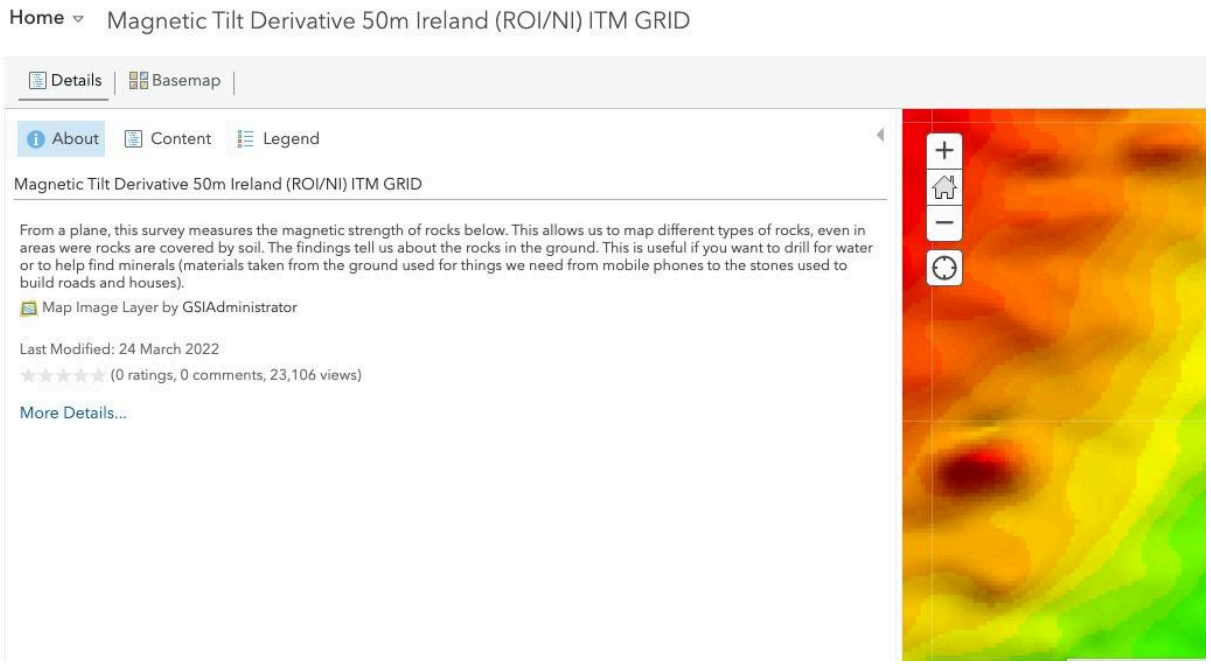
Dear Sir/Madam,
Re: Planning application for a 110 kilovolt electricity substation, approximately 7.5 kilometres of underground electricity line and all associated works at Moyvannan, Feamore, Lisbaun, Carrownolan, Carrowncloghan, Carrowkeeny, Ardmullan, Curraghboy, Gortnasythe, Derryglad, Eskerbaun, and Brideswell, County Roscommon, as described at https://moyvannansubstation.ie .
ABP Case Reference: 321238

Please see below my objections and questions on this development plan.

1)
Have all relevant datasets from GSI been fully utilised? The publicly available resources on GSI.ie are invaluable for comprehensive planning and environmental assessment. These include the Groundwater Data Viewer and the Tellus geophysical data, which provide critical insights through radiometric, electromagnetic, and magnetic surveys. Failing to incorporate these datasets could lead to significant gaps in understanding the area's environmental and geological characteristics.

The Magnetic Tilt Derivative 50m Ireland (ROI/NI) ITM GRID survey (https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754) is a high-resolution geophysical survey that measures and analyses variations in the Earth's magnetic field across Ireland. The survey uses magnetic tilt derivative analysis, a technique that enhances the edges of magnetic anomalies, making it easier to identify subtle geological features. Data is presented in the Irish Transverse Mercator (ITM) Grid, Ireland's standard mapping coordinate system.

With a spatial resolution of 50 meters, the survey provides a detailed view of the magnetic properties of the subsurface, helping to map geological structures and features that are not visible at the surface.



As you can see, in its description, the survey states that the survey is useful if you want to drill for water. I believe, that this is due to its ability to find underground caves and voids.

Caves or voids (such as karst systems, sinkholes, or tunnels) often have **low magnetic susceptibility** because they lack magnetic materials like iron or magnetite.The surrounding rocks, in contrast, generally have higher magnetic susceptibility, creating a contrast in the magnetic field.These voids act as **disruptions** in the magnetic field, reducing the intensity or creating localized weak spots. The **tilt derivative** emphasizes the edges or boundaries of these anomalies, helping to outline voids.

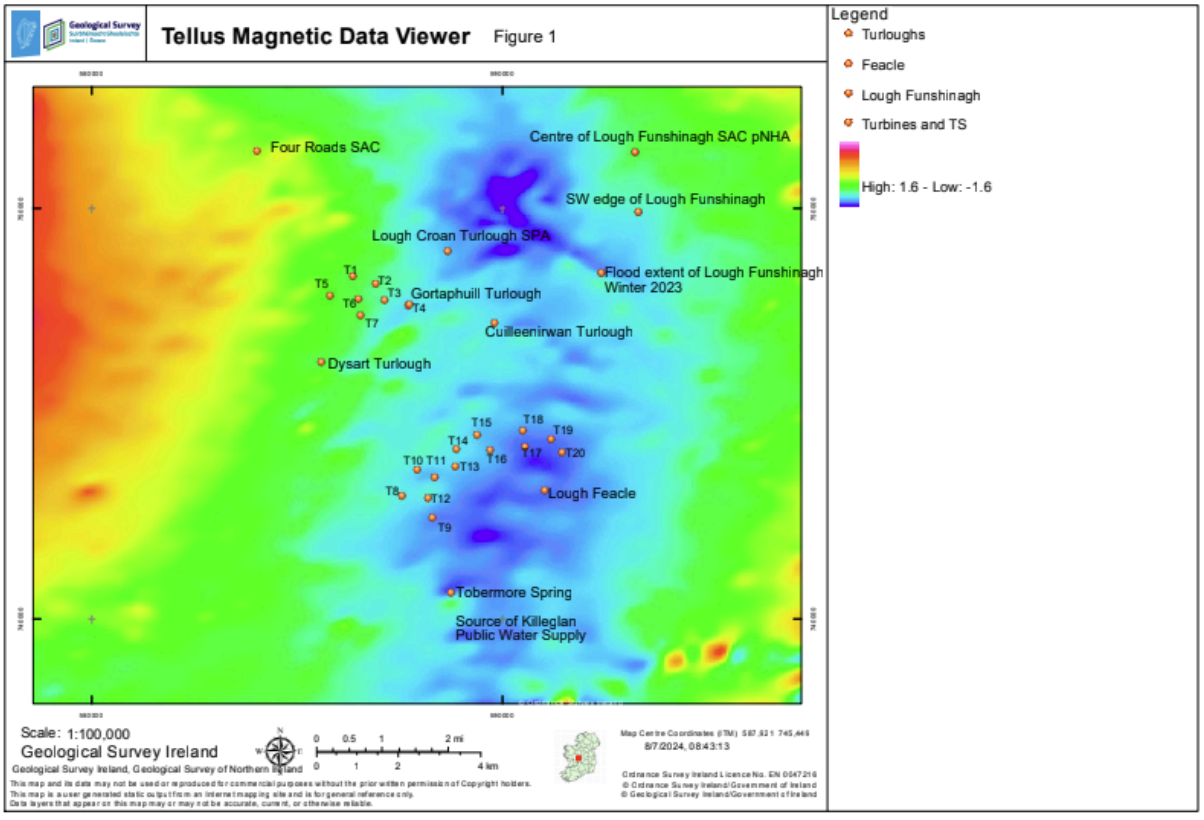
Low Tilt Derivative Values (-1.6 RAD)(Blue section):

Found in areas of **homogeneous low magnetization**, which might indicate:

- The **center** of a void or a cave, where magnetic materials are absent or minimal.
- Broad zones of reduced magnetic susceptibility, such as collapsed karst regions.
- Cool colors (green) might point to the general location of the void.

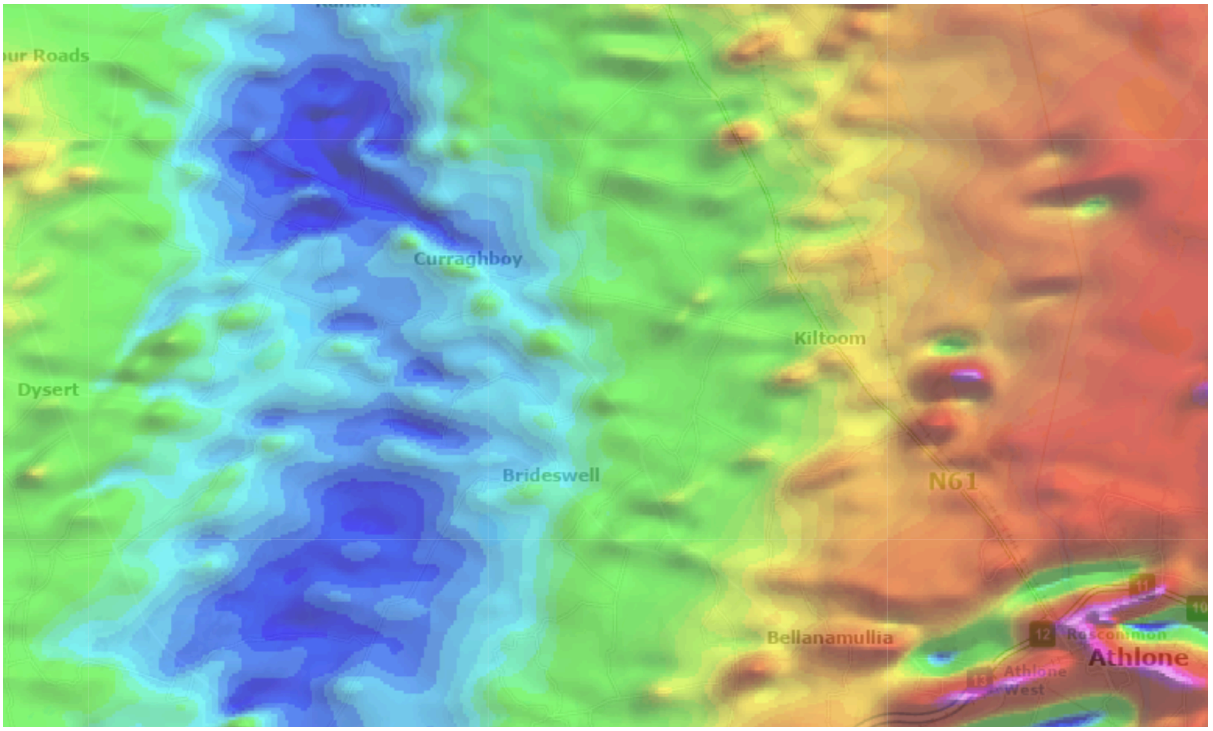
The surrounding rocks, in contrast, generally have higher magnetic susceptibility, creating a contrast in the magnetic field. The magnetic tilt derivative method enhances the edges of these anomalies, allowing geologists to precisely delineate the boundaries of voids, caves, and conduits.

- Subsurface conduits (underground rivers or channels) are critical pathways for groundwater in karst systems. These features can influence the magnetic field due to variations in sediment fill or the flow of water, which can carry suspended magnetic particles.
- These features often create localised magnetic lows due to the absence of magnetic material in voids or a decrease in magnetic mineral content caused by dissolution processes.



The Tellus Magnetic Data viewer for the area surrounding Seven Hills Wind Farm development since I do not have the exact lat/lon coordinates(or ITM coordinates) of the proposed cabling route as mentioned in a point 4 below. The above image covers the vast portion of its route from the Seven Hills wind farm(marked out with the prefix T, taken from Seven Hills EIAR) and is towards the direction of the substation and Lough Funshinagh.

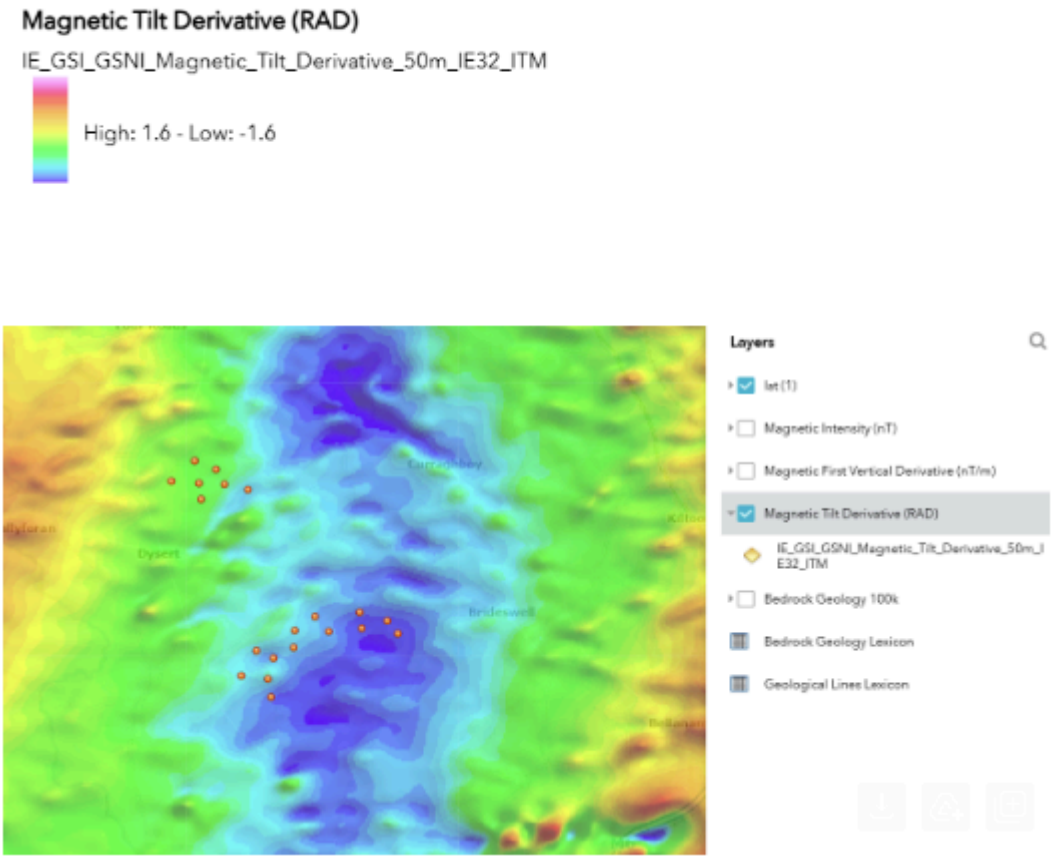
Source:
https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754 under Magnetic Tilt Derivative



Here you can see how the source of Killeglan Water Supply correspondences exactly with the darkest blue section of the Tellus Magnetic Tilt Dedevivative map:

Source:
https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754 under Magnetic Tilt Derivative

I believe that Lough Funshinagh connects to these underground voids and it acts as a conduit for the water out of Lough Funshinagh, bringing it further south along the blue marked area on the map. The dark blue areas are marked as those most likely to have voids/underground channels in them. The Water plant at Killigan is based exactly on one of the darkest blue areas, as is a lot of the land that floods periodically in this area of South Roscommon. This spring has the largest mean discharge in Ireland, as outlined in point 2 below. I object to the routing of the underground cables, as they will involve digging of a 2 meter trench along areas which the Tellus Survey has shown have a very high likelihood of voids(the highest, in the country, based on the darkest blue sections as outlined by GSI).



A presentation we did to a Senior Hydrogeologist at Geological Survey Ireland, agreed that the blue areas do indicate voids. In red dots above are the locations of the Seven Hills turbines(which is the purpose of the Moyvannan substation and its associated underground cables) overlaid on top of the Tellus Survey, to highlight the volatility of this area.

Local knowledge: For example, the St Ronan's well, is located on a hill in Taughmaconnell, beside an isolated bucket of dark blue on the Tellus Map. Also, multiple swallow holes belonging to local farmers are present exactly where the darker shades of blue occur on the Tellus IE GSI GSNI Magnetic Tilt Derivative 50m Ireland (ROI/NI) ITM GRID map.

2)
As noted in GSI's newsletter to all of Ireland's hydrologists https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/activities/Pages/Groundwater-Newsletter.aspx, published September 2021, Killeglin Springs (locally known as Killegan springs) highlights Killeglin's ability to transmit larger volumes of water due to its highly karstified conduit system. Point recharge features, such as swallow holes and turloughs, play a significant role in Killeglin's catchment.

The newsletter highlights 8 springs as chosen from the EPA Hydrometric Programme National Groundwater Monitoring Network as these monitoring sites have the longest continuous discharge records in Ireland.

Spring Pairs	Aquifer	Spring name	Average rainfall (mm/yr)	Average recharge (mm/yr)	Mean Q (m^3/d)
Pair 1	Rkd	Shanballymore	1,033	356	13,176
	Rkc	Mountbellew	1,193	338	11,256
Pair 2	Rkd	Kyle	840	231	5,894
	Rkc	Kilkerrin	1,186	308	3,991
Pair 3	Rkd	Paulstown	856	212	10,587
	Rkc	Kilmaine	1,252	586	9,801
Pair 4	Rkd	Sillogue	975	263	5,763
	Rkc	Killeglin	1,101	417	39,996

Table 1: Estimated average rainfall (mm/yr), average recharge (mm/yr) and mean discharge (m3/d) for the period of 2010 –

The **mean discharge of a spring** is the average volume of water that flows out of the spring over a specified period of time. This table clearly shows, that Killeglin has the HIGHEST mean discharge rate in the country.

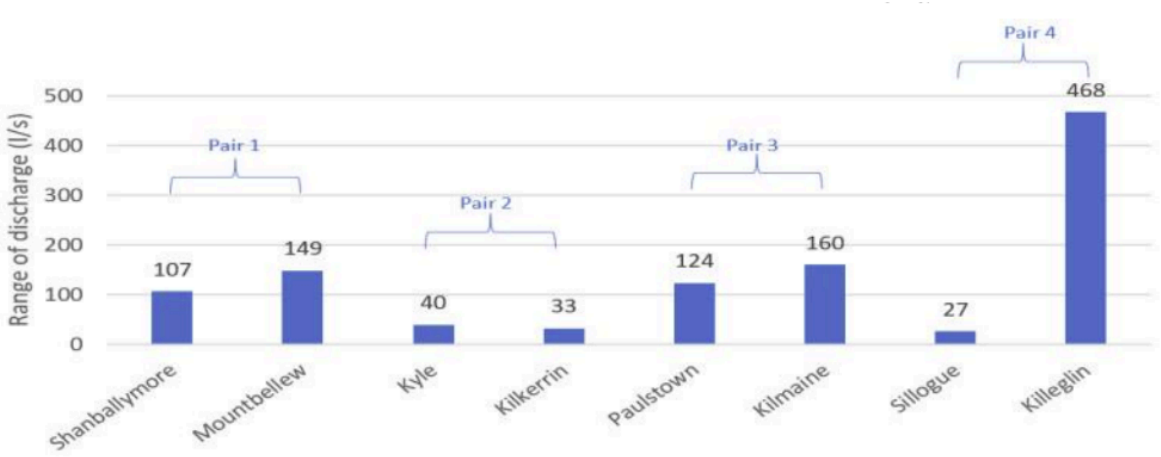


Figure 2: Range of discharge (l/s)

The results show how the Rkd aquifers evacuate approximately 4.6% of the total recharge as storm flow on the hydrograph, before slowly releasing the remaining 95% of recharge as baseflow. The Rkc aquifers, with Killeglin as a leading example, can initially retain between 76% and 86% of the total recharge before slowly releasing the remaining recharge as baseflow. This is due, I believe, to the large voids and caves provided by the extreme Karstification of the catchment area and as demonstrated by the Magnetic Tilt Derivative data supplied by GSI.

Considering the strength of the Spring, have the dolines, sink holes and turloughs which power the springs, been fully documented? I fear that the cabling will interact with currently unknown dolines, and this drives my objection to this proposed development.

3)
A karst landscape has been identified around Killeglan west of Athlone. This is a unique site with limestone boulder ridges formed as glacial deposits. Large parts are untouched and represent a pristine landscape of Roscommon before human intervention and land clearance and enclosures https://gsi.geodata.gov.ie/downloads/Geoheritage/Reports/Roscommon_Audit.pdf p19, The Geological Heritage of Roscommon(An audit of County Geological Sites in Roscommon), 2012.

> disappearing lake. Rather than seasonal fluctuations it occasionally drains entirely as if someone had pulled the plug in the bath. A kind of pseudo karst landscape has been identified around Killeglan west of Athlone. This is a unique site with limestone boulder ridges formed as glacial deposits. Large parts are untouched and represent a pristine landscape of Roscommon before human intervention and land clearance and enclosures.

Has the board considered the extend of the karst as the recharge area is within the zones for the proposed cabling and digging for the Moyvannan Substation development project?

4)
The information provided on the **https://moyvannansubstation.ie/** website regarding the proposed cabling route is inadequate for a clear understanding of the project's potential impacts. Specifically, the absence of exact latitude and longitude coordinates. It also leads to obstruction to public understanding, and more specifically, to my understanding, as I cannot use GSI tools, or even simple Google Earth overlays, to map its route alongside other geo features.

Have the board been given an exact set of co-ordinations from the developers and why is that not shared with me and the general public, as I do not see it on https://moyvannansubstation.ie/ .

On the Website, it only has vague references such as: "The underground electricity line connects the substation in Moyvannan to the permitted Seven Hills Wind Farm grid connection infrastructure, covering approximately 7.5 km. The route utilises local and regional roads, such as L7551, L7556, L2018, L7731, R362, L2023, and L7636, ending at the R363 near Brideswell."

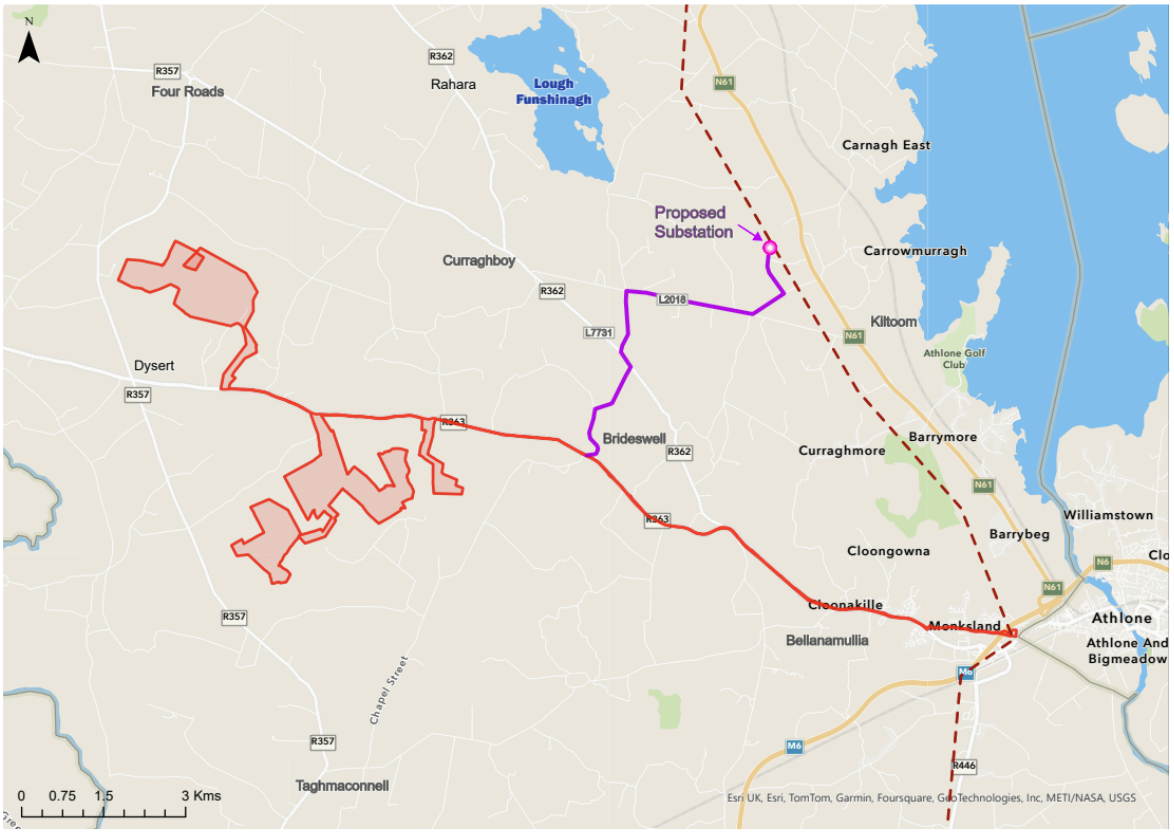
And

"Currently, 2 no. electricity cable route options are being assessed to determine the presence of environmental constraints and to determine the technical suitability of the route to accommodate the electricity cables. Route Option A would be located within the townlands of Moyvannan, Feamore, Lisbaun, Lissygreaghan, Gortacoosan, Ballycreggan, Corrantotan, Knocknanool, and Ballymullavill; and within the L7551, L2019, L2018, and the R362 to its junction with the R363. At this point, the electricity cables will connect to electricity cables permitted as part of the Seven Hills Wind Farm. Route Option B would be located within the townlands of Moyvannan, Feamore, Lisbaun, Carrownolan, Carrowncloghan, Carrowkeeny, Ardmullan, Curraghboy, Gortnasythe, Derryglad, Eskerbaun, and Brideswell; and within the L7551, L2019, L2018, L7731, R362, L2023, and L7636. At this point, the electricity cables will connect to electricity cables permitted as part of the Seven Hills Wind Farm. "

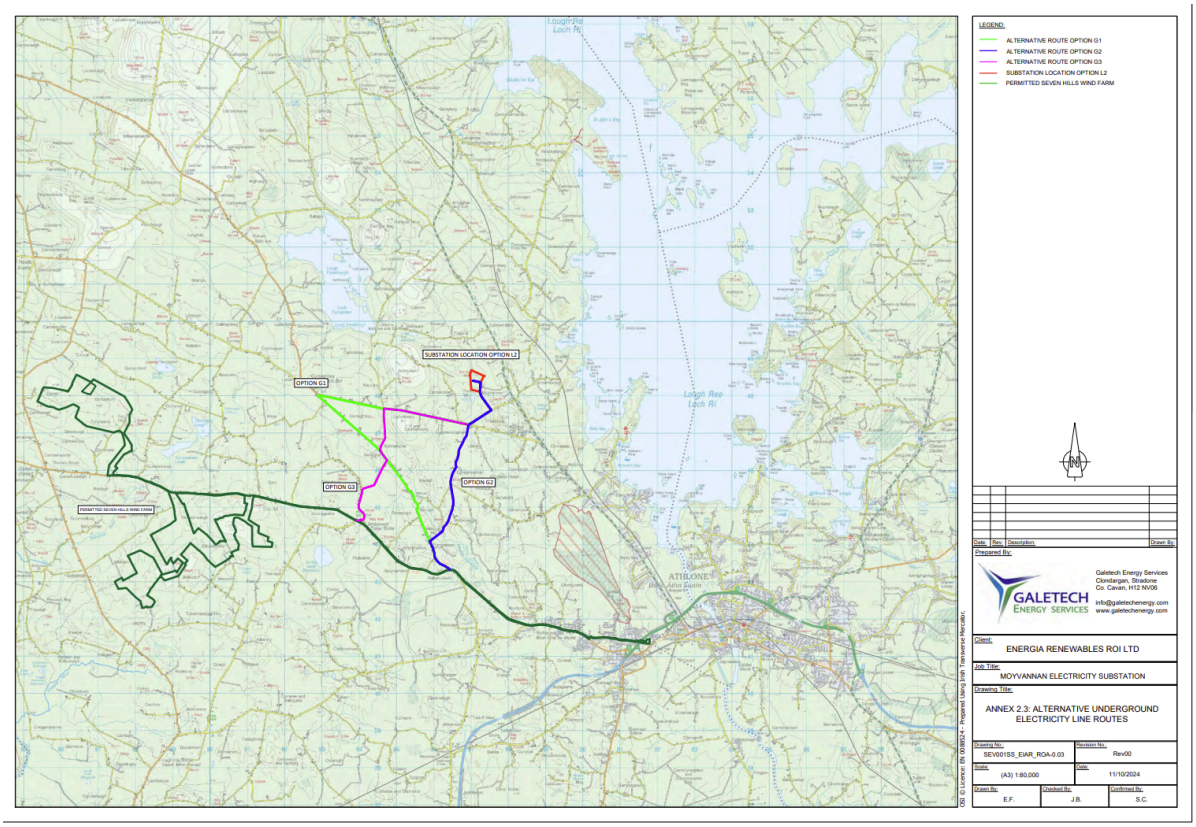
Via: https://moyvannansubstation.ie/media/bbhaqp0j/annex-16-community-consultation-report.pdf

5)

5. Map of proposed substation and wind farm



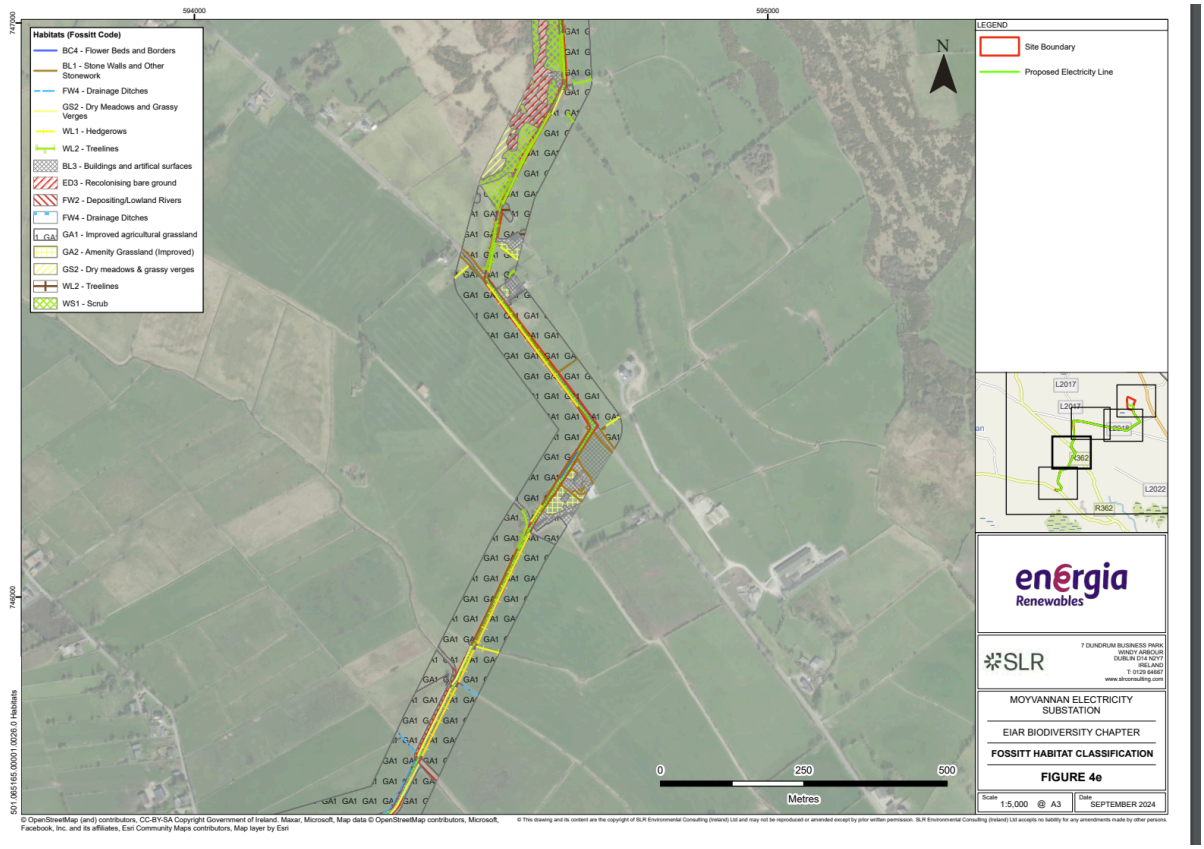
For example, the above image from https://moyvannansubstation.ie/media/bbhaqp0j/annex-16-community-consultation-report.pdf does not map out any of the water features, such as Cross River, despite Cross river been mentioned elsewhere as one of the challenges of the development.



https://moyvannansubstation.ie/media/2eikmm2n/annex-23-alternative-underground-electricity-line-routes.pdf provides a low-resolution image of the proposed routes and is very hard to see in detail, where the Cross River and other water/geological features are interfaced with.

I object as there is not enough transparency available on the routes, and the developer is only providing low-resolution images, meaning I cannot have a full understanding of its effects.

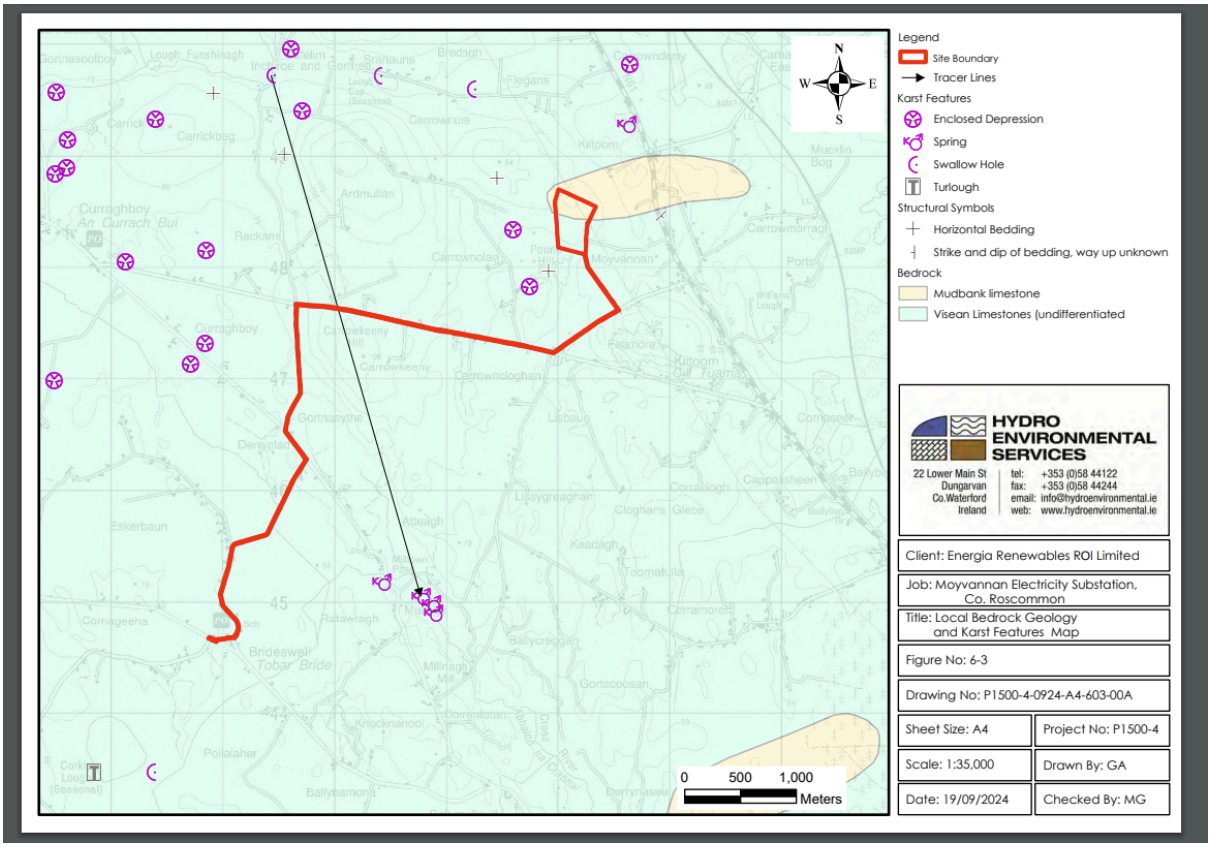
6)



https://moyvannansubstation.ie/media/ij5h4iaj/annex-51-figures.pdf

The developer maps, have no treatment or display for water features, and is very hard to follow the course of this proposed route. Also, is this for just one of the proposed underground cabling lines? We object also, as no data is showing the second proposed route, with similar data and it is a struggle to understand the implications of the route.

7)

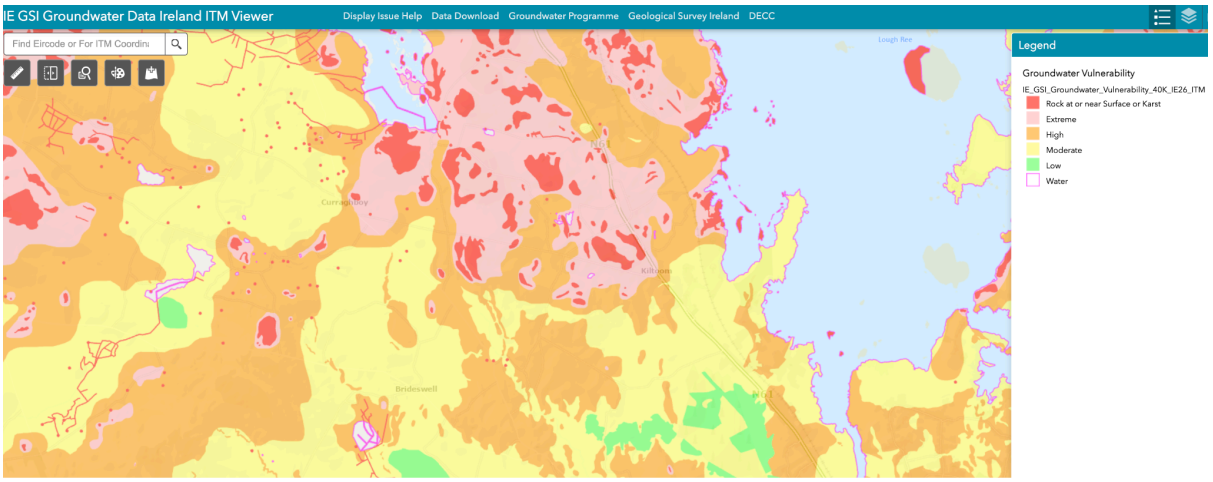


https://moyvannansubstation.ie/media/k5rc5uxy/annex-63-figures.pdf

This seems to be the only map showing the route and its water features. It is very low-resolution, and I find it hard to understand since it is so zoomed out. For example, where are the underground water supplies marked out on the map and is there a version available that I can zoom in on to see details more clearly? It would be a challenge for any member of the public or I, to have a clear understanding of the impact of the route on the water supply based on the above map.

How can I present well-informed submissions or objections to this development when the exact area for the underground cables from Moyvannan remains undefined?

8)



The proposed cabling route from Moyvannan to Seven Hills crosses an area classified by GSI as "extreme" or higher for Groundwater Vulnerability. Ignoring such critical datasets while planning a multi-kilometer channel through this fragile landscape fundamentally undermines the purpose of these assessments. If these tools are disregarded in decisions of such environmental significance, what value do they truly hold?

Furthermore, for laying multiple kilometers of cable—particularly at the 11 proposed joint locations, which will require heavy machinery such as diggers—how is this approach considered prudent when the area is flagged as having extremely vulnerable groundwater?

Can you clarify what types of infrastructure actions would typically be restricted or outright banned in such a highly sensitive area? Additionally, how does the proposed Moyvannan cabling and construction align with, or bypass, the safeguards meant to protect groundwater in these circumstances? This raises serious concerns about the long-term environmental impact and the rationale behind permitting such activities in this landscape.

9)
Will the route, be crossing over or near any eskers? If so, have there been any other such developments that have occurred nationwide, and what was the resulting damage reported by that local community to the environment, by such cabling?

10)
In a recent objection(ABP 313750), my name(Liam Kildea) was misreported as Linda Kildea. What steps have been taken to rectify this, or will this objection also be reported as Linda Kildea? This has posed a legitimate access to justice issue for the party concerned. It also suggests that no due proper diligence was done on the document as highlighted by this error. How do names get changed from submissions to when its placed in front of the board?

11)
Have all interested parties such as GSI, Birdswatch, National Parks, and Uisce Eireann been able to supply their thoughts and feedback on the proposed development? Have any of them expressed concern and if so, what are they?

12)
How does the board determine that the board has sufficient information regarding potential environmental impacts, particularly concerning local bird populations? Co Monaghan Board has rejected similar developments by Energia(Coolberrin Wind Farm Ltd, which is a subsidiary of Energia Group), as Energia has not supplied sufficient information to them in the past.
13)

If the trench crosses or disturbs areas with bird species listed in Annex I of the EU Birds Directive (2009/147/EC) directive, such as curlews or hen harriers, it will disrupt their breeding, feeding, or migration. How have the effects of the cabling on these bird species been approached, and what is the baseline effect that is considered acceptable? Will cabling occur only in specific months? Who documents if harm has occurred and will this be available to view online? Will the route then have to be changed, or adjusted on such an occurrence?

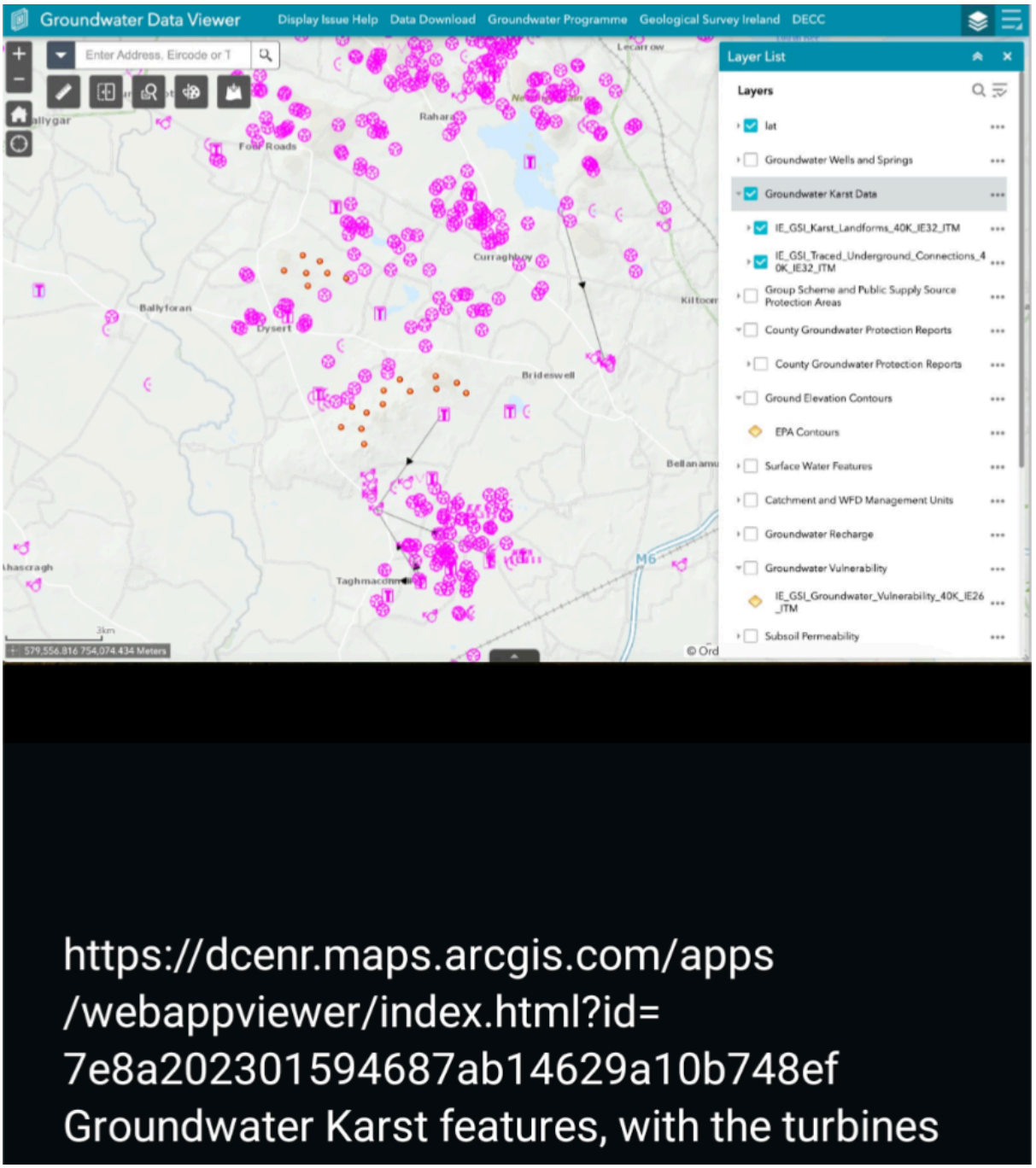
14)

How far from the current route can the cabling be altered, once planning permission for the cabling has been granted?

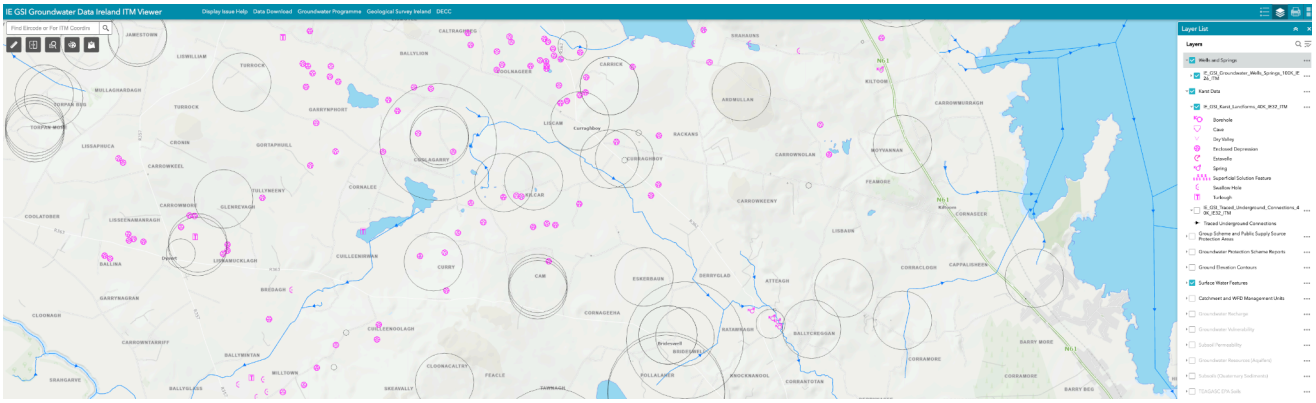
15)

https://maps.biodiversityireland.ie/Map maps out Proposed and Natural Heritage Areas, as well as existing SAC's, SPA's and ASSI. If a portion of the cabling route, in future is redesignated as any of above areas, such as a Special Area of Conservation, what treatment if any is given to the cabling?

16)



And
https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228



https://gsi.geodata.gov.ie/portal/apps/webappviewer/index.html?id=d333a8a9b6ab44378411fc0d973db4ef

Both maps highlight critical groundwater karst features that are conspicuously absent in Figure Annex-63 (available at: Annex-63). This oversight demonstrates that the proposed development has failed to utilise the latest data from the GSI and other authoritative government sources to accurately map the water features of the karst landscape. As a result, I strongly object to the approval of this project.

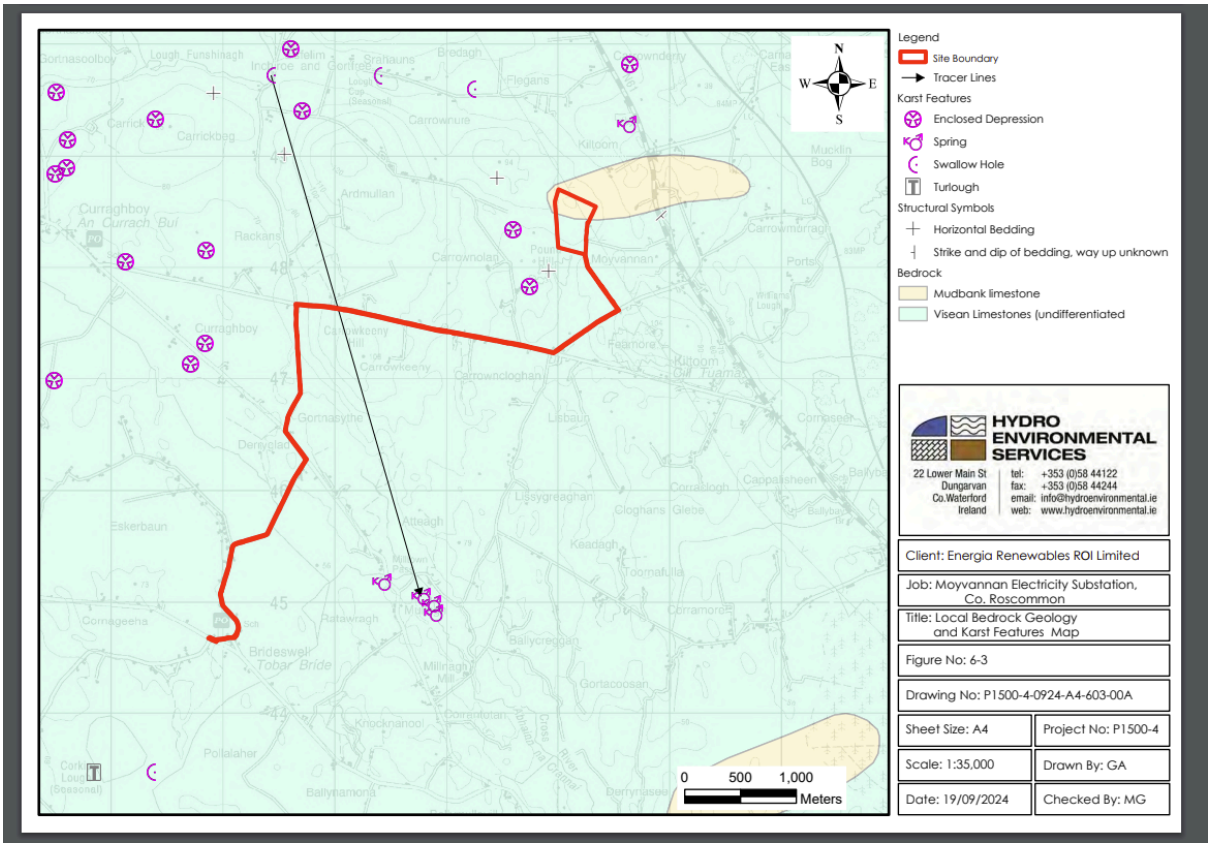
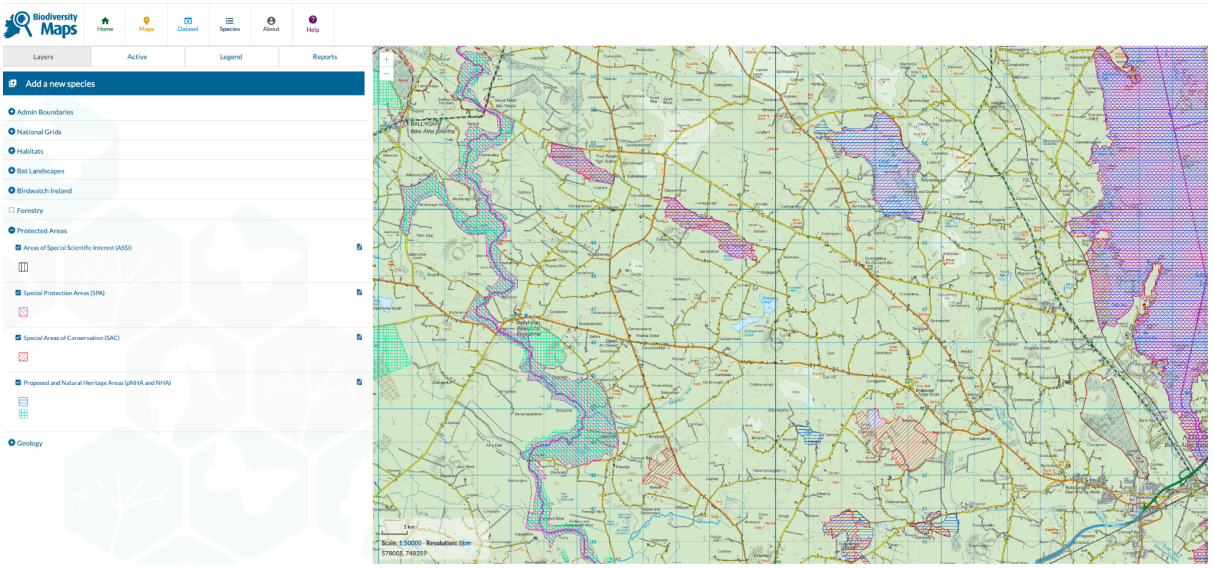


Figure Annex-63 : https://moyvannansubstation.ie/media/k5rc5uxy/annex-63-figures.pdf

17)

Is it prudent to be digging up land, alongside and inside Proposed Heritage Areas as mapped out on https://maps.biodiversityireland.ie/Map ?



18)
On https://moyvannansubstation.ie, it makes reference to “Seven Hills Wind Farm (An Bord Pleanála Reference ABP-313750-22)”, which has its information site at https://sevenhillswindfarm.ie/ . A cookie banner on https://sevenhillswindfarm.ie/ states it's not monitoring personal data, but you can clearly see Google Analytics is set up and tracking me and also tracking page views/web performance, without my consent.

This immediately makes me distrust the Moyvannan website, when I see the same banner as part of the same project. I also believe that on my initial visit to https://moyvannansubstation.ie, when it first launched, the same tracking of my data was in place, without my consent, which is against GDPR.

Project

Moyvannan Substation

Moyvannan Substation

As instructed by An Bord Pleanála during the pre-application consultation process, this stand alone website has been set up to provide access to all planning documentation associated with the proposed Moyvannan substation development.

The planning application seeks a 10-year planning permission for a proposed development generally described as follows:-

i. A 110 kilovolt (kV) 'loop-in/loop-out' Air-Insulated Switchgear (AIS) electricity substation, including a single-storey control building (with a Gross Floor Area of 450 square metres) and all associated electrical equipment and services within a 2.6 metre high fenced compound (with a total footprint of approximately 8,500 square metres);

ii. Replacement of 1 no. existing wooden pole-set with 2 no. lattice-type interface masts, each of which will be between 15 and 18 metres in height, to facilitate connection of the 110kV underground electricity lines to the existing Athlone Lanesborough 110kV overhead electricity transmission line;

iii. Approximately 270 metres of 110kV underground electricity line between the electricity substation and the interface masts;

iv. Approximately 630 metres of access tracks with associated upgrade works to an existing agricultural entrance from the L7551 local road;

v. Approximately 7.5 kilometres of 110kV underground electricity line between the electricity substation and the junction of the L7636 local road and R363 regional road where the electricity line will connect to electricity cables permitted as part of the Seven Hills Wind Farm (An Bord Pleanála Reference ABP-313750-22). The electricity line will be placed within private lands and within the carriageway of the L7551, L7556, L2018, L7731, R362, L2023, and L7636; and,

vi. All associated and ancillary site development, excavation, construction, landscaping and reinstatement works and the provision of site drainage infrastructure and water protection measures.

The development has been deemed Strategic Infrastructure Development by An Bord Pleanála.

Contact Details

Project

Seven Hills Wind Farm, Co. Roscommon

Seven Hills Wind Farm

As instructed by An Bord Pleanála during the pre-application consultation process, this stand-alone website has been set up to provide access to all planning documentation associated with the proposed Seven Hills Wind Farm development in the townlands of Turrock, Cronin, Gortaphuill, Glenrevagh, Tullyneeny, Bredagh, Cuilleenirwan, Cuilleenoolagh, Curry, Milltown, Tobermacloughlin, Skeavally, Boleyduff, Clooncaltry, Feacle, Cam, Tawnagh, Cornageeha, Pollalaher, Brideswell, Knocknanool, Ballymullavill, Rooskagh, Bellanamullia, Cloonakille, Monksland and Commeen, Co. Roscommon

The development will consist of the following:

I. 20 no. wind turbines with an overall ground to blade tip height of 180 metres, a rotor dimeter of 162m and a hub height of 99m, associated foundations, hard-standing areas

II. 15 no. spoil storage areas at hardstands of turbines no. 1, 2, 3, 4, 5, 6 and 7 (in the townlands of Turrock, Gortaphuill, Cronin, and Tullyneeny) and turbines no. 8, 10, 11, 13, 14, 17, 19 and 20 (in the townlands of Milltown, Cuilleenoolagh, Cloonacaltry, Feacle and Tawnagh)

III. Provision of 1 no. permanent meteorological mast with a maximum height of 100 metres for a period of 30 years from the date of commissioning of the entire wind farm

IV. Provision of 1 no. 110kV onsite substation in the townland of Cam, along with associated control buildings, MV switchgear building, associated electrical plant, associated security fencing, and equipment and wastewater holding tank

V. All underground electrical and communication cabling connecting the proposed wind turbines to the proposed onsite substation and associated control buildings and plant

VI. All works associated with the connection of the proposed wind farm to the national electricity grid via underground 110kV cabling from the site to the existing Athlone 110kV substation located in the townland of Monksland. Cabling will be placed within the public road corridor of the R362, R363 and L2047, or on private land

VII. Upgrade works to the existing 110kV Athlone substation consisting of the construction of an additional dedicated bay to facilitate connection of the cable

VIII. Provision of 2 no. new site accesses north and south from the R363 and upgrade of 1 no. junction south of the R363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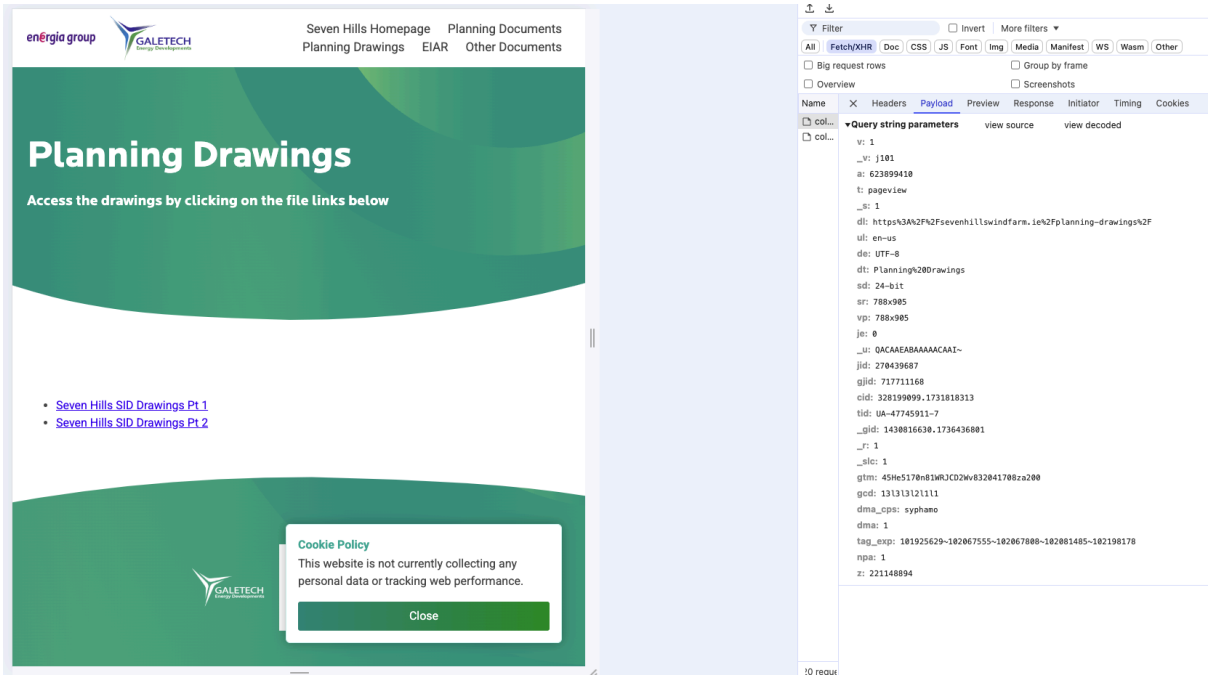
energia group
GALETECH
Seven Hills Homepage
Planning Documents
Planning Drawings
EIAR
Other Documents
Planning Drawings
Access the drawings by clicking on the file links below
Seven Hills SID Drawings Pt 1
Seven Hills SID Drawings Pt 2
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Media
Manifest
WS
Wasm
Other
Big request rows
Group by frame
Overview
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Payload
Preview
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Initiator
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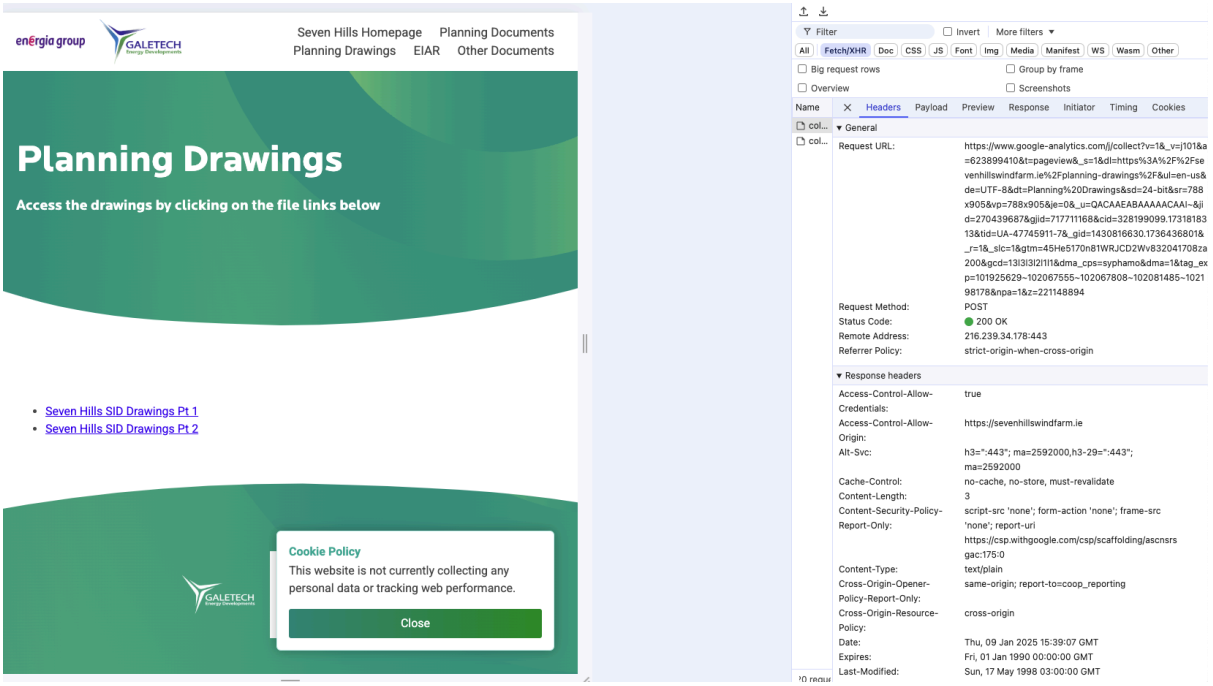


You can see here the data that is been shared about me and my usage of the site to Gaeltech, despite the cookie policy saying no data is been shared. This affects my ability to use their latest site at https://moyvannansubstation.ie/ as I do not want more of my personal data going to GaelTech.

19)
Has the board, consulted the GSI and the local knowledge in the area of the trench construction for the cables, of where the turloughs, subsurface streams and dolines are, and have the dolines been mapped in the area as they are the start of the turloughs and the turloughs are EU protected?

20)
Are any of the people on Bord Pleanála experts on the characteristics of a Karst Landscape, since this is the predominant area which the cabling is going through? Have they attended any recent conferences, or recent up training sessions to increase their knowledge base? Have they published any recent papers on Karst landscapes? I fear that the plan can be approved by people not using the best scientific data at hand.

21)
Has Roscommon County Council verified that the development is in compliance with its biodiversity plan for the karst landscape, in South Roscommon? If Roscommon County Council lacks such a plan for the karst landscape, should the development not be postponed until said plan is agreed upon? Approving such a large-scale development, then there is no clear understanding of the region's biodiversity priorities or the cumulative impacts of its development, as there is no baseline data, to work against.

22)
Flooding is a recurring challenge in South Roscommon due to:

- Surface runoff during heavy rainfall, which naturally flows into turloughs and other drainage points.
- The karst hydrology, where underground streams and conduits play a crucial role in managing water flow and mitigating surface flooding.
- Rising water levels in turloughs and lakes, depend on interconnected subterranean systems for drainage and balance.

How will the project prevent disruptions to the natural flow of water between turloughs, lakes, and underground conduits?
What mitigation measures are planned to ensure the new channels do not worsen flooding or block underground water pathways?

23)
The proposed cable installation in South Roscommon raises significant concerns about the lack of evidence suggesting that the planning board has engaged expert analysis or specialised research into the unique karst landscape of the area. This omission is particularly troubling given the well-documented issues associated with karst hydrology, such as the blocked turlough at Lough Funshinagh, which has caused flooding, environmental damage, and disruption to local communities.

The blocked turlough at Lough Funshinagh is a stark reminder of what can happen when the natural hydrology of a karst landscape is disrupted:

- Hydrological disruptions: Alterations in the underground water network have caused persistent flooding, damaging farmland, habitats, and infrastructure.
- Overflow risks: The inability of the system to drain properly has exacerbated winter flooding, with severe implications for the local community.
- Potential parallels: Similar blocking and overflowing could occur in other lakes, turloughs, and water collection points in South Roscommon during winter if construction disturbs or alters the region's delicate hydrology.

To ensure the integrity of the planning process, we request the board confirm:

1. Has the board consulted experts specialising in karst geology and hydrology to evaluate the potential impacts of this project on South Roscommon's karst landscape?
2. What specific research has been conducted to assess the risks of blocking or overflowing turloughs, aquifers, or water pathways during and after construction?

24)
The proposed cable installation in South Roscommon raises serious concerns about its potential to disrupt significant aquifers within the karst landscape. These aquifers are critical for groundwater recharge, water supply, and maintaining the ecological balance of the area. Any disturbance could have far-reaching consequences for water quality, availability, and the broader hydrological system.

Is the proposed cable route near any aquifers or subterranean features critical for groundwater recharge or flow?

Has a hydrological survey been conducted to assess:

- The locations and recharge zones of aquifers along or near the cable route.
- The potential impact of excavation and trenching on natural groundwater flow patterns.
- Risks of contamination during and after construction.

What mitigation measures are planned to prevent disruption or contamination of aquifers, particularly during excavation and construction phases?

25)

Karst landscapes such as what the proposed cabling route will be crossing over, are characterised by:

- Underground voids and conduits, formed by the dissolution of limestone bedrock, create areas of instability.
- High susceptibility to sinkholes, which can occur when the ground above collapses into these voids, is often triggered by human activities like excavation, drilling, or increased surface load.

Has a detailed geotechnical survey been conducted along the entire cable route to identify areas prone to sinkhole formation? This would also give adherence to the Planning and Development Act 2000, requiring comprehensive risk assessments for geologically sensitive areas.

26)

Karst landscapes are prone to sinkholes due to their unstable subsurface geology. Excavation or drilling activities for cable installation could destabilize the ground, triggering sinkholes that damage infrastructure and pose risks to the environment. Is there a study done showing where this exists, along the route or the vicinity?

27)

Farmers along the proposed route may face several risks, including:

Disruption to agricultural activities, such as soil compaction, drainage alterations, or access restrictions during construction.

Boundary disputes: If the cabling encroaches on or affects boundaries, it could lead to disputes over land use or ownership.

Have all farmers whose boundaries intersect or adjoin the proposed cable route been directly notified of the project, its timeline, and its potential impacts? What is the minimum distance the cabling must be from a farmer's boundary walls, where such a farmer has not given its consent to have the cabling be near its land?

28)

Some land in South Roscommon does not have clear ownership, as it has been farmed over the generations, with farmers swapping land parcels with each other. Has the board sought ownership of all title deeds?

29)

South Roscommon is home to numerous turloughs, a unique karst feature that supports rare ecological communities. Disturbance from the cable installation could disrupt their hydrology and ecology, threatening these sensitive systems. Has the board a comprehensive hydrological and ecological assessment of the karst landscape, including all turloughs along the proposed cabling route? Have the relevant Irish experts(University facility lecturers, etc) independently endorsed this assessment? Will such a report provide a detailed mapping of the karst system, its turloughs and dolines and its hydrological connectivity, alongside an evaluation of potential impacts on these features during both construction and maintenance of the cabling?

30)

If the land that the cabling is under, is flooded, such as with seasonal lakes that are very common in South Roscommon during the winter months, how will the cable be repaired, given the sensitivity of the environmental landscape and its connected flora and fauna? Will land need to be drained to get to the cables? Is the substation to be shut down, during these maintenance periods?

31)

The proposed installation of a 3 km cable through South Roscommon raises significant concerns about habitat fragmentation, which can disrupt wildlife movement, diminish ecosystem connectivity, and threaten species that depend on the unique karst habitats of the area, especially in areas that are not farmed intensity/or have wilded to nature. Especially during the construction and maintenance of the channels for the cabling. Has the board investigated the effect of this on the wildlife?

32)

The proposed development raises serious concerns about its potential to damage the semi-natural grasslands of South Roscommon, which serve as vital habitats for pollinators such as bees and butterflies. These ecosystems are crucial for maintaining local biodiversity and supporting agricultural productivity.

The semi-natural grasslands in South Roscommon are home to diverse wildflower species, which provide essential foraging resources for pollinators. These habitats:

- Support critical pollinator species, including wild bees and butterflies, many of which are already under significant pressure due to habitat loss, pesticide use, and climate change.
- Contribute to local agriculture, particularly for crops reliant on pollination, such as fruits and vegetables.

The trenching and cabling activities proposed in this development risk:

- Destroying or fragmenting pollinator habitats, reducing the availability of food and nesting sites.
- Disrupting ecological networks affects not only pollinators but also the plants and animals that depend on them.
- Increasing vulnerability of pollinator populations, which are already in decline across Ireland, as highlighted in the National Biodiversity Action Plan (NBAP) and All-Ireland Pollinator Plan.

Ireland has made commitments to protect pollinator habitats and biodiversity under:

- The EU Habitats Directive (92/43/EEC), mandates the preservation of natural habitats critical for species survival.
- The All-Ireland Pollinator Plan, prioritizes the protection of pollinator-friendly landscapes.
- The National Biodiversity Action Plan (NBAP), recognizes the vital role of pollinators in sustaining ecosystems and agriculture.

Does the route of the proposed cabling adequately account for these legal and policy obligations?

33)

The proposed development raises significant concerns regarding its potential contravention of key environmental legislation, including the EU Water Framework Directive (Directive 2000/60/EC) and S.I. No. 9/2010 - European Communities Environmental Objectives (Groundwater) Regulations 2010. These legal frameworks obligate Ireland, as an EU Member State, to prevent the deterioration of groundwater bodies and to maintain their chemical and quantitative status.

1. Vulnerability of Karst Systems

Karst landscapes, such as those in South Roscommon, are particularly vulnerable to contamination due to their:

- High permeability: Water flows rapidly through fissures and conduits, offering minimal filtration.
- Hydrological connectivity: Groundwater in karst systems is often directly linked to surface water bodies and ecosystems, meaning any pollution could spread widely and quickly.

Given these characteristics, the proposed trenching and construction works present a substantial risk of introducing contaminants into the groundwater system, with potentially far-reaching consequences.

2. Specific Local Concerns

Historical water quality issues in the area further underscore the sensitivity of the groundwater system. For example:

- Over the last decade, the water quality in Taughmaconnell has, at times, been deemed unsuitable for drinking, forcing residents to rely on alternative water supplies.
- These incidents highlight the fragility of local aquifers and the potential consequences of inadequate environmental protection during construction.

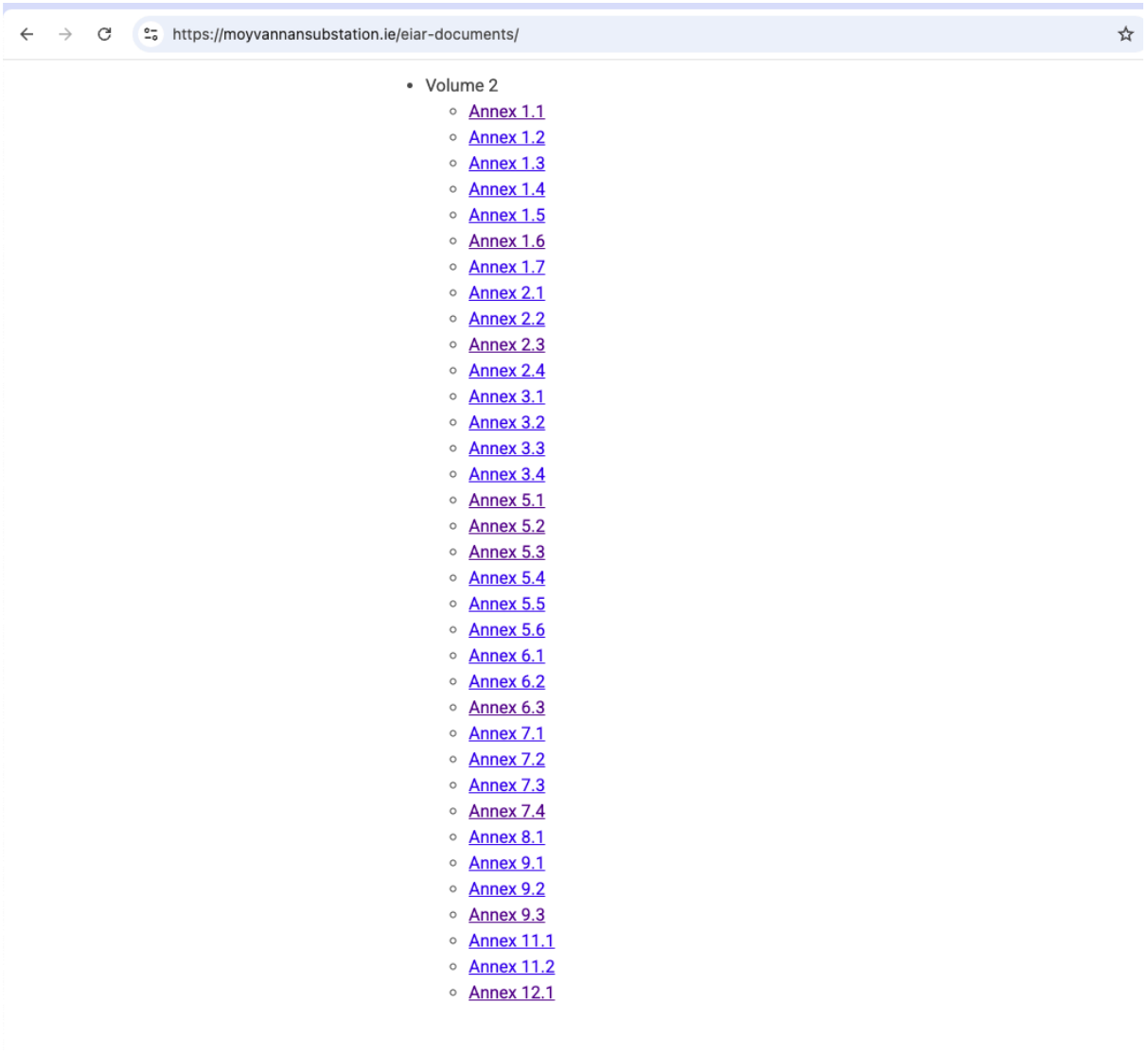
We request that the planning authority provide clear evidence demonstrating that:

1. The proposed development has been found fully compliant with the Water Framework Directive and S.I. No. 9/2010 regulations.
2. Detailed risk assessments and mitigation strategies have been developed and independently validated by qualified hydrogeologists.
3. The lessons from past water quality issues in Taughmaconnell have been factored into the planning and approval process.

34)

Has any ecological and environmental research on the Karst landscape, ie dolines, sinkholes, and underground aquifers been conducted beyond the defined redline area of the proposed Moyvannan development plan? While we know surveys have been done within the designated area, we’re curious if anyone has examined the broader landscape. This is particularly important given that it’s a karst landscape—highly fragmented and poorly documented, with limited existing knowledge about its features.

35)



The presentation of the documents on https://moyvannansubstation.ie/eiar-documents/ effectively obscures critical information by making it unnecessarily difficult to locate. Here's why:

1. Lack of Labels: The 35 annexes are not labelled with descriptive names, leaving users unaware of their content until they are downloaded and opened individually. This design prevents users from efficiently identifying the documents relevant to their queries.
2. No Search Functionality: There is no centralised search tool to quickly locate specific topics or terms across the over 40 PDF documents. For instance, trying to find information on the "11 joints" involves manually downloading and scanning through multiple files—a time-consuming and frustrating process.
3. Barrier to Accessibility: The complexity of this setup particularly affects vulnerable groups, such as elderly residents in the catchment area. Many lack the technical proficiency or resources to repeatedly download and review numerous large files. This limits their ability to engage with or object to the development meaningfully.
4. Deterrent to Engagement: By making critical information hard to find, the system discourages public involvement and reduces transparency in the decision-making process. It raises concerns about whether the goal is to inform or to dissuade active participation.

This lack of accessibility undermines the principles of transparency and public engagement, which are fundamental to responsible development planning. Why isn't the information presented in an organized, searchable, and user-friendly manner, ensuring all stakeholders can access it easily? I feel I cannot find the information I am seeking, nor have a full understanding of the documents, whenever I change the device I am using.

36)

South Roscommon is renowned for its significant contribution to Ireland's rich archaeological heritage, with numerous gold artefacts discovered in the area now prominently displayed in the National Museum of Ireland in Dublin. Notable examples include treasures such as https://www.manuelcohen.com/image/I0000AHGWmEUIuCs and the celebrated Ardnaglug Torcs, which feature as a central display in the museum's Bronze Age collection (https://microsites.museum.ie/bronzeagehandlingbox/timeline.html).

Despite this archaeological significance, the Moyvannan proposal does not appear to include any mention of archaeological digs or investigations in its planning documents. This is particularly concerning given that the proposed cabling project involves extensive ground disturbance by heavy machinery, such as diggers, over a large area.

How can a project of this scale and impact proceed without accounting for the potential to uncover and preserve invaluable historical artefacts in one of Ireland's most archaeologically rich regions? The lack of provisions for archaeological assessment raises serious concerns about the protection of our cultural heritage in the face of such development. And when historical items are discovered along the route, how will this affect the proposed routing of the cables from Moyvannan Substation, under this development plan?

37)
Has the board have sufficient expertise to take into consideration that the Taughmaconnell/Dysart region has one of the most karstic aquifers in Ireland, as demonstrated by numerous referrers at https://www.gsi.ie/documents/GWNewsletterNo.59.pdf ?

As shown in my point 1 at the start, Taughmaconell, Brideswell and Dysart up to Lough Funshinagh and the general hinterland are sitting above large conduits created from karst limestone, which is very fragile. This area rests completely within the proposed cabling development of Moyvannan Substation. In https://www.gsi.ie/documents/GWNewsletterNo.59.pdf , it also describes Killeglin Springs as a Regionally Important Karstified Bedrock Aquifer (conduit) (Rkc).
I object to the routing of cabling due to the necessity of digging out extensive channels extending Kilometers, across the catchment of the highest mean discharge aquifer in the country. Nowhere in the EIAR documents for Moyvannan or Seven Hills, is this fact mentioned. Has the board this knowledge separate from EIAR documents while considering planning permission for Moyvannan Substation development and how do they propose catering for this unique and critical aspect? I have not seen any recently published papers on this unique karst landscape by the Board.

I would appreciate an oral hearing on this matter.
Yours sincerely,
Liam Kildea,
Boleyduff, Taughmaconnell, Ballinasloe, Co. Galway