

Sinead White

From: Housing Manager DAU <Manager.DAU@npws.gov.ie>
Sent: Friday 31 October 2025 16:16
To: LAPS
Cc: SIDS
Subject: ACP-323635-25 - REDIII Application
Attachments: SID-LK-2025-023 Garrane Green Energy Project Limited ACP-323635-25.pdf

Categories: Sinead White

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Garrane Green Energy Project Limited
ACP-323635-25

9 no. wind turbines, grid connection, an energy storage facility and all associated site works.
Ballynagoul, Creggane and Garrane, County Limerick.

A Chara,

Attached please find the Heritage observations/recommendations of the Department in relation to the aforementioned SID Application.

Can you please confirm receipt of same?

Kind Regards,
Diarmuid

Diarmuid Buttiner
Executive Officer

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreacht
Department of Housing, Local Government and Heritage
Aonad na nIarratas ar Fhorbairt
Development Applications Unit
Oifigí an Rialtais
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Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90
Newtown Road, Wexford, County Wexford, Y35 AP90

Diarmuid.Buttiner@npws.gov.ie
Manager.DAU@npws.gov.ie



Your Ref: **ACP-323635-25**

Our Ref: **SID-LK-2025-023**

(Please quote in all related correspondence)

31 October 2025

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1
D01 V902

Via email to laps@pleanala.ie

Re: Notification under the Planning and Development Act, 2000, as amended.

Proposed Strategic Infrastructure Development (SID): REDIII Application 9 no. wind turbines, grid connection, an energy storage facility and all associated site works at Ballynagoul, Creggane and Garrane, County Limerick.

A chara

I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated headings.

Archaeology

It is noted that the Environmental Impact Assessment Report (EIAR) submitted as part of the planning application includes a desk-based Archaeological Impact Assessment (AIA), which was carried out in relation to the proposed development by John Cronin and Associates (EIAR Chapter 15; date August 2025). The Department notes that no advance archaeological investigations have been carried out within the proposed development site (PDS) to inform the EIAR, other than a walkover survey.

The proposed development is located in proximity to a number of Recorded Monuments—located both within and without the redline boundary for the development—which are subject to statutory protection under Section 12 of the National Monuments (Amendment) Act 1930-2014. In addition, there are a large number of recently identified non-Statutory Sites and Monuments Record (SMR) sites located within the PDS. The EIAR also acknowledges that there is a generalised potential that previously unknown sub-surface archaeological features or deposits may be present within the PDS that may be negatively impacted by the proposed development.



Exclusion zones may be necessary to protect vulnerable heritage assets located in proximity to the proposed development and to ensure that they are safely preserved in situ during the construction phase. In that regard, the Department advises that similar measures may be required at decommissioning phase also and that the advice of a suitably qualified archaeologist may be needed to inform any plan for decommissioning of the development in due course. The Department advises that this can be addressed by the inclusion of an appropriate condition if the development is permitted.

However, there are a number of more substantive errors or omissions in the assessment of this project:

1. Unassessed impacts to terrestrial archaeological heritage:

Review of publicly available LiDAR data and aerial photography shows a series of potential new archaeological sites within the PDS at the following locations (see also Figures 1–4 below):

- a. Possible ring-ditch within sub-station compound.
- b. Possible rectilinear earthwork at/adjacent to T06 and associated infrastructure.
- c. Possible rectilinear earthwork at proposed temporary spoil storage to west of T09 access road.
- d. Three possible ring-ditches adjacent to T09 and associated infrastructure.

Note: these are in addition to the new archaeological sites within the PDS identified by the applicant's own consultant.

2. Baseline archaeological and cultural heritage environment not adequately characterised:

Impact assessments must be informed by an adequate characterisation and understanding of the baseline archaeological and cultural heritage environment and its vulnerabilities. Given the density of known archaeological sites in very close proximity to certain turbines—T05; T06; T08, T09—there is insufficient information available from the desk-based research and walkover field inspection to adequately define likely scale and significance of the potential impacts to archaeological heritage. Targeted Archaeological Geophysical Survey and Archaeological Test Excavation is needed.

Section 15.2.5 of the EIAR states that the following datasets were reviewed as part of the baseline assessment:

- Aerial/satellite images published online by Tailte Éireann, Google Earth and Bing Maps
- LiDAR datasets of the PDS which were commissioned by the Developer.

Section 15.3.6 notes the identification of seven previously unrecorded potential ring-ditch sites in the townland of Creggane to the west of the proposed access track between T03 and T05. No new potential unrecorded archaeological sites were noted from aerial photography.



The Department's review of publicly available aerial photography (primarily Google Earth imagery) and publicly available LiDAR data that incorporates the location of the PDS indicates the presence of a number of potential unrecorded archaeological sites within the PDS that have not been accounted for in the EIAR, despite access to and utilisation of the same datasets. Therefore, the potential impacts of the proposal to these sites have not been assessed within the EIAR and, as a result, the mitigation measures proposed for the development do not take account of any likely impacts to these vulnerable sites.



Figure 1— Excerpt from Google Earth imagery (dated April 2015) with potential enclosure site at proposed location for sub-station outlined in red.

Google Earth imagery from April 2015 (Figure 1) shows a potential ring-ditch (ITM 555073, 625785) located within the footprint of the proposed sub-station; the site also appears on later Google Earth imagery as well. The potential ring-ditch is c. five metres in diameter. This site would be vulnerable to direct impacts from the proposed development. If the development is permitted as currently proposed, then the preservation by record of this site would be required if the sub-station is not redesigned or relocated to allow this site to be preserved in situ.



Figure 2—Excerpt from Google Earth imagery (dated April 2025) with potential rectilinear enclosure site at T06 outlined in red.



Google Earth imagery dating from April 2025 (Figure 2) shows a possible rectilinear enclosure (ITM: 554399, 627191) located within or partially within the footprint for T06 and its associated infrastructure. The site measures c. 20 metres by 18 metres and is visible on earlier Google Earth imagery as well as being faintly visible on OSI orthophotography. It could be a moated site or similar settlement-type enclosure. This site would be vulnerable to direct impacts from the proposed development. If the development is permitted as currently proposed, then the preservation by record of this site would be required if T06 either relocated or omitted to allow this site to be preserved in situ.



Figure 3—Excerpt from Google Earth imagery (dated April 2025) with potential rectilinear earthwork at the propose spoil storage west of the access road to T09.

Google Earth imagery from April 2025 (Figure 3) shows a low-relief rectilinear earthwork located within the area proposed for spoil storage to the west of the access road to T09 (ITM: 553900, 627752). It measures c. 50 metres by 30 metres. The site appears on earlier Google imagery (e.g. Figure 4) and OSI orthophotography; it can be distinguished on both publicly available LiDAR:

https://gsi.geodata.gov.ie/imagehost/rest/services/Lidar/IE_GSI_LiDAR_DTM_HS_TII_2m_IE26_ITM_MH_TIFF/ImageServer and the applicant's own LiDAR dataset as excerpted on page 41 of Chapter 15 of the EIAR.

As the site is located within an area proposed for temporary soil storage it will be vulnerable to direct impacts from the proposed development. As this appears to be a low-relief site (i.e. it has surface expression even if only very slight) it is potentially much more vulnerable to negative effects than sites with no above-ground remains. Stockpiling of soils (even without excavation below present ground level) could result in the loss of the surface expression of the site. Further, the proposed works at this location are temporary construction/enabling works not part of the permanent infrastructure, but any effects to this new site are likely to be



permanent. The Department strongly advises that the spoil storage area should either be redesigned or relocated to ensure the preservation in situ of this new site. If the development is permitted as currently proposed, then the preservation by record of this site would be required.



Figure 4—Excerpt from Google Earth imagery (dated March 2016) showing location for T09. Known non-Statutory SMR sites are shown in blue; three additional potential ring-barrows and a rectilinear earthwork are shown in red.

Google Earth imagery from March 2016 (Figure 4) shows three further potential ring-ditches within the field where T09 would be located (ITM: 554109, 627898; 554190, 627865; 554014, 627780). They range in diameter from c. 6 metres to c. 12 metres. These three sites are in addition to the two known non-Statutory SMR sites (LI047-112----; LI047-113----). While none of the sites appear to be within the footprint of T09 or its associated infrastructure, their close proximity would make them vulnerable to direct impacts from construction activity. Full exclusion zones of appropriate size and scale would be need to be put in place and secured/demarcated to ensure the preservation in situ of these sites during construction and decommissioning phases.

Impact assessments must be informed by an adequate characterisation and understanding of the baseline archaeological and cultural heritage environment. In that regard, the Department notes that the assessment has treated the identified archaeological sites within and immediately adjacent to the PDS as individual isolated receptors, without no substantive regard for their landscape context and potential inter-relationships. The proposed development is situated within a dense distribution of known and identifiable archaeological sites. Elements of the proposed infrastructure such as turbines T05, T06, T08, T09 and the proposed spoil stockpile west of T09 are located in close proximity to clusters of known sites with potential direct impacts to those sites. The Sites and Monuments Records (SMR) shows



six ring barrow or ring-ditch sites within the PDS. The applicant's consultant has identified seven further potential ring-ditch sites and the Departments review of the aerial photography and LiDAR data adds a further four potential sites of this type. Of particular concern is the clustering of ring barrow or ring-ditch sites around T08/T09 and to the south of T05. These strongly suggest that the PDS encompasses a prehistoric (most likely Bronze Age) ritual landscape incorporating one or more barrow cemeteries. If such is the case, then it is likely that there are could be many more ring-barrows present (surviving only as sub-surface remains) than have been identified to date from known survey records and examination of aerial photography and LiDAR. It is also possible that other types of archaeological features reflecting more extensive ritual and burial activity may be present in the vicinity of such cemetery clusters, such as cist or pit graves and flat cemeteries (often including urn burials). The proposed development could have quite extensive direct impacts to such a ritual landscape, but there is insufficient information available in the archaeological baseline to assess this.

The only way to confidently assess the extent of such a prehistoric landscape (and any potential direct impacts to it) is through direct prospection using archaeological geophysical survey and targeted archaeological test excavation. The Department notes that the applicant was advised to carry out this type of advance prospection by the Limerick County Archaeologist as part of the pre-planning EIA scoping (see EIAR Section 15.2.7). Deferment of the full archaeological assessment of the project to the post-consent stage (i.e. deferment of the carrying out of any archaeological geophysical survey or archaeological test excavation) as proposed in the EIAR is not appropriate, in this instance, and does not support the making of an informed planning decision. A fuller understanding of this prehistoric landscape may indicate that elements of the proposed development should be substantively redesigned or omitted to ensure the protection of archaeological heritage.

Similarly, the Department notes that the site of the medieval parish church of Kilcoyn/Kilcommon/Hakmys is located within the PDS (LI047-030001-; LI047-030002-). Located c. 650 metres to the west of it (and outside of the PDS) is Creggane or Hakmys Castle (LI047-029----) and the remains of an associated medieval manorial village (LI047-103----). The parish church would have been an integral part of any medieval manorial settlement so, despite the distance, it is extremely likely that medieval settlement activity would have extended east from the castle to the church. A proposed access track and the proposed met mast are located in the PDS directly between the church and castle/village sites, so could have direct impacts to any such extended village settlement. Again, direct prospection using archaeological geophysical survey and targeted archaeological test excavation would be needed to fully understand this potential medieval settlement landscape.



If Further Information is being requested by the Board, it may be beneficial to consider including clarification of the aforementioned points as part of the request.

Notwithstanding this, the Department therefore, advises that the following should be included as a condition of any grant of permission. Note these recommended conditions align with Sample Conditions C3, C5 and C6 as set out in *OPR Practice Note PN03: Planning Conditions* (October 2022), with appropriate site-specific additions/adaptations based on the particular characteristics of this development and informed by the findings of the EIAR.

Archaeological Requirements:

1. All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 15 of the EIAR (John Cronin and Associates; date August 2025) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order.
2. The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out a pre-development Archaeological Geophysical Survey and a pre-development Archaeological Test Excavation of the development site for all greenfield sections of the development and to submit an archaeological impact assessment report for the written agreement of the planning authority, following consultation with the Department, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.
 - a. The Archaeological Geophysical Survey must be carried out under licence or consent from the National Monuments Service of this Department (as applies) and in accordance with an approved method statement. Having completed the work, the archaeologist shall submit a written report to this Department and the Planning Authority describing the results of the Archaeological Geophysical Survey.
 - b. The archaeologist shall liaise with this Department to establish—based on the results the Archaeological Geophysical Survey—the appropriate scope of the Archaeological Test Excavation to adequately characterise the character and extent of any potential sub-surface archaeological material within the development site.
 - c. The report on the Archaeological Test Excavation shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or monitoring may be required.



- d. Any further archaeological mitigation requirements specified by the planning authority, following consultation with this Department, shall be complied with by the developer.
 - e. No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the planning authority.
 - 3. In advance of the commencement of any construction works, the developer shall engage a suitably qualified archaeologist to carry out Full Archaeological Excavation (licensed under the National Monuments Acts) of newly identified archaeological sites at the sub-station, T06 and spoil storage at T09.
 - a. The Full Archaeological Excavation shall be carried out to according to Best Archaeological Practice and in accordance with an approved Method Statement that shall incorporate a strategy for environmental sampling, finds retrieval and conservation and subsequent publication or other suitable dissemination of results.
 - b. If significant archaeological features are discovered during the course of the Full Archaeological Excavation, work on site shall stop pending a decision of the planning authority, in consultation with this Department, regarding appropriate additional mitigation measures, which may include preservation in-situ or full archaeological excavation. Any additional archaeological mitigation requirements specified by the planning authority, following consultation with this Department, shall be complied with by the developer.
 - c. No construction works shall be carried out on site until a Preliminary Excavation Report on the Full Archaeological Excavation has been submitted to this Department and the Planning Authority and approval to proceed is agreed in writing.
 - d. The developer shall ensure that any necessary Post-Excavation Analysis—as set out in the Preliminary Excavation Report—including (but not limited to) specialist analysis of finds and samples, scientific dating and conservation of artefacts is completed.
 - e. The developer shall ensure that the results of the Full Archaeological Excavation are adequately disseminated to the public by way of publication or other appropriate means.
 - 4. A suitably qualified archaeologist shall be retained to advise on, and establish appropriate Exclusion Zones around the external-most elements of vulnerable



Heritage Assets located within the development site (as identified in Chapter 15 of the EIAR or by any subsequent investigations associated with the project).

- a. Exclusion Zones shall be fenced off or appropriately demarcated for the duration of construction works in the vicinity of the monuments. The location and extent of each Exclusion Zone and the appropriate methodology for fencing off or demarcating at each location shall be agreed in advance with this Department and the planning authority.
 - b. No groundworks of any kind (including but not limited to advance geotechnical site investigations) and no machinery, storage of materials or any other activity related to construction will be permitted within Exclusion Zones.
5. The Construction Environment Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 15 of the EIAR and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.
6. The applicant shall retain the services of a suitably qualified archaeologist to advise on an archaeological mitigation plan for decommissioning of the development, to include mitigation measures for the removal of the turbines and the protection of any archaeological sites and monuments that are in situ at the site. The Decommissioning Plan shall be updated to include the location of any archaeological or cultural heritage constraints as set out in Chapter 15 of the EIAR and by any subsequent archaeological investigations associated with the project. It shall clearly describe all identified likely impacts from decommissioning—both direct and indirect—and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during decommissioning works.
7. The planning authority and this Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer.

Reason:

To ensure the continued preservation (either *in situ* or by record) of places, caves, sites, features or other objects of archaeological interest.



Nature Conservation

Appropriate Assessment

In assessing ecological connectivity with designated sites, the potential for bird movements through the proposed development site between the Charleville Lagoons and the River Shannon and River Fergus Estuaries SPA has been discounted due to the distance between the sites. However, this assessment only takes local bird movements into account; the potential for SCI birds on passage to and from the SPA to use the Charleville Lagoons has not been considered. For example, Shoveler numbers at the Charleville Lagoons (for which species numbers the lagoons are of national importance) peak in October and early spring¹, indicating that there is some use of the lagoons by birds on passage; whereas Shoveler numbers at the Shannon and Fergus Estuaries SPA peak in winter. This aspect of ecological connectivity between the Charleville Lagoons and the Shannon and Fergus Estuaries SPA needs to be explored more fully.

Ecological Impact Assessment

Ornithology

Collision risk

While detailed diurnal bird monitoring was undertaken, covering different periods of the day and extending to dusk on some occasions, it is considered that due to the extreme proximity of the proposed development to the Charleville Lagoons, their ornithological importance in a national context, and the observed levels and direction of flight activity over the site, the level of nocturnal flight activity over the site also needs to be established to enable robust collision risk assessment to be undertaken. The findings of a radar study of flight activity around Lough Beg, part of Cork Harbour SPA (in relation to a proposed single turbine development), showed a significant level of nocturnal flight activity².

The contribution of the turbine layout and density to collision risk; particularly for flocks, species observed to have strong north-south movement patterns through the site, and species observed to be spending considerable periods of time over the site, is likely to be significant and has not been discussed in the risk assessment.

¹ Lewis, L. J., Burke, B., Fitzgerald, N., Tierney, T. D. & Kelly, S. (2019) Irish Wetland Bird Survey: Waterbird Status and Distribution 2009/10-2015/16. *Irish Wildlife Manuals*, No. 106. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

² Simms, I.C., Plonczkier, P., and Johnson, L. (2011) *Cork Lower Harbour Wind Turbine Development Bird Radar Monitoring Final Report*. Arup/Cork Lower Harbour Energy Group



Examples of particular concern are *inter alia* the Red Listed³ Kestrel, which was recorded as using the site extensively, often flying at rotor height, and breeding either on or in close proximity to the site, with a peak count of up to four birds including a juvenile; the identified strong north – south movement of Cormorant and Heron over the site, and frequent records of Red Listed Golden Plover, Lapwing and Snipe, and Amber-listed Lesser Black-backed and Black-headed Gulls (all including flocks) flying at rotor height over the site. The observed relative significance of any bird movement over the site needs to be qualified by the fact that only diurnal movements have been considered.

Barn Owls (Red Listed) were observed two to three times (there are differing numbers of records provided) including flying at height. While no evidence of breeding was found during dusk surveys of the five buildings initially identified as having roost potential, it is noted that the field sightings were outside of the breeding season, therefore non-breeding use of the buildings on site cannot be ruled out, especially given the historic records of Barn Owl usage of the area (including the building identified as potential roost structure 3) (NBDC distribution maps) and the availability of suitable roost structures on site. A more comprehensive survey of Barn Owl usage of these buildings throughout the year (including as winter roosts) is recommended, in order to better inform a collision risk assessment.

The proposed frequency of carcass monitoring post-construction (monthly) is not considered to be adequate due to the potential for carcasses to be scavenged and, in the case of smaller birds, removed completely by scavengers. Full details of the carcass monitoring protocol, including systematic coverage of the search plot, are needed.

Lesser Horseshoe Bats (Annex II species)

The Lesser Horseshoe record (October 2022) from the proposed development site is considered highly significant, as no roosts are currently known from this area. The October date of the record may indicate a dispersal movement to a winter roost; however, given the availability of several derelict buildings on site, the presence of a transitional Lesser Horseshoe roost, or a night roost, in the vicinity cannot be ruled out. The time stamp of the record has not been provided; this may have given useful information about the proximity of a roost. Due to the extremely low detectability of the Lesser Horseshoe call on static detectors (sometimes only a few metres), any recorded presence of Lesser Horseshoes is likely to indicate a greater level of activity than the number of records would suggest.

It is noted that activity surveys of the potential roost structures on site were carried out in summer, which would not necessarily detect an autumn transitional roost. However, it is also

³ Gilbert, G; Stanbury, A and Lewis, L (2021) Birds of Conservation Concern in Ireland 4: 2020 – 2026. *Irish Birds* 43: 1 – 22



noted that during an activity survey at roost structure 2 (the closest such structure to the Lesser Horseshoe record) an unidentified bat was observed which did not trigger the recorder. While this could have been, for example, a Brown Long-eared Bat, which also has a narrow recorder-detectable range, there is the possibility that it was a Lesser Horseshoe. In any case, the Lesser Horseshoe record should have triggered a comprehensive and targeted survey of Lesser Horseshoe usage of the site; including commuting routes and use of the buildings, throughout the year. However, an October survey was not carried out in 2023, and the static detector for T1 was deployed in a different location; no detailed static detector survey of the hedgerows in this area was carried out.

It would be very important that Lesser Horseshoe commuting routes and usage of the area is established, due to the significant degree of hedgerow and treeline removal proposed. Although replacement planting is planned, this will be in different locations, and in the absence of more detailed information, there is the risk that isolation of a roost (particularly in relation to structure 2), or severing of a significant commuting route, may occur. Replacement planting will also take several years to develop into an effective and sheltered commuting route.

Bat species

Since 33 trees with roosting potential (13 of which may need to be removed) have been identified, further information is needed at this stage as to whether these trees are in fact bat roosts (ie established by emergence survey at the appropriate time of year), and whether they will need to be removed (or be otherwise affected), so that the impact of vegetation clearance on bats can be adequately assessed, and so that a Regulation 54 derogation licence can be applied for if necessary in good time. The issue of potential tree roosts has not been adequately addressed in the survey report.

The proposed carcass search protocol has not been described in detail. It is recommended that a site specific carcass search schedule, and protocol in line with the current NIAE guidelines⁴, is provided.

It is proposed as potential further mitigation to increase the buffer area of clearance if high levels of mortality are found. This could have a negative impact on site connectivity for bats, and needs to be assessed in detail at this stage.

There are two points of concern in relation to the proposal in the Biodiversity Enhancement Management Plan to remove scrub and bramble from the base of hedgerows as part of the hedgerow management plans. Firstly, NPWS are aware of a Badger sett along the eastern boundary of the site, which could be negatively affected by scrub removal. Secondly, the

⁴ NIEA Natural Environment Division (2024) *Guidance on Bat Surveys, Assessment and Mitigation for Onshore Wind Turbine Developments in Northern Ireland*



large scale removal of some of the structural complexity of the hedgerows (particularly if they are over mature and have grown sparse at the base) may affect their quality for foraging and commuting bats. Bramble retains much of its foliage into the winter and therefore provides valuable shelter later in the year, when other foliage cover in the hedgerow is sparse. This may be especially relevant if Lesser Horseshoes are using the site in autumn.

You are requested to send any further communications to this Department's Development Applications Unit (DAU) at manager.dau@npws.gov.ie, or to the following address:

The Manager
Development Applications Unit (DAU)
Government Offices
Newtown Road
Wexford
Y35 AP90

Is mise, le meas

A handwritten signature in blue ink, which appears to read 'Julie Sullivan', is written above a horizontal line.

Julie Sullivan
Assistant Principal
Development Applications Unit
Administration