Alicia O'Dell

18 Ard Caladh
Youghal
P36 PN20

2 November 2026

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

Dear Sir / Madam,

RE: Observation on Strategic Infrastructure Application number: 324632
Applicant: Perigus Energy Ireland Midco Ltd
Description of Development: a 10-year planning permission for the development of a solar farm with an operational life of 40 years.
Location: Knocknagappagh, Barnaviddane, Ballyneague, Ballydaniel, Youghalpark, Ballydaheen and Cornaveigh in County Cork

I am writing in response to the above planning application and list my observations below.

1.0 Incomplete application

1.1 Environmental impact assessment is needed

Perigus have supplied a screening report that concludes the requirement for an EIA by concluding that no significant environmental effects will occur. This is assertion is based on mitiation measures being applied and is not consistent with EIA directive.

> *'While solar farm development projects are not specifically listed as requiring assessment under the EIA Directive…'*[1]

EU guidance does specifically list industrial scale solar installations under Annex II.[2]

This application involves 5,135m on new access tracks. In addition, 7115m worth of tracks will be upgraded (presumably dirt tracks that will now be paved).

[1] Page 3, Applicant's EIA Screening report.

[2] https://op.europa.eu/en/publication-detail/-/publication/e7f9c73c-86ba-11ef-a67d-01aa75ed71a1/language-en. Page 51

A full EIA is legally required for private roads that exceed 2,000 meters (2 km) in length under Schedule 5 (Part 2, Class 10(dd)) of the Planning and Development Regulations. The application gives no mention of this requirement as part of the Legislative Context in their EIA Screening Report.

This application also involves the development of a complex network of drains, soakaways and silt ponds for the entirety of the 323ha site, meaning that all 323ha will be affected by the drains. These drains will not be removed and will be permanent features. Land drainage works on lands used for agriculture trigger a mandatory EIA above 50 hectares.

Additionally the Greenhills Energy Station substation and BESS are 4.7 ha and require significant cut and fill / ground recontouring due to the elevations of the site with a cut volume of 17,304 m2 and a fill volume 36,649 m2 [3]. All the following will be permanent fixtures and will not be removed during decommissioning. However they are not included in the applicant's estimate of 4.7 hectares to be recontoured:

54 Inverter hardstandings and Inverter concrete pads: 15,660 m2 (1.56 Hectares)
33Kv cables pithing sides and off-road - cables and ducts : 2070 m2 (.2 Hectacres)
Network of drains, soakaways, silt ponds: Undisclosed m2

By including all of the areas that will be physically and permanently altered by earthworks, the total pushes this project above the 5 hectare limit that would trigger a mandatory assessment.

By three separate and distinct counts, a mandatory EIAR should have been produced. Without this information, An Coimisiún Pleanála cannot make an informed decision on the environmental effects of this project. As such the precautionary principle needs to be applied and this application refused.

1.2 Inadequate Archeological Assessment

Following the applicant's first submission to Cork County Council, the application was deemed incomplete due to *'the inadequacy of the archeological assessment'*[4]*. 'An assessment of sub-surface archaeology is required at a minimum.*'

. 'A provisional programme of geophysical surveying was agreed across a significant portion of the site, with some areas omitted where known physical constraints created unsuitable conditions for geophysical surveying. A number of fields were also subsequently excluded in the south-western portion of the site due to rough ground and in the south-eastern portion of the site due to the presence of crops of

[3] Applicant's document labelled 300101185-DR-213-P2_Cut-fill-Details-Substation-Compound.pdf

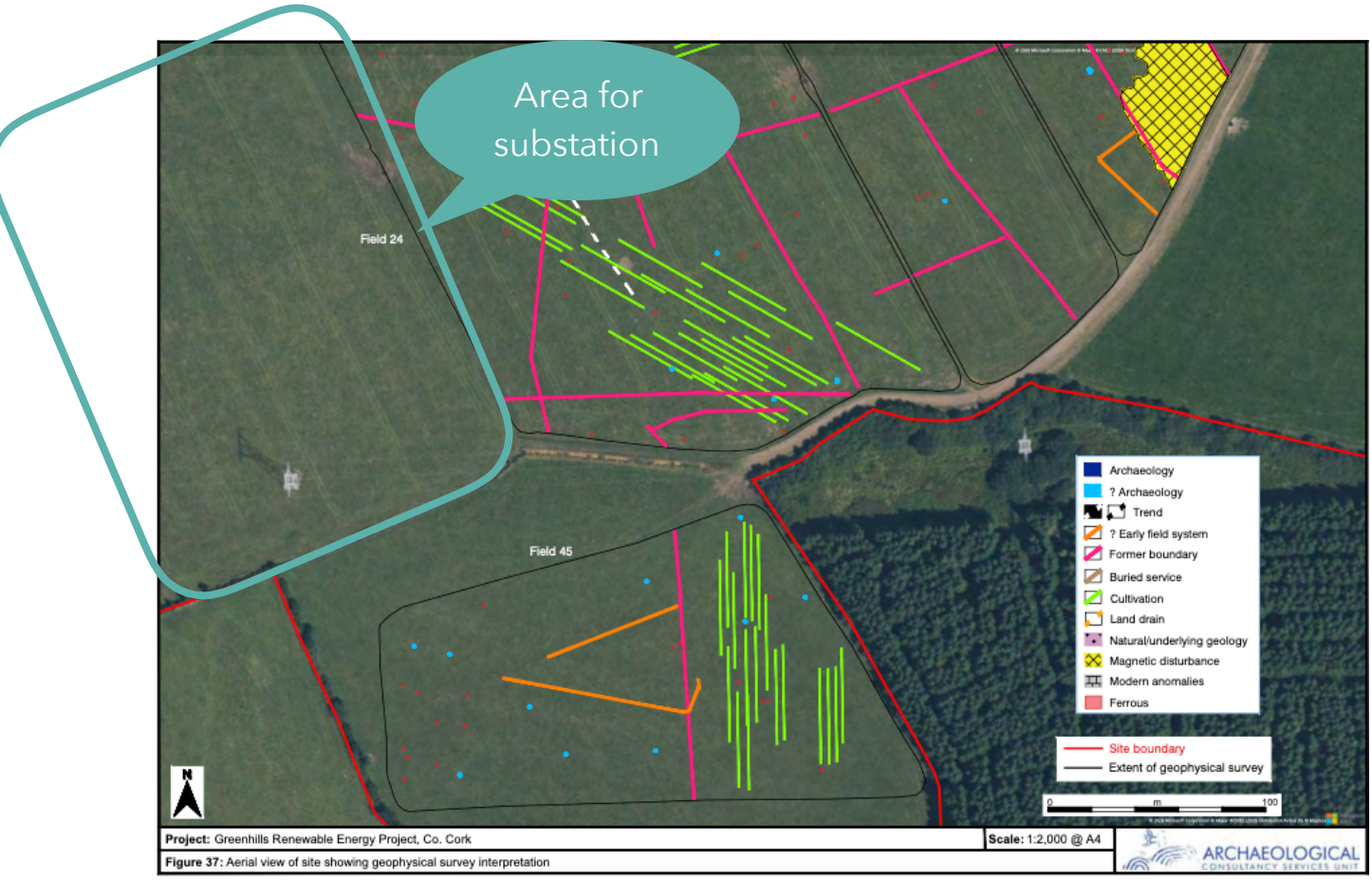
[4] Invalid letter to applicant https://planning.agileapplications.ie/corkcoco/application-details/996775#documents

sufficient height so as to prevent the sensors from reaching an acceptable proximity to the ground.' [5]

The applicant met with Cork County Council and agreed a programme of geophysical surveying. However they have subsequently dropped portions of that agreed area: Perigus reports that approximately 42.85 hectares were not surveyed. The crops are now harvested. The applicant has provided no reasoning as to why they did not wait for the harvest to be able to submit a full and complete application. Nor have they provided any justification for 'unsuitable ground conditions'. The summer has had near continual dry weather. If the ground conditions are such that they cannot run a quad bike over them during these conditions, it raises concerns as to how they are going to install and maintain solar panels in these areas.

Furthermore, Cork County Council specified that '*a Geophysical Survey should be carried out as a first step to guide further assessments/investigations.'* Not only has the geophysical survey not been completed in full, there have been no further investigations to the archaeology they have found.

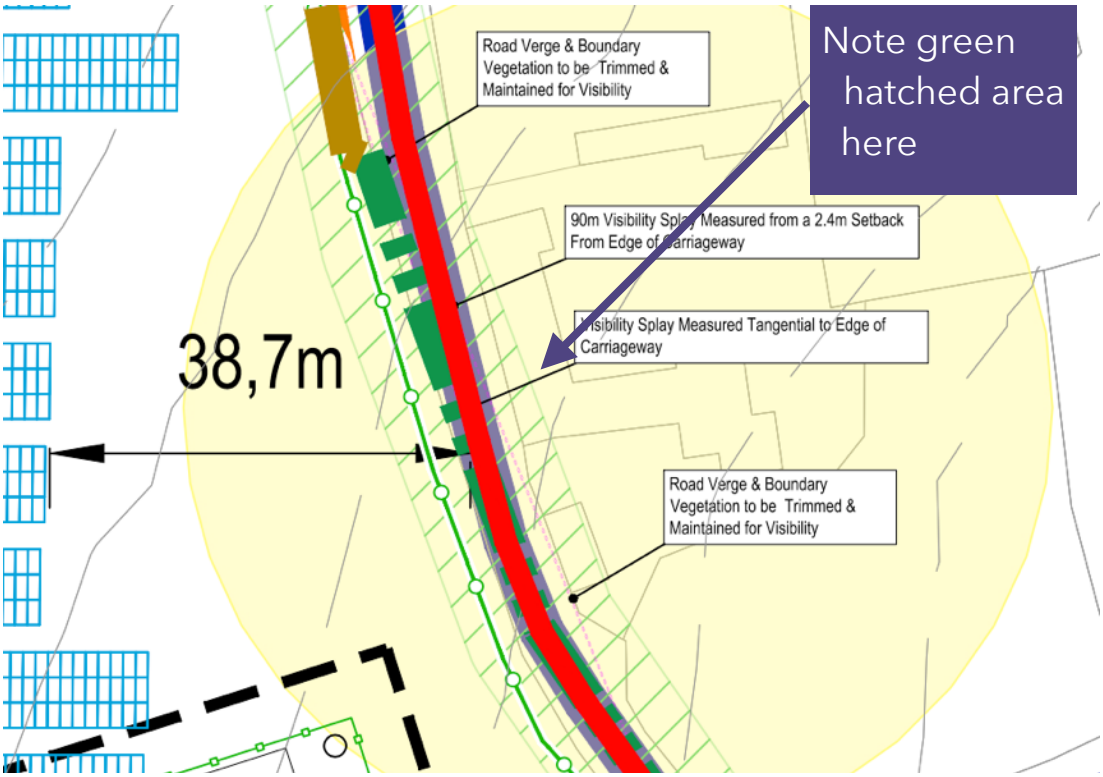
Key to this application, one of the areas that was omitted from the geophysical survey was the proposed location of the substation. This is also a part of the site closest to Rath Ring Fort and as such may contain underground archeology. This area will also be subject to vast recontouring with large areas of cut and fill and as such where it would be most beneficial and where it would be beneficial to see subterranean information.



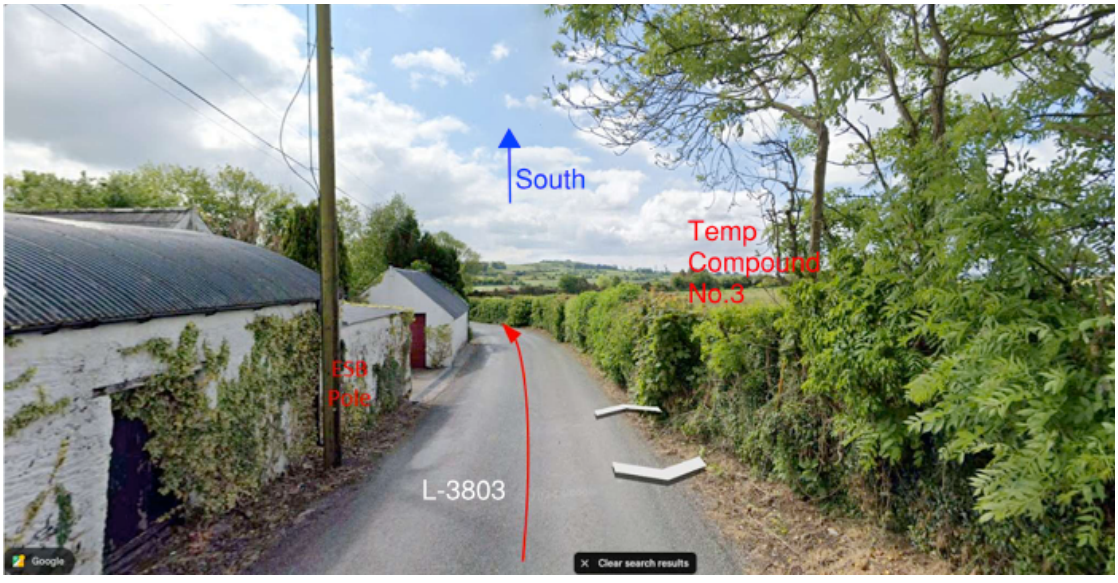
[5] Pg 20 Applicant's Archaeological, Architectural and Cultural Heritage Baseline Impact Assessment

For the Recorded Monuments they have identified, inadequate mitigation measures are in place.

I have taken the section below the applicant's own drawing[6]. The green hatched area is a '14m wide existing hedgerow buffer'. Not only is the hedgerow buffer on the righthand side of the drawing outside the site boundary, they require it to be trimmed and maintained for visibility to achieve their sight lines.



The biggest problem is that it isn't a hedgerow but a private dwelling and an ESB pole that cannot be trimmed for visibility. This discrepancy between what exists in reality and what is shown on the documents submitted is deeply concerning as it has the potential to lead to extremely dangerous road conditions.



[6] 7353-pl-dr-101.pdf



Photo 6: View of surviving vernacular house (13) and approximate location of Barnaviddane 19th century settlement cluster, looking north-east.

In addition, this private dwelling is also CO056-006, a recorded monument near the site boundary. It is shown below in the applicant's Archaeology and Cultural Heritage Impact Assessment. This dwelling is roadside on one of the site's main haul routes to Site entrances 6 and 7.



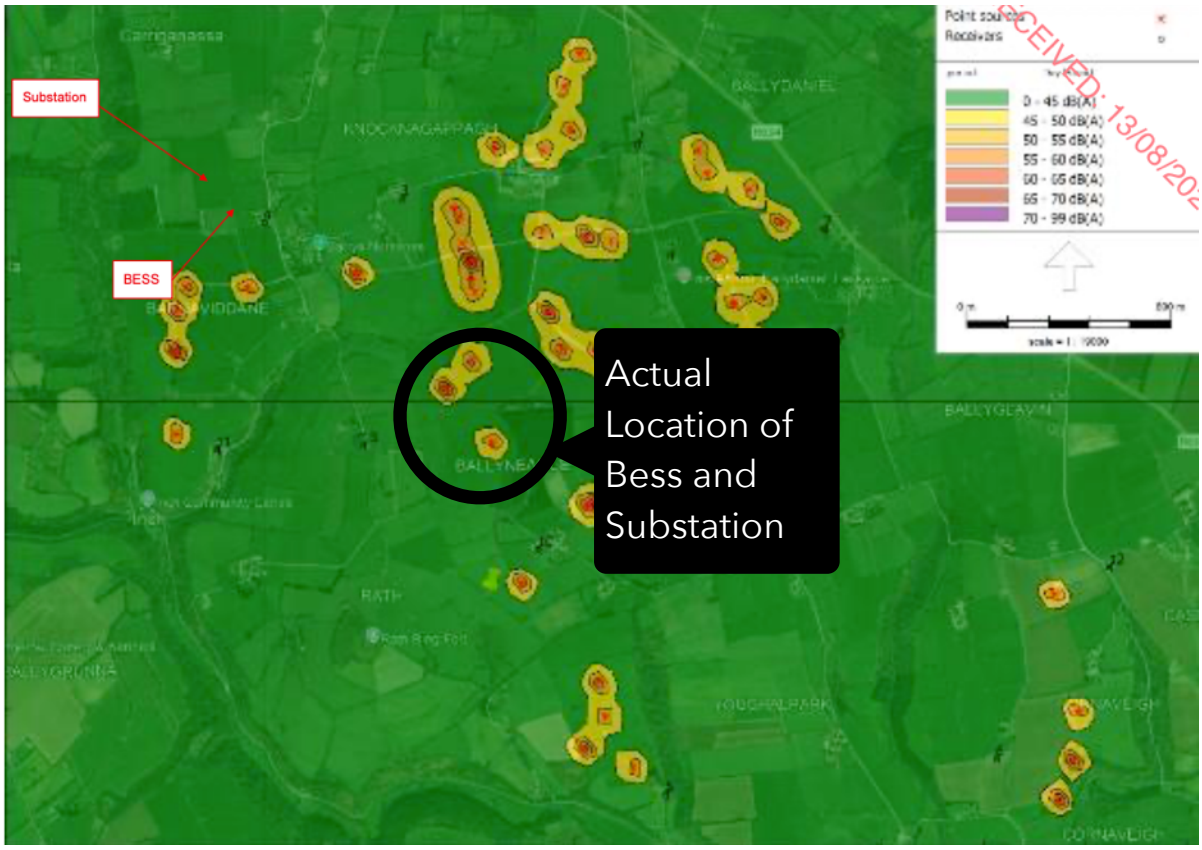
Above is Figure 6: Recommended Buffer Zones from the applicant's Archaeology and Cultural Heritage Report. This vernacular house is 13 on the image above. Figure 13 is marked with blue hatched lines indicating that a buffer zone is recommended.

> '6.27 No groundworks, construction vehicle movements, storage of materials, or other construction- related activities shall take place within the exclusion zones established around recorded monuments and historic structures adjacent to the site boundary, as shown on Figure 6.' [7]

Given CO056-006 is a recorded monument that is located on the immediate roadside, the recommend buffer zone would mean that road should not be used for construction traffic as part of the mitigation measures as per the applicant's own submission. If An Coimisiún Pleanála approves this application, it should maintain the buffer zone and required sightlines, removing Site Access No 3 and the current haul routes to Site Access Nos 6 and 7 from use.

1.3 Incomplete noise assessment

In it's letter to the applicant, Cork County Council also required *'a suitably scaled map should be submitted as part of the assessment showing the location of all noise sensitive locations in the vicinity of the proposed development.'*



[7] Pg 41 Applicant's Archaeology and Cultural Heritage Impact Assessment.

Included above is one of the maps from the applicant's Noise and Vibration Impact Assessment. The Substation and Bess are marked as being located between Carriganassa and Barnaviddane. The location on this portion of the map shows the lowest levels of noise. However, I have ringed in black the proposed location of the Substation and Bess. I note that all similar maps in this document have the same location error. Their assessment and subsequent conclusions have been done using the incorrect location. As such, the applicant has not provided the information needed by An Coimisiún Pleanála to make a fair assessment and the application should again be deemed incomplete.

1.4 Incomplete landscape and visual impact assessment

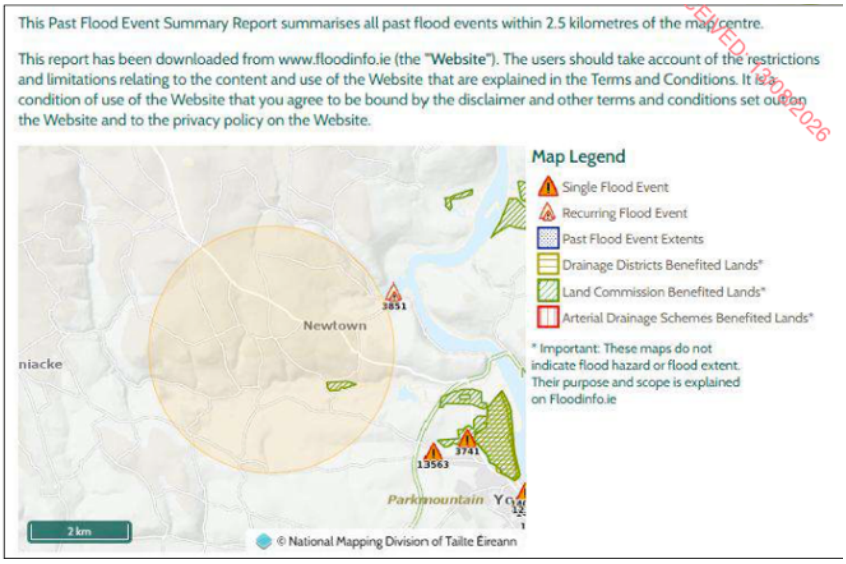
As there is a nearby wind farm development, Cork County Council previously requested a cumulative impact assessment. The cumulative assessment provided is largely descriptive in nature and does not include any visual or analytical evidence that would normally be expected of a development of this scale. There are no cumulative photomontages, cumulative ZTV mapping, cumulative viewpoint analysis, or any visual modelling of the 150m wind turbines that have been granted planning permission. This area is identified by the Cork County Development Plan as having a High Landscape Sensitivity.

1.5 Incomplete application conclusion

Key baseline data is missing, incomplete or incorrect. Under established Irish and EU case law, An Coimisiún Pleanála cannot legally perform an informed assessment. As such the precautionary principle needs to be applied and further information is required before this application can be approved.

2.0 Grounds for refusal

2.1 Flood risk



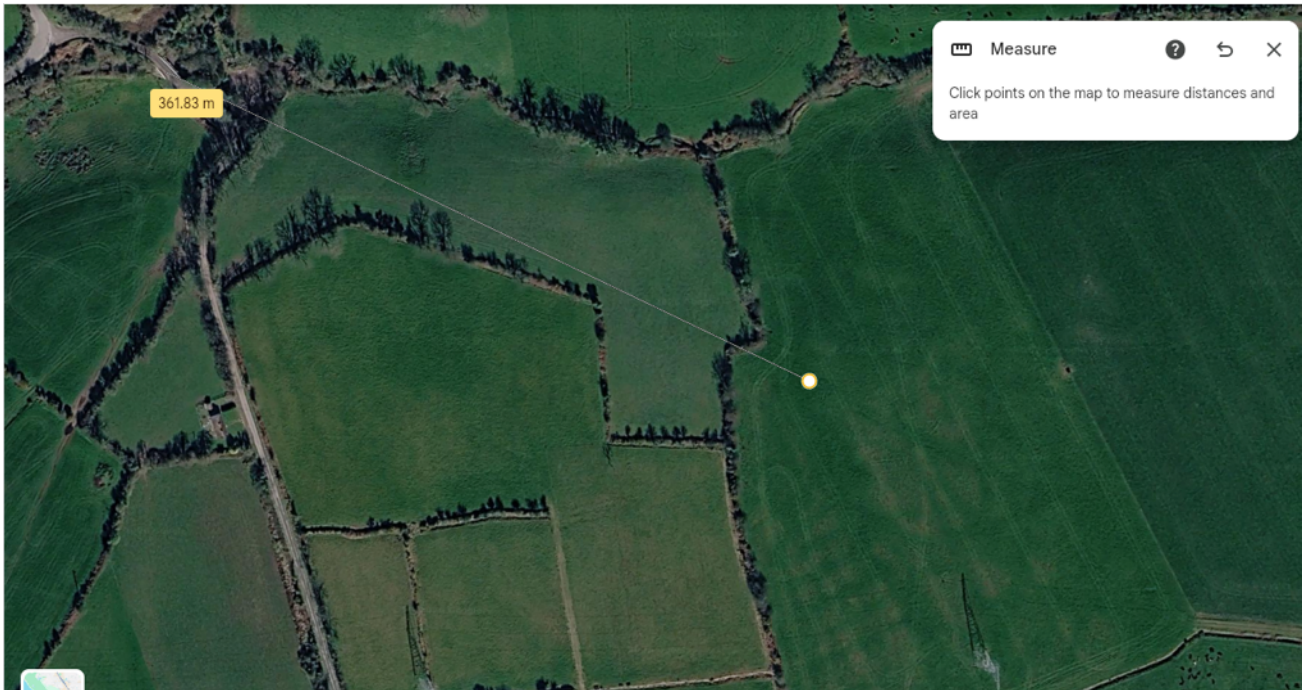
The image above is from the applicant's document 'Appendix N: Land, Soils, Geology, Hydrology and Hydrogeology' (pg 113). The image above is entitled 'Past Flood Events'

and the document states '*The Proposed Development lies within Flood Zone C, with no records or reports of flooding on-site.'*

This area experienced significant flooding in 2023[8] and Perigus was advised of this during their consultations with CCC and locals[9].

Much damage was done to the local road and bridge infrastructure. The photo below is taken from information available on floodinfo.ie (the same site they used for their flood risk image above) detailing work to the road nearest the Substation and BESS[10] following flooding.





[9] Page 35 Planning and Environmental report. Appendix A - Summary of Public Engagement.

[10] https://share.google/4CkLKO3YEEsnwePe0

Above is the approximate location of the substation and the Barnaviddane bridge marked as being within 500m of each other on Google Earth.

. ‘While the Proposed Development includes the addition of 2,100,000m^2 of solar panel surfaces, this does not impact the existing ground below the solar panel array.Therefore, the existing natural responses and processes (recharge potential of rain percolating to groundwater, overland flow, catchment response to rainfall events) will remain unaffected. ‘[11]

Despite the applicant asserting that the ground and natural responses and processes will remain unaffected *‘… a study found that … the runoff increased when assessing simply the introduction of the panel cover by 0.26 m3, which was a difference of only 0.35% (Cook and McCuen, 2013). While this means when assessing the panel cover that smaller sites are likely to have a limited impact this could lead to large additional volumes of water affecting downstream flood risk from a large site.’*[12]

It is concerning to me that Perigus insists there is no flood risk, and that all overland flow will be unaffected. Whilst I understand that they are putting in drainage infrastructure, their starting position is that this is an area with zero flood risk and zero increase to over land flow. This is despite recent and substantial flooding in the immediate vicinity of the Substation and BESS and studies that indicate an increase in runoff. This is especially concerning in a development at this size and proportion as their mitigation strategies may not be sufficient. ‘As outlined in the FRM Guidelines, future developments must avoid where possible areas at risk of flooding, and as ‘the development of the Greenhills Renewable Energy Park is essential infrastructure including electricity substations, it is considered a ‘highly vulnerable development’.’[13] This area has experienced significant flooding in recent years and the sheer volume of run off will increase into the local waterways due the vast coverage of panels. This is not a suitable location for a highly vulnerable development and Perigus have not satisfied the ‘justification test’.

2.2 Scale and disproportional visual impact of site

The industrial scale of the proposal would effectively change the area from rural to industrial. Whilst I understand the need to move quickly towards renewable energy, a development of this size is grossly unsuited to the established rural character of the Inch and Killeagh area. The plans appear to be simultaneously monolithic and patchwork in nature. Much of the site is hilly and with the amount of solar panels on slopes and ridge lines, they are even more conspicuous and have a disproportionate visual impact, especially at this industrial scale.

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[11] 4.2.7 Proposed development and Flood Risk. Applicant’s Appendix N Land, Soils, Geology, Hydrology and Hydrogeology

[12] https://www.essexdesignguide.co.uk/suds/further-guidance/solar-array-development/

[13] 4.2.7 Proposed development and Flood Risk. Applicant’s Appendix N Land, Soils, Geology, Hydrology and Hydrogeology

2.3 Fire risk

While rare, Battery Energy Storage Systems (BESS) introduce a completely new fire risk to the area. Risks and causes can include thermal runaway (where one cell fails and triggers a chain reaction to adjacent cells, leading to intense fire and potential explosion), toxic gas release, electrical failures, and mechanical defects. I have not found any Fire Report within the documentation on how any fire will be safely dealt with after the project has been commissioned, nor anything that describes how fire with be mitigated or contained. The Substation and BESS occupy one of the most remote areas of the site, accessed by rough, potholed single track lanes.





I note that there will be a new track built internally within the development site to build and access the BESS and Substation. However, given the perimeter fencing - this is unlikely to be available to be used by the emergency services. The nearest fire station is in Youghal, roughly 14km away. This is a small fire station with only 2 fire engines.

In addition, a significant watercourse, the River Tohrig is measured at 1.2km downhill from the site of the BESS and Substation. The River Tohrig is a source of drinking water for Youghal[14]. There is no documentation to show how the risk to the river will be managed / mitigated in the event of a large chemical fire. A fire at the battery storage site could present a substantial risk of deleterious matter entering watercourses downstream.

The area remains a rural and agricultural area. BESS fires can require local evacuation which will be especially difficult for the local livestock.

2.4 Affects on water quality and hydrologically linked waterways

Local water is mostly well based. The Touring supplies drinking water to Youghal. The location for the substation is surrounded on three sides by waterways that all drain towards to the Tourig. During construction there is likely to be an increase in silty water

[14] https://share.google/voI2Q5jtTD4hMYx4L

draining. This site has hydrological links to the Blackwater SAC. Construction phase and operation phase effects on local wells and drinking water rivers are inadequately assessed.

Studies have shown that large solar layer arrays have the potential to impact on mayfly and other invertebrate behaviour and egg laying in ways which will impact survival and population sizes[15]. Invertebrate have an aquatic life stage and are essential in the diet of many fish species particularly Atlantic salmon and white clawed crayfish. None of the glint and glare or ecological assessments or AA screening, submitted with the application recognised, considered or addressed this potential impact.

2.5 Potential unregularised works and improper beneficial use

I have searched for planning permission for the past removal of hedgerows and the establishment of the 7115m worth of tracks that Perigus seeks to upgrade. I have not found permission and as such this may be unauthorised development that Perigus seeks to have beneficial use of. A significant volume of hedgerow has been removed on the existing landholding and internal tracks constructed. If the relevant planning permission does not exist, retention must be applied for (complete with the mandatory EIA) before the tracks can be upgraded.

Conclusion

I would ask An Coimisiún Pleanála in the first instance to deem this application incomplete due to the applicant's failure to provide the adequate and legally required information upon which An Coimisiún Pleanála can make an informed planning decision.

Alternatively, I would request that the application is refused due to:

- the scale of the development
- the sloped nature of the site would have a disproportionate visual impact
- flood risk to highly vulnerable development
- fire risk
- affects on local drinking water rivers and the hydrologically connected Blackwater SAC
- lack of buffer zone for monument CO056-006 due to main haul routes to Site Access Nos 6 and 7.

Sincerely,

Alicia O'Dell

[15] https://www.researchgate.net/publication/260592244_Potential_ecological_impacts_of_ground-_mounted_photovoltaic_solar_panels_in_the_UK_An_introduction_and_literature_review