Temporary Staging area)**

The CCC Archaeology Report requested clarification in relation to proposed turbine delivery staging works area in the Drishane Castle (National Monument) property near Millstreet and recommends consideration of the use of Horizontal Directional Drilling (HDD) at a road culvert on the turbine delivery route. Clarification was required to establish if the temporary staging area was to be removed on completion of the Project and if the area is to be returned to green field. The applicant has clarified that construction of a temporary staging area comprising aggregate hard standing and associated access track to and from the public road R583 in the grounds of Drishane Castle will occur and that removal of masonry wall will occur to facilitate temporary access from public road R583. The aforementioned staging area is to be removed and the area will be fully reinstated and returned to green pasture upon completion of staging works.

##### **Response to Further Information submitted**

**This has been clarified and is satisfactory.**

**Turbine Delivery Route (Ballinagree East Culvert)**

The CCC Archaeology Report (Mary Sleeman) states that the use of Horizontal Directional Drilling (HDD) techniques utilised at other bridge crossings should be considered at the location of this culvert. The proposed removal of a stone built culvert feature under a public road in Ballinagree East townland is required to facilitate the delivery of turbines to the wind farm site.

The applicant's response is as follows:

*'As described in Section 14.3.4.3 of the EIAR, this culvert likely dates to the post-1840s period as this section of road is not present on the 1st edition 6-inch Ordnance Survey map. The culvert is not a Protected Structure and is also not included in the National Inventory of Architectural Heritage but is interpreted in the EIAR as a feature of local cultural heritage interest. The EIAR mitigation for this culvert entails the compilation of a detailed pre-works record in written, drawn and photographic formats and archaeological monitoring of construction phase works at its location. The HDD technique referred to in the CCC Archaeological Report is a methodology utilised to facilitate the installation of cables at bridge crossings along the grid connection route and it is not an applicable technique for the proposed works at this location which are required to facilitate the delivery of turbines to the wind farm site'.*

**Response to Further Information submitted**

The response has been clarified. The County Archaeologist suggests that prior to the removal of the section of the culvert that it be subject to a pre-construction survey (Preservation by record) (descriptive, plans drawn to scale and a photographic). The details and results of the survey should be submitted to the Local Authority (in report form) prior to the commencement of works in this area.

**Wind Farm: Omission of Turbine 8**

Mary Sleeman in her Archaeology Report recommended the omission of Turbine 8 as currently proposed as it will negatively impact on the setting of a stone row (CO049-020) and the surrounding prehistoric landscape.

The applicant's response is as follows:

*'The following section collates contextual information on the current condition of stone row (CO049-020), which has been partially levelled, and known prehistoric sites within the surrounding landscape, a number of which retain little or no surface expressions. The stone row is located 430m to the*

*southeast of the proposed location of Turbine 8 and is 350m from the nearest section of the proposed access track to this turbine. The description of this monument published in the Archaeological Inventory of County Cork. Volume 3: Mid Cork (1997) notes that it formerly comprised a line of three upright stones which were set on a northeast to southwest alignment. The inventory descriptions in this publication are based on field surveys carried out by the Cork Archaeological Survey during the 1980s and early*

*1990s. As detailed in Table 14-15 of the EIAR, which includes an appraisal of the landscape setting of the monument, the stone row was significantly disturbed at some point following its inspection by the Cork Archaeological Survey and only one of the stones now survives upright at the location. One of the levelled stones lies prostrate on the nearby ground while the third stone has been removed from the location. While only one of the upright stones remains extant and the monument no longer retains a surface expression as stone row feature, it is also noted in Table 14-15 of the EIAR that none of the proposed turbines impinge on its original recorded alignment to the southwest and this includes the proposed location of Turbine 8 which is 430m to the northwest of the stone row.*

*There are three recorded prehistoric sites of likely Bronze Age date located within a 1km area extending from the stone row location and each of these, including their views and settings, are described in Table 14-15 of the EIAR. A burnt mound site (CO049-068----) located c.560m to the south of the stone row comprises a levelled surface spread identified within a field after ploughing works. This site had no surface expression when inspected during the assessment and as noted in Table 14-15 of the EIAR, the ground level views from its location towards the north are obscured by natural topography. Two stone circles (CO049-007---- & CO049-008----) are located on the opposite side of a large ridgeline which rises steeply upwards in the lands to the north of the stone row. The stone circles are located at respective distances of 915m and 560m from the stone row. As noted in Table 14-15 of the EIAR, this ridgeline completely screens ground level views from the stone circles towards the archaeological sites on its opposite side of the ridge, including the location of the stone row. This landscape setting indicates that these monuments were not constructed to create any intervisible sightlines between their locations. The proposed location of Turbine 8 will, therefore, not impinge on any potential ground level sightlines between the stone row and stone circles as none exist and, in addition, the proposed turbine location*

*is not sited between their locations.*

*There are also three recorded fulachta fiadh sites of likely Bronze Age date within the southern area of the wind farm site (CO049-057----, CO049-058---& CO049-059-----). These are located in a commercial forestry plantation located c.1.2km to the southwest of the stone row and c.1.17km southwest of Turbine 8. As detailed in Table 14-15 of the EIAR, while existing views from their locations are now*

*completely screened by trees, the partially or completely levelled remains of these sites appear to be located within an area with dominant views to the south. In addition, even when fully extant, fulachta fiadh do not possess visual alignment attributes and Turbine 8 is not located within any potential direct sightline between their locations and the stone row. As noted in Table 14-6 of the EIAR, an extant stone pair (CO060-019----), which is orientated NE-SW, is located within a field to the south of the forestry plantation containing the three fulachta fiadh, has no direct alignment with any of the proposed turbine locations, including Turbine 8. This monument is located outside the site boundary, but a review of satellite images indicates that any potential ground level views towards the stone row are now likely screened by the adjacent forestry plantation.*

*Turbine 8 and its associated infrastructure, including its hardstand and access road, will result in no predicted direct impacts on Stone Row CO049-020---- or any other archaeological monuments. The project mitigation at its location includes advance geophysical and archaeological test trenching of the footprint of the turbine and its associated hardstand and access track. While the proposed wind farm development has been interpreted as resulting in a predicted moderate indirect impact on the wider setting of this partially levelled monument during the operational phase of the Project, as noted in Section 14.4.4 of the EIAR, this impact will be reversed during the decommissioning phase.*

#### **Response to Further Information Submitted**

**The Stone Row is located 430m from Turbine 8. The monument CO049-020 (originally 3 upright stones) has been disturbed with only one stone remaining which lies upright, one levelled and one missing. It had a north-east/south-west alignment and according to the applicant, there are no turbines within this trajectory. There are no proposed turbines along this alignment although verified data and imagery would have assisted in the submission response by the applicant using viewshed analysis or software to ascertain the alignments with the rising and setting of the sun in this location. Shadow flicker has not been addressed with the stone row in mind although since the stone row is largely disturbed, the County Archaeologist is not overly concerned about this element. There were no original or current direct sightline views to other stone circles CO049-007 & CO049-008 to the north therefore intervisibility between monuments is not impacted since it does not occur. The applicant has suggested that there will be no direct impacts to the monument and the CCC report concurred with this conclusion. The concerns raised in the CCC report were not relating to direct effects but rather negative effects on setting. It is the opinion of the County Archaeologist that there are no mitigation measures that will alleviate potential negative effects on setting resulting from turbines but in this instance given the separation distance of 430m to the nearest turbine, the poorly preserved nature of the monument and the lack of existing sightlines to the**

**stone circles to the north to the north, the County Archaeologist will accept the applicants' response.**

### **Omission of Turbine 9**

The Archaeological report by Mary Sleeman recommended the omission of Turbine 9 given its proximity to Stone Circle (CO049-008) and also cites the following monuments located within the wider landscape: Stone Circle CO049-007, Stone Row CO049-020 and Fulachta Fiadh CO049-057, CO049-058 & CO049-059. The applicant's response is as follows:

*'The multiple stone circle monument (CO049-008) is located 270m to southeast of the proposed location of Turbine 9. The proposed access track to the turbine extends from the south through a forestry plantation and includes a section of an existing surfaced farm lane. This route was designed to avoid the area of pasture farmland which contains this stone circle. The monument is shown within an open area of land on the 1st edition 6-inch map OS and the existing enclosed pasture field at its location was likely created during late 19th or early 20th century land reclamation works.*

*The stone circle contains 15 remaining upright stones (of a likely original 17 stones) that range between 40cm and 90cm in height and have been arranged to form an alignment extending to the west-southwest. As noted in Table 14-15 of the EIAR, which includes an appraisal of its setting within the landscape and views to other prehistoric monuments, this monument is situated within a low-lying area with the wider terrain rising to the east and west.*

*There are no recorded archaeological sites or notable natural topographic features located on the sections of the visually dominant ridgeline to the west and west-southwest of the monument and none of the known archaeological sites within the area of the wind farm on the opposite side of the ridgeline are visible at ground level from its location. A review of the location of solar events on the ridgeline during solstice and equinox dates was carried out as part of the EIAR assessment and did not reveal any events which intersected with the monument alignment on these dates.*

*As noted in Section 14.4 of the EIAR, the stone circle is located in a pasture field within private farmland and according to the landowner it is rarely visited. In addition, its location cannot be seen from outside the field as the upright stones are below the level of the surrounding field banks and it does not form a prominent feature within the landscape. The proposed Project will incorporate a signed amenity trail which will facilitate public access to the location which is assessed as a moderate positive impact on the cultural heritage resource of the area. The emerging wind farm layout was subject to*

*archaeological review during the design phase, and this included inputs from the project Landscape and Visual consultants in relation to potential visual impacts on Stone Circle CO049-008. While turbines will be visible from its location, the review process assisted in the development of a turbine layout intended to avoid direct intrusions on its ritual alignment. In addition, a potential turbine location extending into the east end of the area of fields containing the stone circle was removed from the Project due to a combination of potential archaeological and noise issues identified during this review process. Turbine 9 was also reviewed as part of this process and its proposed location was determined based on a number of environmental constraints, including maximising its set-back from the stone circle as far as feasible.*

*The proposed location of Turbine 9 and its associated infrastructure will not result in any predicted direct impacts on Stone Circle CO049-008---and will not impinge on its alignment which is orientated to the west southwest. The archaeological mitigation measures for the turbine comprise advance geophysical surveys and archaeological test trenching of the footprint of the turbine and its associated hardstand. While the turbine will contribute to the predicted significant indirect impact on the setting of Stone Circle CO049-008---- during the operational phase of the Project, as noted in Section 14.4.4 of the EIAR, this impact will be completely reversed by the decommissioning of the wind farm.*

*Information on the other prehistoric monuments within the wider environs of Turbine 9 as cited in the CCC Archaeology Report (Stone Circle CO049-007, Stone Row CO049-020 and Fulachta Fiadh CO049-057, CO049-058 & CO049-059) is presented in the EIAR chapter and summary details are collated below. As detailed in Chapter 14 of the EIAR, Stone Circle CO049-007 remains well-preserved in a clearing within an area of a modern forestry plantation which will remain unfelled for the lifespan of the proposed Project. This is part of the project proposal in order to protect the above stone circle's existing setting. The surrounding conifer trees within the plantation are set c.10m back from its location and screen ground and sky level views from the monument in all directions, including towards its set alignment to the west-southwest as well as towards the location of Turbine 9 which is 420m directly west. As noted within Table 14-15 of the EIAR, the area between this monument and the field containing stone circle (CO049-008), which is located c.370m to the south, is heavily forested and there is no existing intervisibility between these monuments. Neither stone circle is situated on a prominence and given their low heights combined with the undulating local topography they may not have been intervisible prior to the forestry plantation. In any event, the proposed location of Turbine 9 will not impinge on any potential pre-forestry sightlines between the two monuments. While Stone Circle*

*CO049-007--- is a National Monument in State Ownership (ref. 660) there are no direction signs in the surrounding area, there are no forest tracks leading to its location and a GPS had to be used to find the monument during the field survey. The amenity trail element of the proposed Project will include location and information signage for this monument and will facilitate public access to its environs resulting in a positive impact. No new access tracks or other elements of the trail will be constructed or erected at its location in order to avoid potential indirect negative impacts on its setting.*

*Details on the other prehistoric monuments within the wider environs of Turbine 9 as cited in the CCC Archaeology Report are provided in the above section in relation to Turbine 8 which notes these monuments have no identified interconnecting sightlines and all have been subject to modern disturbance. The location of Turbine 9 will not impinge on the projected alignment of Stone Row CO049-020, which now retains only one extant stone upright and is located c.750m to the south of the turbine. As described in the EIAR chapter, the three fulachta fiadh sites cited in the CCC Archaeology Report comprise partially or completely levelled sites within a modern forestry plantation and are located 1.7km to the southwest of Turbine 9. In conclusion, Turbine 9 is not interpreted as contributing to any predicted significant indirect impacts on the settings of Stone Circle CO049-007, Stone Row CO049-020 and Fulachta Fiadh CO049-057, CO049-058 & CO049-059'.*

#### **Response to Further Information submitted**

**The applicant has provided detail regarding how the applicant arrived at the current design (through a number of layout iterations) and how the design avoided impacting on the monument. The County Archaeologist accepts that it has avoided direct negative effects, however, the current design will arise in a negative effect on the setting of this monument as indicated in both the EIAR and the RFI response. The monument is largely intact and well preserved in its own right and is therefore of high heritage value. The applicant has addressed concerns regarding intervisibility to other monuments within the windfarm and that the other monuments are not visible at ground level from the stone circle. This is acceptable and it has been established that intervisibility between monuments will not be impacted by Turbine 9. The applicant has stated that (via the landowner) that the monument is rarely visited. The lack of visitor numbers does not alleviate the negative effects to the monument and furthermore, the proposed amenity trail in accordance with the applicant's response, will offer public access to the monument. The applicant has stated in their response that '*the turbine will contribute to the predicted significant indirect impact on the setting of Stone Circle CO049-008*' but that this will be reversed during decommissioning. The County Archaeologist assessed the impacts on the lifetime of the project and not after the windfarm has been decommissioned. The mitigation measures proposed (including geophysical survey and test trenching) address the potential direct**

**effects to sub-surface archaeology and do not address impacts and negative effects on setting. In this instance the County Archaeologist concurs with the recommendations of the former County Archaeologist for removal of Turbine 9 as it stands in the current design. Turbine 9 will negatively affect the setting of the nearest Stone circle (Multiple stone circle CO049-008).**

### **Recommendation**

In accordance with the original comments of the former County Archaeologist (dated 2022) the County Archaeologist concurs with the mitigation proposed in Section of Chapter 14.5 of EIAR as amended below and recommends they are attached as a condition of planning.

The following conditions are attached if planning permission granted:

1. The applicant is required to engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930–2004) to carry out

(a) A systematic advance programme of archaeological field-walking survey in areas where pre-construction tree felling is to take place in order to identify any previous unrecorded archaeological, cultural or architectural heritage sites. A report shall be submitted to the Local Authority on completion of the survey. Archaeological monitoring under license of ground excavation works shall be carried out in these areas under license by the National Monument Service. A monitoring report shall be submitted to the National Monuments Service and the Local Authority.

(b) The turbines, hardstands and associated new access tracks located within improved green field areas shall be subject to a pre-construction geophysical survey followed by program of licensed targeted archaeological test trenching. The testing plan shall be submitted to the Local Authority archaeologist for written approval prior to submitting for the license. The testing shall include the investigation of a potential section of a relict field boundary noted in the EIAR.

(c) A pre-construction programme of linear archaeological test trenching will be carried out on the footprint of the three turbines (T13, 16 and 17) in these areas and along the routes of any associated new access tracks which will require ground excavation works during the construction phase. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and/or monitoring may be required and the Planning Authority and National Monuments Service of (Dept. of Housing Local Government and Heritage) will advise the Applicant/Developer with regard to these matters.



(d) Having completed the work, the archaeologist shall submit a written report to the Planning Authority and to the National Monuments Service for consideration. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with National Monuments Service

2. Having regard to the proximity of proposed Turbine 9 to archaeological monument CO049-008 Multiple Stone Circle and its setting, it is considered that the proposed Turbine (9) would have detrimental and significant visual impact on the Recorded Archaeological Monument and would therefore be contrary to Objective HE16-2 of the County Development Plan 2022 to protect sites and their settings and HE16-11 Landscapes and their setting. Turbine 9 should be omitted.

3. The applicant shall engage the services of a suitably qualified archaeologist to undertake a pre-construction detailed survey and photographic record of the section of the drystone wall which forms part of the Ballynagree East and Carrigagulla townland boundary, located within the northern end of the T5 hardstand. A report on the results of the survey shall be submitted to the Local Authority and National Monuments service on completion of the survey.

4. The applicant is required to engage the services of a suitably qualified archaeologist to monitor under licence from the National Monument Service (NMS) of the Department of Housing, Local Government and Heritage all ground works within green field locations, including HDD areas required as part of the grid connection, all ground works within the environs of the Famine memorials at the crossroads in Killberriherth townland and green field areas required to accommodate the turbine delivery route. The ground works/removal of topsoil shall be carried out under the direction of the appointed archaeologist. Intermittently monitoring /archaeological watching brief of other grid connection trench excavations within the public road will be carried out as part of the licensed archaeological monitoring of the project. In advance of the development a method statement shall be submitted for the watching brief for written approval of the County archaeologist. If archaeological material is found during the course of monitoring, the archaeologist shall have work on the site suspended in this area, pending a decision as to how best to deal with the archaeology. Monitoring is to take place to the uppermost archaeological horizons only. The developer shall be prepared to be advised by the Local Authority Archaeologist and National Monuments Service with regard to any necessary mitigating action (e.g. preservation in situ, or excavation). The applicant shall facilitate the

archaeologist in recording all the archaeological material found. In addition, the archaeologist shall record all Undesignated Cultural features to be impacted /removed by the development including historic roads, townland and field boundaries (photographs, sketch section & plans, written description). The Planning Authority and National Monuments Service shall be furnished with a written report describing the results of the monitoring.

5. Prior to the commencement of the development the applicant is required to engage the services of a suitably qualified archaeologist, under licence from the National Monument Service (NMS) of the Department of Housing, Local Government and Heritage, to carry out a geophysical survey of the green field area for the temporary hardstand in the southern end of the Drishane Castle demesne. This is to be followed by archaeological test trenching both targeting the results of any geophysical anomalies and also testing in areas with no anomalies at regular intervals across the site. A report on the results of the Geophysical survey and testing shall be submitted to the National Monuments Service and the Local Authority.

## **(ii) Ecology**

**Condition for the omission of certain Turbines** – Notwithstanding the applicant contention that the four turbines recommended by us for exclusion from the proposal should be retained, the position of the Ecology Office of Cork County Council in respect of same is that these turbines be omitted for the following reasons:

- Facilitation of these turbines at their proposed location would be contrary to Objective ET 13-7 and Objective BE 15-2 of the County Development Plan 2022;
- Having regard to preplanning advice advising the applicant to avoid impacts to habitats of high ecological value such as peatland habitats to align with the policies and objectives of the County Development Plan;
- Having regard to the extent of loss, degradation and fragmentation of upland habitats and habitats of high biodiversity value in the wider area.

There is considerable pressure on upland habitats related to proposed renewable energy developments and it is recommended that the Board have regard to in-combination effects on such

habitat types in that context. In that regard we would request An Bord consider cumulative effects including other SID application in the wider area which propose development over significant areas of upland habitat of high biodiversity value such as the Gortyrhilly Windfarm Strategic Infrastructure Development.

**Further information response in respect of Hen Harrier & Golden Plover** – the Ecology Office request that the assessment of An Bord in respect of the potential implications the proposal could have on Hen Harrier, a species of conservation interest of the nearby Mullaghanish to Musheramore Mountains Special Protection Area should have regard to recently released Threat Response Plan and National Survey findings, which were not available us at the time of our opinion. These are as follows:

- The 2022 National Survey of breeding Hen Harrier in Ireland (Ruddock. et. al. 2024); and
- Threat Response Plan for the Hen Harrier 2024-2028 Draft for Public Consultation (NPWS 2024).

With respect to Golden Plover, the Ecology Office disagrees with the response of the consultant ecologists which asserts that the development will not impact on Golden Plover and we continue to be concerned about the likely effects the proposal will have on the species. Therefore, we again recommend that further assessment is required in respect of this red-listed species of conservation concern. This recommendation is made having regard to data gathered by the Irish Wetland Bird Survey (I-WeBS) which has seen a large decline of the species of 54% over a 23-year period.

Furthermore, we request that An Bord have regard Article 4 (4) of the Birds Directive and Article 10 of Habitats Directive in completion of their assessment in respect of species such as Hen Harrier and Golden Plover given the loss, fragmentation and alteration habitat utilised by these species in the wider environment.

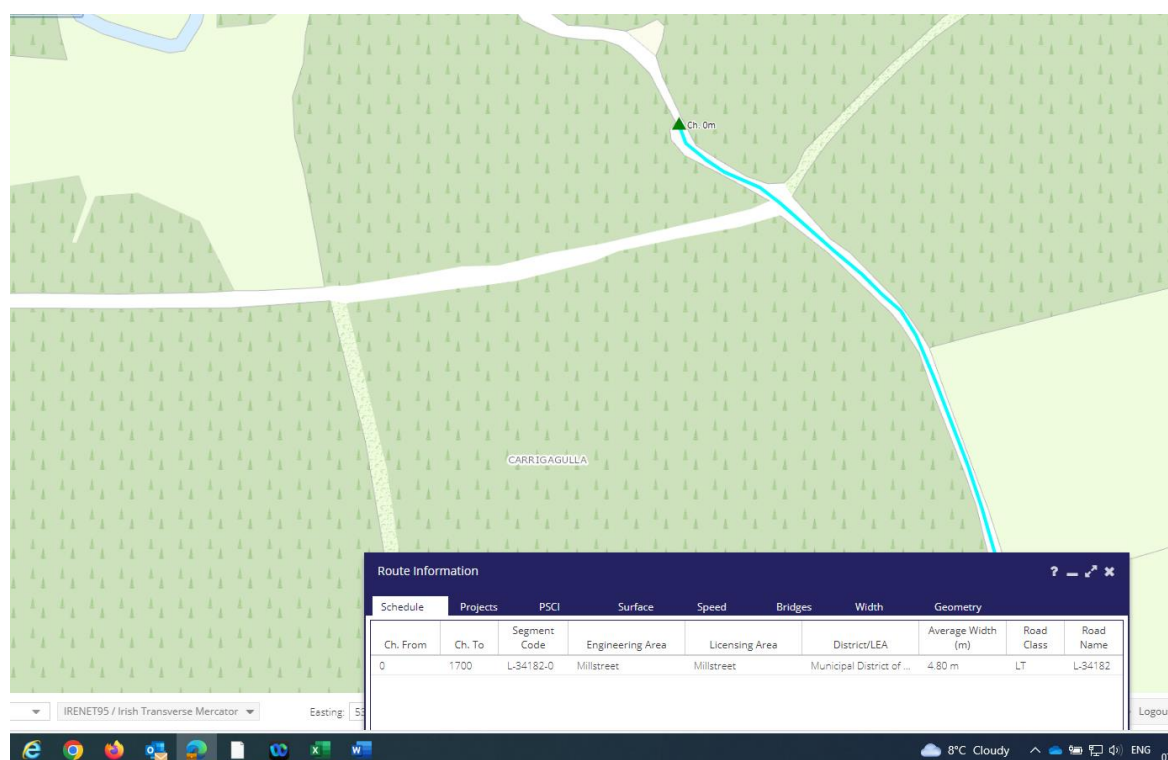
Further to the conditions recommended in our previous report we request An Bord incorporates the imposition of a further condition of planning which includes for a detailed Post-Construction Ornithological Monitoring and Mitigation Plan for the site. This plan should be prepared by a suitably experienced and qualified ornithologist and it is recommended that it include the following:

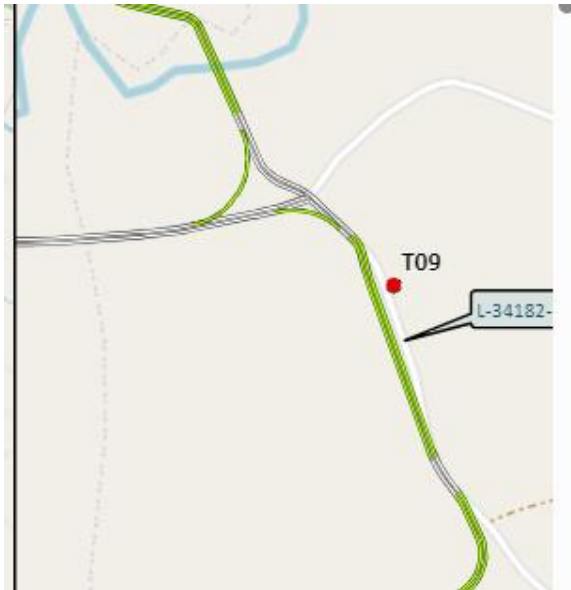
- Details of ornithological post construction monitoring and surveys for the site and its zone of influence for the lifetime of the proposal;
- Details of fatality monitoring for the lifetime of the proposal.
- Details of a fluid mitigation response based on the assessment of results / observations collected during monitoring / surveys and the provision for review and updating of the monitoring programme and mitigation strategy arising from the ongoing monitoring e.g. in

the event that its discovered that particular periods of the year have large numbers of species of conservation traversing and/or utilising the site then a curtailment programme shall be implemented.

### (iii) Traffic and Transport

There seems to be some confusion on the Location of Turbine 9 in relation to Public Road Below is the screen shot from the Public Road Register – the L-34182 is highlighted in blue. When compared to the second screenshot below as extracted from Page 43 of the response to RFI it is clear that the public road continues north past T09.





It is accepted that this surface may be poor or non-existent but none the less it is legally registered as a public road. The applicant must address this issue – it is not acceptable to simply dismiss it as an ‘error in the shapefile’.

#### *Cable Route*

The applicant has responded saying that on two lane routes where the cable is being installed that they will reinstate the trench.

Experience of previous windfarms on 2 lane roads where cable routes are installed is that the second lane is used for moving plant and machinery while the first lane is being excavated. This results in the second lane being severely damaged. It then become virtually impossible to match in the trench reinstatement to the road surface in a satisfactory manner. For this reason:

It is recommended that all roads where the cable route is installed shall receive full road width regulating and resurfacing. Surface dressing alone will not suffice. The resurfacing type shall match existing surfaces.

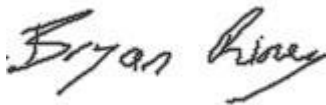
#### *Construction Traffic:*

The response is noted but it is recommended that no construction traffic **of any kind** including light vehicle or workers travelling to or from site is to be allowed on public roads: L-7464-0, L-34192-0, L-7463-0, L-34183-0, L-34182-0 (except at northern end), L-34181-0, L-7461-44( south of the site boundary), L-5245-26, L-3418 between Copeleen Bawn Cross and Annaganihy Cross.

Submission on further information received by An Bord Pleanála.

## 5. Concluding remarks

If An Bord Pleanála, (being the ‘competent authority’) considers granting planning permission for the proposal, a schedule of suggested conditions, as requested in the Advice Guidelines that accompanied the publication of the Planning and Development (Strategic Infrastructure) Act 2006 is attached under Appendix A of the previous submitted Chief Executive report. This should be considered in conjunction with the comments as provided in section 4 of this report which provide the Planning Authorities response in relation to the further information received.



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**Bryan Riney**  
Senior Planner  
14<sup>th</sup> March 2024



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**Valerie O' Sullivan**  
Chief Executive  
14<sup>th</sup> March 2024

## **Appendix A: Internal Reports**

### **(i) County Archaeologist**

#### **Planning Context**

##### **County Development Plan 2022 Objectives**

*HE 16-2: Protection of Archaeological Sites and Monuments Secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments and their setting included in the Sites and Monuments Record (SMR) (see [www.archaeology.ie](http://www.archaeology.ie)) and the Record of Monuments and Places (RMP) and of sites, features and objects of archaeological and historical interest generally. In securing such preservation, the planning authority will have regard to the advice and recommendations of the Development Applications Unit of the Department of Housing, Local Government and Heritage as outlined in the Frameworks and Principles for the Protection of the Archaeological Heritage policy document or any changes to the policy within the lifetime of the Plan.*

*County Development Plan 2022 Objectives HE 16-3: Underwater Archaeology Protect and preserve the archaeological value of underwater archaeological sites and associated underwater and terrestrial features. In assessing proposals for development, the development will take account of the potential underwater archaeology of rivers, lakes, wetlands, intertidal and sub-tidal environments through appropriate archaeological assessment by a suitably qualified archaeologist.*

*County Development Plan 2022 Objectives HE 16-4: Zones of Archaeological Potential in Historic Towns and Settlements Proposed development works in Historic Towns and settlements, Zones of Archaeological Potential, Zones of Notification and the general historic environs in proximity to the zones, should take cognisance of the impact potential of the works, and all appropriate archaeological assessments employed to identify and mitigate the potential impacts.*

*County Development Plan 2022 Objectives HE 16-5: Zones of Archaeological Potential Protect the Zones of Archaeological Potential (ZAPs) located within historic towns, urban areas and around archaeological monuments generally. Any development within the ZAPs will need to take cognisance of the upstanding and potential for subsurface archaeology, through appropriate archaeological assessment.*

*County Development Plan 2022 Objectives HE 16-6: Industrial and Post Medieval Archaeology Protect and preserve industrial and post-medieval archaeology and long-term management of heritage features such as mills, limekilns, forges, bridges, piers and harbours, water-related engineering works and buildings, penal chapels, dwellings, walls and boundaries, farm buildings, estate features, military and coastal installations. There is a general presumption for retention of these structures and features. Proposals for appropriate redevelopment including conversion should be subject to an appropriate assessment and record by a suitably qualified specialist/s.*

*County Development Plan 2022 Objectives HE 16-7: Battlefield, Ambush and Siege Sites and Defensive Archaeology Protect and preserve the defensive archaeological record of County Cork including strategic battlefield, ambush and siege sites, and coastal fortifications and their associated landscape due to their historical and cultural value. Any development within or adjoining these areas shall undertake a historic assessment by a suitably qualified specialist to ensure development does not negatively impact on this historic landscape.*

*County Development Plan Objectives HE 16-8: Burial Places Protect all historical burial places and their setting in County Cork and encourage their maintenance and care in accordance with appropriate conservation principles.*

*County Development Plan Objectives HE 16-9: Archaeology and Infrastructure Schemes All large scale planning applications (i.e. development of lands on 0.5 ha or more in area or 1km or more in length) and Infrastructure schemes and proposed roadworks are subjected to an archaeological assessment as part of the planning application process which should comply with the Department of Arts, Heritage and the Gaeltacht's codes of practice. It is recommended that the assessment is carried out following pre planning consultation with the County Archaeologist, by an appropriately experienced archaeologist to guide the design and layout of the proposed scheme/development, safeguarding the archaeological heritage in line with Development Management Guidelines.*

*County Development Plan Objectives HE 16-10: Management of Monuments within Development Sites Where archaeological sites are accommodated within a development it shall be appropriately conservation/ protection with provision for a suitable buffer zone and long-term management plan put in place all to be agreed in advance with the County Archaeologist.*

*County Development Plan Objectives HE 16-11: Archaeological Landscapes To protect archaeological landscapes and their setting where the number and extent of archaeological monuments are significant and as a collective are considered an important archaeological landscape of heritage value.*

*County Development Plan Objectives HE 16-12: Raising Archaeological Awareness As part of the Heritage Plan it is an objective to develop a management plan, if resources allow, for the archaeology of County Cork, which could include an evaluation of the Historic Character Assessment of Cork County helping to identify areas for tourism potential, and strategic research while also promoting best practice in archaeology and encouraging the interpretation, publication and dissemination of archaeological findings from the development application process.*

*County Development Plan Objectives HE 16-13: Undiscovered Archaeological Sites To protect and preserve previously unrecorded archaeological sites within County Cork as part of any development proposals. The Council will require preservation in situ to protect archaeological monuments discovered. Preservation by record will only be considered in exceptional circumstances.*



## Observations

The observations and recommendations made thus far were made by the former County Archaeologist, Mary Sleeman. I had not read the original EIAR or commented on same as this was prior to my appointment.

The response to the RFI was compiled by John Cronin and Associates (JCA) at the request of Fehily Timoney in relation to the Archaeology Report included as an Appendix to the Cork County Council (CCC) submission on the proposed Ballinagree Wind Farm development (Ref. ABP 312606-22).

### **Turbine Delivery Route (Temporary Staging area)**

The CCC Archaeology Report requested clarification in relation to proposed turbine delivery staging works area in the Drishane Castle (National Monument) property near Millstreet and recommends consideration of the use of Horizontal Directional Drilling (HDD) at a road culvert on the turbine delivery route. Clarification was required to establish if the temporary staging area was to be removed on completion of the Project and if the area is to be returned to green field. The applicant has clarified that construction of a temporary staging area comprising aggregate hard standing and associated access track to and from the public road R583 in the grounds of Drishane Castle will occur and that removal of masonry wall will occur to facilitate temporary access from public road R583. The aforementioned staging area is to be removed and the area will be fully reinstated and returned to green pasture upon completion of staging works.

**This has been clarified and is satisfactory.**

### **Turbine Delivery Route (Ballinagree East Culvert)**

The CCC Archaeology Report (Mary Sleeman) states that the use of Horizontal Directional Drilling (HDD) techniques utilised at other bridge crossings should be considered at the location of this culvert. The proposed removal of a stone built culvert feature under a public road in Ballinagree East townland is required to facilitate the delivery of turbines to the wind farm site.

The applicant's response is as follows:

*'As described in Section 14.3.4.3 of the EIAR, this culvert likely dates to the post-1840s period as this section of road is not present on the 1st edition 6-inch Ordnance Survey map. The culvert is not a Protected Structure and is also not included in the National Inventory of Architectural Heritage but is interpreted in the EIAR as a feature of local cultural heritage interest. The EIAR mitigation for this culvert entails the compilation of a detailed pre-works record in written, drawn and photographic formats and archaeological monitoring of construction phase works at its location. The HDD technique referred to in the CCC Archaeological Report is a methodology utilised to facilitate the installation of cables at bridge crossings along the grid connection route and it is not an applicable technique for the proposed works at this location which are required to facilitate the delivery of turbines to the wind farm site'.*

**The response has been clarified. I am suggesting that prior to the removal of the section of the culvert that it be subject to a pre-construction survey (Preservation by record) (descriptive, plans drawn to scale and a photographic). The details and results of the survey should be submitted to the Local Authority (in report form) prior to the commencement of works in this area.**

**Wind Farm: Omission of Turbine 8**

Mary Sleeman in her Archaeology Report recommended the omission of Turbine 8 as currently proposed as it will negatively impact on the setting of a stone row (CO049-020) and the surrounding prehistoric landscape.

The applicant's response is as follows:

*'The following section collates contextual information on the current condition of stone row (CO049-020), which has been partially levelled, and known prehistoric sites within the surrounding landscape, a number of which retain little or no surface expressions. The stone row is located 430m to the southeast of the proposed location of Turbine 8 and is 350m from the nearest section of the proposed access track to this turbine. The description of this monument published in the Archaeological Inventory of County Cork. Volume 3: Mid Cork (1997) notes that it formerly comprised a line of three upright stones which were set on a northeast to southwest alignment. The inventory descriptions in this publication are based on field surveys carried out by the Cork Archaeological Survey during the 1980s and early 1990s. As detailed in Table 14-15 of the EIAR, which includes an appraisal of the landscape setting of the monument, the stone row was significantly disturbed at some point following its inspection by the Cork Archaeological Survey and only one of the stones now survives upright at the location. One of the levelled stones lies prostrate on the nearby ground while the third stone has been removed from the location. While only one of the upright stones remains extant and the monument no longer retains a surface expression as stone row feature, it is also noted in Table 14-15 of the EIAR that none of the proposed turbines impinge on its original recorded alignment to the southwest and this includes the proposed location of Turbine 8 which is 430m to the northwest of the stone row.*

*There are three recorded prehistoric sites of likely Bronze Age date located within a 1km area extending from the stone row location and each of these, including their views and settings, are described in Table 14-15 of the EIAR. A burnt mound site (CO049-068----) located c.560m to the south of the stone row comprises a levelled surface spread identified within a field after ploughing works. This site had no surface expression when inspected during the assessment and as noted in Table 14-15 of the EIAR, the ground level views from its location towards the north are obscured by natural topography. Two stone circles (CO049-007---- & CO049-008----) are located on the opposite side of a large ridgeline which rises steeply upwards in the lands to the north of the stone row. The stone circles are located at respective distances of 915m and 560m from the stone row. As noted in Table 14-15 of the EIAR, this ridgeline completely screens ground level views from the stone circles towards the archaeological sites on its opposite side of the ridge, including the location of the stone row. This landscape setting indicates that these monuments were not constructed to create any intervisible sightlines between their locations. The proposed location of Turbine 8 will, therefore, not impinge on any potential ground level sightlines between the stone row and stone circles as none exist and, in addition, the proposed turbine location is not sited between their locations.*

*There are also three recorded fulachta fiadh sites of likely Bronze Age date within the southern area of the wind farm site (CO049-057----, CO049-058---& CO049-059-----). These are located in a commercial forestry plantation located c.1.2km to the southwest of the stone row and c.1.17km southwest of Turbine 8. As detailed in Table 14-15 of the EIAR, while existing views from their locations are now completely screened by trees, the partially or completely levelled remains of these sites appear to be located within an area with dominant views to the south. In addition, even when fully extant, fulachta fiadh do not possess visual alignment attributes and Turbine 8 is not located within any potential direct sightline between their locations and the stone row. As noted in Table 14-6 of the EIAR, an extant stone pair (CO060-019----), which is orientated NE-SW, is located within a field to the south of the forestry plantation containing the three fulachta fiadh, has no direct alignment with any of the proposed turbine locations, including Turbine 8. This monument is located outside the site boundary, but a review of satellite images indicates that any potential ground level views towards the stone row are now likely screened by the adjacent forestry plantation.*

*Turbine 8 and its associated infrastructure, including its hardstand and access road, will result in no predicted direct impacts on Stone Row CO049-020---- or any other archaeological monuments. The*

*project mitigation at its location includes advance geophysical and archaeological test trenching of the footprint of the turbine and its associated hardstand and access track. While the proposed wind farm development has been interpreted as resulting in a predicted moderate indirect impact on the wider setting of this partially levelled monument during the operational phase of the Project, as noted in Section 14.4.4 of the EIAR, this impact will be reversed during the decommissioning phase.*

#### **Response to Further Information Submitted**

**The Stone Row is located 430m from Turbine 8. The monument CO049-020 (originally 3 upright stones) has been disturbed with only one stone remaining which lies upright, one levelled and one missing. It had a north-east/south-west alignment and according to the applicant, there are no turbines within this trajectory. There are no proposed turbines along this alignment although verified data and imagery would have assisted in the submission response by the applicant using viewshed analysis or software to ascertain the alignments with the rising and setting of the sun in this location. Shadow flicker has not been addressed with the stone row in mind although since the stone row is largely disturbed, I am not overly concerned about this element. There were no original or current direct sightline views to other stone circles CO049-007 & CO049-008 to the north therefore intervisibility between monuments is not impacted since it does not occur. The applicant has suggested that there will be no direct impacts to the monument and the CCC report concurred with this conclusion. The concerns raised in the CCC report were not relating to direct effects but rather negative effects on setting. It is my opinion that there are no mitigation measures that will alleviate potential negative effects on setting resulting from turbines but in this instance given the separation distance of 430m to the nearest turbine, the poorly preserved nature of the monument and the lack of existing sightlines to the stone circles to the north to the north, I will accept the applicants' response.**

#### **Omission of Turbine 9**

The Archaeological report by Mary Sleeman recommended the omission of Turbine 9 given its proximity to Stone Circle (CO049-008) and also cites the following monuments located within the wider landscape: Stone Circle CO049-007, Stone Row CO049-020 and Fulachta Fiadh CO049-057, CO049-058 & CO049-059. The applicant's response is as follows:

*'The multiple stone circle monument (CO049-008) is located 270m to southeast of the proposed location of Turbine 9. The proposed access track to the turbine extends from the south through a forestry plantation and includes a section of an existing surfaced farm lane. This route was designed to avoid the area of pasture farmland which contains this stone circle. The monument is shown within an open area of land on the 1st edition 6-inch map OS and the existing enclosed pasture field at its location was likely created during late 19th or early 20th century land reclamation works.*

*The stone circle contains 15 remaining upright stones (of a likely original 17 stones) that range between 40cm and 90cm in height and have been arranged to form an alignment extending to the west-southwest. As noted in Table 14-15 of the EIAR, which includes an appraisal of its setting within the landscape and views to other prehistoric monuments, this monument is situated within a low-lying area with the wider terrain rising to the east and west.*

*There are no recorded archaeological sites or notable natural topographic features located on the sections of the visually dominant ridgeline to the west and west-southwest of the monument and none of the known archaeological sites within the area of the wind farm on the opposite side of the ridgeline are visible at ground level from its location. A review of the location of solar events on the ridgeline during solstice and equinox dates was carried out as part of the EIAR assessment and did not reveal any events which intersected with the monument alignment on these dates.*

*As noted in Section 14.4 of the EIAR, the stone circle is located in a pasture field within private farmland and according to the landowner it is rarely visited. In addition, its location cannot be seen from outside*

*the field as the upright stones are below the level of the surrounding field banks and it does not form a prominent feature within the landscape. The proposed Project will incorporate a signed amenity trail which will facilitate public access to the location which is assessed as a moderate positive impact on the cultural heritage resource of the area. The emerging wind farm layout was subject to archaeological review during the design phase, and this included inputs from the project Landscape and Visual consultants in relation to potential visual impacts on Stone Circle CO049-008. While turbines will be visible from its location, the review process assisted in the development of a turbine layout intended to avoid direct intrusions on its ritual alignment. In addition, a potential turbine location extending into the east end of the area of fields containing the stone circle was removed from the Project due to a combination of potential archaeological and noise issues identified during this review process. Turbine 9 was also reviewed as part of this process and its proposed location was determined based on a number of environmental constraints, including maximising its set-back from the stone circle as far as feasible.*

*The proposed location of Turbine 9 and its associated infrastructure will not result in any predicted direct impacts on Stone Circle CO049-008---and will not impinge on its alignment which is orientated to the west southwest. The archaeological mitigation measures for the turbine comprise advance geophysical surveys and archaeological test trenching of the footprint of the turbine and its associated hardstand. While the turbine will contribute to the predicted significant indirect impact on the setting of Stone Circle CO049-008---- during the operational phase of the Project, as noted in Section 14.4.4 of the EIAR, this impact will be completely reversed by the decommissioning of the wind farm.*

*Information on the other prehistoric monuments within the wider environs of Turbine 9 as cited in the CCC Archaeology Report (Stone Circle CO049-007, Stone Row CO049-020 and Fulachta Fiadh CO049-057, CO049-058 & CO049-059) is presented in the EIAR chapter and summary details are collated below. As detailed in Chapter 14 of the EIAR, Stone Circle CO049-007 remains well-preserved in a clearing within an area of a modern forestry plantation which will remain unfelled for the lifespan of the proposed Project. This is part of the project proposal in order to protect the above stone circle's existing setting. The surrounding conifer trees within the plantation are set c.10m back from its location and screen ground and sky level views from the monument in all directions, including towards its set alignment to the west-southwest as well as towards the location of Turbine 9 which is 420m directly west. As noted within Table 14-15 of the EIAR, the area between this monument and the field containing stone circle (CO049-008), which is located c.370m to the south, is heavily forested and there is no existing intervisibility between these monuments. Neither stone circle is situated on a prominence and given their low heights combined with the undulating local topography they may not have been intervisible prior to the forestry plantation. In any event, the proposed location of Turbine 9 will not impinge on any potential pre-forestry sightlines between the two monuments. While Stone Circle CO049-007---- is a National Monument in State Ownership (ref. 660) there are no direction signs in the surrounding area, there are no forest tracks leading to its location and a GPS had to be used to find the monument during the field survey. The amenity trail element of the proposed Project will include location and information signage for this monument and will facilitate public access to its environs resulting in a positive impact. No new access tracks or other elements of the trail will be constructed or erected at its location in order to avoid potential indirect negative impacts on its setting.*

*Details on the other prehistoric monuments within the wider environs of Turbine 9 as cited in the CCC Archaeology Report are provided in the above section in relation to Turbine 8 which notes these monuments have no identified interconnecting sightlines and all have been subject to modern disturbance. The location of Turbine 9 will not impinge on the projected alignment of Stone Row CO049-020, which now retains only one extant stone upright and is located c.750m to the south of the turbine. As described in the EIAR chapter, the three fulachta fiadh sites cited in the CCC Archaeology Report comprise partially or completely levelled sites within a modern forestry plantation and are located 1.7km to the southwest of Turbine 9. In conclusion, Turbine 9 is not interpreted as contributing to any predicted*

*significant indirect impacts on the settings of Stone Circle CO049-007, Stone Row CO049-020 and Fulachta Fiadh CO049-057, CO049-058 & CO049-059'.*

#### **Response to Further Information submitted**

The applicant has provided detail regarding how the applicant arrived at the current design (through a number of layout iterations) and how the design avoided impacting on the monument. I accept that it has avoided direct negative effects, however, the current design will arise in a negative effect on the setting of this monument as indicated in both the EIAR and the RFI response. The monument is largely intact and well preserved in its own right and is therefore of high heritage value. The applicant has addressed concerns regarding intervisibility to other monuments within the windfarm and that the other monuments are not visible at ground level from the stone circle. This is acceptable and it has been established that intervisibility between monuments will not be impacted by Turbine 9. The applicant has stated that (via the landowner) that the monument is rarely visited. The lack of visitor numbers does not alleviate the negative effects to the monument and furthermore, the proposed amenity trail in accordance with the applicant's response, will offer public access to the monument. The applicant has stated in their response that *'the turbine will contribute to the predicted significant indirect impact on the setting of Stone Circle CO049-008'* but that this will be reversed during decommissioning. I am assessing the impacts on the lifetime of the project and not after the windfarm has been decommissioned. The mitigation measures proposed (including geophysical survey and test trenching) address the potential direct effects to sub-surface archaeology and do not address impacts and negative effects on setting. In this instance I concur with the recommendations of the former County Archaeologist for removal of Turbine 9 as it stands in the current design. Turbine 9 will negatively affect the setting of the nearest Stone circle (Multiple stone circle CO049-008).

#### **Recommendations:**

In accordance with the original comments of the County Archaeologist (dated 2022) I concur with the mitigation proposed in Section of Chapter 14.5 of EIAR as amended below and recommend they are attached as a condition of planning.

The following conditions are attached if planning permission granted:

1. The applicant is required to engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930–2004) to carry out
  - (a) A systematic advance programme of archaeological field-walking survey in areas where pre-construction tree felling is to take place in order to identify any previous unrecorded archaeological, cultural or architectural heritage sites. A report shall be submitted to the Local Authority on completion of the survey. Archaeological monitoring under license of ground excavation works shall be carried out in these areas under license by the National Monument Service. A monitoring report shall be submitted to the National Monuments Service and the Local Authority.
  - (b) The turbines, hardstands and associated new access tracks located within improved green field areas shall be subject to a pre-construction geophysical survey followed by program of licensed targeted archaeological test trenching. The testing plan shall be submitted to the Local Authority archaeologist for written approval prior to submitting for the license. The testing shall include the investigation of a potential section of a relict field boundary noted in the EIAR.
  - (c) A pre-construction programme of linear archaeological test trenching will be carried out on the footprint of the three turbines (T13, 16 and 17) in these areas and along the routes of any associated new access tracks which will require ground excavation works during the

construction phase. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and/or monitoring may be required and the Planning Authority and National Monuments Service of (Dept. of Housing Local Government and Heritage) will advise the Applicant/Developer with regard to these matters.

(d) Having completed the work, the archaeologist shall submit a written report to the Planning Authority and to the National Monuments Service for consideration. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with National Monuments Service

2. Having regard to the proximity of proposed Turbine 9 to archaeological monument CO049-008 Multiple Stone Circle and its setting, it is considered that the proposed Turbine (9) would have detrimental and significant visual impact on the Recorded Archaeological Monument and would therefore be contrary to Objective HE16-2 of the County Development Plan 2022 to protect sites and their settings and HE16-11 Landscapes and their setting. Turbine 9 should be omitted.

3. The applicant shall engage the services of a suitably qualified archaeologist to undertake a pre-construction detailed survey and photographic record of the section of the drystone wall which forms part of the Ballynagree East and Carrigagulla townland boundary, located within the northern end of the T5 hardstand. A report on the results of the survey shall be submitted to the Local Authority and National Monuments service on completion of the survey.

4. The applicant is required to engage the services of a suitably qualified archaeologist to monitor under licence from the National Monument Service (NMS) of the Department of Housing, Local Government and Heritage all ground works within green field locations, including HDD areas required as part of the grid connection, all ground works within the environs of the Famine memorials at the crossroads in Killberriherth townland and green field areas required to accommodate the turbine delivery route. The ground works/removal of topsoil shall be carried out under the direction of the appointed archaeologist. Intermittently monitoring /archaeological watching brief of other grid connection trench excavations within the public road will be carried out as part of the licensed archaeological monitoring of the project. In advance of the development a method statement shall be submitted for the watching brief for written approval of the County archaeologist. If archaeological material is found during the course of monitoring, the archaeologist shall have work on the site suspended in this area, pending a decision as to how best to deal with the archaeology. Monitoring is to take place to the uppermost archaeological horizons only. The developer shall be prepared to be advised by the Local Authority Archaeologist and National Monuments Service with regard to any necessary mitigating action (e.g. preservation in situ, or excavation). The applicant shall facilitate the archaeologist in recording all the archaeological material found. In addition, the archaeologist shall record all Undesignated Cultural features to be impacted /removed by the development including historic roads, townland and field boundaries (photographs, sketch section & plans, written description). The Planning Authority and National Monuments Service shall be furnished with a written report describing the results of the monitoring.

5. Prior to the commencement of the development the applicant is required to engage the services of a suitably qualified archaeologist, under licence from the National Monument Service (NMS) of the Department of Housing, Local Government and Heritage, to carry out a geophysical survey of the green field area for the temporary hardstand in the southern end of the Drishane Castle demesne. This is to be followed by archaeological test trenching both targeting the results of any geophysical anomalies and also testing in areas with no anomalies

at regular intervals across the site. A report on the results of the Geophysical survey and testing shall be submitted to the National Monuments Service and the Local Authority.

## (ii) Ecology Office

### **Cork County Council Ecology Office submission in respect of the Ballinagree Windfarm Strategic Infrastructure Development (An Bord Pleanála Ref No ABP-312606-22) Further Information Response.**

Given the late referral of the Further Information Response received by the An Bord Pleanála to Cork County Council, the Ecology Office has been unable to provide an in depth response to same. As such, please find below the Ecology Office high level remarks in respect of certain aspect of the applicant's response.

**Condition for the omission of certain Turbines** – Notwithstanding the applicant contention that the four turbines recommended by us for exclusion from the proposal should be retained, the position of the Ecology Office in respect of same is that these turbines be omitted for the following reasons:

- Facilitation of these turbines at their proposed location would be contrary to Objective ET 13-7 and Objective BE 15-2 of the County Development Plan 2022;
- Having regard to preplanning advice advising the applicant to avoid impacts to habitats of high ecological value such as peatland habitats to align with the policies and objectives of the County Development Plan;
- Having regard to the extent of loss, degradation and fragmentation of upland habitats and habitats of high biodiversity value in the wider area.

There is considerable pressure on upland habitats related to proposed renewable energy developments and it is recommended that the Board have regard to in-combination effects on such habitat types in that context. In that regard we would request the Board consider cumulative effects including other SID application in the wider area which propose development over significant areas of upland habitat of high biodiversity value such as the Gortyrachilly Windfarm Strategic Infrastructure Development.

**Further information response in respect of Hen Harrier & Golden Plover** – We request that the assessment of the Board in respect of the potential implications the proposal could have on Hen Harrier, a species of conservation interest of the nearby Mullaghanish to Musheramore Mountains Special Protection Area should have regard to recently released Threat Response Plan and National Survey findings, which were not available us at the time of our opinion. These are as follows:

- The 2022 National Survey of breeding Hen Harrier in Ireland (Ruddock. et. al. 2024); and
- Threat Response Plan for the Hen Harrier 2024-2028 Draft for Public Consultation (NPWS 2024).

With respect to Golden Plover, we disagree with the response of the consultant ecologists which asserts that the development will not impact on Golden Plover and we continue to be concerned about the likely effects the proposal will have on the species. Therefore, we again recommend that further assessment is required in respect of this red-listed species of conservation concern. This recommendation is made having regard to data gathered by the Irish Wetland Bird Survey (I-WeBS) which has seen a large decline of the species of 54% over a 23-year period.

Submission on further information received by An Bord Pleanála.

Furthermore, we request that the Board have regard Article 4 (4) of the Birds Directive and Article 10 of Habitats Directive in completion of their assessment in respect of species such as Hen Harrier and Golden Plover given the loss, fragmentation and alteration habitat utilised by these species in the wider environment.

Further to the conditions recommended in our previous report we request the Board incorporates the imposition of a further condition of planning which includes for a detailed Post-Construction Ornithological Monitoring and Mitigation Plan for the site. This plan should be prepared by a suitably experienced and qualified ornithologist and it is recommended that it include the following:

- Details of ornithological post construction monitoring and surveys for the site and its zone of influence for the lifetime of the proposal;
- Details of fatality monitoring for the lifetime of the proposal.
- Details of a fluid mitigation response based on the assessment of results / observations collected during monitoring / surveys and the provision for review and updating of the monitoring programme and mitigation strategy arising from the ongoing monitoring e.g. in the event that its discovered that particular periods of the year have large numbers of species of conservation traversing and/or utilising the site then a curtailment programme shall be implemented.

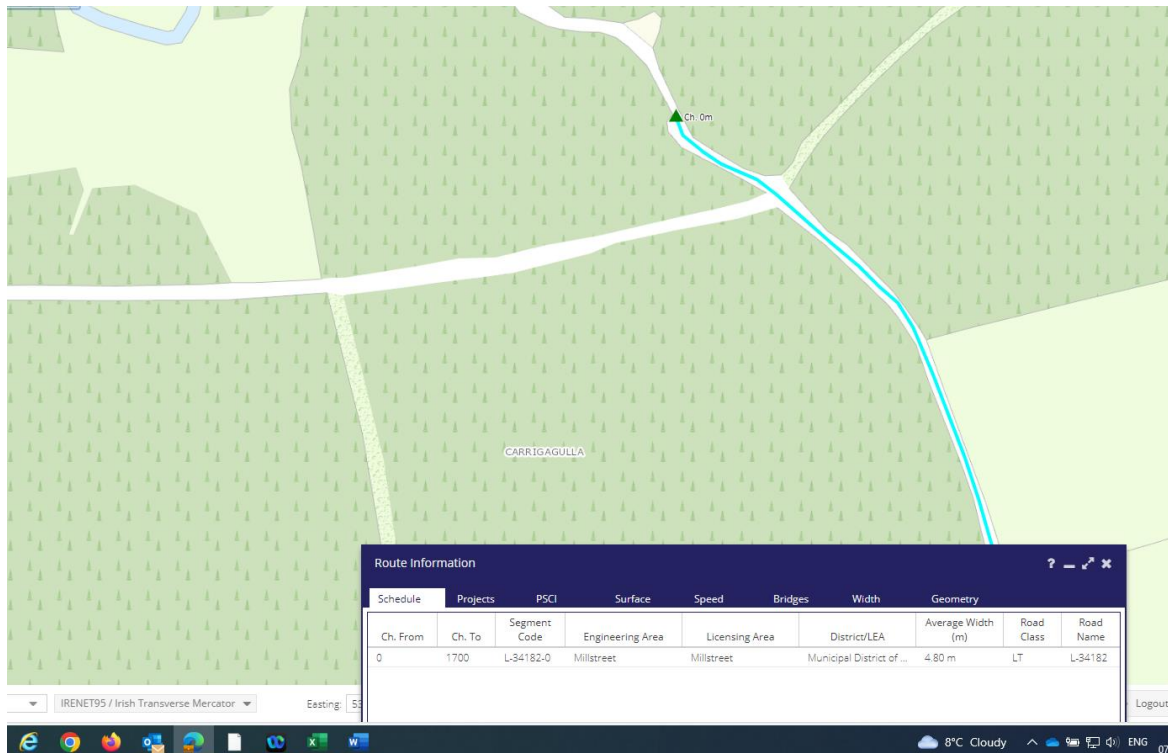
Cork County Council Ecology Office



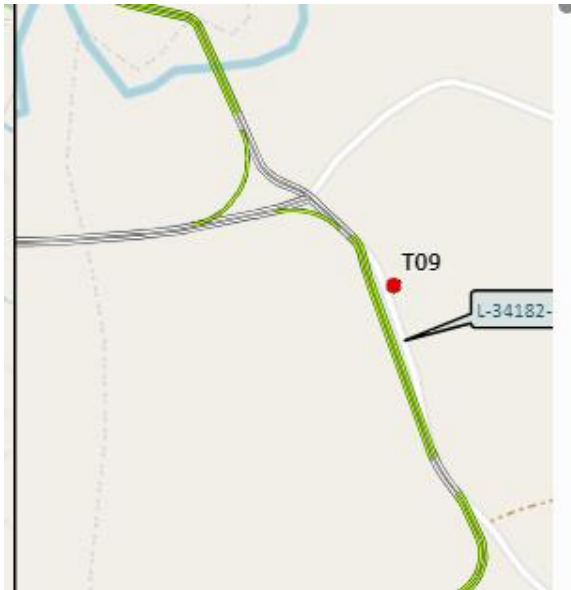
**(iii) Area Engineers Report****Response to RFI Letter 5/1/24**

Location of Turbine 9 in relation to Public Road.

There seems to be some confusion on this matter. Below is the screen shot from the Public Road Register – the L-34182 is highlighted in blue. When compared to the second screenshot below



as extracted from Page 43 of the response to RFI it is clear that the public road continues north past



T09. I accept that this surface may be poor or non-existent but none the less it is legally registered as a public road. The applicant must address this issue – it is not acceptable to simply dismiss it as an ‘error in the shapefile’.

## Cable Route;

The applicant has responded saying that on two lane routes where the cable is being installed that they will reinstate the trench.

Experience of previous windfarms on 2 lane roads where cable routes are installed is that the 2<sup>nd</sup> lane is used for moving plant and machinery while the 1<sup>st</sup> lane is being excavated. This results in the 2<sup>nd</sup> lane being severely damaged. It then become virtually impossible to match in the trench reinstatement to the road surface in a satisfactory manner. For this reason:

*All roads where the cable route is installed shall receive full road width regulating and resurfacing. Surface dressing alone will not suffice. The resurfacing type shall match existing surfaces.*

## Construction Traffic:

The response is noted but no construction traffic **of any kind** including light vehicle or workers travelling to or from site is to be allowed on public roads:

*L-7464-0, L-34192-0, L-7463-0, L-34183-0, L-34182-0 (except at northern end), L-34181-0, L-7461-44( south of the site boundary), L-5245-26,*

*L-3418 between Coppeleen Bawn Cross and Annaganihy Cross.*

James Dwyer, SEE, 8 /3 2024

Submission on further information received by An Bord Pleanála.