



An
Coimisiún
Pleanála

Inspector's Report

ABP-322575-25

Development

Construction of a data centre and all associated site works. An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) have been submitted with the planning application.

Location

Mullafarry and Tawnaghmore Upper, Killala, Co. Mayo.

Planning Authority

Mayo County Council

Planning Authority Reg. Ref.

2460708

Applicant(s)

Mayo DataHub Limited

Type of Application

Permission

Planning Authority Decision

Grant

Type of Appeal

Third Party

Appellant(s)

Colin Doyle

Observer(s)

An Taisce

Date of Site Inspection

21st July 2025

Inspector

Catherine Dillon

Contents

1.0 Site Location and Description.....	6
2.0 Proposed Development.....	7
3.0 Planning Authority Decision	11
3.1. Decision.....	11
3.2. Planning Authority Reports.....	11
3.3. Prescribed Bodies	13
3.4. Third Party Observations.....	13
4.0 Planning History	15
5.0 Policy Context	17
5.1. National Policy Context	17
5.2. National Planning Framework (NPF) First Revision – April 2025	17
5.3. Programme for Government- Our Shared Future (GOI 2020)	18
5.4. Climate Action & Low Carbon Development (Amendment) Act 2021	19
5.5. Climate Action Plan (CAP) 2025 (subject to annual reviews)	19
5.6. Regional Policy.....	20
5.7. Other National Guidance	21
5.8. Local Policy Context.....	25
6.0 Natural Heritage Designations	33
7.0 The Appeal.....	34
7.1. Grounds of Appeal	34
7.2. Applicant Response	36
7.3. Planning Authority Response	43
7.4. Observations	43
8.0 Assessment.....	45

9.0 Planning Assessment.....	45
9.1. Introduction.....	45
9.2. Principle of development	45
9.3. Compliance with national & regional policy on data centres.....	47
9.4. Greenhouse Gas Emissions (GHG) and Energy Use.....	59
9.5. Design, layout and visual amenity	64
9.6. Impact on the setting of Ballysakeery House and other NIAH structures in the vicinity of the subject site	67
10.0 Environmental Impact Assessment.....	70
10.1. Statutory Provisions.....	70
10.2. EIA Structure	71
10.3. Issues raised in respect of the EIA	72
10.4. Compliance with the Requirements of Article 94 and Schedule 6 of the Planning Regulations	72
10.5. Consultations	75
10.6. Compliance.....	76
10.8. Population and Human Health	77
10.9. Land, Soils, Geology and Hydrogeology.....	82
10.10. Hydrology (Water).....	87
10.11. Biodiversity	94
10.12. Air Quality	101
10.13. Climate.....	108
10.14. Noise & Vibration	116
10.15. Landscape & Visual Impact Assessment.....	121
10.16. Archaeology, Architectural and Cultural Heritage	129

10.17.	Material Assets: Traffic & Transport.....	133
10.18.	Material Assets- Utilities.....	140
10.19.	Material Assets – Waste Management	145
10.20.	Interactions	150
11.0	Appropriate Assessment (AA).....	155
11.1.	Introduction	155
11.2.	Compliance with Article 6(3) of the EU Habitats Directive	155
11.3.	Stage 1 AA Screening.....	155
11.4.	Appropriate Assessment Conclusion: Integrity Test	156
12.0	Water Framework Directive.....	157
13.0	Recommendation.....	158
14.0	Reasons and Considerations	159
	Appendix 1: AA screening	161
	Appendix 2 Water Framework Directive (WFD) Screening.....	173

1.0 Site Location and Description

- 1.1. The subject site is located in north County Mayo, 9km north of Ballina and 2km south of Killala town. Killala is a coastal town along the R314 regional road which links Ballina to Ballycastle. The site is stated as having a site area of 10.58 hectares. It comprises agricultural land with a marshy area in the south eastern corner and the perimeter of the site is formed by mature hedgerows which also form internal field boundaries. Two 110kv overhead power lines transect the eastern end of the site and a 10kv/20kv MV overhead line transects the northern end of the site.
- 1.2. The site borders the Killala Business Park and former Asahi factory to its north both of which are accessed off the R314 to the east. To the north eastern boundary of the site is the Tawnaghmore Power Station and to the eastern boundary is a 110kV network substation. There are 5 wind turbines visible to the north west of the subject site, known as Killala Community windfarm.
- 1.3. The central southern boundary of the site wraps around a vacant two storey structure Ballysakeery Glebe House which is set within its own grounds which are overgrown and enclosed by a garden wall.
- 1.4. It is proposed to access the site off a local road the L-1111 (Mullafarry Road), which forms most of the site's southern boundary. The subject site includes a stretch of this road heading east which spurs north and includes a linear strip abutting the site to the public waste water treatment system which lies to the south of the Business Park. The waste water treatment plant is adjacent to the land fall of the AEConnect 1 Transatlantic Data Cable.
- 1.5. The site rises significantly from the Mullafarry Road to the northern boundary of the site by circa 20m. Mullafarry Road serves a number of rural dwellings to the west and east, in addition to two quarries, a church and graveyard. This road connects with the R314 (Wild Atlantic Way) to its east leading to Killala town to the north.
- 1.6. The land is drained by an agricultural ditch which runs along the southern perimeter of the site beside the Mullafarry road. The drainage ditch flows in an easterly direction and connects to the Moyne Stream (c. 500m to the east of the site) which flows in a northeasterly direction into Killala Bay.

2.0 Proposed Development

- 2.1. The proposed development comprises the construction of a data centre building located to the north of the site, with a footprint of 185m x 77m with an overall gross floor area of c.29,7640m² over two levels and an overall maximum height of 22.76m at parapet level. A letter of consent was submitted from Mayo County Council to develop on the lands.
- 2.2. It is stated the power supply for the development would be provided from the national grid via the 110kV line from Moy110kV to Tawnaghmore Power Station. A gas AGI is located in the southwest of the facility to allow for gas connection when this becomes available. The applicant has stated that Eirgrid will process an application for connection once planning permission has been granted and not before that.
- 2.3. The development would comprise the following:

Ground and first floors of data centre building

- Data halls over the two floors with associated electrical and plant rooms (23, 076m²), a gallery, an administrative and staff services block (c. 5,052 m²) and circulation and stairs (c. 116 m²).
- 2 no. external terraces are proposed to the east of the building (c. 309 m²).
- The facility would require c.50MW average electrical power to operate and an IT load of 40 MW.
- A cooling system within the data halls is proposed which would be a closed loop water circulatory system with roof chillers forming the primary cooling solution. This system would reuse the same volume of water, to minimise water usage.
- The façade of the building would include aluminium Kingspan cladding and green living walls along the southern elevation.

Roof level

- Solar panels are proposed to be located on the southern and central roof area and roof chiller systems. The roof chillers would be positioned behind the roof parapet.

- The solar panels are stated as having an input of 50kW.
- A green roof system is proposed on the hipped eastern section of roof to the building.

Generator yard and back up generators

- An external generator yard immediately to the south of the data centre building (c. 5,205 m² gfa) accommodating 25. no. backup / dispatchable generators and associated flues grouped into 5 columns (to a height of c. 21.164m) within an enclosed compound.
- The generators would be dual fuel powered by Hydrotreated Vegetable Oil (HVO) and gas and would provide back up power pending a power failure/grid outage. They have the potential to operate for up to 400 hours and generate 75 MW. It is stated the generators would be capable of dispatchable generation if required.
- A fuelling area is indicated to the south of the generator yard with associated petrol and debris interceptors.

Sprinkler tank & pump house

- This would be located to the northeast of the data centre building.
- The sprinkler tank would have an overall height of c. 7.2 m and the single storey pump house an overall height of c. 4.15m and area of c. 40.23m².

Access into the site

- 2.4. It is proposed to have 2 access points into the site off Mullafarry Road. The main access would be along the south eastern end of the site to the east of Ballysakeery Glebe House. It is proposed to have a security guard hut (gfa 11.6m²) close to this entrance.
- 2.5. The secondary access would be an emergency access which would be connected to the primary entrance via an internal looped road to the west of Ballysakeery Glebe House onto Mullafarry Road.

Car & Cycle parking

2.6. It is proposed to provide 56 no. car parking spaces (including 12 EV charging spaces and 7 disabled spaces, 3 of them EV), and 20 no. cycle parking spaces, to the east of the proposed data centre building.

Drainage

2.7. An attenuation pond and surface water swale area is proposed to the south east of the site close to the primary entrance into the site. A 3m high berm area is indicated to the south of this area. Other sustainable drainage details are proposed including permeable surfaces.

Water Supply

2.8. A diverted water main would be laid along the eastern boundary of the site, which would tie into the existing watermain in the northeastern and southeastern corners of the site. A pre connection enquiry was submitted to Uisce Eireann in September 2024.

Foul water

2.9. The development would be connected to the existing WWTP in Killala Business Park, 500m to the east of the site. Due to the levels on the site a 24 holding tank with a rising main is proposed at the southern end of the site to temporarily hold the flow before it is pumped to the WWTP.

Cut and Fill

2.10. The construction would require excavations down to a maximum depth of 4.5m below ground level from existing ground levels.

2.11. It is estimated that a total of 50,235 m³ would be excavated, of which 22,648 m³ would consist of rock. In addition, approximately 56,620 m³ of fill material would be needed throughout the development site.

Operating Times

2.12. The development once completed would operate 24 hours a day, 7 days a week. It is estimated that when the site is fully developed that there would be up to 32 staff onsite per shift. The rotational shift system would consist of 3 shifts over a 24 hour period.

End user of building

2.13. The future occupiers of the building have not been specified, however it is stated the developer is targeting the major technology companies as its tenant, and to date there is no future named tenant.

Future development on the subject land

2.14. The site plan indicates an area to the north east of the site being reserved for a future 110kV GIS substation which is stated as being subject to a separate pre-application request to An Coimisiun Pleanála.

2.15. An area to the south west of the site is reserved for a future planning application for a gas Above Ground Installation (AGI) to connect the facility to gas when it becomes available. The future gas pipeline would be subject to an application to the Commission for Regulation of Utilities (CRU) under Section 39A of the Gas Act 1976 (as amended).

2.16. An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) was submitted to the Planning Authority with the planning application.

2.17. The following documentation was submitted with the planning application:

- Architectural Design Statement
- Architectural Drawings,
- Engineering Planning Report,
- Outline Construction Management Plan,
- Traffic and Transport Assessment,
- Mobility Management Plan,
- Engineering Drawings,
- Commercial Energy Statement,
- Landscape Report & Outline Landscape Specification,
- Landscape Drawings,
- Environmental Impact Assessment Report,
- Bat survey,
- Natura Impact Statement,

- Water Framework Directive (WFD) Screening Assessment.

EPA-Industrial Emissions Directive licence

- 2.18. An EPA-Industrial Emissions Directive (IED) licence is required to facilitate the operation of the development under the First Schedule of the EPA Act (as amended) for 50MW or more (Activity 2.1 Combustion of fuels in installations with a total rated thermal input or more).
- 2.19. Further information was requested by the P.A on 23/1/2025 on 10 items and a response was received on 4/3/2025. This response forms part of this appeal assessment.

3.0 Planning Authority Decision

3.1. Decision

- 3.1.1. On 25th April 2025, Mayo County Council issued a decision to grant planning permission for the proposed development subject to 12 conditions. Conditions of note include the following:

Condition 1: Development to be carried out in accordance with plans & particulars at application and as amended by way of further information.

Condition 2: Mitigation measures in EIAR & NIS carried out in full.

Condition 3: Construction Traffic Management Plan.

Condition 7: Noise levels restricted to 55dB(A) Leq at nearest noise sensitive locations between 0800-2000hours Mon- Fri and 45dB(A) Leq at any other time.

Condition 10: During the life of the project, the applicant shall be required to install a suitable pipework at the site's perimeter to facilitate a district heating system, if deemed necessary and appropriate by MCC.

3.2. Planning Authority Reports

3.2.1. Initial planner's report dated 18/10/2024

Following an initial assessment of the planning application, Mayo County Council's planning officer recommended further information in relation to 10 items. Items 1-3 of the planner's F.I request related to archaeology, but these were not issued as part of

the further information request. Seven items were issued by the Planning Authority as summarised below:

- Item 1 related to the lack of energy from renewable sources in the development as overall percentage of required power and required the applicant to demonstrate compliance with the Commission for Regulation of Utilities (C.R.U) requirement regarding “grid connections” which require that any developer provides on-site-dispatchable generation, and/or storage, equivalent to or greater than its demand.
- Item 2 related to a current planning permission (MCC Ref:16/694 as extended under planning reference 16/6940) for another Data Centre, and for the applicant to justify the need for another development of this nature at this specific location.
- Item 3 requested justification for the scale and height of the proposed building, and why the main building could not be located on a lower part of the site.
- Item 4 related to the use of “Green Walls” and potential fire risk and to provide examples of the proposed concept elsewhere.
- Item 5 related to the absence of any suggested uses for the heat generated by the development and whether it could be used to heat other businesses within Killala Business Park.
- Item 6 requested any evidence of discussions/agreements to connect to the nearby transatlantic cable landing station.
- Item 7 sought clarity as to why the existing access into Killala Business Park could not be used for the development rather than the access off Mullafarry Road, and a revised site visibility off the proposed access, in accordance with CDP.

3.2.2. Second planner's report dated 16/4/2025

The P.A conducted a formal review of both the EIAR and NIS and the response to the F.I and were satisfied on receipt of the further information the development was acceptable.

3.2.3. Other Technical Reports

Environment: Report dated 11/12/2024: No further assessment required regarding flood risk.

Archaeologist: Report dated 18/12/2024: Requested pre-development testing be undertaken prior to a planning decision being made.

Area Engineer MCC: Report dated 20/1/2025: This report raised a number of issues relating to the location of the proposed data centre and why it could not be located within Killala Business Park and consideration given to the use of the access to the wind farms being used.

Other questions were raised regarding inter alia, the source of the HVO fuel for the on-site generators, limited PV installation being proposed, source of the fill material required, no carpark lighting layout and design submitted, setback is required along site road frontage, durability of the green wall proposal, district heating should be utilised, consider locating building on lower part of the site and power cables run underground, consents in place regarding Industrial Emissions Licence with the EPA and that of the 110kv substation.

Architectural Conservation officer: Report dated 21/1/2025: Scale, design & massing of proposal will negatively impact on Ballysakeery Glebe House and rectory Protected Structure Ref:0272. Notes a number of structures in close proximity to the site that are registered on the NIAH, and that the proposed development would change the general visual character and integrity of the historic landscape.

3.3. Prescribed Bodies

- 3.3.1. The Department of Housing, Local Government and Heritage (Archaeology) & (Natural Heritage), An Taisce and Uisce Eireann were consulted by the P.A but no record of responses received.

3.4. Third Party Observations

- 3.4.1. Submissions were received from Colin Doyle, Sally Rooney, Christopher Stark, Angela Deegan, & Micheal Hogan to the planning application on the following summarised grounds:

Greenhouse gas emission reductions:

- Given the power usage of data centres, the proposal is not sufficiently powered by on or off-site renewables, as per the requirements of Ireland's Climate Action Plan and commitments under the 2015 Paris Agreement.
- Proposal ignores Ireland's obligations under the Energy Efficiency Directive (EED) which requires Ireland to reduce both its primary and final energy consumption by 2030 and is contrary to "net-zero" trajectory.
- Mitigation measures within the EIAR are insufficient.
- Ireland is not on-track to meet its national and E.U climate targets, especially given the proposal to use back up HVO generators as part of the proposal.
- Corporate Power Purchase Agreements (CPPAs), which are often offered as mitigation for Data Centre developments, are of no environmental benefit for new data centre developments.
- Offsetting Greenhouse gas emissions through carbon credits ignores the basic fact that these emissions will still occur.
- Data Centres must provide sufficient energy storage (eg battery or renewable fuel) rather than fossil fuel based emergency storage, as proposed. It is submitted that the on-site solar installation proposed will provide only 0.1% of the plants power needs. This will lead to an increase in Ireland's greenhouse gas emissions.

Perceived errors in application/EIAR and lack of transparency:

- The calculations offered for Greenhouse Gas emissions in the EIAR are flawed.
- Perceived factual errors are pointed out in the EIAR.
- The transparency of aspects of the planning application is questionable, especially with regard to the company in whose name the application is being made.

Growth in Data centres in Ireland and need for same:

- There has been an unsustainable growth in data centre development in Ireland, which goes against Irelands targets for power usage from renewable energy sources, due to their large energy demands.
- The Cost/Benefit of Data Centres is questionable with one point being made that much of the data being stored is redundant.

District Heating and use of heat generated:

- Heat generated from Data Centres should be utilised for district heating systems, or in the absence of such systems, existing heat pump technology should be used to avoid the waste of generated heat energy from the date centre.
- Blackouts as a result of pressure from data centres is a real risk.

Lack of Community engagement:

- While developments in the tech sector outside Dublin are welcomed, it is submitted that better consultation with the local community should have occurred.

Planning History of area:

- The Planning History of the site's wider area provided within application documents is inaccurate, notably that of another Data Centre permitted in the site's immediate surrounds under reference number 16/694.

Impact on historical house:

- Development will impact adversely on a house of historical and architectural importance that is in close proximity to the site.

4.0 Planning History

4.1. There is no planning history connected with the subject site but of relevance are the following summarised descriptions of planning permissions on the adjoining lands:

North of the subject site:

- 4.1.1. **P.A Ref: 17/619:** MCC granted a 10 year planning permission on 11th January 2018 for a 5 turbine wind farm. Each turbine had a rotor diameter not exceeding 103.2m, a hub height not exceeding 73.5m and a blade tip height not exceeding 126m subject to 19 conditions.

This development is known as the Killala Community Wind Farm Project and involves a direct investment in partnership with a private development company. According to the MCDP it generates 17MW of renewable power.

North east of the subject site

- 4.1.2. **P.A 23/60266:** MCC granted planning permission on 27/5/2025 for the development of a Hydrogen Plant and an Energy Centre with an access onto the existing entrance road to the Ballina/Killala regional road (R314), subject to 13 conditions. The site has a total overall application boundary of 6.88ha. This is classified as a lower tier Seveso site. This development includes the demolition and removal of the existing Asahi plant buildings and the developer will apply to connect to EirGrid/ESB.
- 4.1.3. **P.A Ref: 16/ 694:** MCC granted planning permission on 12th May 2017 for change of use of an existing 12,000m² vacant warehouse building to a data centre (13,200m²) and a new build data centre and ancillary buildings and services subject to 15 conditions.
- 4.1.4. **P.A Ref: 16/6940:** MCC granted an extension of duration for P.A Ref: 16/694 on 16th November 2021 which expires on 15th June 2027.
- 4.1.5. **P.A Ref: 13/158:** MCC planning permission for an electrical transformer station on 10th September 2013, subject to 15 conditions.
- 4.1.6. **ABP Ref: 245557 & MCC 15/195:** Planning permission granted on 15th February 2016, for the Killala WWTP.

East of the subject site

- 4.1.7. **P.A Ref: 23/60134:** MCC granted planning permission on 20th February 2024, for a 50 megawatt electricity generating station, combusting woody biomass chips (domestic and imported) as well as a small proportion of fuel oil for boiler start-up. The site had a total area of 19.0 ha of which approximately 7 ha will be developed.

- 4.1.8. **P.A Ref: 22/562:** MCC granted planning permission on 29th September 2022 for the erection of a single storey extension to existing cable landing station, proposed ESB substation and all associated works subject to 5 conditions.
- 4.1.9. **P.A Ref: 18/362:** MCC granted planning permission on 3rd September 2019 for 3 Bespoke Electrical plant room containers, 1 chiller unit and retention of storage shed, subject to 3 conditions.

West of the subject site

- 4.1.10. **ABP Ref: 319173 & MCC Ref: 2360182:** Planning permission was granted by ABP on 7th July 2025 for the construction of an inert waste recovery facility in an active quarry subject to 16 conditions.

South west of subject site:

- 4.1.11. **ABP Ref: 313975-22 & MCC Ref: 2193:** Planning permission was granted by ABP on 19th February 2024 for an anaerobic digestion biogas facility using locally sourced slurry & feedstock to generate biogas to export to the national grid and associated gas pipeline and associated works (overall area including pipeline c.18ha).

5.0 Policy Context

5.1. National Policy Context

5.2. National Planning Framework (NPF) First Revision – April 2025

- 5.2.1. This Framework is revised and updated to take account of changes that have occurred since The National Planning Framework was published in 2018 and to build on the framework that is in place. Of relevance to this appeal it states the future planning and development of Ireland's communities at local level is being refocused to tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing the country's prodigious renewable energy potential.

National Strategic Outcome (NSO) No. 6- A Strong Economy Supported by Enterprise, Innovation and Skills.

A competitive, innovative and resilient regional enterprise base is essential to provide the jobs and employment opportunities to enable people to live and prosper in the regions.

NSO No. 8 – Transition to Carbon Neutral & Climate Resilient Society

The Climate Action and Low Carbon Development (Amendment) Act was enacted in 2021 with a commitment to a legally binding target to reduce greenhouse gas emissions by 51% and increase the share of electricity generated from renewable sources to 80% over the decade (2021 – 2030), and to achieve net-zero emissions no later than 2050.

This objective will shape investment choices over the coming decades in line with the National Climate Action Plan 2024 and the National Adaptation Framework. New energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand.

National Planning Objective (NPO) 32: Enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT-based industries and those addressing climate change and sustainability.

NPO 69: Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions as expressed in the most recently adopted carbon budgets.

NPO 71: Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.

5.3. Programme for Government- Our Shared Future (GOI 2020)

- 5.3.1. This programme in relation to climate has a commitment to an average 7% per annum reduction in overall GHG emissions from 2021 to 2030, a 51% reduction over the decade with an overall aim to achieve net zero emissions by 2050.

5.4. Climate Action & Low Carbon Development (Amendment) Act 2021

- 5.4.1. This Act amends the Climate Action and Low Carbon Development Act 2015. It sets out the national objective of transitioning to a low carbon, climate resilient and environmentally sustainable economy in the period up to 2050. The Act commits in law, to a move to a climate resilient and climate neutral economy by 2050.

5.5. Climate Action Plan (CAP) 2025 (subject to annual reviews)

- 5.5.1. Climate Action Plan 2025 (CAP25) is the third statutory annual update to Ireland's Climate Action Plan under the Climate Action and Low Carbon Development (Amendment) Act 2021. It builds upon the 2023 and 2024 Plans by updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings and is read in conjunction with the Climate Action Plan 2024. This Plan notes electricity emissions have decreased by 26.2% from 2018 to 2023 due to the increasing share of renewable generation and net electricity imports. Wind energy now counts for over a third of our electricity supply.
- 5.5.2. Chapter 11 of this Plan specifically deals with electricity and states that electricity accounted for 12.5% of Ireland's greenhouse gas (GHG) emissions in 2023. Between 2018 and 2023, electricity emissions decreased by 26.2% to 7.6 MtCO₂eq¹. in 2023. The 2023 figure represents a 22% decrease on the 2021 emissions which had risen to 9.89 MtCO₂eq. The Plan states the 22% reduction in emissions in the electricity sector is due to an increase in the share of renewable electricity generation, from 38.6% to 40.7% from 2022 to 2023, with wind energy accounting for 33.7% of electricity supply (up from 33.1%), and an increase in net imports of electricity, rising from 1% in 2022 to 10% in 2023, resulting in a reduction in the use of coal, oil, and gas-fired plant for domestic generation.
- 5.5.3. While the EPA Projections Report 2023–2050 indicates an overshoot of over 1 MtCO₂eq. in the period 2021 to 2025, and an overshoot of over 5 MtCO₂eq. in the second period 2026 to 2030, for electricity with a reduction of 5.2 MtCO₂eq. and 8.2 MtCO₂eq., respectively, as set out in the Climate Action Plan 2024.

¹ Million Tonnes of Carbon Dioxide Equivalent

5.6. Regional Policy

Regional Spatial & Economic Strategy (RSES) for the northern and western region (2020-2032)

- 5.6.1. The RSES provides a high-level development framework for the Northern and Western Region that supports the implementation of the National Planning Framework (NPF) and the relevant economic policies and objectives of Government over a 12 year strategy period.
- 5.6.2. The RSES indicates the locations of various electricity generating stations within the region and Ireland as a whole which include hydro, thermal and wind. It specifically states the location of the higher voltage infrastructure is useful, particularly when seeking to identify regional opportunities that may attract industries (e.g. data centres, renewables, etc.) (Figure 64 refers).
- 5.6.3. The RSES states the west region is particularly rich in renewable energy resources. The existing transmission network is predominantly lower capacity 110 kV with very little higher capacity of 220 kV and 400 kV transmission infrastructure. The Border Region has significant renewable energy resources and supply exceeds demand, so there is an excess of generation in the area. Demand in the region, including the main urban centres, is expected to grow over the period of the RSES. The Bellacorick – Moy 110kV line is indicated as being upgraded.
- 5.6.4. Relevant Regional Policy Objectives (RPO) of the RSES relating to this development include the following

RPO 4.17 includes: Encourage the development of the transmission and distribution grids to facilitate the development of renewable energy projects and the effective utilisation of the energy generated from renewable sources having regard to the future potential of the region over the lifetime of the Strategy and beyond.

RPO 8.1: The Assembly support the development of a safe, secure and reliable electricity network and the transition towards a low carbon economy centred on energy efficiency and the growth projects outlined and described in this strategy.

RPO 8.2: Support the reinforcement and strengthening of the electricity transmission network with particular reference to the regionally important projects contained within Table 11. This includes the Bellacorick-Moy 110kV line upgrade.

5.7. Other National Guidance

Government Statement on the role of data centres in Ireland's Enterprise Strategy (July 2022)

- 5.7.1. This Statement was produced by the Department of Enterprise, Trade & Employment (DETE) and sets out how digital and climate change policies can be achieved in respect to data centres, recognising the capacity constraints within the electricity system and the significantly large loads required by data centres. It notes the importance and role of data centres to the Irish economy and that they directly and indirectly support 27,000 jobs in Ireland but in the short term there is only limited capacity for data centre development until the necessary upgrades to infrastructure are implemented and more renewable energy supply comes on stream.

The statement sets out 6 principles to inform and guide decisions on future data centre development:

- ***Economic Impact*** - The Government has a preference for data centre developments associated with strong economic activity and employment.
- ***Grid Capacity and Efficiency*** - The Government has a preference for data centre developments that make efficient use of our electricity grid, using available capacity and alleviating constraints.
- ***Renewables and Additionality*** - The Government has a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland.
- ***Co-location or Proximity with Future-Proof Energy Supply*** - The Government has a preference for data centre developments in locations where there is potential to co-locate a renewable generation facility or advanced storage with the data centre, supported by CPPA, private wire or other arrangement.
- ***Decarbonised Data Centre by Design*** - The Government has a preference for data centre developments that can demonstrate a clear pathway to decarbonise and ultimately provide net zero data services.

- ***SME Access and Community Benefits*** - The Government has a preference for data centre developments that provide opportunities for community engagement and assist SMEs, both at a construction phase and throughout the data centre life cycle.

Commission for Regulation of Utilities Direction to the System Operators related to Data Centre grid connection processing (CRU/21/124), Nov 2021

- 5.7.2. The Commission for Regulations of Utilities (CRU) issued a direction to the Transmission System Operators (TSO) Eirgrid, and the Distribution System Operator (DSO) ESB Networks, collectively referred to as the System Operators (SOs) to consider specific assessment criteria regarding data centre connection applications. Whilst it is primarily a policy document for the SOs, it is of relevance to the assessment of data centres, particularly with regard to the guidance for onsite dispatchable generation.
- 5.7.3. The Direction notes concern that continuing to allow data centres to connect to the electricity network in accordance with the current arrangements will significantly impact on the CRU's ability to comply with its obligation to protect security of electricity supply. In this context, data centres are identified as a distinct class where specific criteria needs to be met when SOs are considering connection applications in order to determine whether to make a connection offer. The assessment criteria includes:
- Location – whether it is a constrained/unconstrained region of the electricity system.
 - Ability of the data centre applicant to bring onsite dispatchable generation (and/or storage) equivalent to or greater than their demand, which meets requirements as may be specified by the relevant SO, in order to support security of supply.
 - Ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so, through the use of dispatchable on-site generation (and /or storage).
 - Ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by the relevant SO, in order to support security of supply.

- The SO can terminate a grid connection where an offer would be inconsistent with the needs of the electricity system.
- CRU expects any dispatchable on-site generation that uses fossil fuel will use natural gas as its fuel source and capable of being retrofitted to run on alternative renewable fuel sources.

CRU Decision paper- Review of Large Energy Users Connection Policy (CRU202504) Published 18th February 2025

- 5.7.4. This decision paper published by the CRU identified that large energy users (LEUs) such as data centres are having an impact on the ability of Ireland's electricity system to meet reasonable demands, that is not comparable to any other sectors or industries. The share of electricity consumed by data centres has grown from 5% of total national demand in 2015 to 21% in 2023. Electricity demand from data centres in Ireland is projected to almost double within the next ten years based on already contracted data centre demand connections which are yet to be built and connected to the network. It is expected that data centres will represent 30% of national electricity demand in Ireland by 2030 if no additional data centres are contracted over and above what is already signed up. Data centres are also heavily concentrated around the Dublin area creating additional pressure on the local electricity network, which System Operators (SOs) have indicated is constrained and in need of a multi-annual programme of upgrade.
- 5.7.5. It recognises that data centres are a core infrastructure enabler of a technology rich, innovative economy and help to make Ireland a location of choice for a broad range of sectors and value added activities and there is an opportunity to match this demand with future available renewable resources such as off shore wind energy. The CRU is committed to working with relevant Departments in order to support the delivery of the comprehensive plan referred to in the Programme for Government. This aligns with the commitments set out in the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy which states that the principles for sustainable data centre development set out within that statement "will facilitate the appropriate planned approach" .
- 5.7.6. The decision paper sets out conditions for new data centre customers seeking to connect to the electricity network in advance of the potential of a State-led approach

for all data centres seeking to connect to the electricity network and include the following:

- Data centres will be required to provide dispatchable generation or storage onsite or nearby.
- The ramping up of a new data centre's demand will be linked to the delivery of the required generation capacity.
- The System Operators (SOs) should continue to take into account the location of any data centre connection applications and associated generation capacity in respect of whether it is in a constrained or unconstrained region of the electricity network.
- The SOs will be required to publish regular information on existing and future grid network capacity to accommodate connections on the electricity network and to provide insight to new data centres and other developers.
- Data centres will be required to self report to the System Operator annually in relation to their use of renewable energy and their sites' emissions.

SOs & CRU required to perform their functions in a manner consistent with the national climate objective.

Renewable Electricity Corporate Power Purchase Agreements (CPPA) Roadmap (March 2022)

- 5.7.7. A CPPA is an arrangement whereby a company procures renewable electricity through a direct contractual agreement with a renewable electricity generator. This Roadmap notes that the forecast growth of data centres is a challenge to Ireland's emission's targets because of their electricity demand. It states that policy should seek to incentivise greater temporal and spatial matching between the contracted renewable electricity generation and corporate demand, to reduce pressures on the electricity system and drive deeper emissions reductions. The document sets out seven core principles to help ensure that corporate power procurement contributes effectively and efficiently to delivering on Ireland's climate and renewable energy targets.

Government Policy Statement on Security of Electricity Supply (2021)

- 5.7.8. This Government Statement notes that given the variable nature of renewable sources, other technologies will be required to support their operation and provide electricity supply when they are not generating. With regard to data centres, it acknowledges that there has been significant growth in electricity demands from users such as data centres but also details that the risk associated with such demand can be significantly mitigated by ensuring that new demand can be flexible, particularly at periods of peak demand, or have its own onsite backup generation or storage capacity. It is detailed as more wind, solar, storage and interconnection are added to the electricity system, conventional generation is expected to operate less but sufficient generation capacity will still be required.

Harnessing Digital – the Digital Ireland Framework (2022)

- 5.7.9. The Framework sets out a pathway to drive and enable the digital transition across Ireland's economy and society. The document sets out a coherent framework to oversee the increased uptake of digital technologies across all sectors of the economy and society. Data centres are noted to be a very significant feature of Ireland's electricity demand but are a core infrastructure enabler of a technological and innovative economy.

5.8. Local Policy Context

Mayo County Development Plan (MCDP) 2022-2028

- 5.8.1. The subject site is not zoned within the Mayo County Development Plan (MCDP).
- 5.8.2. While many sections of the MCDP directly and indirectly apply in the assessment of this application, the following are considered to be of most significance: In Volume 1, Chapter 2- Core & Settlement Strategy, Chapter 4- Economic Development, Chapter 7- Infrastructure, Chapter 8- Sustainable Communities, Chapter 9- Built Environment, Chapter 10- Natural Environment and Chapter 11- Climate Action and Renewable Energy.
- 5.8.3. **Chapter 2- Core & Settlement Strategy**

Strategic Objective SO 4: Low Carbon and Climate Resilient County

To transition to a low carbon and climate resilient county, by promoting sustainable settlement patterns, the integration of land-use and sustainable modes of transport, encourage walking, cycling and public transport, increasing reliance on green energy sources, encouraging urban and rural communities to facilitate effective change and by building climate change resilience and climate action into all services and functions of Mayo County Council.

CSO 7: To implement all land use planning policies and objectives in a manner which takes account of and is consistent with the Core Strategy, in order to accelerate a transition to a greener, low carbon and climate resilient county with a focus on reduced travel demand through the promotion of sustainable settlement patterns.

5.8.4. **Chapter 4- Economic Development**

Section .4.7 Smart Economy

Information and Communication Technologies (ICT) play a crucial role in enabling social and economic activity and the enhancement the ICT infrastructure throughout the county is a priority. This must be managed to ensure a balance between the provision of such infrastructure in the interests of social and economic progress and sustaining residential amenity and environmental quality. Mayo County Council has prepared a Digital Strategy which seeks to facilitate and support the rollout of Digital Infrastructure and Skills to all citizens in County Mayo.

EDO 67: To facilitate the development of industries that create and employ green technologies and take measures to accelerate the transition towards low carbon and circular economies.

EDO 69: To support and facilitate renewable energy initiatives that facilitate a low carbon transition.

EDP 16 To support the development of the ICT sector in Mayo, along with key stakeholders and relevant agencies to ensure that the economic, potential of the sector is secured for the benefit of the local, regional and national economy.

EDP 18 To support the development of a Smart County to develop and diversify the rural economy, to build on local enterprise and infrastructure assets, to drive innovations around energy, transport, agri-food, tourism, e-services and remote working.

Objective EDO 7 To identify and promote a range of locations within the County for different types of enterprise activity including international business and technology parks, small and medium enterprises (SME) and micro enterprise centres.

Objective EDO 40 To explore the feasibility of seeking the designation of the former Asahi Plant and adjoining lands outside of Killala as a Strategic Development Zone.

Objective EDO 52 To support the development of sites where data centres, ICT related development and high potential start-ups can thrive.

5.8.5. **Chapter 7 – Infrastructure**

Section 7.4.4.5 AEConnect 1

AEConnect 1 is a trans-Atlantic sub-sea fibre-optic cable extending from Long Island, New York to Killala, Mayo, which offers the potential for the West of Ireland to become a key telecommunications and data gateway. The AEConnect cable has the capacity to cover the entire European and American information and data traffic currently in existence and the potential to double its capacity within a few years as required. The delivery of advanced technological infrastructure in the area also provides a potential platform for the development of ICT facilities, such as data centres in the county and other businesses to set up their operations in the locality.

Policy INP 20 To promote Mayo as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities, at appropriate locations.

Policy INP 23 To support the statutory providers of national grid infrastructure by safeguarding such strategic corridors from encroachment by other developments that might compromise the provision of energy networks where strategic route corridors have been identified.

Objective INO 17 To require the use of SuDS to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage techniques where appropriate for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risks.

INO 32 To maximise and widely promote connectivity of Mayo based on building on existing ICT infrastructure and sub-sea fibre optic cables where possible.

5.8.6. **Chapter 8- Sustainable Communities**

SCO9: To facilitate the provision of community and resource centres and youth clubs/ cafes, recreational amenities and other facilities for younger people by the identification of suitably located sites, including Council landbanks and by assisting in the provision of finance, where possible.

SCP 18 To promote the improvement of health and wellbeing services throughout the county, in particular to encourage the integration of health and wellbeing services and facilities with new and existing community facilities, where feasible.

5.8.7. **Chapter 9 - Built Environment**

Section 9.4.1.1 Archaeological Heritage

Policies BEP 1-3 contain policies to protect the archaeological heritage of the county.

Policies BEP 4 17 contain policies to protect the architectural heritage of the county and buildings and structures included within the Record of Protected Structures within the Plan.

Section 9.4.1.3 relates specifically to the historic building stock and vernacular architecture.

BEP 8 To encourage the retention, sympathetic maintenance and sustainable re-use of historic buildings, including vernacular dwellings or farm buildings and the retention of historic streetscape character, fabric, detail and features, where appropriate.

BEP 10 To encourage the protection, retention, appreciation and appropriate revitalisation of the vernacular heritage of Mayo.

BEP 11 To promote the sympathetic maintenance refurbishment and re-use of vernacular built heritage and to support the retention of original fabric such as windows, doors, renders/pub/shopfronts, roof coverings and interiors.

BEP 12 To support proposals to appropriately refurbish and extend vernacular structures in a semi-derelict or derelict condition.

5.8.8. **Chapter 10 Natural Environment**

Policy NEP 1 To support the protection, conservation and enhancement of the natural heritage and biodiversity of County Mayo, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural

Heritage Areas, proposed Natural Heritage Areas Ramsar Sites, Nature Reserves and Wild Fowl Sanctuaries (and other designated sites including any future designations).

NEP 7 To encourage the effective management of native and semi-natural woodlands, groups of trees and individual trees in the discharge of development management functions.

The subject site lies within the North Mayo Drumlins Landscape area of the County (Area G) which corresponds with Policy Area 4 in the County Landscape Appraisal of the County (Volume 4 of the CDP

NEO 13 To ensure the protection of trees or groups of trees protected under Tree Preservation Orders, as well as recognise the value and encourage the retention and management of other trees and woodlands, which make a valuable contribution to the character of the landscape, ecological corridors, green infrastructure, a settlement or its setting.

NEP 14 To protect, enhance and contribute to the physical, visual and scenic character of County Mayo and to preserve its unique landscape character.

Policies NEP 15-21 seeks to protect the visual character of the county and enhance surface water, ground waters sources and the continued implementation of the Water Framework Directive.

Objective NEO 27 seeks to ensure all development proposals are consistent with the Landscape Appraisal of County Mayo and the associated Landscape Sensitivity Matrix and future editions thereof.

5.8.9. **Chapter 11 Climate Action & Renewable Energy**

CAP 2 To support the National Climate Change Strategy and methods of reducing anthropogenic greenhouse gases on an ongoing basis through implementation of supporting objectives in this Plan, particularly those supporting use of alternative and renewable energy sources, sustainable transport, air quality, coastal zone management, flooding and soil erosion and promotion of the retention of, and planting of trees, hedgerows and afforestation, subject to no significant adverse effects on the environment including the integrity of the Natura 2000 network.

CAP 6 To support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases,

increasing renewable energy, and improving energy efficiency and supporting nature-based solutions to climate adaptation and mitigation that provides co benefits

Section 11.7.3 Mayo Context

Mayo County Council is a leader in the development of renewable energy, with Ireland's first commercial wind farm at Bellacorick, Co Mayo in 1992. The Council recognises that a safe, secure, sustainable and affordable supply of energy is of central importance to the economic and social wellbeing of County Mayo. Continued development of renewable energy sources in Mayo will help Ireland achieve our national targets. Mayo has an enormous wind resource with the potential to underpin an entire new economy in the county. The county generates 266MW (Q1 2020) from 15 wind farms, which is approximately 6% of Ireland's overall wind energy production. The development of the extant permissions for wind and solar energy projects in the county will significantly add to Mayo's renewable energy output.

Section 11.7.4 County Mayo Renewable Energy Target

In setting a realistic deliverable target for a county with a high wind potential like Mayo, a minimum target of 600MW over the plan period is considered achievable. The target would meet the energy demands of existing households in Mayo, as well as the proposed additional households for the county set out in the Core Strategy Table (Chapter 2). This renewable energy target for Mayo may need to be revised over the lifetime of the Plan to ensure alignment with the Northern and Western Regional Assembly's forthcoming Renewable Energy Strategy.

Section 11.7.6 Wind Energy

Mayo has a strong wind resource and a rich history of wind generation. In 1992, Ireland's first commercial wind farm came into operation at Bellacorick. The capacity of the Oweninny wind farm at Bellacorick has recently been upgraded and will be further increased to 172MW, following completion of Oweninny Phase 2. The Oweninny wind farm will generate sufficient electricity to power around 100,000 households per annum.

The Killala Community Wind Farm project in North Mayo involves a direct community investment in partnership with a private development company. The Killala Community Wind Farm, comprising of five turbines, generates 17MW of renewable power. The Council encourages community ownership of wind energy projects in Mayo.

Objective REO 2 To examine options to ensure that community benefits are derived from renewable energy development in the County.

Objective REO 10 To encourage solar energy in commercial and residential development, subject to the proper planning and sustainable development of the area and consideration of environmental and ecological sensitivities.

Objective REO 16 To promote the use of geothermal heat pumps for space heating and cooling as well as water heating in domestic, commercial and recreational buildings.

5.8.10. **Chapter 12- Settlement plans**

Killala

Killala is the 16th largest settlement within the county and is identified as a self-sustaining Tier III town within the settlement hierarchy and functions as a commuter area primarily for Ballina. Self sustaining towns have moderate levels of population growth and a limited localised employment base, are reliant on other areas for employment and/or services and therefore require targeted 'catch up' investment to become more self-sustaining. The population of the town decreased from 657 persons in the 1996 census to 562 persons in the 2016 census. The subject site is not zoned within this settlement plan.

5.8.11. In section 12.13.3 of this chapter, it states opportunities exist for Killala for a data centre and /or renewable energy hub at the Killala Business Park.

5.8.12. A new municipal wastewater treatment plant (3,155P.E) has been operational for Killala since 2020. Killala is served by the Ballina Regional Water Supply.

Objective KAO 7 To protect Killala Bay/Moy Estuary Special Area of Conservation (Site Code 000458) and Special Protection Area (Site Code 004036). Development proposals will be required to demonstrate that the development will not have an adverse effect on the integrity of the sites.

5.8.13. Three opportunity sites have been identified for Killala settlement in Volume 3 Book of maps but the subject site is not included as an opportunity site.

5.8.14. **Volume 2- Development Management Standards**

Of particular relevance are the following sections: Section 5.0 – Enterprise & Employment Section 7.0 – Roads and Parking Section 8.0 – Infrastructure, Service and Safety Section 11.0 – Built Environment Section 12.0 – Natural Environment Section 13.0 – Guidance for Planning Applications and Assessments Required for Certain Developments.

5.8.15. **Volume 4 of CDP - Supporting Documentation-**

Landscape Appraisal for Co.Mayo

The site lies within Area G: North Mayo Drumlins in the Landscape Appraisal of the county, and Policy Area 4: Drumlins and Lowlands. Policies 21-24 are relevant to Policy Area 4 as set out in the Landscape Appraisal of the county in Volume 4 of the CDP .

Policy 21 Recognise that these areas are made up of a variety of working landscapes and contain the vast proportion of the County's population within principle towns and on rural holdings. These also incorporate all of the major national primary and regional roads, and railways.

Policy 22 Continue to permit development that can utilise existing infrastructure, whilst taking account of absorption opportunities provided by the landscape and prevailing vegetation.

Policy 23 Encourage development that will not significantly interfere or detract from scenic lakeland vistas, as identified in the Development Plan, when viewed from areas of the public realm.

Policy 24 Encourage development that will not result in detrimental impacts (through excessive bulk, scale or inappropriate siting) on the landscape at a local or micro level as viewed from areas of the public realm.

Mayo Renewable Energy Strategy 2011-2020

This document was adopted in May 2011 and is supported in the current CDP. Mayo has been identified as having the largest (35%) expected regional distribution of the renewable generation capacity, as the area is particularly rich in wind and ocean renewable energy resources. The upgrading of the national grid is considered imperative for the future development of renewable energy production in Mayo. It is stated within this strategy that planning permission has been granted for 6 additional

windfarms in the County consisting of an estimated output of 371.4MW and a number of additional wind farm developments during the period 2010-2023 generating a total of 500.25 MW of electricity.

Map 8 of this strategy indicates renewable energy potential and existing infrastructure in Mayo 2011-2020. To the west of Killala town is identified as being suitable for large wind farms.

6.0 Natural Heritage Designations

- 6.1.1. The site is not located on a designated site. The following European sites are located within c.15km radius of the site:

Site name & (site code ref)	Distance from site (km)
Killala Bay/Moy Estuary SAC (000458)	1.17km north
Killala Bay/Moy Estuary SPA (004036)	1.77km north
Lackan Saltmarsh & Kilcummin Head SAC (000516)	7.5km north
River Moy SAC (002298)	7.5km south west
Lough Conn & Lough Cullin SPA (004228)	10.5km south west
Bellacorick Bog Complex SAC (001922)	10.7km west
Glenamoy Bog Complex SAC (000500)	13km north west

The following Natural Heritage sites are located within c.15km radius of the site:

Site name & site code	Distance from site (km)
Killala Esker pNHA (001517)	0.8km north
Killala Bay/Moy Estuary pNHA (000458)	1.2km to north
Cloonagh Lough(Mayo) pNHA (001485)	5.4km south
Lackan Saltmarsh & Kilcummin Head pNHA (000516)	7.5km north of site
Lough Conn and Lough Cullin pNHA (000519)	10.5km south

Forrew Bog NHA (002432)	11.1km south west
Creevagh Head pNHA (000482)	11.8km north
Bellacorick Bog Complex pNHA (001922)	12km north
Lough Alick pNHA (soite code: 001527)	12.7km south east
Unmerantarry Bog NHA (001570)	14.8km north west

7.0 The Appeal

7.1. Grounds of Appeal

7.1.1. A Third Party submission was received from Dr. Colin Doyle, on the following summarised grounds:

- EIAR is defective and flawed and the measures described in the EIAR are questionable regarding capability of mitigating the climate impact to a level where a grant of permission would be consistent with the national climate action plan.
- A development which would increase GHG emissions from the electricity sector to 2030 would not be consistent with CAP 25 & 24.
- Reality as confirmed by the EPA & EEA reports is that Ireland is falling short to achieve any of its legally binding national or EU GHG reduction and energy targets.
- Invalid mitigation claims in EIAR regarding, assumption of automatic alignment, EU Emissions Trading Scheme (ETS), inadequate design mitigation measures (i.e PV panels), renewable gas, emission savings from elsewhere as data centre more efficient storage, Corporate Power Purchase Agreement (CPPA) are not a mitigation measure, and invalid GHG calculations based on grid emissions. Development cannot be mitigated to 'minor adverse'.
- Solar PV panels would just meet 0.01% of annual power demand of the data centre.

- A new load onto the grid will reduce the percentage of renewables on the grid and increase the overall grid emission factor, thereby increasing fossil fuel usage.
- GHG emissions from the data centre have been calculated on a flawed methodology., i.e that the development can benefit from reduced electricity emission factors in the future as per national targets.
- Ireland will not reach its 2030 Energy Efficient Directive (EED) or GHG targets if its energy consumption continues to grow driven by data centres.
- Renewables are not keeping pace with growing data centre numbers.
- The fixed load of the proposed data centre would absorb around 50% of all the wind energy in the county.
- Growth in data centres is outpacing deployment of renewables.
- Data centre would consume the renewables that were committed to meet the CAP targets for the rest of the economy.
- Too simplistic to state the data centre would benefit from the CAP 24 target of 80% renewable electricity in 2030, as there is no allowance in CAP 24/25 to accommodate large loads such as data centres granted consents and grid connections since 2023.
- ESB heatmap in EIAR indicates a capacity of 26.83MW which is less than the 48MW for the data centre and 58MW stated in the F.I.
- Applicant did not consider cumulative impact in terms of GHG emissions or cumulative power demand from the second data centre granted permission close by.
- Condition 10 of P.A regarding use of waste heat is not enforceable.
- Proposed development would double the electricity consumption for the non residential sector in the county, and questions whether this is economically or socially justified.
- The large energy consumption per job associated with the data centre would compromise less energy hungry job opportunities. The same energy consumption could provide 52,800 jobs rather than 96 as proposed.

- The proposal would lock the county into an energy constrained future at the expense of economic development.

7.2. Applicant Response

7.2.1. The applicant's agent has responded to the issues raised by the third party and includes a technical note from a specialist in the context of the Climate Action Plan and carbon budgets and Electricity Sectoral Emission Ceilings. The response refers to changes in policy since the application was submitted, addresses the 6 principles for sustainable data centre development outlined in the Government's Statement and refers to planning precedent on a data centre in Ennis. The applicant's response is summarised in the following headings and grounds:

Impact on Climate

- GHG assessment in EIAR was based on the principles of the Institute of Environmental Management & Assessment (IEMA) guidelines 2022.
- Development will replace activities that have a higher GHG profile and is a more efficient means of data storage compared to data storage by individuals and companies by up to 80%.
- Best practice measure will be employed to reduce GHG emissions via PV panels and feasibility of a connection to a future district heating scheme.
- Back up generators will be able to be run with Hydrotreated Vegetable Oil (HVO) and the development will be phased and the GHG emissions in the early years will be an over estimation of reality.
- Development will be in close proximity to renewable generation projects and the tenants will seek to enter into CPPAs with renewable (wind) producers when it becomes available.
- Project is targeting major tech companies such as Microsoft, Google, Meta & Amazon, which all make commitments to offset carbon emissions associated with their data centres.
- Following the mitigation measures in the EIAR, the development would reduce the impact from significant adverse to minor adverse climate impact.

- Conditions 1 & 2 of the P.A permission would ensure the mitigation measures in the EIAR & NIS are carried out in full.

Reliability of EIAR- Chapter 9- Climate

- Applicant refutes appellant's claims regarding the reliability of the Climate Chapter of the EIAR. Typos in Tables 9.1 & 9.9 of EIAR referred to by appellant are acknowledged and revised, but are considered to have no bearing on overall conclusions in chapter.
- Emission Trading Scheme (ETS) is an EU wide scheme which regulates the GHG emissions of larger industrial emitters including electricity generation and facilities which have greater than 20MW thermal input capacity such as the proposed development.
- Under the EU ETS there are no country specific targets. The EU Regulations aims to deliver collectively reductions in GHG emissions from the ETS and non ETS sectors to 43% and 30% respectively by 2030 compared to 2005. The cap on ETS emission has been tightened to reduce emissions by 62% by 2030 compared to 2005.
- Notes CAP 25 has been published since EIAR but CAP 25 builds upon the policies in CAP 24, which is therefore still relevant.
- Uncertain from the most recent EPA data whether agricultural emissions will decrease.

Misleading narrative on progress to national targets

- CHG emission factors have been assumed to decrease in a linear fashion to 2030 for the purposes of the assessment, in accordance with the relevant Climate Action Plans including CAP24 & 25 which seeks a target of 80% renewables by 2030 which is the equivalent of reach 100 gCO₂/kWh by 2030.
- Notes recent published EPA 'Ireland's GHG Emissions Projections 2024-2055' is less optimistic on reaching 80% renewable targets and that 68.3% is more likely to be reached. This documents also suggests the carbon budgets and sectoral emissions ceilings will be difficult to comply with 2030 targets

- EPA projections have excluded 5 GW off shore and 8 GW solar PV outlined in CAP 25, a new flexible gas fired generation of 1.4GW by 2030 compared to 2 GW in CAP 25, 2 GW off shore wind for green hydrogen post 2030.
- While some targets delivery is falling below the anticipated level of provision, there are additional measures coming on stream which will contribute to these targets.

Invalid Mitigation Claims

False assumption of automatic alignment

- Developer has committed to ensuring the facility operates in a net zero environment and will ensure that the GHG emissions associated with the development is met by renewable energy generated in line with the Government's statement on data centres.
- If development results in a greater GHG emission factor of electricity above the assumed 100 gCO₂/kWh it will lead to a greater CPPA requirement.
- Any project that is powered from the grid will benefit from improvements to the grid. The users of the facility will seek to enter into CPPAs with renewable generators and producers when it becomes available.
- The grid is not constrained in this location and there are a significant number of renewable projects located in the area, and the proposal is in compliance with policies & objectives of the CDP.

EU Emissions Trading Scheme (ETS)

- As the cost of EU ETS rise the volume of free allocations will reduce, which is an incentive mechanism to reduce GHG emissions in industrial sectors.
- Indirect electricity emissions and the direct emissions from HVO generators will operate within ETS and will requires GHG permits under ETS in order to operate.
- GHG emissions associated with the development will be in line with CAP 2025.

Inadequate embedded mitigations

- The project was assessed using the guidance and methodology of the Institute of Environmental Management and Assessment (IEMA) Guidelines 2022 which is recognised as the authoritative body on GHG and climate impact assessment.
- Solar panels on roof will generate some of the energy and the developer will investigate a connection to a future district heating scheme. Back up generators will be able to run with Hydrotreated Vegetable Oil (HVO). The remainder of the development will be from the national grid.
- The development will also be phased and the GHG emissions in the early years of the project will be an over estimation.
- Carbon intensity of the grid is reducing with 40% from renewable sources in 2023. CAP 25 includes a target of 80% from renewables to generate electricity.
- The source of energy for the development is therefore renewables which will increase as time goes on.
- Project is in close proximity to renewable regeneration projects & the future tenants will seek to enter into CPPAs with renewable energy providers when available.
- Two letters enclosed indicating engagement with renewable energy providers.
- Applicant has also registered with SSE Renewables, Mercury Renewables and EDP renewables.
- Mayo has 358MW installed wind energy capacity which contributes to 829 GWh of energy generated. New wind energy facilities such as Oweninny 3 and Sheskin will contribute to 100MW which will increase the availability of renewable energy for the development.
- Proposed development would contribute to mitigating against the current wasted wind energy by consuming locally generated renewable power which could not be transported to the east of the country.
- HVO back up generators have been modelled to operate a maximum of 400 hours per year but will operate less than this.

- On site generation proposed is greater than the demand in line with CRU requirements and emerging requirements.
- The 2022 EirGrid restricted connection agreements for data centres in the greater Dublin area due to capacity constraints does not apply to data centres outside this area which would indicate there is available capacity.
- Recent ESN demand capacity heatmap from Nov 2024 indicates there is capacity in Tawnaghmore.
- Applicants are in discussions with EirGrid who have confirmed that they will process an application for connections once the project has been granted permission and not beforehand.
- Clarifies development would have a nominal IT capacity of 40MW, which would require 58MW of maximum import capacity from the grid and demand 50MW of power.

False claim for mitigation by renewable gas

- No assessment of the facility has been undertaken for natural gas or biomethane.
- A gas above ground installation which would be part of a future planning approval and be located in the south west of the facility to allow for gas connection when available.

IEMA Guidance- unsupported mitigation

- CPPAs are recommended by IEMA as an appropriate project specific 'substitution' mitigation measure alongside other mitigation measures such as renewable technologies and reducing the carbon intensity used.
- The requirement for data centres is a response to the changes in how data is stored.
- Data centres represent a more sufficient means of data storage when compared to a distributed model of enterprise data storage by individuals or companies- up to 80%.

- First revision of NPF recognises Ireland is a prime location for ICT infrastructure due to its geographical location, climatic factors and future renewable energy resources.
- The proposed development is plan led and its location corresponds with the policies & objectives of the CDP.

Corporate power purchasing agreement (CPPA)

- Proposal is in accordance with the Government's statement on the role of data centres and is located in an area with no electricity constraints and strong renewable energy generation and connection will be supported by CPPA.

Invalid GHG calculations based on grid emission factors

- Unrealistic to ignore the actual inputs into the electricity grid network as the developer would be expected to mitigate the electricity from abroad which has a GHG emission of zero in Ireland.
- According to SEAI report (2024) 14% of electricity is imported from the UK and the increased use of imported electricity from the UK has acted to displace fossil – based generation in Ireland in 2023 and has reduced Ireland's GHG emissions from electricity, as imported electricity is 'emission free'.
- Developer is committed to ensure energy consumed is by renewable energy generation in line with Government's statement on data centres.

Energy Efficiency Directive

- Data centre will replace activities with a higher GHG profile as they are a more efficient means of data storage.
- A range of measures are proposed to reduce GHG emissions such as LED lighting, use of natural daylight as much as possible, closed loop chilled water system, PUE to be annualised & PV solar panels.
- Development will work with renewable developments to facilitate CPPAs, support development of additional renewable power which will offset energy usage and ensure the energy consumed by the development would be matched by renewable energy generation.

Unsustainable growth in data centre power demand

- Research carried out indicates wind power has outpaced data centre demand over the period 2013-2023 every year.
- Wind energy Ireland reported in 2024, that 14% of wind energy was lost due to transmission in the network challenges.
- Long range power transmission infrastructure has not been upgraded, and production is often wasted because of a lack of grid capacity.
- Proposed development would consume locally generated renewable energy which cannot be transported to the east of the country where there is significant demand.

Additional grounds regarding applicant's F.I response

- Notes the CAP 24 & 25 target of 80% renewable electricity by 2030, and that this target should not be disregarded and that if not met there is significant progress being made towards these targets.
- Electricity demand of the proposal will be met by additional renewable energy by way of CPPA, and the development would not contribute to any shortfall in these targets.
- Proposal is in line with Government policy which recognises the importance of data centres to the economy, in areas of grid capacity and in regional locations in proximity to renewable generation.
- The GHG assessment of the project was undertaken based on the principles outlined in the Institute of Environmental Management & Assessment (IEMA) guidelines recommends when assessing the effects of GHG emissions from specific cumulative projects should not be individually assesses as there is no basis for selecting any particular cumulative project that has GHG emissions for assessment over another.
- Applicant is willing to engage to provide waste heat if any appropriate end user is identified.

- Applicant will work with local renewable developments to facilitate CPPAs supporting the development of additional renewable power, so energy consumed on site will be matched by renewable energy generation.
- Development will have modest job creation on site but will generate construction, off site and ancillary jobs., and this is recognised in the Governments statement on the role of Data centres & NPF.

7.3.Planning Authority Response

No response received.

7.4.Observations

7.4.1. One observation was received from An Taisce by ACP on the following summarised grounds:

- 92 operational data centres in Ireland with the majority in the Dublin region.
- Data centres as of 2023 consumed 21% of Ireland's total metered electricity.
- Data centres power demand has a significant impact on carbon emissions and uses a disproportionate amount of renewable energy.
- Ireland is currently exceeding its carbon budgets and sectoral emission ceilings which has significant implications for large energy users such as data centres and the Board is bound to the objectives in addressing the Climate Act in its decision making.
- EIAR is misleading as it does not project overshoots meaning the development will have a more significant impact on carbon budgets and sectoral ceilings than stated by applicant.
- EIAR has not allowed for unallocated emissions.
- Applicant relies heavily on the decarbonisation of the national grid, but Ireland is falling behind its 2030 targets regarding renewables, which is being diluted by high energy development such as data centres.
- Mitigation measures in EIAR which are specified as artificial lighting, HVAC system, water cooling, bicycle & EV charging, PEU, HVO for generators, solar

installation and replacement of on site data storage elsewhere, are inadequate and insufficient to reduce the climate impact of the data centre.

- The mitigation measures including participating in the EU Emissions Trading Scheme (ETS) does not guarantee compliance with national emission limits under the Climate Act as there is no mechanism within the ETS to do so.
- The use of hydrotreated vegetable oil (HVO) as the back up generator's fuel source is questionable, as the use of palm oil can contribute to deforestation and associated carbon losses and the sourcing of the HVO should be confirmed and the indirect emissions quantified. Do not consider Corporate Power Purchase Agreements (CPPAs) can be considered as a mitigation measure as there is no evidence of these being in place.
- Condition 10 of the P.A's grant of permission regarding facilitating district heating from the data centre should not be considered by the Board as mitigation measure as it is not in place.
- Residual and cumulative impacts of the development in the EIAR have not been adequately substantiated.
- The project's emissions could be assessed in the context of other and proposed developments within the electricity sectoral ceiling and industrial built environment.
- No evidence that WFD considerations have been taken into account and impacts on the Moyne stream, air quality (nitrogen deposition) on Natura 2000 sites and relies on the CEMP for mitigation measures.
- Glenamoy Bog Complex SAC (site code: 000500) and Bellacorick Bog Complex SAC (site code:001922), have not been assessed in NIS regarding nitrogen deposition.
- Risks to SAC and SPA during the construction phase have not been assessed in accordance with the Habitats Directive.

8.0 Assessment

8.1. To avoid repetition and ensure clear articulation of the key issues my assessment is structured into four inter-related sections: The Planning Assessment, the Environmental Impact Assessment (EIA), the Water Framework Assessment and the Appropriate Assessment (AA). The Planning Assessment will address the principle of development and other matters.

9.0 Planning Assessment

9.1. Introduction

9.1.1. Having examined the application details and all other documentation on file, including the reports of the Local Authority, the submissions on file, inspected the site, and having regard to the relevant local/regional/national policies and guidance, I consider that the substantive issues in this appeal to be considered are as follows:

- Principle of development,
- Compliance with national & regional policy on data centres,
- Greenhouse Gas Emissions and energy use,
- Design, layout and visual amenity, and
- Impact on the setting of Ballysakeery House and other NIAH structures in the vicinity of the subject site

9.2. Principle of development

9.2.1. Killala town is identified as a Tier 3 Self-Sustaining town within the settlement hierarchy of County Mayo, and such towns play an important role in supporting the social, economic and cultural life within rural communities. The population of the town has gradually decreased since the 2016 census and the focus of the settlement plan for the town is to encourage job creation and population growth within the built-up footprint of the town, and increasing service provision and attracting investment into the town. Killala is recognised within the CDP for its tourism potential associated with its cultural heritage, fishing and marine amenity at Killala Bay.

- 9.2.2. The subject site lies approximately 1.8km beyond the settlement boundary of Killala town in a rural area on unzoned land. It is bound on its north eastern boundary with Killala business park which is located on the southern outskirts of the town along the R314. This business park which is not zoned was historically occupied by the Asahi factory and these buildings are predominantly vacant and in a poor state of repair. Objective EDO 40 of the CDP seeks to explore the feasibility of the designation of the former Asahi Plant and adjoining lands outside of Killala as a Strategic Development Zone.
- 9.2.3. Planning permission was granted within the former Asahi complex (P.A Ref: 16/694) for a data centre but to date has not been implemented, although I note an extension of duration was granted for this permission on 16th November 2021 up to 15th June 2027. The applicant in their response to the P.A's further information (F.I), considered there is no risk of the proposed data centre impacting on the viability of the permitted data centre in the business park, as data centres provide a service to a wide area, not just the immediate area. The applicants have also stated that there are no available land banks within Killala business park itself which have an adequate area for the proposed development. I acknowledge the applicant's rationale in this regard, however, I consider the implementation of both data centres would have implications regarding the use of electricity from the national grid. I will discuss this aspect in 9.4 below in more detail. I also note planning permission was granted in May of this year by the P.A for a hydrogen plant and energy centre in part of the Asahi buildings (P.A Ref: 23/60266).
- 9.2.4. Contained within the business park is the ESB 110kv network substation compound and the Tawnaghmore Power Station. Immediately to the east of the business park, is the AEConnect 1 trans-Atlantic sub sea fibre optic cable beyond the Killala waste water treatment plant. Section 7.4.4.5 of the CDP refers to the trans Atlantic cable as having the capacity to cover the entire European and American information and data traffic currently in existence and there is the potential to double its capacity within a few years as required, and it offers the potential for the west of Ireland to become a key telecommunications and data gateway. Immediately to the west of the business park and north of the subject site is the Killala Community 5 wind turbine farm that according to the CDP generates 17MW of renewable power.

- 9.2.5. It is further stated within the settlement plan for the town that opportunities exist in Killala for a data centre and /or renewable energy hub at the Killala business park. Further objectives and policies within the CDP, namely EDO 52 and INP 20, support the development of sites where data centres, ICT related development and high potential start-ups can thrive and seeks to promote Mayo as a sustainable international destination for ICT infrastructure such as data centres and associated economic activities at appropriate locations.
- 9.2.6. Although the subject site is removed from the central core of Killala town and is on unzoned lands, it is in close proximity to an energy network and existing serviced commercial area.
- 9.2.7. From a local planning policy context, the site is in close proximity to the Killala business park, Tawnaghmore sub station, AEConnect 1 fibre optic cable, ESBN substation and another potential data centre. As set out in the CDP there are a number of objectives and policies within the Plan which seek to support, develop and diversify the rural economy, to build on local enterprise, to drive innovations around energy and the ICT sector and to promote Mayo as a sustainable international destination for ICT infrastructure such as data centres. Section 12.13.3 of chapter 12 of the CDP states opportunities exist for Killala for a data centre and or/renewable energy hub at the Killala business park. As such data centres are identified within the CDP as being appropriate in Killala and in particular the Killala business park.

Conclusion

- 9.2.8. The Planning Authority was satisfied that the principle of a data centre in this location was acceptable and in accordance with the CDP. I consider there are merits in creating an ICT cluster in this location and the proposed data centre would have a synergy with the adjoining uses in the business park and support opportunities to diversify and strengthen the economy in this rural area. I therefore consider the proposed development of a data centre in this location would align with the objectives and policies of the Mayo County Development Plan.

9.3. Compliance with national & regional policy on data centres

- 9.3.1. The third party submissions relate primarily to the overall principle and growth of data centres in Ireland, their impact on the national grid and that their high energy use is

outpacing the deployment of renewables. Furthermore, the third party considers the dispatching of renewable energy in the grid is not a matter for developers to determine but should be considered in a planned manner by the relevant System Operators (SO). I therefore consider it is necessary to set out the Government's policy and guidance on data centres with regards to their connection to the national grid.

9.3.2. The National Planning Framework (NPF) First Revision places a commitment to integrate decarbonisation and net zero commitments whilst placing digital transformation at the heart of enterprise policy. Coupled with the transition to a neutral carbon society the NPF recognises Ireland is very attractive in terms of international digital connectivity, climatic factors and current renewable energy sources for the development of international digital infrastructures such as data centres. The RSES for the northern and western region recognises the west and the border region has significant renewable energy resources and supply exceeds demand in the border region, which provides opportunities to attract industries such as data centres.

9.3.3. The Government's published Statement on the Role of Data Centres in Ireland 2022, (the Government Statement), sets out the importance of data centres for the Irish economy and that data centres directly and indirectly support 27,000 jobs in Ireland and are a core component of Ireland's data-driven knowledge economy. Within this statement, it is acknowledged the Dublin transmission system has been extended, with EirGrid advising the region will not be able to accommodate new requests for power from data centres until significant reinforcement of the transmission network is delivered, through the Power Up Dublin Plan. Areas outside of Dublin that may be able to cater of a typical data centre (i.e 80MW) are identified as being in Cork or Limerick city or regional locations located near to renewable generation in parts of the west or south west of the country close to the 220kV network or Midlands. This document provides 6 principles that should inform and guide decisions on future data centre development. in which to assess data centres.

9.3.4. The applicant in their appeal response refer to an appeal for a data centre in Ennis, Co.Clare (ABP Ref: 314474) which was assessed against the 6 principles in the aforementioned statement and in their opinion sets a precedent as it is similar to the proposed development, being located outside the GDA. The applicant references quite extensively the Inspector's report on this development, however, I consider each application is considered on its own merits, and whilst noting this site lies outside the

Dublin region, this site was located on a large site zoned for data centre use within the CDP, and there was a concurrent SID application for a 110kV (GIS) substation which would connect the data centre to the national grid.

9.3.5. The subject site is located in the north west of the country and as such would not fall within a location identified specifically in the Government Statement for data centre development. However, the site lies outside the Dublin area and is not identified in the Government Statement as an area experiencing capacity constraints on the grid network at this time. The proposed data centre would be approximately half the size of what is considered as a typical data centre in the Government statement. The Mayo Renewable Energy Strategy (adopted 2011) which forms part of the CDP, recognised Mayo as having the largest (35%) of regional distribution renewable energy capacity and was rich in renewable energy resources. I note the applicant in their response to the appeal outline a number of new wind energy facilities such as Oweninny 3 and Sheskin close to the subject site which will contribute to 100MW of renewable energy in the area. There is therefore the potential that these projects would feed into the national grid but Eirgrid have not provided a connection agreement to the applicants confirming there is supply capacity in this region to accommodate the proposed development.

9.3.6. The Government Statement recognises in the short term there is only limited capacity for further data centre development as the key state bodies, regulators and the electricity sector work to upgrade Ireland's infrastructure, connect more renewable energy and ensure security of supply. There is a clear preference for data centre developments that are associated with strong economic activity and employment; make efficient use of the electricity grid and deliver renewable energy in Ireland in accordance with the NPF and RSES. In accordance with the Government Statement, I have assessed the proposed development against these 6 principles summarised in Table 1 below:

Table 1: Summary of assessment of proposed development against 6 principles to inform decisions on data centres

Principle	Preference Criteria for data centre developments	Assessment of proposed development
-----------	--	------------------------------------

Economic Impact	Associated with strong economic activity and employment & favours development in regional locations.	Would provide employment during construction period up to 24 months. Typical day-40 construction staff but during the peak construction period it is expected there would be 300 staff and contractors per day. Operational period-32 staff per 3 shifts over 24 hour period. The subject site is in close proximity to the Killala business park and would therefore provide an economic synergy, however, the applicant has not provided any evidence that the development is associated with any current economic hub.
Grid Capacity & Efficiency	Make efficient use of the electricity grid, using available capacity and alleviating constraints	Located outside constrained Dublin area, in a regional location next to complementary energy based enterprises. Located next to Tawnaghmore Power Station immediately to east & HV lines. Applicant has not provided any evidence of capacity within the grid or that they can connect to the grid. They state Eirgrid to process application for connection following planning application decision.
Renewables Additionally	Can demonstrate the additionality of their renewable energy use in Ireland through new generation repowering or otherwise increasing in country renewable energy capacity	Applicant states west of Ireland has surplus power from renewable sources, & proposed development prevents dispatch of renewable energy. Applicant's appeal response includes 2 letters of support from renewable energy

		providers indicating lost renewable energy in Mayo region. Applicant is targeting major tech companies that have made commitments to off set carbon associated with data centres via CPPAs. Back up generators powered by HVO (400 hours per year). Applicant states the development has the potential to offer export capacity of 73MW to grid through back up generators. This would not however provide any additional power to the grid.
Co-location or proximity with future proof energy supply	Located where there is the potential to co-locate a renewable generation facility or advanced storage with the data centre, supported by a CPPAs, private wire or other arrangement.	Proximity to renewable generation projects (e.g Glenora, Shenskin & Bellacorick) Applicant states they have engaged with SSE Renewables, Mercury Renewables & EDP Renewables. No evidence of CPPAs or other agreements. Applicant states a separate SID application to follow for a new on site 110Kv GIS substation in NE area of site, however no details of applicant or time frame submitted. According to applicant Eirgrid is building a new interconnection in Mayo that is expected to increase deliverability to the site to 60MW for 2024.
Decarbonised Data Centre by Design	Can demonstrate a clear pathway to decarbonise and ultimately provide net zero data services.	Commercial Energy Statement submitted which indicates energy efficiency &

		sustainability measures in building design standards PV panels on roof (input 50kW). HVO to power generators- 73MW. HVAC system PUE annualised to below 1.19 A closed loop water circulatory system. Use of LED lighting.
SME Access & Community Benefits	Provide opportunities for community engagement and assist SMEs, both at the construction phase and throughout the data centre lifecycle.	Construction phase & operational phase would provide employment but may not be localised. Applicants have stated they are prepared to provide a financial contribution (€105,000) to development of Ballysakeery House for community use.

Economic Impact

- 9.3.7. The third party considers the proposed development does not equate to a significant number of jobs based on its energy consumption. The proposed development could provide some direct and indirect local employment opportunities during the construction and operational phase, however the development once operational, employing 32 persons over three shifts in a 24 hour period would provide a low density of employment for a c.10 hectare site.
- 9.3.8. In the Government's Statement it is recognised that data centres play an important role to the Irish economy. I note the applicant considers the development would attract complementary tech based companies to the west of Ireland however there is no evidence-based details to affirm this statement. Nevertheless, I consider the proposed development is a land hungry use located on unzoned lands, and the proposed development would not therefore compete with higher density employment uses on zoned lands. I also consider it would be a mutually synergistic and co-dependent enterprise with the nearby business park which has been the subject of a

number of energy type developments and the proposed development has the potential to provide a positive economic impact to the immediate area and the general region.

Grid Capacity and Fixed Connection Agreement to the Grid

- 9.3.9. Third parties have raised concerns that the growth in data centres in Ireland is outpacing the deployment of renewables and are placing a strain on the national grid. The Commission of Regulation for Utilities (CRU) discussion paper on Large Energy Users Connection (LEUs) accepts that data centres will represent 30% of national electricity demand in Ireland by 2030, if no additional data centres are contracted over and above what has already been signed up, whilst acknowledging they are important to the technology economy. However, this paper also considers data centre demand provides an opportunity to match future available renewable energy resources.
- 9.3.10. I do not consider the impact of data centres on the electricity network is disputed and that there is a disproportionate interest among data centre developers to connect to the greater Dublin region. The Government Statement notes there is only limited capacity for data centre development and that data centre developers should engage collaboratively with the respective Strategic Operators (SOs) to understand available capacity and where a connection can be facilitated, provide grid services such as to best utilise available infrastructure to the benefit of electricity customers.
- 9.3.11. The applicant has not demonstrated that there is capacity within the grid or that they can connect to the grid. They have stated they are in discussions with EirGrid who would not agree on an application for a connection for this project until the planning application process has been completed. The CRU Direction sets out criteria that the SOs will be required to consider in assessing data centre connection applications to determine whether to make a connection offer. This criterion has been outlined in section 5.7.3 above of this report, and includes location, ability to bring on dispatchable generation or storage on site equivalent to meet demand, the connection agreement being subject to a flexible demand arrangement and that the SO can terminate the grid connection.
- 9.3.12. The applicant by way of addressing this criteria states energy from the site would be secured from the national grid in accordance with the Government Statement and CRU Direction. Although an area of land is indicated as being reserved for a future 110kV substation and the applicant is proposing to connect to a gas pipeline if it

becomes available, I am satisfied at this time that the development is not an 'Islanded' data centre development and is therefore in line with national policy in this regard.

The proposed development is in an unconstrained region of the country (i.e. outside Dublin), and although not confirmed has the ability to provide dispatchable generation provided via HVO (up to 400 hours) and thereby provide flexibility in its consumption when requested to do so by the relevant SOs.

- 9.3.13. However, I consider the proposed development is premature in the absence of an agreement from Eirgrid with the applicant. In terms of the capacity of the grid, the CRU have made it clear that data centres will continue to be permitted to the electricity grid and that each application to connect to the electricity grid will be different and should be considered on its own merits by the relevant SO. The matter of grid capacity is therefore a matter for the SO and is not within the remit of the Commission to determine whether there is sufficient capacity on the national grid.

On Site Generation

- 9.3.14. Third parties consider the development is not sufficiently powered by on or off site renewables, that the proposed PV roof panels would only provide 0.01% of the renewable energy for the development, the future provision of waste heat generation is not enforceable, and the development would absorb 50% of all wind energy in the county.
- 9.3.15. It is proposed that the data centre would operate using electricity from the national grid with the back-up of HVO on site generators being able to provide up to 73 MW (up to 400 hours per year), which would be sufficient to meet the demand of the data centre if required for a period of time. I note the third party observer considered the sourcing of the HVO should be confirmed and the indirect emissions quantified as any use of palm oil can contribute to deforestation. HVO markets are global in nature. In this case, the supply of HVO is not linked to any specific source or location, and the operation of the proposed facility would not therefore be associated or have a causal link with identifiable or specific environmental effects. Having regard to their remove from the project, the upstream supply of HVO is not capable of site-specific assessment and would not be considered as part of the project for the purposes of EIA or AA. I consider therefore that the source of HVO fuels is beyond the remit of this report.

- 9.3.16. An EPA-Industrial Emissions Directive (IED) licence would be required for the storage of the HVO as it would equate to a total rated thermal power greater than 50 MW. I therefore consider this would be a matter for the EPA licence.
- 9.3.17. The proposed development would have a nominal IT capacity of 40MW and would require an average of 50MW² of maximum import capacity from the grid but as stated by the applicants will demand approximately 48MW of power. The development would include solar panels on the roof which would provide 50kWp which is not as acknowledged by the applicant, considered as on site/dispatchable generation, and I would agree in this regard.
- 9.3.18. The Government's Statement on data centres requires data centres to have on site generation (and or/battery storage) that is sufficient to meet their own demand in order to assist in the full decarbonisation of the power system. The latest CRU decision paper on data centres (CRU202504) notes that data centres connecting to the grid system will be required to provide on-site generation when needed. The proposed development would be able to provide up to 400 hours of on-site generation, but in the absence of a grid connection the data centre would not function.
- 9.3.19. I note the applicant has indicated that the Tawnaghmore ESBN has 26.3MW demand capacity available. Although this indicates there is capacity in the system, it does not correspond with the demand for the proposed data centre which would have an average demand of 50MW. However, I do acknowledge that the data centre may not require this level of demand when initially set up, but in the CRU Direction it is accepted that data centres unlike other large energy users (LEU) tend to ramp up their Maximum Import Capacity (MIC) much quicker than other LEUs.
- 9.3.20. Both the Government Statement and the CRU Direction to the SOs with regards to Data Centres recognise that data centres pose a challenge to the delivery and maintenance of a sustainable and secure power system, but neither are suggesting a moratorium on data centre connections to the grid. Ultimately in accordance with the CRU Direction it is the relevant SOs which determine whether a connection offer can be made to a data centre based on the relevant assessment criteria as they are best

² Third parties have highlighted that this figure appears as 48MW in the EIAR, however, the EIAR refers to 48 MWe to operate but also refers to an average of 50 MW.

placed to understand the dynamics of their respective systems and maintain stability and reliability of the electricity network.

Renewables Additionality and Future Energy Supply

- 9.3.21. The Government Statement does not provide a clear definition as to what ‘renewables additionality’ entails other than to state it can be achieved through new generation, repowering, or increasing in-country renewable energy capacity-proportional to the impact of their energy demand. In terms of renewables the applicant is providing PV panels (50kWp) and biofuels (73KW), which overall is a small percentage of the energy needs of the proposed facility. I note it is indicated on the site layout plan a future substation in the north eastern end of the site would be the subject to a future application, however there is no date or future applicant/user specified. (Dwg No. 24-078-CSE-V1-XX-DR-C-0010).
- 9.3.22. The applicant considers by siting the proposed data centre in this location where there is a surplus of renewable generation in the region, the proposed development reduces the loss of renewable generation resources which in effect provides ‘renewable additionality’. I consider this is a valid argument in that by preventing the loss of renewable energy in the grid provided by existing renewables reduces the loss of wasted renewable energy in this region. I note in the applicant’s response they have included a letter (redacted) that Mayo lost 28% of renewable energy in 2024. This however has not been substantiated by Eirgrid.
- 9.3.23. The applicant is targeting companies such as Google and others who have made commitments to offset carbon associated with data centres and seek Corporate Power Purchase Agreements (CPPA) opportunities to do so. CPPAs are supported in the Government’s Statement as a means to future proof energy supply. The applicants have not provided any evidence that they have engaged with CPPAs or Power Purchase Agreements (PPAs) in Ireland, other than to contact 2 energy providers to indicate there is significant renewable resource in the region. I am not entirely satisfied with the information as submitted by the applicant that they would be able to avail of the existing renewable energy in the area, and as the future occupiers of the development are unknown that they would be able to off set the carbon associated with the development through CPPAs. Therefore, I would recommend in the event of

planning permission being granted that the applicants sign a CPPA before the development commences.

Decarbonised Data Centre by Design

9.3.24. The application was accompanied by a Commercial Energy Statement which sets out energy efficiency measures included within the overall design such as a Heating, Ventilation, and Air Conditioning (HVAC) system, PV panels, low energy lighting, metering of energy use, bio fuels for generators, closed loop chilled water design and is capable of providing heat for a district heating system.

9.3.25. The Government Statement states it is expected that data centres will align with the EU Climate Neutral Data Centre pact from 2025, which would require members to use mandatory reporting under EU legislation to show progress toward climate neutrality by 2030, rather than self-audits. Evidence of alignment with the Neutral Data Centre Pact has not been indicated but I note it is stated the data centre would have a power usage effectiveness (PUE)³ of 1.19 which denotes efficient power delivery.

SME Access and Community Benefits

9.3.26. The Government Statement states data centres are significant contributors to the economy and support a wide range of employment-intensive businesses and contribute to 6% of the national employment and play a crucial role in attracting and retaining major technology companies and investments. The proposed development would provide employment during the construction phase as outlined in the Table 1 above. However, I agree with the third party's view that given the size of the site and its potential energy consumption it would not be a significant employment generator when operational, compared to a traditional type of industrial or commercial use for example. However, as stated previously within this report as it is not zoned it would not compete with lands which are more suitable for labour intensive enterprises by reason of their proximity to public transport nodes for example or within built up compact areas.

9.3.27. Condition 10 of the P.A's grant of planning permission requires the applicant if deemed necessary and appropriate by the P.A during the lifetime of the project, to install suitable pipework to an agreed location within the site's perimeter to facilitate a

³ Under the Data Centre Pact by January 2025 new data centres operating at full capacity in cool climates will meet an annual PUE target of 1.3.

district heating system. I consider if such a system were implemented it would provide a community gain, however given the site's location I would agree with the third party that it may never be implemented and would be difficult to enforce. I further note the red line does not include Ballysakerry House.

9.3.28. As part of the agreement to purchase the subject site from Mayo Council, the applicant has confirmed their willingness to provide a financial contribution in the planning statement submitted with the application of €105,000 for works to Ballysakeery House, to the south of the site. It is stated in the First party appeal submission that this payment would be provided at the commencement of operations to ensure the building is retained and protected for future community use. However, there is no specific detail regarding an agreement between the Council or applicant in this regard.

9.3.29. The P.A did not attach a financial contribution in this regard. This building is not within the red line of the application site, and therefore it would not be possible to attach a financial contribution for the upkeep of this property by way of condition and would therefore require a Section 47 agreement between the Council and the applicant. I note the applicants sought consent from the Council to make an application on the subject site, however it is not entirely clear whether Ballysakeery House and its curtilage lands are in Council ownership.

9.3.30. I would recommend in the event of planning permission being granted the Commission attach a condition requiring a Section 47 agreement between the Council and the applicant to provide funding for a community benefit, to ensure if this building could not be restored for a community use the money would go to another community benefit as agreed by the Council and in align with the Government's Statement on data centres.

Conclusion

9.3.31. I acknowledge the 6 principles presented in the Government Statement are a preference rather than a requirement, nevertheless I consider this document provides a standard in which to enable an assessment to inform and guide decisions on data centre developments and their connection to the grid.

9.3.32. Although the proposed development is not self-sufficient with regards to providing its own renewable energy power, I consider given the location of the subject site outside

of a constrained area and in a region that has both significant existing and future renewable energy projects as identified in the CDP, there is the potential for the proposed development to ensure surplus renewable energy is not dispatched down (wasted) in the grid. Furthermore, the subject site is in close proximity to the Tawnaghmore substation and can connect to two independent HV lines.

- 9.3.33. Whilst the planning process has no control over the connection policy and energy regulation, I consider it could provide a complementary role in this regard, if Eirgrid could confirm whether a connection to the electricity system was feasible from the outset. I note the applicant has submitted 2 letters from renewable energy providers indicating there is a surplus in the region of the subject site. However, I consider the applicant has not provided any evidence that they can benefit from the established or future renewable energy projects in the area to access the grid. Furthermore, as the future occupiers of the development are unknown there is no guarantee that they could avail of CPPAs.
- 9.3.34. I have concerns in the absence of a named applicant and an agreed connection to the grid that the development is speculative in nature. This has implications for the future applicant's ability to enter into CPPA agreements in which there is a reliance on such agreements to reduce the impact of the development on GHG emissions. The applicant refers to the capacity of renewables in the area but has not provided any significant evidence that would suggest the proposed development could avail of any potential 'wasted' renewable energy in the area, through agreements with renewable energy providers for example. The level of 'additionality' provided for the development is very small with the solar panels contributing 0.01% and the HVO generators 400 hours of energy such that the development is dependent on the decarbonisation of the grid to reduce GHG emissions for the development. Whilst I note the applicant is proposing to contribute for the up keep of Ballysakerry House and provide district heating when available, I consider these aspirational contributions. I am therefore not satisfied the applicant meets the requirements as specified in the Government's Statement on the role for data centres.

9.4. Greenhouse Gas Emissions (GHG) and Energy Use

- 9.4.1. Third parties consider the proposed development would increase Green House Gas (GHG) Emissions and energy consumption and would not be consistent with the

Climate Action Plan (CAP) 24 & 25 and the Energy Efficient Directive (EED) which requires a reduction in GHG emissions from the electricity sector by 2030. The third party considers mitigation measures such as CPPAs, EU Emissions Trading Scheme (ETS), and the increase in the use of renewables in electricity supply is of no benefit to the climate or reduction in GHG emissions.

- 9.4.2. The First party in their response notes CAP 24 & 25 has a target of 80% of electricity to be generated by 2030, that the ETS is an EU wide mechanism to ensure Ireland's GHG targets are met, and that the applicant would work with renewable developments to facilitate CPPAs to offset the development's energy usage being matched by renewable energy generation. The applicant considers the development is in line with the Government's Statement on Data Centres, the Development Plan and relevant Climate policy. They further note the P.A had no objections in this regard and that the development would be carried out in accordance with the mitigation measures in the EIAR and NIS. The EIAR states the proposed data centre would ultimately save GHG emissions elsewhere as it is a much more efficient means of data storage compared to a distributed model and the development would be minor adverse.
- 9.4.3. The proposed development would require 50 MW of electricity from the national grid to operate. The GHG emissions for the proposed development according to the revised Table 0.3 submitted by AWN in the applicant's response to the appeal, states the development would produce 62,450 tonnes CO_{2eq} in 2028 reducing to 32,836 tonnes CO_{2eq} in 2035, which would equate to 1.6% and 0.8% respectively of the 2030 electricity sectoral emission ceiling. Whilst I acknowledge National Policy seeks to reduce carbon emissions in the electricity sector to zero by 2050, the proposed development due to its heavy reliance on connecting to the national grid would not actually be in line with national policy as it will contribute to carbon emissions. Furthermore, the recent EPA publication on Ireland's GHG emissions in 2025 as referenced by the applicant considers Ireland's electricity sector is unlikely to achieve the second sectoral emission ceiling period (2026-2030). There is therefore an over reliance on national targets being achieved and CAP 25 projections for on and off shore renewables for the proposed development to achieve net zero emissions.
- 9.4.4. Although the future occupier of this data centre is unknown the applicant has stated that the ultimate users of the facility will seek to enter into CPPAs with renewable generators and producers including direct/private wire as and when it becomes

available. They further argue that the use of ETS regulates GHG emissions from facilities which have a greater than 20MW thermal capacity such as the proposed development and incentivises such facilities to invest in energy efficient low carbon solutions. I note that the Government Statement acknowledges CPPAs have a role to play in decarbonising the electricity sector and ensuring demand growth reduces the cost of reaching renewable energy targets, but as stated in section 9.3 above it is not clear how the future applicant can commit to CPPAs.

- 9.4.5. The CRU's mission in CRU202504 is to protect the public interest in water, energy and energy safety and is guided by 4 strategic priorities that sit alongside its core activities which principally seek to maintain security of energy supply at a reasonable cost, decarbonising the generation of electricity, and facilitating economic growth. The CRU document notes the share of electricity consumed by data centres has grown from 5% in 2015 to 21% of total national demand in 2023 and is expected to increase to 30% by 2030.
- 9.4.6. Under the Climate Action and Low Carbon Development Act 2021, Ireland is committed to reducing its GHG emissions to 51% by 2030 (relative to 2018 levels) and achieving net zero by 2050. The Climate Action Plan 2025 (CAP25) published in April 2025 was prepared under the Climate Action and Low Carbon Development Act 2021. It is stated in CAP 25 that electricity accounted for 12.5% of Ireland's GHG emissions in 2023. Between 2018 to 2023 electricity emissions decreased by 26.2% to a provisional 7.6MtCO₂eq in 2023 due to the increasing share of renewable generation and net electricity imports. Wind energy accounted for 33.7% of electricity supply (up from 33.1%), with a further 7% coming from other renewable sources, such as solar, hydro, and biomass, resulting in a reduction in the use of fossil fuel-based domestic generation. CAP25 acknowledges that the electricity sector has one of the lowest carbon budgets and that represents a challenge to this sector in meeting the need for an increasing electricity demand required for the economy and supporting sectors that are reliant on decarbonisation through electrification.
- 9.4.7. National Strategic Outcome (NSO) 6 in the first revision of the NPF seeks to promote a strong economy, and it is stated that Ireland is attractive in terms of international digital connectivity due to climatic factors and current and future renewable energy sources for the development of international digital infrastructures such as data centres. In line with the Government's White Paper on Enterprise 2022-2030 it

considers a strong economy will be achieved, inter alia, by integrating decarbonisation and net zero commitments, focussing on digital and data innovation, building competitive clusters and synergies through enhanced digital infrastructure and connectivity. NSO 8 in the NPF recognises the electricity sector faces a significant challenge to meet its requirements under the targets set out in the Climate Action Plan 2023, and that the accelerated delivery of additional renewable electricity generation is essential for Ireland to meet its climate targets, reduce its GHG emissions and reduce the reliance on imported fossil fuels to diversify its electricity supply. There is a commitment within NSO 8 to deliver 80% of our electricity needs from renewable sources by 2030, in line with EU targets and National Policy objectives out to 2030 and beyond. In National Policy Objective 75 of the NPF each Regional Assembly must plan through their RSES for the delivery of the regional renewable electricity capacity allocations for onshore wind and solar energy by 2030 in tandem with CAP 25. The northern and western region has been allocated 35% of the national share of onshore wind (1,389 MW) and 12% of the national share of solar PV (985 MW) in 2030.

- 9.4.8. Mayo's Renewable Energy Strategy for the county (2011-2020) which forms part of the CDP, nominated Crossmolina town as the location to "Establish Local Enterprises and Create Jobs based on the Generation and Utilisation of Energy from Renewable Energy Resources". This town lies c.11.8 km to the south west of the subject site. This Strategy also considers Mayo as having the potential to establish itself as a leading area in renewable production and renewable energy research and development and for on shore wind energy. I also note the subject site is in close proximity to a number of existing, approved and planned wind farms projects at Oweninny, Bellacorick, Shenskin and Glenora as listed by the applicant, which could support the proposed development and prevent the dispatching of renewable energy. The applicant has submitted letters from two energy providers stating there is capacity in the north Mayo area, however, as stated previously I do not consider these letters in anyway indicate the energy providers would or could support this development. Nevertheless, both the NPF and the RSES for the Northern and Western region promote the integration of the transmission network for linkages with renewable energy proposals at all levels in the electricity transmission grid in a sustainable and timely manner.

9.4.9. Third parties consider the use of CPPAs and ETS is a form of ‘robbing Peter to save Paul’ scenario, and I accept it may not be an ideal solution, but CPPAs enable investment to be made in low /no carbon demand growth. CAP24 recognised that the EU ETS operates on a “cap and trade” principle and ‘is an important mechanism to drive emissions reductions in Ireland’. CAP 25 enforces this approach and states that Directive 2023/959 strengthened the rules of ETS in order to ensure the system will support the achievement of the EU’s agreed emissions targets for 2030. I therefore consider the use of CPPAs and EU ETS is a recognised mechanism in which to promote renewable energy and reduce GHG emissions for large industries in Ireland such as the proposed data centre. However as outlined previously the future occupier of the development has not been specified and therefore it is not clear how these mitigation measure could be implemented or binding.

Conclusion

- 9.4.10. It is acknowledged that data centres are large energy users of electricity, and this has implications for potential impacts on national renewable energy targets and carbon emissions. However, I consider the applicant’s approach to the developments impact on GHG calculations is primarily based on the development benefitting from the reliance of the electricity grid on reduced fossil fuel in the future, and the recent EPA report states although the electricity sector achieved its targets in the first budget period, it is unlikely to achieve its second sectoral emission ceiling period (2020-2030), when the proposed development would be operational.
- 9.4.11. Although I note the applicant’s argument that the proposed development would replace activities which have a higher GHG profile, they have not clearly indicated in quantitative figures how the proposed development would reduce GHG emissions compared to the distributed model. From Table 0.3 submitted as part of the appeal submission by the applicant the proposed development would continue to contribute to GHG by 0.8% in 2035 of the overall 2030 electricity sectoral emissions, which is significant for a single development, as the higher the electricity demand the more renewable capacity is required to ensure decarbonisation of the energy sector, which would ultimately impact on the national targets for decarbonisation of this sector.
- 9.4.12. I therefore consider the proposed development is over reliant on aspirational measures with regards to CPPAs and EU ETS to reduce carbon emission and has not

provided a significant amount of renewable energy in the proposed development to offset the developments GHG emissions. I would therefore agree with the third parties that the EIAR is flawed in this regard as it relies on CPPAs, EU ETS and future renewables coming on board in the electricity sector as mitigation measures regarding the development's impact on the climate.

9.5. Design, layout and visual amenity

- 9.5.1. The surrounding area to the subject site is primarily agricultural uses to the west and south, industrial uses to the north and east (Killala business park) and dispersed residential development to the southwest. The closest dwelling to the proposed development is a house and farmyard c. 212m to the western boundary of the site. There are a cluster of 9 houses at the crossroads on an unnamed road which links to the R314, c.412m from the site's eastern boundary. To the west of the site boundary there are 3 houses, at distance between 235m-370m from the proposed development along Mullafarry Road. The impact of the development on population and human health is assessed in detail in chapter 4 of the EIAR and in Section 10 of this assessment. In this section the visual impact of the proposed development on nearby residential occupiers and the general area is assessed.
- 9.5.2. The site rises from Mullafarry Road by c.20m towards the northern end of the site. It is proposed to cut and fill on the site with the main data centre building located on the northern most area of the site with a finished floor level of 58mOD which would be between 11-15m above Mullafarry Road. The overall building would be two storeys in height, 196m wide and 77mm deep with a gross floor area of 31,000m². It would have an overall height of 22.7m to the top of the screening at roof level and a height of c.18.6m to parapet level. A detached pumphouse with a height of 7.2m would be located to the east of the admin block. The main data centre building would step down by 6m to the generator yard and 25 back up generator flues would be placed on the southern elevation of the building along the internal façade of the building and would have a height of 21m. The generator yard would be enclosed by a 6m high fence for a width of 16.3m.
- 9.5.3. I note the P.A sought further information seeking a justification for the height and massing of the building. The applicant by way of response stated the height and size is required to allow for airflow and associated cooling and power distribution and listed

a number of similar sized permitted data centres in Dublin and Co. Meath to the proposed development and this was considered acceptable by the P.A.. I would agree that by having a taller building to accommodate the energy efficiency of the building provides for a more compact structure on the site. I also note from the applicant's response to the F.I that due to the presence of existing high voltage lines in the eastern end of the site it was not possible to position the building in the lower part of the site.

- 9.5.4. The façade of the building would comprise large Kingspan cladding panels with contrasting perforated aluminium panels with green living walls along the southern elevation to the generator yard and admin building. A green roof is proposed on top of the admin building on the eastern side of the of the main data centre building. The southern elevation to the building would have an overall width of 186m and would be the most visible element of the building from Mullafarry Road. The eastern and western facades would have a depth of 84m stepping down to the single storey generator yard with a depth of width of 27m.
- 9.5.5. The submitted cross sections of the proposed development indicate the overall height of the building would have of a similar height as the existing chimneys associated with Tawnaghmore power station immediately to the east of the subject site. I therefore consider the proposed development would not appear overly high when compared to the sub station and buildings in the business park and would not have an over bearing impact on nearby residential properties given its set back from Mullafarry Road and long distance view points.
- 9.5.6. The landscaping plan indicates the existing boundary vegetation and hedgerows would be retained and enhanced along the boundaries of the site. A new woodland area of mature species is proposed between the main data centre building and to the north of Ballysakeery House. The existing mature trees along the proposed secondary access would be removed to the east (west of Ballysakeery House) and the existing vegetation retained and enhanced on the western side of this entrance. A wildflower meadow is proposed in the south eastern area of the site and to the east of the proposed main access to the data centre building. A 3m high berm area is proposed close to the Mullafarry Road in the south eastern end of the site close to the main entrance of the site. The existing mature trees along the eastern side of the

main site are shown to be retained where possible and the boundary vegetation enhanced.

- 9.5.7. There are no landscape designations or protected views at the subject site. The R314 to the east and north of the subject site is designated as part of the Wild Atlantic Way Coastal route and parts of it are identified as a scenic route in the CDP to the north east of Killala (c.1.6km to the north of the site). The site lies within Landscape Character Area (LCA) G, Local Policy Area 4 – Drumlins and Inland Lowlands which is considered as an area wherein opportunities exist to continue to permit development that can utilise existing infrastructure. Policies 21-24 within the Landscape Character Appraisal relating to this area encourage development that would not result in detrimental impacts (through excessive bulk, scale or inappropriate siting) on the landscape at a local or micro level as viewed from the public realm.
- 9.5.8. A set of verified photomontages submitted with the application are provided of 11 viewpoints of the proposed development from the surrounding area. I consider given the overall size and height of the building it would be difficult to completely screen the development from the surrounding area. The photomontages submitted with the proposal indicate the development would be prominent along Mullafarry Road from the west (viewpoints 5 & 6), Ballysakeery House (viewpoint 10) and visible along the distant horizon from Killala to the north (viewpoint 9) and from the south east of Mullafarry Road (viewpoint 8). However, with the exception of Ballysakeery House, I consider the data centre building would be seen in the context of the Killala business park and its buildings and the wind turbines. Long distance views from the other viewpoints including the Wild Atlantic Way would be screened to a large extent by the undulating drumlin nature of the area and existing hedgerows.
- 9.5.9. The impact of industrial/commercial development on Local Policy Area 4 within the County's Landscape Appraisal sensitivity matrix is deemed to be of a 'low potential to create adverse impacts on the existing landscape character. Such development is likely to be widely conceived as normal and appropriate unless siting and design are poor'. I consider the siting of the proposed building including the element of cutting into the northern part of the site is the optimum location for the building on the site, given the constraints of the Kv lines in the south eastern end of the site. Essentially most data centre buildings are designed as a large rectangular box and I consider the vertical arrangement of the panelling and variety of materials and textures used along

the southern elevation in the design of the building break up the bulk and massing of this elevation to a large extent. The use of glazing and green walls on the eastern elevation of the admin provides a variety in the design and reduces the scale and massing of the building when viewed from the east.

Conclusion

- 9.5.10. The surrounding area to the development has a medium landscape sensitivity. The data centre would appear prominent when viewed from Mullafarry Road given its overall size and elevated position. The main building would be relatively self contained within the site and would be seen in the context of the massing of the buildings within the business park and power station to the east and existing wind farm to the north.
- 9.5.11. Although the landscaping plan would enhance the overall development, I do not consider it would screen the overall data centre building to a significant extent. It is the undulating nature of the surrounding drumlin lands, intervening fields and mature tree and hedgerow boundaries which would screen the overall development from the wider area. Overall, I consider the building would be reflective of the existing buildings in Killala business park immediately to the north and east of the site and the existing turbines to the north and would not therefore appear overly dominant or intrusive within the overall landscape. Landscape screening work undertaken in relation to the proposed development would reduce the visibility of the development over time.

9.6. Impact on the setting of Ballysakeery House and other NIAH structures in the vicinity of the subject site

- 9.6.1. The subject site would wrap around the walled garden of the vacant 19th century Ballysakeery House/ Rectory, which is recorded on the National Inventory of Architectural Heritage (NIAH Ref:31302208). Ballysakeery House is surrounded by mature trees and vegetation and is set back from Mullafarry Road, and both the property, outbuildings and the access into the site are largely concealed from Mullafarry Road. MCC's Conservation architect references the building as a Protected Structure within the CDP Ref: 0272. However, it is not referenced as a protected structure in the planning officer's report and it is not recorded within Volume 4 of the Record of Protected Structures list in the CDP. Nevertheless, the NIAH has rated the

property as having regional importance due to its architectural, artistic, historical and social interest.

- 9.6.2. Ballysakeery House is the closest NIAH building to the proposed data centre and the existing business park is visible from the house and its gardens. The proposed development would not encroach the curtilage of the house, its outbuildings and former garden. The house is hidden from view from the road as its boundaries are tree lined. I note from the details submitted in the EIAR this building has been subjected to funding in 2016 and 2017 from the Department under the Structures at Risk fund and repair works have been carried out to the building.
- 9.6.3. The proposed data centre building would be set back c.55m from the walled garden of Ballysakeery House and c.136m from the dwelling and would be c.16m higher than the ridge of this building and extend for 185m along its southern elevation facing the NIAH site. Given the sloping nature of the subject site to the north the proposed development would be visible from this property (refer to Dwg. No. KLL1-HJL-01-ZZ-DR-A-0201 & 0301). The Killala business park is also visible from Ballysakeery House and gardens. Additional planting in the form of a native woodland is proposed along the perimeter of this property and the subject site.
- 9.6.4. There are a number of other structures to the west of Ballysakeery House on the NIAH list including 2 churches, (NIAH Ref: 31302206 & 31302204), a schoolhouse (NIAH Ref:31302205), which all front onto Mullafarry Road and a Manse (NIAH Ref:31302207) which is set back from this road. All of these structures have a regional rating on the NIAH but are not located within or close to an Architectural Conservation Area. An NIAH description and appraisal of these structures including Ballysakeery House are included in Appendix 12.5 of the EIAR. The 2 churches and schoolhouse front Mullafarry Road and the Manse is set back off Mullafarry Road. I noted from my site inspection that the existing wind farm is visible from certain locations along Mullafarry Road and from the NIAH house Ref: 31302207, but due to the intervening distance and existing landscape the business park is not a dominant feature when viewed from the west and from these structures along Mullafarry Road. I consider the proposed data centre would be seen within the context of the business park and I am satisfied that the proposed data centre would not impact on the cluster of NIAH properties to its west.

- 9.6.5. I note the MCC conservation architect considered the proposed development by reason of its scale, design and massing would negatively impact on Ballysakeery House and the overall group value of other structures, the historic landscape and integrity of the area. I acknowledge these structures have an historical group value and contribute to the historical make up of this area. However, I consider given the set back of the proposed data centre from Ballysakeery House and the proposed landscaping measures, the development would not impact on the integrity or overall setting of Ballysakeery House or the cluster of buildings to the west as the proposed development would be seen in the context of the business park.
- 9.6.6. Ballysakeery House is heavily screened with tree and hedge cover and is not visible from Mullafarry Road. The landscape plan indicates the removal of mature trees along the eastern side of the proposed secondary entrance to the development which forms part of the western boundary of Ballysakeery House grounds. The application was not accompanied by a detailed tree survey of the trees to be removed along this boundary, however, there is no record of the trees being the subject of a Tree Protection Order. The existing vegetation is shown to be retained and enhanced on the western side of this access. The landscape plan indicates a new hedgerow to wrap around Ballysakeery House's curtilage as a green infrastructure corridor and to screen the retaining wall to its north. The removal of trees along this boundary has the potential to open views of Ballysakeery House when viewed from Mullafarry Road, which is considered an overall benefit, particularly if the property is be reused for community purposes.

Conclusion

- 9.6.7. Ballysakeery House is not listed as a recorded protected structure within the CDP but is identified on the NIAH. Given the prevailing character of the lands to the east and north of this property, and the set back of the proposed development, I consider the development would be reflective of the adjoining industrial nature of the Business Park and would not unduly impact on the integrity or character of Ballysakeery House. With regards to the other NIAH structures to the west of the proposed development I consider the overall integrity of these structures would not be impacted by the proposed development.

- 9.6.8. Given the scale of the proposed development, it is not possible to fully mitigate against the indirect, visual impact of the development on Ballysakeery House (NIAH 31302208) and its curtilage. However, through the landscaping as presented in Chapter 11 of the EIAR, the impact would be reduced to an acceptable degree once the landscaping matures.

10.0 Environmental Impact Assessment

The proposed development is for a data centre building with an overall gross floor area of 31,000m² on a site with an area of 10.58 hectares. This section sets out an EIA of the proposed project and should be read in conjunction with the planning and appropriate assessment sections of this report.

10.1. Statutory Provisions

- 10.1.1. Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) sets out development for the purposes of Class 10 Infrastructural projects and 10 (a) includes “industrial estate development projects, where the area would exceed 15 hectares.” The proposed development and the associated data centre development are below the 15-hectare threshold, and an EIA is not mandatory under this class.
- 10.1.2. Class 15 of the same schedule includes “any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development, but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.” It is considered by the applicant that the nature and scale of the proposed development provides for the potential for significant effects on the environment, and it was decided to undertake an EIA on this basis.
- 10.1.3. Under article 299A of the Planning Regulations, where a planning application for a sub-threshold development is accompanied by an EIAR and a request for a determination under section 7(1)(a)(i)(I) of the Act of 2016 was not made, the application shall be dealt with as if the EIAR had been submitted in accordance with section 172(1) of the Act of 2000.

10.2. EIA Structure

10.2.1. This section of the report comprises the environmental impact assessment (EIA) of the proposed development in accordance with the Planning and Development Act 2000 (as amended) and the associated Regulations, which incorporate the European Directives on environmental impact assessment (Directive 2011/92/EU as amended by 2014/52/EU). Section 171A of the Planning and Development Act, 2000 (as amended) defines EIA as:

- a) consisting of the preparation of an Environmental Impact Assessment Report (EIAR) by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and
- b) including an examination, analysis, and evaluation, by the Board, that identifies, describes and assesses the likely direct and indirect significant effects of the proposed development on defined environmental parameters and the interaction between these factors, and which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

10.2.2. Article 94 of the Planning and Development Regulations, 2001 as amended and associated Schedule 6 set out requirements on the contents of an EIAR.

10.2.3. This EIA section of the report is therefore divided into two sections. The first section assesses compliance with the requirements of Article 94 and Schedule 6 of the Regulations. The second section provides an examination, analysis and evaluation of the development and an assessment of the likely direct and indirect significant EIAR and relevant supplementary information:

- population and human health,
- land, soil, water, air, and climate,
- biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
- landscape, architectural and cultural heritage
- material assets, traffic, utilities and waste management,

- the interaction between the above factors, and
- the vulnerability of the proposed development to risks of major accidents and/or disasters.

10.2.4. The assessment also provides a reasoned conclusion and allows for integration of the reasoned conclusions into the Commission's decision, should they agree with the recommendation made.

10.3. Issues raised in respect of the EIA

10.3.1. The Planning Authority were satisfied with the EIAR.

10.3.2. Issues raised in respect of the EIA by third parties are:

- Errors and deficiencies in the EIAR,
- Invalid mitigation measures regarding impact on climate,
- An assessment of emissions and impact of energy demand on climate has not been undertaken in line with the EIA Directive,
- Conclusion on residual impacts insufficient.
- Cumulative impacts insufficient and no assessment was carried out, and
- Cumulative effects of other or existing proposed developments not assessed.

10.4. Compliance with the Requirements of Article 94 and Schedule 6 of the Planning Regulations

10.4.1. In the proceeding table, compliance of the EIAR submitted with the requirements of Article 94 and Schedule 6 (paragraphs 1 and 2) of the Planning Regulations is set out below.

A description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development, including the additional information referred to under section 94(b).
A description of the proposed development is contained in Chapter 2 of the EIAR, including details on the site, design, size and operation of the development, arrangements for access, and the construction methodology. In each technical

chapter of the EIAR details are provided on the use of natural resources and the production of emissions and / or waste where relevant. I am satisfied that the development description provided is adequate to enable a decision.
A description of the likely significant effects on the environment of the proposed development, including the additional information referred to under section 94(b).
An assessment of the likely significant direct, indirect, and cumulative effects of the development is carried out for each of the environmental parameters set out in the Regulations. I am satisfied that the assessment of significant effects is comprehensive and robust and enables decision making.
A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development, including the additional information referred to under section 94(b).
These are included in each of the technical chapters of the EIAR and the associated appendices. They are brought together in Chapter 16 of the EIAR and in the outline CMP.
A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment, including the additional information referred to under section 94(b).
Chapter 3 of the EIAR considers alternatives in respect of ‘do nothing’ (section 3.2), alternative project locations (Figures 3.3, Table 3.1 & section 3.3), alternative layout/ design (section 3.4) alternative processes for the activities (Section 3.5). • The site is owned by Mayo County Council and is located close to the existing Killala business park and is unzoned. • 2 alternative sites were assessed for the optimum location for the proposed development: one to the south west and the second to the south east of the business park. <u>South western parcel of land (c.12.12ha):</u> • A number of constraints were identified in the western parcel of land primarily as it contained Ballysakeery House, a small unnamed stream

along the southern boundary, record of a historic lime kiln & overhead power lines.

- The location of the secondary access was chosen to avoid impacting on the existing hedgerows and minimal removal of trees.

South eastern parcel of land (c.14.72 ha)

- Constraints on this land included a ringfort in the se corner, proximity to residential properties to the east, wayleave across site for Moyne River & overhead power lines.

This chapter provides the main reasons for selecting the proposed option(s) and a comparison of environmental effects. I consider, therefore, that the description of alternatives is reasonable, in the context of the proposed development is satisfactory.

It was deemed preferable to locate the building in the most northern section of the site to confine the building closest to similar adjacent land uses in Killala business park and direct connectivity to power sources and reduce the visual impact on Ballysakeery House and surrounding area.

In terms of a 'Do Nothing' approach, whilst this scenario has been assessed under the relevant technical chapters, the EIAR notes that in the absence of the development, the direct and indirect employment opportunities would not arise, and this scenario would limit the data centre capacity required to power the cloud and the digital revolution that is transforming all sectors of the economy.

A description of the baseline environment and likely evolution in the absence of the development.

A detailed description of the baseline environment is included in each of the technical chapters of the EIAR and I am satisfied, it is sufficient to enable the assessment of likely effects and to enable decision making.

A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved.

Forecasting methods and/or evidence to identify and assess significant effects are included in the EIAR, as required for relevant environmental topics. Technical

difficulties are identified where necessary, and I am satisfied that there are no significant deficiencies that prevent decision making.
A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.
Likely significant effects of the development on the environment, arising from its vulnerability to risks of major accidents and/or disasters are addressed, and described in Chapter 2 and 4 of the EIAR and are adequate to support decision making.
Article 94 (c) A summary of the information in non-technical language.
The EIAR submitted with the application comprises a non-technical summary (Volume I), and a main report (Volume II) with appendices. I have read the Non Technical Summary document, and I am satisfied that the document is concise and comprehensive and is written in a language that is easily understood by a lay member of the public.
Article 94 (d) Sources used for the description and the assessments used in the report.
The sources and references used to inform the description, and the assessment of the potential environmental impacts are set out in each individual chapter in the EIAR. I consider the sources relied upon are generally appropriate and sufficient in this regard.
Article 94 (e) A list of the experts who contributed to the preparation of the report.
A list of the various experts who contributed to the EIAR are set out in Table 1.2 in Chapter 1 of the EIAR. Where relevant, I am satisfied that the introductory section of each of the EIAR chapters demonstrates the competence of the individuals who prepared each chapter of the EIAR, including details relating to expertise and qualifications.

10.5. Consultations

- 10.5.1. The application has been advertised and submitted in accordance with the statutory requirements of the Planning & Development Act 2000 as amended na the Planning and Development Regulations 2001 as amended in respect of public notices.

Submissions received from statutory bodies and third parties are considered in this report, in advance of decision making.

10.5.2. Several of the topics and issues raised by the third party observers that concern environmental matters have already been addressed in the planning assessment above, however, where relevant I have cross-referenced between sections to avoid repetition.

10.5.3. I am satisfied that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposed development in advance of decision making.

10.6. Compliance

10.6.1. Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and the associated supplementary information provided with this by the Applicant, is sufficient to comply with Article 94 of the Planning & Development Regulations, 2001 (as amended). Matters of detail are considered in my assessment of likely significant effects below.

10.7. Likely Significant Direct and Indirect Effects

10.7.1. In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR and submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on these environmental parameters and the interaction of these. Each topic section is therefore structured around the following headings:

- Issues Raised
- Context
- Baseline
- Potential Effects
- Mitigation
- Residual Effects
- Analysis, Evaluation, and Assessment: Direct and Indirect Effects
- Conclusion: Direct and Indirect Effects

10.7.2. The third party raised a number of issues regarding discrepancies in the EIAR including typographical errors and invalid GHG calculations. I consider the applicant has responded to these issues by AWN Consulting and amended errors accordingly in the appeal response.

10.7.3. Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and the associated supplementary information provided with this by the developer, is sufficient to comply with article 94 of the Planning Regulations. Matters of detail are considered in my assessment of likely significant effects below.

10.8. **Population and Human Health**

Issues raised

10.8.1. There have been no issues raised in the appeal submissions regarding the proposed development's impact on human health. The Environment section of the Planning Authority raised no concerns regarding the impact of the development on human health.

Context

10.8.2. Chapter 4 of the EIAR considers the impact of the development on population and human health with regards to air quality, noise, water and soil quality. The methodology for the assessment is described, as well as the study area receiving environment and the sources referenced. The assessment is undertaken having regard to the requirements set out in government and industry guidelines for EIA. The methodology includes site surveys, a desk-top survey on human health and the population baseline environment, remote sensing and reference to planning policy

Baseline

10.8.3. The study area comprised 3 EDs, Ballysakeery, Killala and Rathoma and all 3 EDs have experienced a population growth between the 2016-2020 census. Killala ED has the highest population of the 3 EDs and had a population of 1,325 (5.49%) over the census years examined.

10.8.4. There are concentrations of residential settlements that occur to the north of the site in the village of Killala. There are also rural residential developments surrounding the site, predominantly in a one-off development pattern. The nearest sensitive location is

Ballysakeery House c.145m from the site boundary. Two dwelling houses situated to the east of the site are at a distance of 400m and 650m. To the west of the site boundary there are three further noise sensitive residential houses, between 235m-370m. There are 3 additional residential properties located between 950m-1,210m to the northeast of the subject site.

- 10.8.5. A number of primary and secondary schools are in the vicinity of the proposed development including: St. Joseph's National School 2.73 km to the north, Newtownwhite Educate Together National School 2.8 km to the south east and Cooneal National School 2.79 km to the south.
- 10.8.6. The Phobal deprivation index indicates that for the year 2022 the study area is largely 'marginally below average' with areas of 'extremely disadvantaged' and 'disadvantaged' in small pockets in Killala ED which aligns with the state as a whole which had a deprivation score of 'marginally below average'. The age dependency ratio for the 3 EDs assessed indicates the area has a low age dependency ratio and a high proportion describing their health as 'very good' with a low disability ratio (20-22%) in line with the national average.
- 10.8.7. Notable facilities within the vicinity of the site include:Tawnaghmore Power Station (Energy), Killala Community Windfarm (Energy), SCHÜTZ Ireland (Industrial), Mullafarry Quarry Ltd. (extraction quarry), Iron Excellence (Iron Works), Killala Precision Components Ltd. (Manufacturing), and G & G Engineering Ltd. (Manufacturing).

Potential Effects

Summary of potential effects on Population & Human Health	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	The data centre would not be built at the site and the population and social patterns of the study area would remain as existing.
Construction	Indirect positive effects would be in the potential to create employment during the construction phase (300 workers at peak).

	Construction dust & nuisance, engine emissions from traffic & machinery and traffic related air pollution. Sensitive receptors include residential properties within 250m of the site boundary. Noise from construction traffic is predicted to result in an additional 240 cars, 100-120 Heavy Goods Vehicles & 20 Light Goods Vehicles per day during the construction phase peak spread out during the operational hours of the site - 10% of which are estimated to occur during the network peak hours. Visual impact from construction machinery/cranes etc along viewpoints in area, road users, & residents. Health & safety of workers employed during construction phase. Construction phase would be carried out in accordance with Safety, Health & Welfare at work Regs. The risk of major accidents at the facility is negligible due to the absence of nearby permitted Seveso/Control of Major Accident Hazards (COMAH) Regulation sites.
Operational	Area would change from agricultural use to industrial/commercial area. Direct effects for the local population arising from changes to landscape. Landscape and Visual Impact Assessment reports that on completion, the proposed development would be a new feature within the landscape, similar in size and visual appearance to Killala business park. Potential impacts would arise from air quality, noise, visual impact and traffic. Engine emissions from vehicles accessing the site. Emissions associated with operation of 25 no. standby backup generators has the potential to affect air quality. Emissions to atmosphere of NO₂ from extractor flues. Discharge to waterbodies, flooding, risk of landslides.

	Impacts from noise from building services, site operations & traffic on public roads.
Cumulative	The EIAR refers to the potential for cumulative impact of the proposed development for planned and permitted development in Chapter 3 and Sections 4.7.1 & 4.7.2 of the EIAR, however these sections do not specify any projects. However, Table 2.1 and Appendix 2.1 of the EIAR contains a detailed list of projects in the vicinity of the site, but impacts arising from these developments in combination with the proposed development would be unlikely. During construction in a worst case scenario, would be multiple developments overlapping or commencing at the same time as the proposed development cumulating in an increase in dust, noise & traffic. However, permitted developments would incorporate their own measures to limit emissions during construction, and any potential cumulative impacts arising would be short term. The likely cumulative impact of the proposed development in conjunction with these cumulative developments upon health in relation to water (chpt 6), air quality (chpt 8), noise & vibration (chpt 10), visual impact (chpts 11 &12) and traffic (chpt 13), associated with the works; have been assessed in the respective EIAR Chapters.

Mitigation

- 10.8.8. Mitigation measures are set out in relation to each of the potential effects of the project. Measures include controlling hours of construction as set out in the Construction Management Plan (CMP), landscape scheme, control of surface water run off rates to greenfield rates, control and restrictions on dust deposition, monitoring of noise and vibration levels, traffic and transport including a Transport Management Plan (TMP), to prevent nuisance and undue impacts to human health, and controlling emissions to appropriate levels through the use of standard management measures.

Furthermore, the imposition of limits by conditions in any grant of permission would further reinforce the preservation of human health.

Residual Effects

- 10.8.9. No significant residual effects have been identified. Residual impacts are not predicted to be significant subject to the implementation of mitigation measures and suggested conditions during the construction phase.

Direct and Indirect Effects Assessment

- 10.8.10. It is predicted that there will be a slight positive impact on local business activity during the construction phase with the increased presence of construction workers using local facilities. Due to the distance between the site and the nearest sensitive locations, noise and vibration impacts generated during construction would be *negative, not significant and short term*.
- 10.8.11. There would be an increase in noise, dust and traffic emissions from the construction and operational phase of the development. However predicted levels would be within guidance limits. I am satisfied that these impacts would be mitigated by a suite of appropriate construction phase management measures, including implementation of measures for dust mitigation measures and noise monitoring.
- 10.8.12. Following construction, the proposed development would alter the landscape character of the site from the current agricultural lands and peri-urban condition (Killala business park) to one that is guided by employment.
- 10.8.13. Once operational the proposed data centre would operate on a 24 hour basis, but the level of activity associated with staff vehicles (32 staff per shift) to the premises during the night shift would be low. The P.A in their grant of planning permission specified that noise levels were not to exceed 55dB(A) L_{eq} at the nearest noise sensitive locations including dwellings between the hours of 0800-2200hrs Monday to Friday and not to exceed 45 dB(A) L_{eq} at any other time when the development is operational. I consider given the separation distances between the proposed building and nearby residential properties; that the restricted noise levels are reasonable and appropriate and the development would not result in a noise nuisance to nearby residential properties.

Conclusion: Direct and Indirect Effects (Population & Human Health)

10.8.14. I have examined, analysed and evaluated chapter 4 of the EIAR, all of the associated documentation and submissions on file in respect of human health and population. I am satisfied that the applicant's presented baseline environment, is comprehensive and that the key impacts in respect of likely effects on human health and population, as a consequence of the development, have been identified.

10.8.15. I am satisfied that the proposed development would not have an adverse impact on Population and Human Health, subject to compliance with relevant legislation and guidance, implementation of the EIAR and final CEMP mitigation measures, compliance with recommended conditions and adherence to the terms of the EPA IE Licence (as reviewed and/or amended).

10.9. Land, Soils, Geology and Hydrogeology

Issues raised

10.9.1. No issues were raised regarding land, soils, geology or hydrogeology in the appeal submissions.

Context

10.9.2. Chapter 5 of the EIAR assessed the potential impacts on the land, soil, and groundwater environments associated with the project. The EIAR describes the legislation and policy, the methodology used, the baseline conditions, the mitigation measures proposed and any residual impacts. The methodology included site investigations carried out between August and September 2024, which included 4 silt trenches, 5 trial pits, 2 soakaway tests, 4 boreholes, 2 rotary boreholes and soil and rock laboratory testing. The location of the testing points are indicated in Figure 5.4 of the EIAR. The site investigations informed the details contained within the baseline study.

Baseline

10.9.3. Land

The site is currently an undeveloped greenfield site comprising 10.58 hectares of agricultural/greenfield lands. A topographical survey of the site indicates the site has a steep gradient with a level change of c.20m from the highest northern point to the

lowest point along the southern boundary. Killala business park and the community windfarm farm a back drop to the site.

The site investigations carried out indicated there is no evidence of contamination of the land and environmental laboratory testing was carried out on 1 sample (TPO3) which was classified as non-hazardous and that waste from the site can be treated as inert waste. It is however acknowledged that further testing would be required to identify any possible contamination of the site. (The site investigation report is contained in Appendix 5.2 of the EIAR)

10.9.4. Soils

The natural ground conditions are dominated by brown sandy gravelly clay. The subsoil underlying the site comprises bedrock outcrop or subcrop (Rck) and Till derived from limestones (Tls) underlying the southern and eastern portion of the site and immediate vicinity (south, west and east).

10.9.5. Geology

GSI mapping indicates that the bedrock underlying the site are underlain by Visian limestone and calcareous shale. There are no karst features identified in the immediate vicinity of the site. Bedrock was encountered at 0.8mbgl and 0.05mbgl in the north section of the site but this depth increased to 1.35mbgl and 1.90mbgl the north west and south of the site.

The site is located within the Killala Area Audited (Site code:MO068) Geological Heritage site which is described as an extensive area of ridges on the west side of the Moy Estuary at Killala.

10.9.6. Hydrogeology

The site is underlain by a “Locally Important (LI) Aquifer” where the bedrock is moderately productive in local zones. The GSI classifies the aquifer with a vulnerability classification of ‘Rock at or near surface or Karst’ for the majority of the site and lands to the immediate north and west. The south and eastern portion of the site is classified as ‘extreme’.

There are 18 recorded wells within a 2km radius of the site based on GSI data. A group scheme borehole was identified c. >1.5 km north of the site (well no. 1131NWW004). There is no groundwater source protection zone associated within

the vicinity of the site. The area is also serviced by a public mains and it is unlikely that any wells are used for potable supply.

Groundwater ingresses were recorded in the south-east of the site at 1.60m BGL at TP01 (south-east of site) and 1.20m BGL at TP02 and SA01 (south-east of site) during the site investigation. Regional ground water flow is likely to discharge to the north east towards Killala Bay, c. 1.26km north east of the site.

Potential Effects

Summary of potential effects on Lands, Soil, Geology & Hydrogeology	
Project Phase	Potential Direct, Indirect & Cumulative Effects
Do Nothing	The site would remain in agricultural use and no likely significant impacts would arise.
Construction	Removal & transportation of topsoil (27,962m³), subsoil (36,150m³) & rock (22,648m³). Extent of depth of excavations are not specified. Run off/leaks from stockpiling of soil & materials-increase in silt levels. Excavation of rock could increase the aquifer vulnerability. Potential for ground water contamination from infilling of site, cement/concrete, hydrocarbons spillages & storage, waste water discharge. Local dewatering during excavation & ground works.
Operational	Discharge to surface water. Increase in hardstanding area Spillage from filling of bulk fuels (HVO) & risk to aquifer from spillages
Cumulative	With the proposed control measures implemented, cumulative effects would not be significant.

Mitigation

10.9.7. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 5.6 of the EIAR and have been embedded within the design of the proposed development. The outline CMP would contain a number of mitigation measures designed to avoid, reduce, or offset any potential adverse impact lands, soils, geological or hydrological effects. Mitigation measures include:

Construction phase

- All excavated material would be assessed for contamination and if contaminated segregated and disposed of by a suitable licensed operator.
- Risk assessments of fill and aggregates would be carried out to prevent contamination to the underlying soil.
- Temporary drainage systems would be established prior to construction works to collect and discharge any construction water.
- Where feasible mixed concrete would be brought to site by truck and wash outs would take place in designated areas away from any drainage point.
- Designated bunded refuelling areas, spill kit facilities, use of drip trays, flexible pipes would be fitted with a lock, bunded oil & fuel tanks.
- Wastewater would be collected and disposed of by licensed contractor.

Operational phase

- HVO would be contained within double lined tanks.
- Generator yard will be drained through an oil interceptor
- SuDs measures including hydrocarbon interceptors, hydrobrake, pollutant traps, swales, permeable paving, & 4,500m³ attenuation pond.
- Relevant personal will be trained for the implementation of emergency procedures.

Residual Effects

Construction phase

The residual effect on land, soils, geology and hydrogeology during the construction phase is considered to be *neutral, imperceptible and short-term*.

Operational Phase

There are no planned discharges to groundwater during the operational phase of the development. The EIAR considers the residual effects during the operational phase to be *neutral, imperceptible and long term*.

Assessment Direct and Indirect Effects

- 10.9.8. I have examined, analysed and evaluated chapter 5 of the EIAR, all of the associated documentation. I am satisfied that the applicant's presented baseline environment, is comprehensive and that the key impacts in respect of likely effects on land, soils, geology and hydrogeology, as a consequence of the development have been identified.

Construction Phase

During the construction phase there is the potential for the development to impact on soil and groundwater quality from the excavation and infilling works. There was no evidence of soil contamination of the land, however it was noted (Table 5.5 of EIAR) that there are 3 mineral sites identified between 1-2.53km from the subject site relating to active quarries. One of the quarries c.1.5km north east of the site is recorded as having Iron Pyrites nearby. It is noted within this chapter of the EIAR that from one trial pit investigation the material tested was non hazardous but that further environmental testing would be required to identify any possible contamination on the site. However, I would be satisfied based on the information as submitted that mitigation measures include all excavated materials would be assessed for contamination, and if contaminated, would be segregated and disposed of by a suitable licensed waste contractor.

Potential impacts to soil and groundwater quality could occur from accidental spillages and leakages and use of concrete. The final CEMP would include mitigation measures, which will protect soils and groundwater from contamination.

Operational Phase

There are a number of wells within the vicinity of the site but from the GSI and EPA mapping there is no ground water protection zones located within the immediate vicinity of the development site. A group scheme borehole was identified >1.5km

north of the site however there is no groundwater protection zone associated with this supply.

During the operational phase the increase in hardstanding would increase surface run off if not attenuated to the green run off rate from the site. The site is underlain by a 'Locally Important Aquifer' and the bedrock is moderately productive only in local zones. Given the discrete nature of fracturing and lengthy pathway of flow allowing for time for attenuation and dispersion, I would be satisfied that there is no potential for a change in water quality to impact on the wells within the vicinity of the site.

Further mitigation measures outlined above would limit and minimise leakages or spillages from the HVO yard to surface and groundwater.

Conclusion Direct and Indirect (Land, Soils, Geology & Hydrogeology)

10.9.9. I have examined, analysed and evaluated chapter 5 of the EIAR, all of the associated documentation and submissions on file in respect of land, soils, geology and hydrogeology. I am satisfied that the applicant's presented baseline environment, is comprehensive and that the key impacts in respect of likely effects on of land, soils, geology and hydrogeology, as a consequence of the development, have been identified.

10.9.10. I am satisfied that the proposed development would not have an adverse impact on of land, soils, geology and hydrogeology, subject to compliance with relevant legislation and guidance, implementation of the EIAR and final CEMP mitigation measures, and compliance with recommended conditions.

10.10. **Hydrology (Water)**

Issues raised

10.10.1. No issues were raised in the appeal submission regarding hydrology.

Context

10.10.2. Chapter 6 of the EIAR assesses the impact of the development on the hydrological aspects of the site and surrounding area. Desk based hydrological information in the vicinity of the site was obtained through accessing inter alia the EPA website and data mapping, Draft River Basin Management Plan for Ireland, GSI mapping, the OPW flood mapping data, and the NPWS site register. Site investigations were carried out

at the site between August and September 2024 to identify the soil type. The planning application was accompanied by a Flood Risk Assessment and Water Framework Directive Screening Assessment.

Baseline

- 10.10.3. The site is located within the Western River Basin District (WRBD) and lies within the Moy & Killala Bay Catchment (Catchment ID: 34) and the Abbeytown_SC_010 Sub-Catchment (Sub-Catchment ID: 34_19). The ground water body located within the site is the Bellacorick-Killala GWB (IE_WE_0041), and the surface water body connected to the site is the Moyne_010 (IE_WE_34M190890). This surface water flows into the Killala Bay coastal waterbody (IE_WE_420_0000) which is 'Not at Risk' and had 'Good' WFD status in 2016-2021. The most recent Sub-Catchment Assessment (2019) carried out by the EPA on the Abbeytown_SC_010 Sub-Catchment states that the main pressure on Killala Bay is from anthropogenic pressures.
- 10.10.4. A small drainage ditch is located along the southern boundary of the site, along the Mullafarry Road which discharges into the Moyne 34 Stream (Moyne_010 WFD surface waterbody) located c.3.5km downstream (0.55km south-east of the site in a linear distance). The Moyne surface river waterbody has a 'Moderate' WFD status 2016-2021 and a WFD risk score of being 'Under Review'. This 'Moderate' status is related to its ecological status or potential. The most recent Sub-Catchment Assessment (2019) carried out by the EPA on the Abbeytown_SC_010 Sub-Catchment states there are no significant pressures on the Moyne_010 WFD surface water body.
- 10.10.5. This stream flows in a north easterly direction and discharges to Killala Bay coastal waterbody a further c.3.25km downstream, where the receiving environment is designated as part of the Killala Bay/Moy Estuary SAC (site code: 000458) and the Killala Bay/Moy Estuary SPA (site code: 004036). There is therefore an indirect hydrological connection between the subject site and the Killala Bay SAC/SPA through the drainage ditch along the southern boundary of the subject site as the Moyne Stream discharges to Killala Bay coastal waterbody.
- 10.10.6. There is a disused area of land to the immediate east of the site which contains a reservoir used by the former Asahi factory to receive raw water from Lough Conn, c.12km south of the subject site.

Groundwater Quality

- 10.10.7. The site lies within the Bellacorick-Killala Groundwater Body (IE_WE_G_0041) on poorly productive bedrock and according to the EPA website this groundwater body is 'Not at Risk', and the latest status (2016-2021) accessed 12/5/25, is recorded as being 'Good'.

There are no groundwater source protection zones within which development is limited to protect drinking water supplies from pollution within or within the immediate vicinity of the site. A group scheme borehole was identified c.1.5km north of the site (well no.1131NWW004), but according to the latest GSI and EPA mapping there is no groundwater protection zone associated with this supply.

Bedrock

- 10.10.8. The bedrock aquifer beneath the site is classified as a 'Locally Important Aquifer' which is described as being bedrock that is 'Moderately productive only in Local Zones'.

There are 2 principal sub soil types on the site 'Bedrock outcrop or subcrop (Rck)' underlying the majority of the site and 'Till derived from limestones (Tis)' underlying the southern and eastern portions of the site and to the south, west and east. Further areas of bedrock outcrops or near surface outcrops occur in the west and east of the subject site. The site investigations identified the natural ground conditions are dominated by brown sandy slightly gravelly silty CLAY with cobbles. Bedrock was encountered at the centre of the site (0.80mbgl and 0.50mbgl and to the north east of the site. The south east of the site achieved greater depths of 1.0mbgl and 1.80mbgl.

Aquifer

- 10.10.9. The aquifer vulnerability characteristics underlying the site is classified as of "Rock at or near Surface or Karst" (X) for the majority of the site and lands to the immediate north and west. The south and eastern portion of the site is classified as "Extreme" (E). To the immediate south of the site the GSI classifies the aquifer vulnerability as being "High" (H).

Surface Water

- 10.10.10. There is no surface water infrastructure within the subject site. Surface water from the proposed development would discharge to the drainage ditch on the southern boundary.

Water

- 10.10.11. There is an existing 250mm uPVC watermain running through the subject site from north to south. There would be a diversion required from the watermain to service the development. The water network is proposed to loop around the building to create continuity in the flow. It is also noted that a separate fire main will loop the site parallel to the domestic water supply.

Foul Wastewater Drainage Infrastructure

- 10.10.12. There is currently no foul sewer at the site. The closest Uisce Éireann WWTP, Killala WWTP (Licence Number: D0067-01) is located in the east section of Killala Business Park. Killala WWTP serves as the municipal wastewater treatment plant for Killala village and environs. According to the Killala Waste Water Treatment Plant (WWTP) Annual Environmental Report (AER, 2021), the annual mean hydraulic loading and the annual maximum hydraulic loading is less than the peak Treatment Plant Capacity. The design of Killala WWTP allows for peak values and therefore the peak loads have not impacted on compliance with Emission Limit Values.

Flooding

- 10.10.13. The entire site lies within CFRAM Flood Zone C and the probability of flooding on the site is low for river or coastal flooding. There are no recorded flood events at the site or within the vicinity of the site and the closest documented flooding (www.floodmaps.ie accessed 12/9/25) is approximately 2.69km to the north of the site which is a reoccurring event associated with coastal and estuarine waters from Killala Bay.

Potential Effects

Summary of Potential Effects on Hydrology (Water)	
Project Phase	Potential Direct, Indirect & Cumulative Effects

Do Nothing	The site would remain in agricultural use and no likely significant impacts would arise.
Construction	Potential impacts on surface water entering Moyne Stream, from run off and temporary crossing of drainage ditch. Suspended solids arising from excavation and ground disturbance. Local dewatering from excavation & ground works. Removal of topsoil and subsoil could increase aquifer vulnerability. Contamination of groundwater from cement/concrete arising from construction materials. Hydrocarbons & construction chemicals – accidental spillages from construction plant or onsite storage. Wastewater (nutrient and microbial rich) – arising from accidental discharge from on-site toilets and washrooms.
Operational	Potential impacts on stormwater drainage and water quality. Increase in hardstanding, roads, & car parking areas and surface water flow compared to existing green field rates. Spillage & leakage from filling of bulk fuels (HVO). Risk to groundwater from spillages of fuel from car park areas and roads. Indirect risk to Moyne Stream and Killala Bay from stormwater. Indirect connection via foul wastewater. Indirect surface water connection to Moyne Stream & Killala Bay/Moy Estuary SAC /SPA.
Cumulative Effect	The works contractors for other planned or permitted developments will be obliged to ensure that measures are in place to protect soil and water quality in compliance with

	legislative standards for receiving water quality and in accordance with the WFD.
--	---

Mitigation

10.10.14. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 6.6 of the EIAR. Mitigation measures during the construction phase would be embedded in the CEMP which would be implemented during the construction phase of the proposed development. Mitigation measures would be carried out in accordance with best practice guidance from Inland Fisheries Ireland and would contain measures designed to prevent pollution to the hydrology of the area.

Mitigation measures during construction would include the following:

- Employment of a construction contractor, project manager, environmental manager & ecological clerk of works.
- Exposed earthworks would be contained within the main extraction site and stockpiles compacted to reduce run off with excavation areas remaining open for as little time as possible.
- Site roads to be swept & use of wheel wash facilities.
- Storage of fuels, soil, concrete, aggregates etc., carefully managed. Bunding of oil & fuel tanks.
- Use of silt traps, spill kits & attenuation pond.
- Emergency procedures in event of a fire in CMP.

During the operational phase of the development mitigation measures to protect the hydrology of the site would include:

- Generator yard would be drained through an oil interceptor.
- HVO contained within double lined tanks.
- Foul water holding tank-24 hour capacity.
- Tanker loading area drained to foul sewer.

- SuDs measures including swales, permeable paving, & 4,500m³ attenuation pond.

Residual Effects

Construction phase

The residual effect on hydrology during the construction phase is considered to be *temporary, imperceptible and short-term*.

Operational Phase

There are no planned discharges to groundwater during the operational phase of the development. The EIAR considers the residual effects during the operational phase to be *neutral, imperceptible and long term*.

Assessment Direct and Indirect Effects

10.10.15. I have examined, analysed and evaluated chapter 6 of the EIAR, all of the associated documentation. I am satisfied that the applicant's presented baseline environment, is comprehensive and that the key impacts in respect of likely effects on hydrology, as a consequence of the development have been identified.

Construction Phase

There is a direct pathway to the underlying locally important aquifer due to excavation works and leakages.

There is an indirect hydrological link between the Moyne Stream through the drainage ditch along the southern boundary of the site to Killala Bay/Moy Estuary SAC/SPA.

Operational Phase

There is an indirect pathway to Killala Bay coastal waterbody and Killala Bay/Moy Estuary SAC/SPA through the Killala WWTP and surface water to the Moyne Stream during the operational phase of the development.

During the operational phase the increase in hardstanding would increase surface run off if not limited to the green run off rate from the site.

Conclusion Indirect and Direct (Hydrology)

10.10.16. I have examined, analysed and evaluated chapter 6 of the EIAR, all of the associated documentation and submissions on file in respect of hydrology. I am satisfied that the

applicant's presented baseline environment, is comprehensive and that the key impacts in respect of likely effects on hydrology, as a consequence of the development, have been identified.

- 10.10.17. I am satisfied that the proposed development would not have an adverse impact on hydrology, subject to compliance with relevant legislation and guidance, implementation of the EIAR and final CEMP mitigation measures, and compliance with recommended conditions. The CMP includes emergency response procedures in the event of a spill, fire or other environmental incidents related to construction. The development would require potable water for both domestic use, including fire suppression. Uisce Eireann water capacity register (accessed 25/9/25) states there is capacity available subject to Level of Service improvement required.
- 10.10.18. Given the fractured nature of the bedrock which is moderately productive only in local zones and the level of dilution proposed and mitigation measures outlined above, I do not consider significant effects are anticipated.

10.11. Biodiversity

Issues raised

- 10.11.1. There were no issues raised with regards to biodiversity in the third party appeal, however the observation from An Taisce refers to the risks to the SAC and SPA not being assessed in accordance with the Habitats Directive and the impacts of nitrogen deposition in Glenamoy & Bellacorick Bog SAC complexes have not been addressed in the NIS. This aspect will be addressed in detail in the AA section of this report.

Context

- 10.11.2. Chapter 7 of the EIAR addresses impacts on biodiversity and sets out a list of relevant guidance and the policy framework for the assessment of this part of the EIAR.
- 10.11.3. The methodology for the assessment included a desktop survey (up to 150m from the red line boundary) to determine existing records in relation to habitats and species present in the subject site and included research on the National Parks and Wildlife Services (NPWS) metadata website, the National Biodiversity Data Centre (NBDC) database and a literature review of published information on flora and fauna occurring in the subject site. The ecological evaluation of the subject site was assessed

according to the guidelines set out in the Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment (2019) and in the TII Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009).

10.11.4. Three fieldwork surveys were carried out on 30th June, 27th August and 6th November 2024, which included assessing for otters and breeding birds. Following a walked survey on 8th November 2024, it was deemed unnecessary due to the habitat condition of the study area comprising in the main of improved wet agricultural grassland subject to high levels of grazing disturbance to carry out a detailed Wintering Bird Survey.

10.11.5. Three walkover bat surveys were carried out on 2nd August, 23rd August and 11th September 2023 by MKO Environmental Consultants. The main focus of the bat surveys were on the western side of the subject site surrounding Ballysakeery House and outbuildings. Four bat detectors were deployed for a period of 40 nights. The results of these surveys are contained within Appendix 7.1 of the EIAR.

Baseline

10.11.6. Habitats

Habitats identified on the subject site are illustrated in Figure 7.4 of the EIAR. The subject site comprises primarily improved agricultural grassland/semi improved wet grassland (GA1/Si-GS4), artificial hard surfaces (BL3) along the road, mixed broadleaved woodland (WD1) along the proposed secondary access road and contained within the grounds of Ballysakeery House, established hedgerows throughout the site along the field boundaries (WL1), and shrub (WS1) along the eastern boundary. The woodland area comprises predominantly Ash trees which are undergoing early stages of ash die-back along with Beech species. The perimeter of Ballysakeery House has established mature trees and overgrown vegetation within much of its boundary.

10.11.7. The site drainage within the site flows from north to south towards a shallow drainage ditch (FW4) that extends along the roadside boundary and flows into 2 wetland fields in the south eastern corner of the site. The roadside drainage ditch is culverted under access to land along the route of the proposed link to the Wastewater Treatment Plant and continues to the 'Moyne 34' Stream which ultimately discharges to Killala Bay

approximately 3.25 river kilometres downstream to the east at Moyne Abbey where the receiving environment is designated as part of the Killala Bay/Moy Estuary SAC and the Killala Bay/Moy Estuary SPA.

There is a drainage ditch along the western boundary of Ballysakeery Glebe House, which historically redirected into the garden of this property as a drainage feature and towards the roadside ditch. Japanese knotweed was recorded growing in two patches on the property adjacent to the eastern facade. The Japanese Knotweed is located at least 45m from the site boundary to the east.

10.11.8. Fauna

Bats

Bat activity was recorded as being relatively high in the south west and north west section of the site and dominated by soprano pipistrelle (Figure 3-1 Appendix 7.1 of EIAR). There were lower numbers of four other bat species/species group recorded, which included *Myotis* spp. Leisler's bat, Brown long-eared bat and Common pipistrelle. Ballysakeery House, stables and shed supports significant roosting and a large roost of multiple species was identified within the house. The associated shed to this house was considered to have moderate suitability for bats. The bat survey concludes that these roosts are likely to be maternity roosts.

The north and eastern section of the site presented limited suitability for bats as few connecting corridors existed and this area was considered as having moderate suitability for commuting and foraging bats with limited roosting potential identified. There was one sycamore tree identified in this area found to have potential to host larger roosts. It is likely that bats are emerging from the confirmed roosts, foraging to the west of the site and then commuting north/ northeast to continue foraging. Activity was highest to the west of Ballysakeery House and to the north west of the site.

The applicant noted a limitation with the tree survey due to the leaf cover in August making it difficult to completely assess the value of older mature trees for roost potential. A ground level bat roost survey of trees was carried out in November 2024, which did not record any potential features in the trees to be removed under the footprint of the development identifying the potential for bat roosts. An Ash tree was identified due north of Ballysakeery House stables but the proposed development would not impact on this tree. The bat survey recommended additional surveys to be

carried out prior to any proposed development to provide an impact assessment and mitigation.

Otters & Badgers

10.11.9. There were no otters or badgers identified on the subject site.

Breeding Birds

10.11.10. Birds recorded during the fieldwork in July 2024 included in the main birds of BWI green status with the exception of swallow which has BWI Amber status. The field survey indicated the overall lands to be unsuitable for roosting sites for Wintering Birds.

Potential Effects

Summary of Potential Effects on Biodiversity	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	The site would remain as existing with a limited increase in biodiversity value.
Construction	Direct permanent loss of trees and hedgerows or damage to trees and hedgerows, with indirect impacts for associated species reliant on these trees. Temporary crossing of drainage ditch leading to Moyne Stream. Deterioration in water quality as a result of suspended solids, dust, earth movement potential to affect downstream habitats & species. Loss of trees of 130m in length covering an area of 0.14 ha of woodland (WD1), to accommodate access to west boundary. Loss of 150m of low value hedgerows. Loss of improved & wet grassland. Impact on foraging area for bats from removal of hedgerows, trees and lighting.

	Potential effect on nesting birds due to vegetation cutting
Operational	Loss of hedgerows & trees Disturbance to commuting and foraging bats from external & internal light spillage
Cumulative Effects	Reference is made to the CDP and Appendix 2.1 of the EIAR which contains an extensive list of planning application in Table 1 of the same Appendix. These projects include the hydrogen plant, Killala windfarm, energy centre & generating station in Tawnaghmore, but does not include the data centre in Kilala business park. EIAR notes that all projects and plans that could affect European sites or biodiversity within the same zone of influence as the development are required to be initially screened for AA, and in this way cumulative or in combination effects in the same zone of influence would be avoided. The proposed project in combination with the impacts of other projects or developments is not expected to have a significant negative cumulative impact on designated sites or any other ecological receptors.

Mitigation

- 10.11.11. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 7.6 of the EIAR. Ecological monitoring would be carried out during the construction phase of the development and overseen by an Environmental Manager and Environmental Clerk of Works where relevant. A landscape report and outline landscape specifications report also formed part of the planning application. Although this plan is relatively generic it does specify protection measures for trees, hedgerows and topsoil during the construction and operational phase of the development.
- 10.11.12. The Bat survey carried out by MKO recommended a derogation order from NPWS but no order has been submitted with the appeal. The MKO bat survey inputted into the

final site selection and was carried out before the final site selection, and the recommended derogation order in MKO's report related to the roosting bats in Ballysakeery House and outbuildings. The proposed development would not impact on these structures and therefore I am satisfied a derogation order would not be required in this instance. Mitigation measures are proposed for bats to ensure operational lighting is in accordance with Bat Conservation Trust and Best Practice Guidance.

10.11.13. Measures to prevent contamination of groundwater, surface water and downstream ecosystems are proposed as outlined in corresponding chapters in the EIAR , namely chapters 5 (Land, Soils, Geology & Hydrogeology) and 6 (Hydrology). These measures would be implemented as part of the final CEMP.

10.11.14. Tree protection measures are proposed including avoidance of tree roots systems, works to Root Protection Areas (RPAs), erection of fencing/hessian around tree roots, replacement of mature trees on like for like basis and replanting of mature trees. All replacement planting would be of native stock and the storage of hazardous material within 10m of any retained tree, hedgerow or treeline would be avoided. There would be no removal of trees or hedging during the nesting season and an ecologist would be employed to ensure compliance with the Wildlife Act.

The proposed landscaping plan indicates compensatory planting proposed to offset the loss of biodiversity planting and the retention of hedgerows within the middle of the site and to the east of Ballysakeery House. Planting would include enhancing green infrastructure and habitat corridors around the site and connecting new and existing hedgerows. The design of lighting will follow the Bat Conservation Trust in partnership with the Institution for Lighting Professionals (ILP) Best Practice Guidance (BTC & ILP, 2018) on considering the impact on bats when designing lighting schemes.

Residual Effects

Construction Phase

With the implementation of the prescribed mitigation measures set out above, the residual effects on the local bat population and local biodiversity would be *short term, neutral and not significant*.

Operational Phase

The loss of a number of mature trees will have a temporary effect on the bat habitat. The employment of the mitigation measures including the reinstatement of the hedgerows as part of the development would have a *neutral, imperceptible and long-term* effect on biodiversity.

Direct and Indirect Effects Assessment

- 10.11.15. I have examined, analysed and evaluated chapter 7 of the EIAR, all of the associated documentation and submissions on file in respect of biodiversity. I am satisfied that the applicant's presented baseline environment, is comprehensive and that the key impacts in respect of likely effects on biodiversity, as a consequence of the development have been identified.
- 10.11.16. I note the MKO survey recommends a derogation licence be obtained from NPWS prior to commencing works as bat roosts were identified within Ballysakeery House and its structures. However, the proposed development would not impact Ballysakeery House or its structures and I therefore do not consider this is a requirement. There would be no loss of roosts or suitable trees within the subject site with bat roost potential. One Ash tree with bat roost potential is located outside the zone of influence of the development. I note there is a lapse in time since the 2023 bat survey, however based on the 2024 tree survey, I consider the bat roosts are confined to the buildings and one Ash tree to the north of the stable block which would not be impacted by the development.
- 10.11.17. Best Practice construction measures to be included and enforced through an agreed CEMP, the proposed development would have no significant negative construction effects on local ecology and biodiversity or on hydrologically linked European sites.
- 10.11.18. The loss of the linear hedgerow features on site will cause a minor reduction in landscape connectivity in the immediate vicinity of the proposed site. The bat survey recommended that the linear features on the subject site as well as woodland be maintained and enhanced and any tree removal is undertaken by a qualified ecologist to ensure no roosting bats are present and illumination is controlled.

The location of the proposed data centre would be contained within the north section of the site, which I consider is the least sensitive ecological site, and the landscaping plan indicates that the hedgerows to the north and west of the proposed building would be retained and reinforced as a green infrastructure corridor. It is not

considered the development would pose a significant threat to foraging or commuting bats.

Conclusion Direct and Indirect Effects (Biodiversity)

- 10.11.19. There are no rare or protected habitats within the subject site. The loss of hedgerows within the site are considered of Low to Moderate Ecological Value, but any trees / trees or hedgerows that would be removed would be compensated elsewhere on the site.
- 10.11.20. Although the MKO bat survey recommends a bat derogation licence this is in reference to Ballysakeery House and outbuildings which were identified as bat roosts in the bat survey. The proposed development does not impact on any identified roosts within the curtilage of this property and therefore a derogation licence from the NPWS is not required in order to make a decision on this case.
- 10.11.21. Having regard to the examination of environmental information in respect of biodiversity, in particular the EIAR provided by the applicant the main significant direct and indirect effects on biodiversity are the loss of linear hedgerows within the site and the impact on foraging and commuting bats. Lighting would be in accordance with the Bat Conservation Trust in partnership with the Institution for Lighting Professionals (ILP) Best Practice Guidance.

10.12. Air Quality

Issues raised

- 10.12.1. No issues were raised regarding the impact on air quality or dust during the construction or operational phase of the development. The submission from An Taisce to the appeal considered the impact of nitrogen deposition on Glenamoy & Bellacorick Bogs SACs had not been assessed in the AA or EIAR. However, the proposed development would require a licence from the EPA to operate, and as stated in the Draft EPA Licence Application Instruction Note 2(IN2) dated 2024, the EPA will assess the development with regards to Nitrogen Deposition from EPA licensable activities on European Sites. I consider the impact of NO_x from the development (proposed generators) on these sites in the Appropriate Assessment with regards to the steps outlined in the EPA draft document.

Context

10.12.2. Chapter 8 of the EIAR considers the impact of the proposed development on air quality with regards to the limit levels of dust deposition, nitrogen dioxide (NO₂), particulate matter less than 10 microns (PM₁₀) and less than 2.5 microns (PM_{2.5}) and carbon monoxide (CO). Air dispersion modelling was undertaken to assess the impact of the development with reference to National, EU Directives and WHO guidelines regarding air quality standards which are based on the protection of human health. The air dispersion modelling input data consisted of information on the physical environment (including building dimensions and terrain features), design details from all emission points on-site and five years of appropriate hourly meteorological data, in accordance with the EPA guidance AG4 for Air Dispersion Modelling.

Construction and operational stage traffic were scoped out with regards to air assessment as the development would not result in increases or decreases by 1,000 annual average daily traffic, or more than 200 AADT Heavy Duty Vehicles as outlined in the TII guidance -PE_ENV_01106 (TII 2022) for specified infrastructure projects. However, the impact of construction dust was assessed in accordance with IAQM methodology.

AERMOD modelling included an assessment of the plume from the 25 generator stacks. Annual average concentrations for NO_x⁴, nitrogen dioxide (NO₂) and acid deposition from all emission points at the facility were predicted at designated sites within 20km of the facility using AERMOD. For the purpose of the assessment, all of the 25 standby generators were assumed to be running simultaneously in the event of a power failure to the site. Downwash from the proposed generator stacks was taken into account.

Conservative background concentrations were used in order to ensure a robust assessment.

Baseline

10.12.3. Wind Direction

⁴ Nitrogen oxides- or NO_x are the gases nitrogen oxide (NO) and nitrogen dioxide (NO₂). Both of these are pollutants that are emitted in ambient air when petrol or diesel is burned in internal combustion engines. Source EPA – Air Pollutants

Belmullet meteorological station, c.50 km west of the site of the site was used to identify the prevailing wind direction and average wind speeds over a five-year period for the subject site for 2019–2023. The predominant wind direction is westerly to south-westerly with a mean wind speed of 6.4 m/s over a 30 year period 1991– 2020.

10.12.4. Air Quality

The Proposed Development site in terms of air monitoring lies within Zone D, which represents rural Ireland but also includes all towns with a population of less than 15,000, and is representative as the cleanest air quality in Ireland as identified by the EPA.

10.12.5. NO₂ (Nitrogen Dioxide)

NO₂ monitoring was carried out in Zone D locations and Emo Court and Kilkitt by the EPA in 2019-2023, and this has been used as representative of the subject site location. The annual average NO₂ trend values over a 5 year period at both locations ranged between 2-5 µg/m³. An estimate of 5.5 µg/m³ was provided for NO₂ concentrations for the region of the subject site. The annual limit for protection of human health as set out in Directive 2008/50/EC is 40 µg/m³. The final 2040 target as set out in the EU revision to the CAFÉ Directive sets out an annual target of 10 µg/m³ for NO₂. The long term average concentrations are therefore significantly below the Directive limits and 2040 target.

10.12.6. PM₁₀

Based on the same 5 years of monitoring in Zone D locations in Claremorris and Kilkitt, the annual average PM₁₀ levels ranged from 7-11 µg/m³. An estimate of 11 µg/m³, is provided for PM₁₀ concentrations for the subject site. A 90.4th %ile 24-hour background concentration of 20 µg/m³ was used in the assessment, based on average concentrations in these locations. The annual limit for protection of human health as set out in 2008/50/EC is 40 µg/m³ and the 2040 annual target is set at 15 µg/m³. Long term annual average limit at the site would be below the set limits.

10.12.7. PM_{2.5}

Readings at Claremorris and Shannon Estuary/Askeaton, Limerick over the same 5 year period were used for PM_{2.5} levels. The annual average range was recorded as between 4-8.2 µg/m³. Based on long term trends PM_{2.5} concentration for the proposed

development was set at $8 \mu\text{g}/\text{m}^3$. The annual limit for protection of human health as set out in 2008/50/EU is $20 \mu\text{g}/\text{m}^3$ from January 2020, and the annual 2040 target is set at $5 \mu\text{g}/\text{m}^3$. Long term average concentrations measured at all locations were significantly lower than the 2020 average limit value of $20 \mu\text{g}/\text{m}^3$.

10.12.8. CO (Carbon Monoxide)

In terms of CO, monitoring at the suburban traffic Zone D site of Birr over the period 2020 – 2023 was used. Maximum 8-hour concentrations at the Birr site ranged from $1.2 \text{ mg}/\text{m}^3$ – $3.4 \text{ mg}/\text{m}^3$ over this period. Based on these results a background 8-hour CO concentration of $3.4 \text{ mg}/\text{m}^3$ was used in the modelling assessment. Monitored concentrations are significantly below the ambient limit value of $10 \text{ mg}/\text{m}^3$.

10.12.9. Sensitive receptors in vicinity of the site

Residential

There are a total of 33 residential properties within a 1km radius of the subject site. Two of the residential properties are located within 250m of the site boundary, one to the west and one to the south. Based on the Institute of Air Quality Management (IAQM) guidance the sensitivity of the area to dust soiling effects would be low, given the number of receptors and distance from the boundaries. However, Ballysakeery House was not included within this assessment, on the grounds it is vacant. The annual average limit for dust nuisance was set at $350 \text{ mg}/\text{m}^2/\text{day}$ as per the German TA Luft standard 2002.

Designated Habitats and NO_x, nitrogen & acid deposition

There are a total of 3 NHAs, 16 pNHAs, 8 SACs and 2 SPAs identified within 20km of the subject site (refer to section 6.0 of this report for the full list). Designated sites within 20km of the subject site were modelled at 0m height to determine the impact of NO_x, nitrogen and acid deposition within the sites. The IAQM guidance states that dust impacts can occur up to 50m from a construction site and up to 500m for the site entrance.

Background concentrations for NO_x, nitrogen and acid deposition were assessed using the Air Pollution Information System (APIS, 2023) for Killala Esker pNHA, circa 833m north of the subject site. The levels recorded at this site for NO_x was $1.7 \mu\text{g}/\text{m}^3$,

Nitrogen deposition 4.4 kg/ha/yr, and acid deposition 0.3 keq/ha/yr. No other designated habitat sites were assessed in the EIAR for NO_x.

Overall the air quality at the subject site is good, with the concentrations of the key pollutants below the relevant limit values.

Potential Effects

Summary of Potential Effects (Air Quality)	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Ambient air quality at the site will remain as per the baseline and would also change in accordance with trends within the wider area (including influences from new developments in the surrounding industrial estates, changes in road traffic, etc).
Construction	Dust emissions from site preparation works, earthworks, construction and the movement of trucks on site and exiting the site (trackout). • Dust emission from earthworks – large as site area >110,000m². • Dust emission from construction – large volume > 75,000m³ • Dust emission from trackout- large > 50 HGV movements in one day at peak periods. Impact on air quality from engine emissions from site vehicles and machinery through release of NO₂ and PM₁₀ & PM_{2.5}. Impact on residents from dust up to 250m of site. Impact on designated habitats from dust, NO_x, nitrogen & acid deposition.
Operational Phase	Emissions of NO _x on designated sites, PM ₁₀ , PM _{2.5} & CO from 25 no. standby backup generators.

	Emissions from vehicle engines on air quality. Effect on biodiversity on Killala Esker pNHA c. 816m to the north of the site regarding nitrogen dioxide (NOx) concentrations.
Cumulative Effects	The potential for cumulative impact of the emissions from the facility with Industrial Emissions (IE) licenced or Integrated Pollution Control (IPC) installations has been considered, in line with the methodology of AG4 (EPA, 2020). There are two EPA licenced installation within 1 km of the facility, Tawnaghmore Peaking Plant SSE Generation Ireland Limited (P0566- 02) and Mayo Renewable Power Limited (P1077-01) with the potential for cumulative impact with the proposed development. Two further developments were assessed for cumulative impact with the proposed development; Killala Hydrogen Project (MCC Planning Ref. 2360266, planning permission granted 27/5/2025) and Lisgennon anaerobic digestion biogas facility (MCC Planning Ref. 2193, planning permitted in 2014).

Mitigation

10.12.10. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 8.6 of the EIAR.

Mitigation measures would draw on best practice guidance on air quality and monitoring and would be incorporated into the adopted CEMP & TMP. During construction mitigation measures would include stakeholder communications, site management, preparing and maintaining the site, dust control measures, erection of solid screens, storage of aggregates in bunded areas, cover stockpiles, complaints register, regular liaison meetings with other construction sites, and monitoring of

meteorological conditions. Specific measure would be carried out during the track out of the development including speed restriction of vehicles to control dust.

Measures would include ensuring all vehicles switch off engines when stationary - no idling vehicles, adequate water supply on site for dust suppression, avoiding burning of waste, use of a browser during earthworks.

Regular monthly dust monitoring at nearby sensitive receptors using Bergerhoff method by an independent contractor, to ensure the dust limit value does not exceed 350mg/m²/day.

There is no mitigation required for the operational phase of the development as emissions of air pollutants would be significantly below the ambient air quality standards.

Residual effects

Construction Phase

Once the dust minimisation measures outlined in Section 8.6.1 and monitoring measures outlined in 8.7 of the EIAR are implemented, the residual impacts are considered *direct, short term, negative, slight/imperceptible* in terms of dust soiling due to separation distances from sensitive receptors and changes in NO₂, PM₁₀ and PM_{2.5} levels due to vehicle emissions.

Best practice mitigation measures would ensure that the impact of the development complies with all EU ambient air quality legislative limit values which are based on the protection of human health. The impact of construction of the development is likely to be *direct, short-term, localised and not significant* at nearby receptors.

Operational Phase

The proposed back-up generators would give rise to additional NO_x and NO₂ emissions, however they would be used only in the event of a power outage and would be subject to annual checks. The locations of the maximum concentrations of NO₂ are close to the boundary of the site with concentrations decreasing with distance from the facility.

The concentration of NO_x, nitrogen and acid deposition during the operational stages of the development on the Killala Esker pNHA c.816m to the north of the site were assessed and indicated at being below the worst case critical loads of 5-10 kg/ha/yr

for the habitats, and indicates the effects of nitrogen deposition from the development would not have a significant effect on the habitats of the esker.

The effect on air quality is considered to be *direct, long term, negative and not significant*.

Assessment Direct and Indirect Effects

- 10.12.11. The EIAR carried out detailed air dispersion modelling exercises, which were robust, and are compliant with EU and National ambient air quality values. I am satisfied that the emissions are unlikely to exceed statutory limit values with no adverse impacts on local or regional air quality predicted or public health anticipated from the emissions.

Conclusion Direct and Indirect (Air Quality)

- 10.12.12. Based on the above information the air quality in Zone D locations, such as the Killala area, is generally good, with concentrations of the key pollutants generally well below the relevant limit values. Given the proximity of the nearby sensitive receptors the surrounding area has a low sensitivity to dust and NO_x deposition, which I have discussed further in the AA section of this report.
- 10.12.13. The mitigation measures that will be put in place during construction of the development would ensure that the impact of the development complies with all EU ambient air quality legislative limit values which are based on the protection of human health.

10.13. **Climate**

Issues raised

- 10.13.1. The Third party appeal and observation received relate primarily to climate issues, including the energy usage associated with the development on the national grid, lack of on-site renewables, use of carbon credits, CPPAs and EU ETS, to off-set GHG emissions as mitigation measures and the use of data centres saving emissions elsewhere, being contrary to compliance with National Climate action goals and objectives. The Third party considers this chapter of the EIAR portrays a positive picture for Ireland achieving national GHG targets which is contrary to that of the EPA and EEA reports which state Ireland is falling short of its EU GHG and energy targets.

These aspects have been assessed to a large extent in Section 9.4 with regards to the use of CPPAs and ETS.

Context

10.13.2. Chapter 9 of the EIAR assesses the impact on the climate during the construction and operational phases of the project from two aspects: a Greenhouse Gas Assessment (GHGA) and a climate change risk assessment (CCRA). The GHGA quantifies GHG emissions over the project's lifetime and the CCRA identifies the project's vulnerability to climate change.

10.13.3. Both assessments were undertaken in accordance with the relevant guidelines, policy and legislation and includes a review of available published GHG emission data and quantifying the emissions of GHG from the proposed development. In terms of climate guidance methodology, the Institute of Environmental Management & Assessment (IEMA) Guidelines were used which is recognised in Ireland as the authoritative body on GHG emissions and climate impact assessment. This guidance sets out 3 principles:

1. When evaluating significance, all new GHG emissions contribute to a negative environmental impact but that some activities will replace existing development or baseline activity that has a higher GHG profile;
2. Where GHG emissions cannot be avoided, the goal of the EIA process should be to reduce the projects emissions at all stages; and
3. Where GHG emissions remain significant, but cannot be reduced, approaches to compensate the projects remaining emissions should be considered.

The Climate Change Risk Assessment (CCRA) was carried out in accordance with the principles set out in TII guidance PE-ENV-01104 (2022). A CCRA screening was carried out which did not identify any medium or high risks and was therefore scoped out for the construction and operational phase of the development.

The chapter sets out the targets set by the EU for decarbonising industries and the use of Emission Trading Scheme (ETS) to regulate GHG emissions of large industrial users such as the proposed development and includes electricity generation. Trends and projections in the EU ETS from 2005-2023 indicate that the reduction in GHG emission is predicted to continue up to at least 2030.

The Government's Climate Action Plan is referenced to achieve a 51% reduction in overall GHG emissions by 2030 and to reach net zero emission by no later than 2050. In relation to data centres, CAP24 provides that emissions from industry sectors covered by the ETS are subject to EU-wide rather than national targets.

No significant difficulties were identified in the assessment.

10.13.4. Baseline

Climate

10.13.5. The nearest weather and climate monitoring station to the subject site is the Belmullet meteorological station, located approximately 40 km west. Records from 1991-2020 at this station indicate the wettest months are January and October and the driest month on average being April with August being the warmest month with a mean temperature of 14.1 degrees (Table 9.6 of EIAR).

10.13.6. Nationally in reports produced by Met Eireann and the EPA temperatures are predicted to increase by between 1- 1.6°C mean annually by the mid-century in addition to an increase in heat events, sea temperatures, flooding and storms. The year 2023 had above average rainfall and the warmest June on record, with Met Eireann stating that the latest Irish climate change projections indicate further warming in the future, including warmer winters. Wind energy is also predicted to increase in winter and decrease in the other seasons, which has implications for renewables such as wind, solar and hydroelectric energy.

Flooding & landslides

10.13.7. The site is not subject to flooding and is located in Flood Zone C. The project would not be located in an area that is subject to landslides.

Green House Gas (GHG) Emissions

10.13.8. The relevant GHGs are defined as carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). CO₂, accounted for 63.7% of total GHG emissions in Ireland in 2018 while CH₄ and N₂O combined accounted for 34.4%. The main source of CH₄ and N₂O is from the agricultural sector. The release of CO₂ as a result of burning fossil fuels, has been one of the leading factors in the increase of the 'Greenhouse Effect'.

10.13.9. Data published by the EPA in July 2024 indicates that Ireland exceeded its 2023 GHG emissions annual limit set under the EU’s Effort Sharing Decision by 2.27 Mt.CO_{2e}. The baseline GHG emissions in Ireland in 2023 was 60.62 Mt CO_{2e}, which equates to 63.9% of the 295 MT CO_{2e} carbon budget for the five year period from 2021-2025 (Table 9.7 of EIAR). The sectors with the highest emissions in 2023 were agriculture (34%), transport (19.4%) followed by electricity (12.45%) of the 2023 national emissions including LULUCF⁵. With the exception of transport and LULUCF, all sectors indicated a decline in GHG emission between 2022-2023 with electricity having the largest decline of minus 22%.

The operational phase of the development has the potential to release significant GHG emissions and would equate to 62,450 CO_{2eq} in 2028 reducing to 32,836 CO_{2eq} by 2035, allowing for the decline in the use of fossil fuel to supply the electricity sector (Table 9.9 of EIAR⁶). This would equate to between 1.3% and 0.8% of the respective years of the national CO₂ electricity GHG emission intensity as specified by SEAI in 2023. The GHG emissions from the back-up generators would remain constant at 1,300 CO_{2eq} throughout the operational phase of the development. As the capacity of the development is greater than 20MW rated thermal input, a GHG permit would be required for the facility which would be regulated under the EU ETS which offsets GHG emission through the purchase of carbon credits.

10.13.10. CAP 2025 notes that the EPA’s latest projections of GHG emissions for the period 2023–2050 indicate that Ireland will exceed the first two carbon budgets by a margin of 17%–27%. According to the EPA’s provisional emissions inventory for 2023, 64% of the first Carbon Budget was used within the first three years of the budgetary period, requiring a substantial 8% annual emissions reduction for 2024 and 2025 to stay within budget. Electricity needs to reduce its carbon budget from 40MtCO_{2eq} in 2021-2025 to 20 MtCO_{2eq} by 2026-2030.

Potential Effects

Summary of Potential Effects (Climate)	
Project Phase	Potential Direct, Indirect and Cumulative Effects

⁵ LULUCF Land Use, Land Use Change & Forestry
⁶ There was a typo error in this table highlighted by third party which was amended in Table 0.3 of applicant’s submission.

Do Nothing	The subject site would remain as a greenfield site and would not lead to any GHG emissions.
Construction	<u>GHG emissions</u> Increase in GHG emissions from construction traffic & machinery- increase CO₂ & N₂O emissions over 2 years. Effects from embodied carbon associated with raw materials used in the construction process. <u>Climate change</u> Risk of extreme rainfall, increased temperatures, storm damage, flooding or landslides.
Operational	<u>GHG emissions</u> Increase in GHG emissions from use of electricity for data centre c.48MWe from national grid. GHG emissions from HVO back-up generators 75MW (400 hours a year, at a worse case). Increase in GHG emissions from traffic. <u>Climate change</u> Increase in temperature would require greater energy for cooling of the building & associated GHG emissions. Reduction in water availability. Increase rainfall events causing a risk of flooding.
Cumulative Effects	The EIAR states in relation to climate, all global cumulative GHG sources are relevant to the effect on climate change. Therefore, the effects of GHG emissions from specific cumulative projects in general should not be individually assessed. There is no basis for selecting any particular (or more than one) cumulative project that has GHG emissions for assessment over any other.

	The cumulative effects of the extant permission for the data centre in the Killala business park has not been assessed.
--	---

10.13.11. Mitigation

The mitigation measures proposed for the construction and operational phase are set out in detail in Section 9.5 and 9.6 of the EIAR.

GHG emissions during construction phase

Mitigation measures during the construction phase relating to CO₂ and N₂O emissions from construction traffic would include preventing idling engines, avoiding peak traffic periods, carrying out regular machinery maintenance and sourcing materials locally to reduce transport emissions. Measures to minimise the carbon footprint of the development during the construction phase would include preventing material wastage and reusing and recycling of waste materials on site where possible.

Climate change during construction phase

During this phase of the development, the contractor would be required to mitigate against extreme weather events through risk assessments and method statements. The likelihood of extreme weather and flooding at this site is assessed to be low and not significant.

GHG emissions during operational phase

The capacity of the proposed development is greater than 20MW rated thermal input and a GHG permit would therefore be required which would be regulated under the EU ETS which requires off setting GHG emissions through the purchase of carbon credits.

Mitigation measures include the reduction of fossil fuels in the electricity grid by 2050, and the use of EU ETS which would increase the carbon price in future years to ensure all EU wide GHG emission targets are met to off set GHG emissions. The proposed development would equate to 0.006% of the 2030 ETS target and 1% of 2030 Electricity Sectoral Emission ceiling. However as sated in section 9.4 of this report these mitigation measures are outside the control of the applicant.

The installation of PV panels (50kW), investigation into a future district heating system, use of HVO to run the back-up generators, and closed loop chilled water system, LED luminaries, HVAC system to recirculate air, PUE to be below 1.19, and Mobility Management Plan are proposed as mitigation measures. The future occupier of the development would seek to enter into Corporate Power Purchase Agreements (CPPAs) with renewable wind generator producers which would offset GHG emissions ensuring the energy consumed by the development would be matched by renewable energy associated with the development.

Climate change during operational phase

It is stated although the development would be connected to the national grid it would replace activities that have a higher GHG profile as it would provide a more efficient (approx. 80%) means of data storage compared to a distributed onsite premises server.

A detailed flood risk assessment has been carried out for the subject site and surface water attenuation measures are proposed as part of the development. The impact of climate change on the operational phase of the development would be minor adverse which is not significant.

10.13.12. **Residual Effects**

Construction phase

Construction traffic and machinery would increase CO₂ and N₂O emissions during the construction phase of the development. However, the construction period would be short term in nature, and the associated traffic and plant would be *short term and slight*.

Potential impacts from climate change during the construction phase would include flood risk and increased/decreased temperatures, however, during the construction period the contractor would be required to mitigate such effects. The potential for changes to long term climate change from the construction phase are not considered to be significant.

Operational phase

Given that the use of electricity to power the facility will achieve net zero by 2050 and the intention to meet all interim fossil fuel derived GHG emissions associated with the

proposed development by the purchase of CPPAs the predicted impact to climate is deemed to be *long term, negative and slight*. As stated previously this is a target set by the electricity sector and is not determined by the applicant and CPPAs have not been confirmed.

Conclusion Direct and Indirect (Climate)

- 10.13.13. I have examined, analysed and evaluated chapter 9 of the EIAR and all of the associated documentation. I have also noted the third party's comments regarding this chapter and Awn Consulting's appeal response and the amendments/typos as corrected. I am satisfied that the applicant's presented baseline environment is reasonably comprehensive and that the key impacts in respect of likely effects on GHG emissions and climate risk as a consequence of the development have been identified.

Construction phase

The mitigation measures proposed for the construction phase of the development would be controlled by way of the CEMP and TMP, both of which would be required to be agreed by the P.A and this is considered a standard form of the development process and enforceable.

I note the applicant has stated the embodied carbon footprint with regards to material selection would be investigated at the detailed design stage. The applicant proposes to reuse and recycle materials where possible, during the construction phase of the development, including using the extracted material for fill purposes. I consider this a reasonable approach and note there are no specific policies within the Mayo CDP requiring this to be agreed at the planning application stage.

Operational phase

This is a greenfield site and therefore there are no buildings on the site. I note part of the Asahi building has been granted planning permission for a data centre and a more recent permission has been granted to the west of this building for a hydrogen and energy development. I therefore consider there is no opportunity to reuse existing extant building stock in this instance with regards to locking in carbon.

It is stated the project would connect to the national grid and this would result in an increase in GHG emissions due to the increased demand for energy to facilitate the

development. I note the EIAR refers to the Institute of Environmental Management Assessment Guidelines in this regard (IEMA), however there is no quantifiable data that this project would result in a reduction of other smaller data centres if developed.

I am satisfied that the EIAR recognises the proposed development would impact on GHG emissions, and that the use of ETS and CPPAs are methods prescribed in the Government's guidance on data centres to off-set or reduce GHG emissions.

Furthermore, it is national policy that the use of fossil fuels for electricity is to reduce to net zero by 2050. However, as stipulated in section 9.4 the proposed development is reliant on the electricity sector reducing its GHG emissions as time progresses, which lies outside of the control of the applicant and is not enforceable.

10.14. Noise & Vibration

Issues raised

- 10.14.1. There were no issues raised in the appeal submissions regarding noise or vibration. Condition 7 of the P.A's grant of planning permission restricted noise levels between 0800- 2200hrs Monday to Friday to 55dB(A) at the nearest noise sensitive location, including dwellings and not to exceed 45dB(A) at any other time.

Context

- 10.14.2. Chapter 10 of the EIAR the potential impacts on noise and vibration on the surrounding environment both during the construction and operational phase of the development. Noise survey monitoring was carried to identify existing noise levels at the Nearest Sensitive Locations (NSLs) to the proposed development. The Guidelines for Environmental Noise Impact Assessment produced by the Institute of Environmental Management and Assessment (IEMA) 2014, were used to categorise the potential effects of changes in the ambient noise levels during the construction and operational phase of the proposed development.

Baseline

- 10.14.3. The subject site is not located within a 'quiet area' due it to being c.2km to Killala town and being adjacent to Killala Business Park and the Power Station. The area is not considered as being in an 'area of low background noise' as the noise levels during the evening period at Ballysakerry Glebe House, immediately to the south of the site

had noise readings greater than 35dB as categorised in the EPA NG4 guidance (2016).

10.14.4. Ballysakeery House which is currently vacant and is the closest noise sensitive receptor to the subject site being 145m to the south. Figure 10.2 and Table 10.12 in the EIAR identifies these NSLs relative to the subject site.

10.14.5. Baseline noise monitoring was carried out at 3 locations in the vicinity of the site; Location UN1 within the grounds of Ballysakeery House, and Locations AT1 and AT2 to the south west and south east of the site respectively along Mullafarry Road (Figure 10.3 of EIAR). The noise readings along the Mullafarry Road which were taken in the afternoon and had noise level readings in the range of 59-65dB(A) with road traffic being the dominant but infrequent source of noise, the distant windfarm and construction noise were also audible. The noise levels at Ballysakeery House were much lower with an average of 39dB(A) during the evening and at night.

Potential Effects

Summary of Potential Effects (Noise & Vibration)	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Site would continue in agricultural use
Construction	Site preparation works including: • Extensive excavation and rock breaking, loaders, dozers, cranes, generators & concreting works – noise levels in range of 70-82dB LAeq at 10m. • Vibration from piling. Construction of building: • Erection of site compounds, mobile plant (excavators, cranes, dozers) • Landscaping works & concreting works- noise levels 80 dB LAeq at 10m. • Construction Traffic increase in noise levels at AM & PM peak periods at Junctions 1,2 & 3.

Operational	Building services noise – day to day operations of the data centre: • Predicted noise levels in range of 19-35 dB $L_{Aeq,T}$, with the highest reading at property R02 (Manse) to west of site. • Emergency site operations- where back-up generators are used and generator testing at scheduled day time periods • Predicted noise levels in range 29-53 dB $L_{Aeq,T}$, with the highest reading at Ballysakeery Glebe House to south of proposed building. Generator testing- carried out between 0900-1700 hrs • Predicted noise levels between 29-46 dB $L_{Aeq,T}$ with the highest reading at property R02 to west of the site. • Additional traffic on roads.
Cumulative Effects	The EIAR assessed a review of cumulative effects on a number of developments in the immediate vicinity of the site. Cumulative impacts are not expected as a result of the construction and operational phase of the project due to the cumulative noise emissions not exceeding the threshold for significant impacts at the noise sensitive locations are considered to be slight-to moderate at operational stage.

Mitigation

- 10.14.6. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 10.6 of the EIAR.

Mitigating measures during the construction phase would include the following measures:

- Limiting the hours of operation and noise limits.

- Noise & Vibration management plan restricting noise levels
- Establishing channels of communication between the contractor/developer, L.A & residents and appointing a site representative responsible for matters relating to noise and vibration.
- Monitoring levels of noise and/or vibration during critical periods and at sensitive locations.
- All site access roads will be kept even to mitigate the potential for vibration from lorries.
- Selection of plant with low potential of noise/vibration.
- Erection of barriers around generators.
- Noisy plant located away from Noise Sensitive Locations.
- Use of vibration isolated support structures.

Noise levels during the operational phase of the development would not give rise to any vibration, and noise levels would not exceed 45dB(A) at the closest noise sensitive location, but this would increase to 55-60dB(A) when the generators are being tested or in an emergency situation. Mitigation measures during the operational phase of the development have been provided as part of the overall design of the building and would include low generating noise equipment and silencers for stacks and exhausts. There would be no tonal or impulsive noise emissions.

Residual effects

Construction phase

Following mitigation measures the resultant noise effects at construction phase are considered to be *negative, not significant and short term*.

Operational Phase

Following mitigation measures the resultant noise effects at the operational phase of the development are considered to be *negative, slight to moderate and long term*.

Direct and Indirect Effects Assessment

Construction phase

The construction period for the enabling works including cutting and filling, access roads and berms are envisaged to take 4 months beginning in the first quarter of 2026. The second construction phase would include the construction of the substation and data centre building with a combined period of 20 months and a further 3 months for testing of the equipment and systems installed.

The noisiest period of construction activity would occur during the site excavation works and piling and based on the shallow depth to bedrock rock breaking would be required during this period. A combination of bulldozer, cranes, excavators, trucks and other soil shifting plant would be required. Typical noise levels are predicted to be in the range of 70-82 dB L_{Aeq} at 10m. The predicted noise levels at the NSL during the excavation and piling works and construction of the buildings would be 53dB and 51dB at 100m. The closest NSL to the site boundary is Ballysakeery Glebe house (R01) which is stated as being 145m from the site. This building is currently unoccupied/vacant. The next closest residential receptor is R02 to the west at 235m. Predicted construction noise levels are predicted to be between 43-45 dB within 200m during the peak construction months. These noise levels would not be significant and would fall below the general daytime noise limits of 55dB(A) and noise levels would change as works take place across the site. Vibration levels from the rotary bored piling the magnitude of vibration would be below the limits set out in BS 5228-Part 2 to avoid any damage to the closest neighbouring dwellings.

There would be an increase in traffic noise levels during construction however the predicted increase would be within the range of 0.4-2.1 dB L_{A10} which would not be significant and would be for a short period.

Overall construction effects will be temporary and short term and mitigation outlined in the EIAR would ensure that noise levels are kept to a minimum.

Operational Phase

During the operation phase, it is stated all plant would be selected that no tonal emissions are evident from the nearest sensitive locations. There is no source of vibration associated with the day to day operation of the development that would give rise to impacts at nearby noise sensitive locations.

The predicted increase in noise level during the operational phase at the 9 Noise Sensitive Locations would in the main not be significant or imperceptible with the

exception of R02, to the west of the subject site, which would experience a moderate change in noise level of +3.5 with a cumulative noise level of 37.5 dB(A), which is not significant having regard to the existing background noise level at this receptor.

The predicted increase in operational traffic noise would be in the range of 0.3 to 1.4dB LA10 which is considered not to be significant.

Conclusion Direct and Indirect (Noise & Vibration)

- 10.14.7. Having examined the EIAR noise modelling, which has been carried out in line with relevant guidance, I am satisfied that the models and resultant conclusions are robust. I am satisfied following the mitigation measures proposed during the construction phase of the development which would be short term and temporary the noise effects would not be significant. I note no blasting of rock is proposed.
- 10.14.8. During the operational phase of the development noise from the external plant would be minimised by purchasing low noise generating equipment and incorporating appropriately specified in-line acoustic attenuators or 'silencers' for stacks and exhausts where necessary. With due consideration as part of the detailed design and procurement process, I would be satisfied that noise emissions from the building services would not exceed the criterion at the façade of any nearby noise sensitive locations, due to the separation distances involved and predicted noise emissions.

10.15. Landscape & Visual Impact Assessment

Issues raised

- 10.15.1. There were no issues raised regarding landscape and visual impact in the third party appeal or observer's submission. The Mayo County Council report notes from a landscape and visual perspective, following the mitigation measures which include the use of green walls on the building, the development would not have an adverse impact on the landscape or visually amenity of the area.

Context

- 10.15.2. The Landscape and Visual Impact (LVIA) is addressed in Chapter 11 of the EIAR. This comprises an LVIA, which analyses the impacts and effects of the proposed development on the existing landscape and visual amenity of the area in accordance with the 2013 Guidelines for Landscape & Visual Impact Assessments (GLVIA3). The

assessment evaluates receptor sensitivity and predicted changes to the landscape character and views within a 2km radius of the subject site during the construction and operational stage of the development.

- 10.15.3. The LVIA is accompanied by 11 no photomontages based on the Landscape Institute advice Note 0/11 photography and photomontage in LVIA. The individual photomontages are presented on A3 pages in landscape format in Appendix 11.1 of the EIAR, providing a comparison between the existing viewpoint and the proposed development. The photographs were taken in July and September 2024 when the trees were in full leaf.

Baseline

- 10.15.4. The landscape surrounding the site is that of a traditional agricultural landscape with medium to large field patterns, hedgerows and minimal residential development. The landscape is described in the EIAR as 'peri-urban' in character, with agricultural uses to the west and south, a mixture of commercial and industrial uses to the north and east and dispersed residential to the south west.

North of site and north east

- 10.15.5. Killala Community Windfarm adjoins the northern boundary of the site and contains 5 wind turbines on open grazing land. Tawnaghmore Power Station is visible from the subject site to the east and Killala business park lies beyond the power station. Killala town is c.1.6km to the north of the Business Park with Ross Beach and Killala Bay immediately to the north of the town. Meelick Lough, is located c. 800m north of the business park.

West & south west of site

- 10.15.6. The western boundary of the site is marked with overgrown hedgerow and mature trees with Ballysakeery Glebe House c.180m to the west of the subject site enclosed by mature trees. Mullafarry Graveyard and the adjacent ruins of Ballysakeery church, lie to the west of the site and Killala Rock quarry c.750m to the west of the site. Mullafarry Presbyterian Church and Ballysakeery Church and graveyard are located further south west of the site screened by mature trees and hedgerows. There are 3 residential properties to the west of the site.

South of site

10.15.7. The southern boundary of the site is bound by the L-1111 Mullafarry Road, and comprises a number of NIAH structures, with a predominantly agricultural landscape and minimal residential development. There is a cluster of 9 residential houses at the junction of the L1111 and R314 to the south east. The R314 forms part of the Wild Atlantic Way route.

Summary of Potentially Sensitive Landscape Receptors

- Properties to east end of Mullafarry Road at the junction of the R134
- Properties to Mullafarry Road to the west of the subject site
- Heritage Properties including:
 - NIAH Ref: 31302208: Ballysakeery Glebe House, (the old Rectory)
 - NIAH Ref: 31302204: Ballysakeery Church
 - NIAH Ref: 31302205: School
 - NIAH Ref:31302206: Mullafarry Presbyterian Church
 - NIAH Ref: 31302207: Ballysakeery Manse
 - MA022-032: Ringfort: Mullafarry

Scenic Routes:

- Coastal Road to the Northeast of Killala: R314 Wild Atlantic Way

Views from this road may potentially have a high landscape sensitivity. The main focus of views from this road is towards the open ocean; this is softened to moderate sensitivity where views are inland towards industrial development such as near the subject site.

Protected Views: None.

Landscape Designation in CDP

10.15.8. The site lies within Landscape Protection Policy Area 4: 'Drumlins and Inland Lowland (LPA 4)' within the CDP. To the west is LPA 3- 'Uplands, moors, heath and bogs', to the north LPA 1-'Montaine Coastal Zone' and to the south LPA 4a- 'Lakeland Sub-policy Area'.

10.15.9. The Landscape Sensitivity Matrix of the CDP indicates Policy Area 4 has a medium to high sensitivity to wind farms and power lines, medium sensitivity to quarries and low potential sensitivity to forestry, communication masts, industrial commercial, rural dwellings and road projects with regards to development impact.

The site lies within Landscape Character Unit (LCU) G within the CDP which refers to North Mayo Drumlins, characterised by an area of drumlin topography containing mild low lying lakeland drumlins at the southern end merging into similar coastal topography in the north east surrounding Killala Bay. To the north of the subject site and beyond LCU G is LCU D – the North Coastal Plateau. The R314 to the east and north east of the subject site is designated a part of the Wild Atlantic Way touring route and is identified as a Scenic route within the Mayo Landscape Appraisal Map.

Potential Effects

Summary of Potential Effects (Landscape & Visual)	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Site would remain in agricultural use with no impact on landscape character and visual amenity
Construction	<u>Landscape</u> • Loss of vegetation and removal of mature hedgerows. • Associated earthworks, including reprofiling of the site topography to accommodate the building platform, construction rigs/cranes, footings, attenuation pond and excavation of services on the Mullafarry Road. • On-site cut and fill operations to the north and south of the site, spoil stockpiles, trenching operations, environmental bunds, construction of retaining walls to accommodate the main buildings. • Dust and fumes. • Floodlighting for shift work and winter periods.

	• Movement of heavy construction traffic within the site and on the Mullafarry Road and R134. • Disturbance of the tranquillity of religious sites (graveyards) and heritage properties to the west of the site. • Site hoarding and security fencing. <u>Visual effects</u> Visual effects would include the removal of trees, hedgerows and vegetation and the overall change in the land topography. Construction works including the building of internal roads and grading of the land would have the potential to result in visual effects.
Operational	<u>Landscape effects</u> Greenfield topography of the site would be altered, replaced by an industrial structure and associated buildings, new internal roads, hard landscaping and overall change in the use of the land. <u>Visual effects:</u> Impact of the development on nearby residential properties, Ballysakeery House and heritage properties to the west of the site and road users and tourists of the R319 (Wild Atlantic Way).
Cumulative Effect	Cumulatively the proposed development when complete would be seen in the context of the landscape and visual amenity of the existing business park and wind farm turbines and other permitted development, and would be consistent with the peri urban nature of the existing landscape. The exception being when viewed from Ballysakeery House and heritage structures to west.

Mitigation Measures

- 10.15.10. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 11.6 of the EIAR. Mitigation measures would be embedded in the design of the proposed scheme.
- 10.15.11. Mitigation measures during the construction phase would comprise Standard Best Practice in construction management including the erection and maintenance of site hoarding and orderly storage of materials. Measures for the avoidance of damage to tree roots, by excluding any works within the root protection area (RPA) as recommended in the Landscape Management Plan would be adhered to.
- 10.15.12. The proposed development would be set back from locations where sensitive receptors may otherwise experience an adverse effect (e.g., Mullafarry Road, the R134 Wild Atlantic Way, Ballysakeery Glebe House and other NIAH structures to south west of the site. Additional mature tree planting and a retaining wall is proposed within the site to screen views from Ballysakeery House.
- 10.15.13. The boundaries of the site would be enhanced with additional tree and hedgerow planting with a wildflower meadow, berm planting and attenuation pond to the south of the site would be visible from Mullafarry Road and enhance the visual effect of the development from Mullafarry Road.

Residual Effects

Construction

The residual effects after the implementation of mitigation measures are likely to be not significant at construction stage as it will be temporary.

Operational

- 10.15.14. At operational stage the effects on the landscape will range from *slight to moderate*, as there will be a permanent structure on the site, and the development would result in the removal of a tree/hedgerow boundary to accommodate the secondary access to the west of Ballysakeery House. Overtime new landscaping would screen the development to the west from the NIAH structures to the west and to the south from Ballysakeery House.

Direct and Indirect Effects Assessment

- 10.15.15. I have examined, analysed and evaluated chapter 11 of the EIAR, all of the associated documentation and submissions on file in respect of landscape and visual impacts. I am satisfied that the applicant's presented baseline environment, is comprehensive and that the key visual impacts in respect of likely effects on landscape and visual amenity, as a consequence of the development have been identified.
- 10.15.16. Table 2 below provides a summary assessment of the likely visual change from the applicant's 11 selected viewpoints arising from the completed proposed development. The building and its associated structures would become a new feature in the landscape, within the context of the Killala business park.

Table 2: Viewpoint changes

No.	Location	Sensitivity	Description of change
1	R314 at the outskirts of Killala	Medium	Development would not be visible from this viewpoint due to intervening landform and vegetation.
2	Junction at R314/Unnamed Rd (leading to Mullafarry Rd)	Medium	Although the vegetation, when in leaf, provides significant screening, road users and nearby residents may be able to see the roof and upper structure of the new building during periods when the trees are leafless.
3	Mullafarry Rd to east	Medium	Intervening vegetation would screen the proposed development
4	Mullafarry Rd at site entrance	Low	Due to the clearance of foreground vegetation for visibility splays at the entrance and installation of a new entrance gateway, there would be perceived changes to the view resulting from the proposed development.
5	Mullafarry Rd to west representing houses/graveyard	Medium	Intervening hedgerows, woodland and landscape planting would partially screen the proposed development, limiting the level of change to the view

			despite its relatively close proximity. Approximately 10% of the upper structure and roof would be visible when vegetation is in full leaf; a slightly greater extent of visibility would be likely at other times.
6	Mullyafarry Rd, representing houses/graveyard	Medium	A small element of the upper structure and roof will be visible when vegetation is in full leaf; a slightly greater extent of visibility will be likely at other times.
7	Distant view from north west (Rathowen East)	Medium	Development would not be visible from this viewpoint.
8	Distant view from south (towards Coonealmore)	Medium	There would be minor perceived changes to the view from this viewpoint resulting from the proposed development.
9	Couthouse Rd (R314), Killala	Low	Approximately 10% of the viewpoint would be exposed to visibility of a minor section of the upper structure and roof both when vegetation is in full leaf.
10	Ballysakeery Glebe House (the old Rectory)	High	Intervening hedgerows and woodland fully screen the proposed development from viewpoint 10; due to proximity there will be noise of day to day operations and a perception of change.
11	Wild Atlantic Way (R314), east of Killala	Medium	Intervening hedgerows, woodland landform and structures would screen the proposed development, limiting the level of change to the view in addition to its distant proximity.

Conclusion: Direct & Indirect Effects (Landscape & Visual)

- 10.15.17. The surrounding area is rural in character with the highest concentration of residents to the east at the unnamed Road/Mullafarry Rd intersection. There are no protected views in the immediate vicinity, and Ballysakeery House is the closest NIAH building is to the south of the subject site. The main visual receptor groups are residents, vehicle travellers, workers and tourists using the R319 (Wild Atlantic Way).
- 10.15.18. Of the 11 viewpoints submitted as part of the LVIA, Viewpoint 10 from Ballysakeery House would have the highest sensitivity. I consider overtime the proposed woodland landscape would screen the development to a degree. Although the development would be visible from viewpoints 5 and 6 along the Mullafarry Road to the west of the site, I consider the development would be seen in the context of the Killala business park and comparable in height to the existing structures within the park.

10.16. Archaeology, Architectural and Cultural Heritage

Issues raised

- 10.16.1. There were no issues raised regarding archaeology, architectural or cultural heritage in the third party appeal or observer's submission. The Council's conservation officer considered the scale, design and massing of the proposal would negatively impact on the nearby Ballysakeery Glebe House/Rectory (RPS Ref: No. 0272) to the south of the site and the adjacent historical structures Mullafarry Presbyterian Church, Manse, Former Col school and Ballysakeery Church which are structures of regional rating on the National Inventory of Architectural heritage (NIAH) to the west and south west, in that they would change the general appearance and legibility of the historic character, the group value of the historical landscape and overall integrity and coherence of the their setting. The Council's archaeology officer requested pre development testing to be undertaken prior to a planning decision being made.

Context

- 10.16.2. Chapter 12 of the EIAR describes and assesses the predicted impacts of the proposed development on archaeology, architectural and cultural heritage. The assessment methodology included reference to international and national legislation for the protection of the archaeological, architectural and cultural heritage in line with best practice is set out in Section 12.2 of the EIAR. Reference to heritage data sets

including, the National Monuments Service (RMS), Record of Monuments and Places, recorded archaeological excavations, the National Inventory of Architectural Heritage (NIAH), cartographic sources, and aerial photography.

- 10.16.3. The applicant undertook a desk-based study of 500m radius of the site area with reference to important relevant findings further afield. Details of the placenames relating to the area and a chronological description of the historical background to the surrounding area is provided, including cartographic analysis. A site walkover was undertaken on 28th June 2024. No significant limitations were encountered during fieldwork.

Baseline

- 10.16.4. Figure 12.1 and tables 12.1-12.3 and Appendices 12.1-12.7 summarises the recorded archaeological and architectural heritage within the vicinity of the subject site and includes an area of approximately 500m from the subject site.

Archaeology

- 10.16.5. There are fifteen recorded archaeological sites within c. 500m of the site but no recorded archaeological sites or monuments within the subject site lands, as listed in the Record of Monuments and Places. None of the 15 recorded sites would be impacted, either directly or indirectly, by the proposed development. There have been five licenced archaeological excavations in the study area in advance of development works (none of which are within the subject site footprint). Only one of these uncovered archaeological remains, a shell midden of unknown date (but possibly Mesolithic).

Architectural Heritage

- 10.16.6. There are no recorded architectural heritage structures or sites recorded in the Record of Protected Structures (RPS) in the CDP or National Inventory of Architectural Heritage (NIAH) on the subject site. There are six recorded NIAH sites within c. 700m of the Proposed Development lands as listed in Table 3 below. The site wraps around the most significant and closest of these sites, Ballysakeery Glebe House/Rectory (NIAH Ref: 31302208), and walled garden landscape. There is no record of this being a protected structure within the Mayo CDP.

Table 3: List of buildings on NIAH list

NIAH Ref:	Description	Distance from site
31302208 Rating: Regional	Detached three bay two storey Col Glebe House, Ballysakeery Rectory/Glebe House	Abuts southern boundary of subject site
31302207 Rating: Regional	Detached two storey Manse, Mullafarry	c.214m to west
31302206 Rating: Regional	Presbyterian Church Mullafarry	c.324m to west
31302205 Rating: Regional	Detached three bay school house Lisglennon	c.709m to south west
31302204 Rating: Regional	Col church Ballysakeery	c.742m to south west
31302209 Rating: Regional	Freestanding cut limestone grave monument Crosspatrick	c.694 to north east

Potential Effects

Summary of potential effects (archaeology, architectural & cultural)	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Effects on archaeology, architecture or cultural heritage would remain unchanged.
Construction	Potential for unrecorded archaeological material during the construction works. Effect of construction works on setting of Ballysakeery House, with the removal of vegetation.
Operational	The proposed building will be visible from Ballysakeery House (NIAH Ref: 31302208) and the adjacent historical structures Mullafarry Presbyterian Church, Manse, Former school and Ballysakeery Church.
Cumulative	Cumulative effects during the construction and operation stages are not considered to be significant for archaeology or built heritage.

Mitigation Measures

- 10.16.7. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 12.6 of the EIAR.
- 10.16.8. Mitigation measures during the construction phase of the development would include a suitably qualified archaeological consultant being retained to oversee the archaeological and architectural mitigation strategy for the project from design through to planning and construction phase. A geophysical survey to be undertaken under license to the NMS, of areas that will be subject to development or construction-related impacts.

Archaeological testing at pre-construction phase, and monitoring during construction phase in consultation and in permission with NMS. Further test excavation of areas where no features were positively identified also to be undertaken, to alleviate the risk of them being uncovered during the construction phase.

- 10.16.9. Mitigation measures by way of a landscaping plan are proposed around the adjoining Ballysakeery House to minimise the visual impact of the proposed development on this structure.

Residual Effects

Construction Phase:

The residual effects during the construction phase relating to archaeological is *positive, imperceptible and short term*. With mitigation in place, the residual effect on architectural; and cultural heritage is deemed to be *negative, not significant and short term*. MCC's archaeologist requested pre development testing be undertaken prior to development taking place. However mitigation measures proposed by the applicant include archaeological testing at pre-construction stage, which I consider acceptable.

Operational Phase

There are no identified residual effects during the operational phase relating to archaeology. With mitigation in place, the residual effect on architectural and cultural heritage is deemed to be *negative, not significant and long term*.

Direct and Indirect Effects Assessment

- 10.16.10. I have examined, analysed and evaluated chapter 12 of the EIAR and all of the associated documentation. I am satisfied that the applicant's presented baseline environment, is reasonably comprehensive and that the key impacts in respect of likely effects on archaeology, architecture and cultural heritage, as a consequence of the development have been identified. The altered use of the land is not considered to be a significant effect of the project.
- 10.16.11. The development would be a substantive distance from known archaeological features and zones of influence and the separation distances involved would not result in direct impacts on such features. During the construction phase, the applicant has set out standard measures with respect to archaeological monitoring and recording, which could be further clarified as a condition in the event of a grant of planning permission for the development.
- 10.16.12. Given the prominent nature of the development, it is not possible to fully mitigate against the indirect, visual impact of the development on the surrounding area, however, I consider it would be seen in the context of the business park and overtime the landscaping works would reduce its prominence. I do not consider it would have a negative impact on the nearby NIAH buildings in the vicinity which are seen in the context of Mullafarry Road. No works are proposed that would have significant negative impacts on the curtilage of Ballysakeery House. However, I do not consider the impacts to be significant negative impacts.

Conclusion- Direct and Indirect Effects (Archaeology, Architectural & Cultural)

- 10.16.13. Having regard to the examination of environmental information in respect of archaeology, architectural and cultural heritage, in particular the EIAR provided by the applicant, it is considered that the main significant direct and indirect effects on archaeology, architecture and cultural heritage will be mitigated.

10.17. Material Assets: Traffic & Transport

- 10.17.1. Chapter 13 of the EIAR describes the potential traffic and transportation impacts of the proposed development.

Issues raised

10.17.2. There were no concerns raised by third parties regarding the traffic impact of the development. The P.A did not raise any objections to the development on traffic grounds. I note the District engineer raised the matter of sharing an access into the site from the Killala business park but did not object to the proposed accesses off Mullafarry Road for the development. Conditions were attached in the P.A final grant regarding mud and dirt on the public roads during the construction period.

Context

10.17.3. The traffic and transport assessment within this chapter of the EIAR addresses the existing road network, the traffic flow serving the proposed development, the local junctions in the vicinity of the site and public transport provision in the area. It includes information on estimated traffic during both the Construction Year (2026) and Operational Opening Year (2026) and Operational Opening Year + 5 years (2031) and+ 15 year (2041).

10.17.4. A traffic survey was carried out by an independent survey company 'IDASO' on Tuesday 1st October 2024 during a 12 hour period at the three junctions to the east of the subject site. Appendix 13.2 of the EIAR provides the full traffic survey over the 12 hour period. The planning application was also accompanied by a Traffic & Transport Assessment (TTA), and includes detailed modelling to assess the impact of the development and whether the local junctions would have sufficient capacity to accommodate trips arising from the construction and operational phase.

Baseline

10.17.5. Mullafarry Road is a rural road with a speed limit of 60Kph, and runs east-west along the southern boundary of the site, and two accesses are proposed for the proposed development onto this road. This road serves a number of individual dwellings in addition to a number of non-residential sites including, Mullafarry quarry, church and graveyard. Mullafarry Road connects with the R314 to the east and a local road Crossmolina Road to the west both which connect to Killala town.

10.17.6. The R314 is a regional road running north-south to the east of the site and serves as a key vehicular route linking Killala to the north and Ballina to the south and the access to the Killala Business Park.

Junctions

10.17.7. There are 3 junctions to the east of the site which are all operating well within capacity during the AM (0800-0915hrs) and PM (1530-1645hrs) peak flows according to the traffic survey carried out as part of the Proposed Development. These junctions are as follows:

- Junction 1: This is a priority-controlled T-junction between the R314 and an Unnamed Local Road.
- Junction 2: This is a priority-controlled crossroads between the access roads to the R314, the access road to Ballintean and the Mullafarry Road.
- Junction 3: This is a priority-controlled crossroads between R314, the access road to Newtownwhite School and the access road to the R314.

Existing traffic flows

10.17.8. The existing traffic flows indicate the busiest junctions are Nos.1 and 3, which access onto the R314. The two way peak traffic flow at Junction 2 which accesses the Mullafarry Road has the lowest traffic flows with an AM peak of 62 vehicles and PM peak of 78 vehicles.

Public transport

10.17.9. The closest bus stops to the site are located on the access road to Newtownwhite School, east of the R314 at Mullafarry Cross, c. 1.4km away or a 19-minute walk from the site. This route operates once a week. There is no rail service in close proximity to the site with the closest train station being in Ballina. The development would not be located close to any regular public transport service.

Active Travel Infrastructure

10.17.10. The local area currently lacks pedestrian and cycle infrastructure. There are draft cycling proposals for the Mayo County as part of the 'Cycle Connects' scheme and this includes a Greenway and an Inter -Urban route running to the west and east of the subject site connecting Ballina to Killala.

Access

10.17.11. The main entrance into the site would be located on the eastern side of the site and would be 8m wide. There would be a security hut and gate positioned at the entrance

to permit vehicles to pull off the public road. This road way from the entrance would loop around the proposed building in an anti-clockwise direction, with 3 designated lay-bys for service vehicles if needed. The secondary access off the Mullafarry road would be 5m wide to the west of the site and is proposed for emergency use only in the event the main entrance is blocked. Both accesses can achieve the sightline requirements in accordance with the CDP standards.

Potential Effects

Summary of potential effects (Traffic & Transport)	
Project Phase	Potential Direct, Indirect & Cumulative effects
Do Nothing	The surrounding road network would remain in the current condition.
Construction Phase	Construction traffic predicted to result in an additional 240 cars, 100-120 HGVs & 30 LGV per day at construction peak. Estimated percentage increase of 10% to occur during the local network at peak hours. All local junctions would operate within capacity. 96% of construction traffic would travel from the north and south along the R314 to and from site. Increase in noise, dust and vibration levels in vicinity of site. Conflicts with pedestrian and cyclist movements along the Mullafarry Road. Inappropriate parking and queuing of vehicles along Mullafarry Road to access the site.
Operational	Total employee numbers = 32 over a 24 hour period (3 shifts) Car parking = 56 spaces including 2 spaces for security (Bicycle parking spaces = 25

	Operational traffic 22 car trips and 4 service trucks on the peak hours during the shift changeover.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site. Whilst it is acknowledged the permitted developments would generate additional traffic on the local road network, based on the modelling results and the junction's spare capacities, it is anticipated that, during the construction & operational phase of the proposed development, the local assessed junctions would be able to accommodate any cumulative traffic arising from the permitted developments.

Mitigation Measures

10.17.12. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 13.6 of the EIAR.

Mitigation measures during the construction period would include

- Construction Transport Plan (CTP) to minimise potential impacts of construction traffic on the safety and amenity of road users with regards to dust, noise, working hours and parking facilities.
- Specific measures include, on-going assessment of traffic routes, not permitting construction traffic to wait on public roads, delivery scheduling of materials, and wheel wash facilities.
- Detailed Construction Traffic Management Plan to be agreed prior to commencement with main contractor
- A Mobility Management Plan (MMP) to encourage cycle to work scheme, car pooling, public transport service, shower and locker facilities for staff.

Residual Effects

10.17.13. The EIAR notes that the construction phase would result in a temporary increase in traffic, but it would be *short in terms of duration and neutral imperceptible in terms of*

magnitude. The management of these effects would be through the implementation of a construction traffic management plan and regular monitoring of traffic and vehicles.

The residual impacts of the proposed development once operational would have a MMP incorporated early to further reduce traffic in the operational phase and the residual effect would be *neutral, imperceptible and permanent*.

Direct and Indirect Effects Assessment

- 10.17.14. There is the potential for temporary minor localised effects on the road network during the construction phase of the development, but the local junctions would operate within capacity and there would be minimal delay at the junctions, particularly as construction traffic would be less likely to affect the peak flow times. The number of employees and shift operational hours would not have a direct or indirect effect on the road network in terms of traffic.
- 10.17.15. The 3 local junctions close to the site would operate at capacity and there would be no significant queues, delays or increase in Ration to Flow capacity (RFC) values. The proposed main access junction would operate well within capacity during both peak hours on Mullafarry Road.
- 10.17.16. Vehicle trips anticipated during the operational stage of the proposed development, of 29 cars and 2 deliveries arriving and departing daily (total 59 cars and 4 deliveries) would not have a significant effect on the overall road network.
- 10.17.17. I note by way of further information (F.I) the applicant was requested to consider accessing the site from Killala business park which has an access off the R314. The applicant stated in their response to the F.I request that given the topography of the site any access from the north via the windfarm or business park lands onto the subject lands would be too steep and would be in conflict with the proposed car park and building area. The applicant also stated although there is a small section of land to the north east corner of the site between the SEE power plant and Tawnaghmore substation, there are ground services at this location which would be technically and economically unfeasible to provide an access over them.
- 10.17.18. Whilst I acknowledge the subject site is constrained in that it is at a lower level than the Killala business park, I consider an access through the business park would provide a more cohesive campus form of development given the existing uses close to the site. However, I consider an access between the SEE power station plant and

Tawnaghmore substation could be technically difficult. Nevertheless, the proposed trip generation from the proposed development as discussed further below, could be accommodated on the local road and the P.A were satisfied with the proposed access.

Car parking & cycle provision

- 10.17.19. The development would include 56 no. car parking spaces and 25 no. bicycle spaces for full time staff, maintenance contractors and visitors attending the site. The car parking area would be located to the east of the proposed data centre. It is envisaged there would be 32 staff in total with a maximum of 13 staff on site per shift. The rotational shift system consists of 3 shifts over a 24 hour period.
- 10.17.20. The application was accompanied by a Mobility Management Plan to encourage staff to use alternative forms of transport other than the car. The CDP has no specific parking standards for a data centre, however, I consider given the site's location and lack of public transport provision in the area, staff are going to travel to the site primarily by car. I therefore consider 56 car parking spaces and 25 bicycle spaces would more than adequately accommodate the proposed staffing levels over a 24 hours period.

Trip generation

- 10.17.21. Mullafarry Road leads to 3 junctions to the east of the site. Traffic surveys were carried out at all 3 junctions on 1st October 2024 over a 12 hour period. Peak flows at the 3 junctions were identified as between 0800 hrs- 0915hrs AM and 1530-1645 hrs PM. Junctions 1 and 3 experienced the highest two way traffic volumes in the peak hours. Both these junctions link onto the R314 with Junction 1 links to Mullafarry Road.

It is stated in the Traffic & Transport section of the EIAR that the likely catchments for the proposed development are currently unknown and will be established once the development is in operation, but 96% of all trips will arrive and depart off the R314 to the east of the site. I consider this a reasonable assumption as the R314 connects the site to Killala to the north and Ballina and the N62 to the south. Overall, I consider the level of traffic associated with the construction phase would result in a negative effect on the surrounding road, I consider this would be short term. Once operational the effect would be neutral, imperceptible and brief.

Conclusion Direct and Indirect (Traffic & Transport)

10.17.22. I have had regard to the examination of environmental information in respect of Traffic and Transport, and I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on traffic and transportation and provides suitable monitoring measures and that no significant direct or indirect effects would arise due to the nature and scale of the proposed project, the duration of the works and to the range of mitigation and monitoring measures. I am satisfied subject to the recommended mitigation measures being adhered to the proposed development would have no significant direct or indirect effects.

10.18. **Material Assets- Utilities**

Chapter 14 of the EIAR evaluates the likely impacts of the proposed development on utilities, in terms of power and electricity supply, water services (including surface water, foul drainage and water supply), telecommunications and gas supply.

Issues raised

10.18.1. There were no concerns raised by third parties regarding utilities for the development, and the P.A did not raise any objections to the development on this issue.

Context

10.18.2. It is stated the assessment for this chapter was carried out from a desk top review and consultation undertaken by the project engineers, architects and with service providers including Uisce Éireann (UÉ), Electricity Supply Board (ESB), Telecommunications Providers and Gas Network Ireland (GNI) and related to the subject site and surrounding area.

Difficulties in compiling this chapter are stated as being a complex process, particularly due to the need for ongoing consultations with multiple service providers, such as UÉ, EirGrid, ESB Networks, GNI, telecommunications providers, and other relevant local entities.

Baseline

Power & Electricity supply

An existing MV (10KV/20KV) power line runs from the north of the site connecting to Ballysakeery House. Two existing HV (110KV) overhead lines extend the site on its

eastern side from Mullafarry Road, into the adjoining site to the east. A 110kV ESNB substation is located to the east of the site.

Telecommunications

Records from GNI indicate the presence of existing Aurora and Eir telecommunications cables in close proximity to the site. To the east of the site is the future land fall of the AEConnect 1 Transatlantic Data Cable, which is a transatlantic subsea fibre optic cable extending from Long Island, New York, to Killala, Mayo.

Surface Water

Several man-made land drains are present on the site and discharge to an unnamed stream which runs west to east along the southern boundary of the site towards Moyne River.

Foul Drainage

There is no foul drainage connection on the site. The Killala WWTP is located to the c.550m east of the site. UE WWTP register indicates Killala WWTP (D0067) has spare capacity available (accessed 29/9/2025).

Potable Water Supply

According to the applicant UE records indicate there is a 225mm uPVC watermain running through the eastern portion of the site from the north to south boundary. UE water capacity register (accessed 25/11/25) indicates Killala has capacity available to meet 2034 population targets but a Level of Service improvement is required.

Natural Gas Supply

There is currently no existing natural gas infrastructure on site. The nearest connection is c 25.6 km.

Potential Effects

Summary of Potential Effects (Utilities)	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Site would remain a greenfield site and there would be no impact on the existing or future utility services in the area.

Construction	Temporary power installed for heating & lighting of the site & on-site construction compound. Outages to power supply/disruptions to ESB networks to allow for connections to power supply Potential for surface water run off to become contaminated & pollutants to enter drainage ditches. Waste water generation from welfare facilities Temporary connection to existing watermain for potable water/impact on water pressure in area Disruption to UE services during connection to watermain & watermain diversion
Operational Phase	Increase in demand for electricity from the national grid via connection to existing substation to the east. Increase in demand on telecommunications network Increase in surface water run off Stormwater to be discharged to public sewer following attenuation onsite. Increase in foul drainage to Killala WWTP to east of site (PCE submitted to UE) Increase use of public water supply, for cooling system, staff welfare facilities, generator yard & fire suppression, connection to be agreed with UÉ. Natural Gas Enquiry has been placed with GNI to secure a connection & AGI to be installed to provide 50-150MWth- no connection agreed (subject to separate application).
Cumulative Effect	There is a potential for cumulative effects associated with temporary disruptions to existing utilities and increased demands on existing utilities. However, providing standard best practice control measures are implemented and

	arrangement with all utility suppliers is agreed the cumulative impact would not be significant.
--	--

Mitigation Measures

10.18.3. The mitigation measures proposed for the construction and operational phase are set out in detail in Section 14.6 of the EIAR.

10.18.4. All mitigation measures outlined within the CEMP would be implemented during the construction phase and include any additional mitigation required to comply with any subsequent conditions and emergency response procedures for incidents such as spills, leaks, fires, or other environmental events. Further mitigation measures during the construction phase would include:

- Any excavation works would be confirmed with relevant utility providers to ensure there is no impact on underground or overhead services or existing networks.
- The use of telecom lines would not be required.
- Surface water would be attenuated on site.
- There would be no connection to public surface or storm water.
- Foul effluent would be managed and treated offsite by a licensed waste sewerage contractor.
- During initial construction water would be provided by a road tanker on site.
- Connection to watermains would be subject to agreement from UE.

10.18.5. It is acknowledged in this chapter of the EIAR that once the development is operational it will increase the demand on existing power and electrical utilities, and reference is made to a future SID application for a new substation and use of on-site generators. There is no reference made in this chapter regarding communication with Eirgrid regarding connection to the grid. It is stated a Natural Gas Enquiry has been placed with GNI to secure a connection at the site.

It is considered the development would not impact on telecommunications due to the site's proximity to existing telecommunication providers and the AEConnect 1 data cable.

- 10.18.6. The applicant states a Pre-Connection Enquiry (PCE) has been submitted to UE in relation to the connection to Killala WWTP. The foul flow discharge from the development would be 0.25l/s which is similar to domestic use, as it would be primarily servicing administrative areas and there would be no peak industrial demand. Consultation with UE by the applicant has confirmed there is capacity in the WWTP.
- 10.18.7. A PCE has been submitted to UÉ regarding potable water for on-site welfare facilities and staff needs, cooling equipment (closed loop), fire suppression, and other applications.
- 10.18.8. All maintenance or upgrades of on-site utilities infrastructure during the operational phase of the development would be carried out in accordance with the specifications of the relevant service providers and facilitated by facilities management.

Residual Effects

- 10.18.9. The construction phase of the development would be carried out in accordance with the CEMP and the residual effects would be *neutral, not significant and short term*.

Direct and Indirect Effects Assessment

Construction

- 10.18.10. A range of mitigation measures are proposed to address the effects on utilities during the construction period of the development. All utility work would be carried out in accordance with the relevant requirements of the respective providers. There would be no impact on foul sewer drainage during the construction stage and the water demand would not be significant to affect existing pressures. I am satisfied that the applicant's baseline is comprehensive for the construction period, and the key aspects have been addressed.

Operational

- 10.18.11. Stormwater will be discharged to public sewer following attenuation on site, and foul water would be discharged in accordance with UE requirements. All foul generated on site will be piped to a holding tank (24 hr storage) and pumped to the adjacent WWTP along the public road. The peak flow is 0.25l/s (average 0.25l/s). This is primarily

domestic sewage. The impact is expected to be neutral, not significant, and long-term. Based on the approval for connection by UÉ following review of capacity in the network, for the proposed demand, the potential impact on potable water infrastructure for the operational phase is neutral, not significant, and long term.

There will be an increase in demand of natural gas on the GNI network to provide the potential future supply of up to 50-150 MW. Any such connection will be undertaken by GNI and require its own planning and environmental assessment. The proposed development once operational would increase the demand on existing power and electrical utilities I note the applicant is proposing to seek permission for a new substation but this does not form part of the current proposal.

Conclusion Direct and Indirect (utilities)

- 10.18.12. I have had regard to the examination of environmental information in respect of utilities, and I am satisfied that the information submitted in the EIAR demonstrates an understanding of the potential impacts of the proposed development on the utilities at the site. I note the applicant is proposing to seek permission for a new substation but this does not form part of the current proposal.

However, the proposed development once operational would increase the demand on existing power and electrical utilities. There has been no agreement with Eirgrid and this would have a negative effect on the existing community at this location.

10.19. Material Assets – Waste Management

Issues raised

- 10.19.1. There were no concerns raised by third parties or observers in terms of significant effects arising from waste management.

Context

- 10.19.2. Chapter 15 of the EIAR describes and assesses the predicted impacts of the proposed development on waste management during the construction and operational phase of the development.
- 10.19.3. The assessment methodology was carried out with reference to national and regional waste legislation, which includes inter alia; Waste Framework Directive (2008/98/EC) as amended, Waste Management Act 1996 (as amended), Industrial Best Practice

Guidelines for the preparation of Resource and Waste Management Plans for Construction & Demolition Projects (2021), Waste Action Plan for a Circular Economy- Waste Management Policy in Ireland 2024-2030. The EPA National Waste Reports and National Waste Statistics and data recorded from similar developments was also assessed.

- 10.19.4. Limitations identified included the difficulty in predicting with a high level of accuracy the exact materials and quantities of generated construction waste and the potential for contaminated waste. It is acknowledged the ultimate selection of waste contractors and waste facilities would be subject to appropriate selection criteria proximity, competency, capacity and serviceability.

Baseline

- 10.19.5. MCC no longer operate a municipal waste landfill in the area. According to the EIAR there are a number of waste permitted and licensed facilities located in the Connacht-Ulster Waste Region for the management of waste from the construction industry, which include soil recovery facilities, inert C&D waste facilities, municipal waste landfills, material recovery facilities and waste transfer stations. These facilities have not been identified in the EIAR.

There would be no demolition waste associated with the proposed development.

- 10.19.6. It is estimated that c.86,760m³ of material would be excavated to facilitate the development, and 36,150m³ of this would be reused for use in landscaping. The remaining 50,610m³ of material would be removed offsite for appropriate off-site disposal.
- 10.19.7. It is anticipated that bedrock would be encountered during the excavation phase and it would be crushed on-site, and the appropriate certificate of registration (COR) or waste facility permit will be obtained from MCC. Any excavated rock is expected to be removed off-site for appropriate reuse, recovery and / or disposal.

Waste material would initially need to be classified as hazardous or non-hazardous in accordance with the EPA publication Waste Classification- List of Waste & Determining if Waste is Hazardous or Non-Hazardous (2018).

- 10.19.8. Waste would also be generated from construction workers such as food waste, dry recyclables or sewage sludge from temporary welfare facilities. Table 15.1 of the

EIAR outlines the predicted tonnage of waste material, reuse and disposal as a result of the construction works.

- 10.19.9. The operational phase of the development is anticipated to comprise mostly non hazardous waste, in the form of packaging, canteen/kitchen waste, landscape waste and general non-hazardous waste. Harzardous waste would comprise WEEE products, waste filters, lube oil and waste diesel replaced once a year of the generators if not used, batteries form the battery room, and waste sludge form the petrol interceptors.

Potential Effects

Summary of Potential Effects (Waste)	
Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Site would remain a greenfield site and there would be no effect on the environment from waste.
Construction	Significant level of excavation (86,760m³) Impact on capacity in waste management facilities and landfill sites in area Range of non-hazardous & hazardous waste would be generated. Incorrect storage of waste on site could result in litter, pollution and vermin Use of non permitted contractors or unauthorised waste facilities could give rise to inappropriate waste management. Contamination of materials and segregation of waste to waste facilities.
Operational Phase	Lack of waste management procedures in workplace Incorrect storage and management could result in litter, pollution and vermin Unnecessary waste if not managed/segregated/recycled and could be disposed to landfill sites

	Use of non-permitted waste contractors or unauthorised facilities for disposal of waste Inappropriate disposal of recycling/hazardous waste
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site as outlined in Table 15.4 of the EIAR. Other developments in the area would be required to manage waste in accordance with national & local legislation. Cumulative effects for waste during the construction and operation phases are considered to be not significant

Mitigation Measures

10.19.10. The EIAR states the ‘circular economy’ and ‘waste hierarchy’ were applied to all mitigation measures with regards to waste.

Construction phase

A site-specific Resource Waste Management Plan (RWPM), contained within Appendix 15.1 of the EIAR, would be implemented in full for the construction phase of the development and has been prepared in line with the EPA ‘Best Practice Guidelines for the preparation of Resource and Waste Management Plans for Construction & Demolition Projects’ (2021).

This Plan includes would include the following mitigation measures:

- A Resource Manager and future contractor would be assigned to meet the objectives of the RWMP and to ensure effective management of waste during the excavation and construction works.
- Correct classification and segregation of excavated material including contaminated materials.
- Building materials being chosen to ‘design out waste’.
- Onsite segregation of waste materials for offsite reuse, recycling & recovery.
- Storage of waste & hazardous waste in skips or other suitable receptacles.
- Training of staff.

- All waste leaving the site will be recorded and copies of relevant documentation maintained.
- All waste leaving the site transported by suitably permitted contractors and taken to suitably registered, permitted or licenced facilities.

Operational phase

During the operational phase it would be the responsibility of the operator/buildings manager to implement an Operational Waste Management Plan (OWMP) to ensure the recycling, reuse and recovery of waste on site. It is stated this Plan would be developed prior to commencement. All recyclable materials would be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, and achieve the targets set out in the NWMPCE 2024-2030 and the MCC waste management bye-laws (2020). Further mitigation measures would include:

- Segregation of all waste into appropriate categories and stored in appropriate colour coded bins, skips or receptacles.
- Regular auditing of onsite waste storage facilities.
- Maintain a paper trail of waste documentation for all waste movements from the site.
- All wastes be managed through the permitted/licenced waste contractors and in accordance with best practice and all EU and Irish waste management legislation.

10.19.11. Residual effects

The mitigation measures would ensure that targeted rates of reuse, recovery and recycling are achieved during the construction and operational phase of the development and in accordance with European, National and Regional legislation.

During the construction phase the predicted effect on the environment would be short term, imperceptible and neutral. The predicted effect of the operational phase would be long term, imperceptible and neutral.

Direct and Indirect Effects Assessment

I have examined, analysed and evaluated Chapter 15 of the EIAR and all of the associated documentation. A range of mitigation measures are proposed to address

the effects of waste generated during the construction and operational phases of the development which include recording, reuse, recycling, storage, disposal and transportation.

Construction phase

The quantities and type of waste that would be generated on site during the construction phase of the proposed development have been identified. It is anticipated 42% of the excavated material would be reused for landscaping and fill, and the remaining material removed offsite for appropriate disposal. Small quantities of waste would be generated by construction workers and in onsite offices. All waste would be documented prior to leaving the site, weighed and tracked.

Operational phase

During the operational phase, the proposed development would generate a range of small amounts of mostly non-hazardous wastes, with some hazardous waste (batteries, fluorescent tubes, landscape waste). A standard operational management plan would be implemented in the event of planning permission being granted.

10.19.12. Conclusion- Direct and Indirect Effects

Although the EIAR did not identify licensed contractors or nearby sites for any fill material in the area, I am satisfied that the proposed project would comply the relevant legislation to reduce and recycle waste. I therefore consider there would be no significant adverse impacts in relation to waste subject during the construction and operational phase of the development through the implementation of a RWMP and OPWM plan.

10.20. **Interactions**

Issues raised

10.20.1. No issues were raised by thirds parties to the appeal in relation to interactions.

Context

10.20.2. Chapter 16 of the EIAR evaluates the potential interaction of effects of each of the environmental topic areas assessed within the EIAR. No additional mitigation or monitoring measures are proposed as a result of the interaction of effects. A matrix

presented in Table 16.12 of the EIAR identifies potential interactions between the various aspects of the development relevant to the topic areas discussed within the EIAR.

The main interaction between these topics would occur during the construction phase of the development. The following key interventions are identified and considered:

Construction Phase

During the construction phase population and human health would interact with hydrology via water quality from unmitigated pollutants entering water supplies, noise and vibration from construction works and traffic, landscape and visual impacts as a result of the change in the landscape and construction equipment, air quality and climate from dust related activities and material assets from the increase in traffic and poor management of litter issues and an increase in vermin.

Further interactions would occur between air quality & climate with lands, soil & hydrogeology, hydrology, biodiversity and material assets via dust deposition as a result of site clearance, suspended solids and contamination due to leakages, photosynthesising of plants from dust deposits, CO₂ emissions from construction traffic, and waste management.

Hydrology would interact with biodiversity in the absence of mitigation during the construction phase as a result of surface water run-off and increased silt which may damage downstream water and lead to a degradation of habitats.

Operational Phase

Human health and population interaction during the operational phase would include air quality and climate from pollutants and GHG emissions, noise and vibration from building plant and equipment, landscape & visual impact and cultural heritage with regards to the change from a greenfield site to an employment use and impact on Ballysakeery House, and material assets with the increase in demand on the use of existing utilities.

There would be an interaction between hydrology and biodiversity during the operational phase in the event that surface water run off would contaminate the Moyne stream which connects to the Killala Bay/Moy Estuary SAC and SPA.

Cumulative Effects

10.20.3. The cumulative effects of the proposed development alongside other proposed/permitted development in the vicinity of the site has been addressed in each chapter of the EIAR, and it has been concluded that the cumulation of effects from the planned and permitted development and the proposed development would not be likely to give rise to significant effects on the environment other than those that have been described in the EIAR and considered in this EIA.

Reasoned Conclusion on the Significant Effects

10.20.4. Having regard to the examination of environmental information set out above in respect of the proposed development, in particular to the EIAR and other information provided by the applicant, and to the submissions on the file and to the appeal, it is considered that the main potential direct and indirect effects of the proposed development on the environment are as follows:

Climate

- Potentially long term and significant effect relating to emissions of GHG from energy generated from fossil fuels by the national grid during the operational phase of the development. The applicant has identified there is a significant level of renewable energy projects in the North Mayo area but has not indicated how the development would avail of these projects. Furthermore, the applicant has not provided any supporting documentation from Eirgrid agreeing to a connection to power the proposed development.

Landscape, Visual Impact, Architectural and Cultural

- The proposed development would alter the character of this greenfield site including the removal of hedgerows and trees and the introduction of a two storey data centre and associated works.
- During construction visibility of the excavation works, stockpiles and construction equipment would be visible but this would be in the short term.
- The development once constructed would be visible from Ballysakeery House and its curtilage. Mitigation measures include the planting of a semi mature woodland area within the subject site to the north of this property which overtime would screen the proposed development to a large extent.

- The data centre building when complete would be visible intermittently from the NIAH buildings to the west and the R319 Wild Atlantic Way. However, the visual impact of the proposed development would be seen in the context of the existing Killala business park.
- Site landscaping measures would assist in integrating and screening the proposed development within the landscape and increase the biodiversity of the site, which is a long-term, positive and significant effect.

Hydrology

- The proposed development during the construction and operational phase of the development could impact negatively on surface waters by way of contamination through accidents and spillages. These impacts would be mitigated by the agreement of measures in the CEMP and SUDs measures and the implementation of mitigation measures relating to the management of sediments, spillages and drainage management.

Biodiversity

- On a precautionary basis, there is potential for significant impacts on the direct mortality of amphibians, bats, breeding birds and other mammals during the construction phase. In terms of foraging, there are potential significant effects on bats, breeding birds and other mammals and further significant impacts in terms of disturbance for birds.
- At operational stage there is the potential for significant adverse effects on the local bat population due to disturbance to foraging and external lighting.
- Loss of hedgerows and biodiversity corridors.

Population and Human Health

- During the construction of the proposed development there is the potential of dust emissions arising from excavation works to nearby residential properties. Mitigation measures and dust monitoring during construction would ensure no significant dust nuisance would arise at nearby sensitive receptors.
- Noise during the construction phase, would be mitigated as much as practicable by a suite of appropriate construction phase management measures, adherence to best practice measures, and planning conditions.

- Direct significant negative noise effects during the operational phase as a result of use of the emergency back-up generators. This would apply to the hourly testing once a month or rare use in emergency situations where there is a site black out. In both instances the effects would be very short term and, the context of testing, noise limits would remain in compliance with the Industrial Emissions Licence.

Resource and Waste Management

- Potential for significant direct or indirect cumulative effects on resource and waste management during the construction phase related to site excavations.

Material Assets

- Potential negative, significant and long-term effects on power supply as a result of total annual energy consumption based on 100% load at 48MW, having regard to the sensitive baseline environment as a result of energy demands in Ireland.
- Operationally, there is the potential for a negative, significant and long-term residual effect on power supply.

10.20.5. On the basis of my report above, I conclude that the EIAR does assess the interactions arising from the project, including mitigation measures set out in the EIAR and the application, and as conditioned in the event of a grant of planning permission for the project, in my opinion the environmental impacts identified above would not be significant and would not justify refusing permission for the proposed development.

10.21. The vulnerability of the proposed development to risks of major accidents and /or disasters

No issues were raised on this matter in the application or appeal. The potential for landslides, flooding or the risk of fire at the site is considered to be low and therefore there is limited potential for significant natural disasters to occur at the site. The risk of major accidents at the facility is negligible due to the absence of nearby Seveso or COMAH sites. Having regard to the location of the appeal site, its scale and nature of the operations I am satisfied that there is no significant risk of major accidents and / or disasters.

11.0 Appropriate Assessment (AA)

11.1. Introduction

- 11.1.1. The requirements of Article 6(3) of the Habitats Directive, related to screening the need for appropriate assessment (AA) of a project under section 177U of the Act of 2000, are considered in the following section.

11.2. Compliance with Article 6(3) of the EU Habitats Directive

- 11.2.1. The Habitats Directive deals with the conservation of natural habitats and of wild fauna and flora throughout the EU. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of a European site, but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to an AA of its implications for the site, in view of the site's conservation objectives. The competent authority must be satisfied that the proposal would not adversely affect the integrity of a European site before consent can be given. European sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) forming part of the Natura 2000 network.
- 11.2.2. Third party observations have stated that the deposition of NO_x emissions from the development has not been assessed on the various plant species in Killala Bay SAC and Glenamoy Bog SAC (site code: 000500) and Bellacorick Bog Complex SAC (site code: 001922) in the NIS regarding nitrogen deposition in accordance with the Habitats Directive. They state that Glenamoy Bog and Bellacorick Bog have not been assessed in the NIS and both are within 13km and 10km respectively from the site. This submission also considers the potential impact on surface and ground water is inadequate.

11.3. Stage 1 AA Screening

- 11.3.1. In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information considered in this AA screening, I conclude that it is not possible to exclude that the proposed development alone will not give rise to significant effects on the Killala Bay/Moy Estuary SAC and Killala Bay/Moy Estuary SPA in view of the sites conservation objectives.

11.3.2. It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development is required.

11.4. Appropriate Assessment Conclusion: Integrity Test

11.4.1. In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the Killala Bay/Moy Estuary SAC and Killala Bay/Moy Estuary SPA, or Glenamoy Bog and Bellacorick Bog complex SACs, in view of the conservation objectives of those sites and that Appropriate Assessment under the provisions of S177U was required.

11.4.2. Following an examination, analysis and evaluation of the NIS all associated material submitted and taking into account observations of third parties, I consider that adverse effects on site integrity of the Killala Bay/Moy Estuary SAC and Killala Bay/Moy Estuary SPA, or Bellacorick Bog complex SAC can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

11.4.3. My conclusion is based on the following:

- Detailed assessment of construction and operational impacts.
- Separation from and nature of pathways to European sites.
- Effectiveness of mitigation measures proposed including standard practice construction mitigation measures, dust management and noise mitigation.
- Application of planning conditions to ensure these measures.
- The proposed development will not affect the attainment of conservation objectives for the Killala Bay/Moy Estuary SAC and Killala Bay/Moy Estuary SPA, or Glenamoy Bog SAC and Bellacorick Bog SAC.

11.4.4. Please refer to the attached appendices for detailed Stage 1 and 2 Appropriate Assessment.

12.0 Water Framework Directive

- 12.1.1. The third party observation to the appeal notes that the NIS refers to the WFD which considered the impact of the development on the Killala Bay and Moy Estuary, but that there is no evidence that WFD considerations have been taken into account with regards to the Moyne Stream and that this is a significant omission.
- 12.1.2. A WFD Screening Assessment was submitted with the planning application (Appendix 6.2) and considers that the proposed development would not cause any adverse effects on the Moyne 34 Stream surface waterbody, the Killala Bay coastal waterbody, Killala Bay/Moy Estuary SAC & SPA or Bellacorick-Killala ground waterbody. The development would not result in a significant deterioration or change in surface or water body status or prevent attainment, or potential to achieve, the WFD or meet the objectives in the second RBMP 2018-2021 (River Basin Management Plan) and draft third RBMP 2022-2027. No further assessment of WFD was recommended given that no significant deterioration or change in water body status is expected based on the current understanding of the proposed development during construction and operation.
- 12.1.3. A drainage ditch is located along the southern boundary of the site, adjacent to the Mullafarry Road which discharges into the Moyne 34 Stream (Moyne_010 WFD surface waterbody) located c.550m to the south east of the site. The Moyne Stream flows in a north easterly direction and discharges into Killala Bay coastal waterbody a further c.3.25km downstream, where the receiving environment is designated as part of the Killala Bay/Moy Estuary SAC and SPA.
- 12.1.4. The proposed development comprises a two storey data centre with an overall floor area of 31,000m² with all associated site works. It is proposed to provide 25 back up generators and associated flues powered by HVO to the south of the data centre. The development would result in the excavation of c.27,962m³ of topsoil, c.36,150m³ of subsoil and c.22,648m³ of rock. Local minor dewatering may be required during excavation works and groundworks.
- 12.1.5. I have assessed the proposed development and have considered the objectives as set out in Article 4 of the Water Framework Directive which seek to protect and, where necessary, restore surface, ground water and coastal waterbodies in order to reach good status, and to prevent deterioration. Having considered the nature, scale and

location of the project, I am satisfied that it can be eliminated from further assessment because there is no conceivable risk to any surface, ground or coastal waterbodies either qualitatively or quantitatively. (Refer to Appendix 2)

12.1.6. The reason for this conclusion is as follows:

- Mitigation measures as detailed in the planning documentation to protect the hydrological and hydrogeological environment and in particular those measures relating to surface water management during the construction and operational phase of the development.
- Surface water would be managed to greenfield run off rates and treated via attenuation measures.
- Nature of underlying bedrock.
- There are no planned discharges to ground water and no long term groundwater dewatering.
- The development would be connected to the Killala WWTP.

Conclusion

12.1.7. I conclude that on the basis of objective information, that the proposed development would not result in a risk of deterioration on any water body (rivers, lakes, groundwaters, transitional and coastal) either qualitatively or quantitatively or on a temporary or permanent basis or otherwise jeopardise any water body in reaching its WFD objectives and consequently can be excluded from further assessment.

13.0 Recommendation

13.1. Although the subject site is removed from Killala town and is on unzoned lands, it is in close proximity to an existing energy network and a serviced commercial area. The site being located in the north west of the country does not lie within an area specifically identified in the Government's Statement for data centres as experiencing capacity constraints on the grid at this time. Nevertheless, the applicant does not have a connection agreement from Eirgrid to connect to the network or confirmation there is supply capacity in this region to accommodate the proposed development.

- 13.2. The EIAR relies to a large extent on the electricity sectoral ceilings be met and net zero decarbonisation of GHG emissions in the electoral sector by 2050 as committed to in the Programme for Government and set out in the Climate Act 2021. Whilst I acknowledge there are a number of renewable facilities within the vicinity of the subject site, as the future occupier of the development is unknown the applicant has not provided any evidence that they can avail of CPPAs to contribute to renewable projects in the region.
- 13.3. I therefore recommend that planning permission is refused in accordance with the following reason and conditions.

14.0 Reasons and Considerations

1. Having regard to the information on file, the application has failed to demonstrate that they have a fixed connection agreement to the grid, and that there is existing capacity in the electricity grid (without which the broader principles and allowances set out in the Government Statement on the role of Data Centres can be assessed), the lack of significant on site renewable energy to power the proposed development, the lack of evidence provided in relation to the applicant's engagement with Compulsory Power Purchase Agreements (CPPAs) in Ireland, and in the absence of a future occupier of the development to engage in EU Emission Trading Systems (ETS), it is considered the applicant has failed to demonstrate that the proposed development would be in accordance with the overarching objectives of the Climate Action Plan 2025, by reference to reducing Greenhouse Gas emissions and the broader principles and allowances set out in the Government Statement on the Role of Data Centres. Notwithstanding a number of renewable wind energy projects in the vicinity of the appeal site, the applicant has not provided any evidence that the proposed development could avail of locally generated renewable power for the development and that there is sufficient capacity in the grid to service the development and would therefore be contrary to Objectives EDO 67 and EDO 69 of the Mayo County Development Plan. The proposed development would therefore be contrary to the proper planning and development of the area.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Catherine Dillon
Planning Inspector

22nd December 2025

Appendix 1: AA screening

Screening for Appropriate Assessment Test for likely significant effects	
Step 1: Description of the project and local site characteristics	
Brief description of project:	The proposed development is for a data centre and associated works including 25 back up generators and associated flues at Mullafarry and Tawnaghmore Upper, Killala, Co. Mayo. There would be a significant element of cut and fill associated with the development. I have provided a detailed description of the project in Section 2 of this report.
Brief description of development site characteristics and potential impact mechanisms:	The subject site has a total site area of 10.58 hectares. A detailed description of the site & surrounding area is provided in Section 1 of this report and within the EIAR and NIS. The subject site comprises agricultural grassland (GA1), artificial surfaces along the local road and adjacent areas at Killala Business park. The majority of the fields within the site are improved grassland with the exception of the southern portions of the two most southeasterly fields which grade to wet grassland (GS4) and wetter sections from a marsh area adjacent to the road. The fields within the site are lined by hedgerows (WL1). There are no rare or protected habitats recorded in the study area inside the site boundary. The site may be considered of Low to Moderate Ecological Value at a Local level. The subject site is not located within a Natura 2000 site. A drainage ditch (FW4) extends along the Mullafarry Road parallel to the southern boundary of the site. This ditch is hydrologically connected to Moyne Stream which flows into Killala Bay. The land surrounding Ballysakeery Glebe House comprises Mixed broadleaf woodland (WD1). The proposed western access route runs through an area of mature trees, with Scots Pine, Aspen, Alder and Beech. There is a centrally located area of conjoining hedgerows which forms a spread of woodland, c. 75m NW of Ballysakeery House. Japanese Knotweed was recorded in two patches on this property adjacent to the eastern façade, 45m from the subject site's boundary.
Screening report:	Yes, screening report provided by the applicant and prepared by Moore Group.
Natura Impact Statement	Yes, NIS submitted by applicant and prepared by Moore Group.
Relevant Submissions	An Taisce's observation to the appeal considers the NIS is inadequate as it has not assessed the impacts on the Moyne stream with regards to air quality, nitrogen deposition and relies on the CEMP for mitigation measures. The submission further states Glenamoy Bog Complex SAC and Bellacorick Bog Complex SAC have not been assessed in the NIS regarding NO _x , nitrogen dioxide and acid deposition in accordance with the Habitats Directive.
Step 2: Identification of relevant European sites using the source-pathway-receptor model It is noted that the applicant's stage 1 AA screening report identified 2 European sites as being within a potential zone of influence of the proposed development. These sites were Killala Bay/Moy Estuary SPA & SAC, based on S-P-R. There are 5 other sites within the zone of Influence (Zoi). I have assessed all sites within the Zoi below. The NIS considered the effects on air quality from the proposed development has been assessed in the EIAR. I note An Taisce consider the EIAR is a separate process to the NIS. Chapter 8 Section 8.5.2.2 of the EIAR states emissions to atmosphere of NO₂, PM₁₀ and PM_{2.5} from the site would be in compliance with the ambient air	

quality standards and the design of the proposed development is such that there is no potential for significant impacts to air quality during the operation of the development.

The NIS does not assess the impact of emissions of NOX, nitrogen and acid deposition on ambient ground level concentrations within designated habitats sites. It is noted that after 20km, the ambient air concentration of NOX, and nitrogen dioxide and acid deposition emissions from the facility are imperceptible.

I note the third party observation to the appeal references Glenamoy Bog complex SAC and Bellacorick Bog Complex SAC not being assessed regarding NOx deposition from the proposed development. Bellacorick Bog and Glenamoy Bog complex SAC are located c.10.km and c.13km respectively at their closet point from the western and north western boundary of the subject site. I have therefore included both within this screening assessment.

Table 1:

European Site (code)	Qualifying interests ¹ [natura code]	Distance from proposed development (km)	Ecological Connections²	Consider further in screening³ Y/N
Killala Bay/Moy Estuary SAC (site code: 000458)	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows [1330] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with white dunes [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]	c.1.17km	Hydrologically connected to the subject site via the Moyne Stream which discharges to Killala Bay approximately 3.25km downstream into Killala Bay/Moy Estuary SAC. Indirect effects from pollution on surface & ground water during construction and operation on water quality & loss of habitat. Foul discharge to WWTP during the operational stage of the development which flows into the Killala Bay. Emissions from generators and dust during construction period on air quality.	Yes

	Narrow-mouthed Whorl Snail [1014] Sea Lamprey [1095] Harbour Seal [1365]			
Killala Bay/Moy Estuary SPA (site Code: 004036)	Ringed Plover [A137] Golden Plover [A140] Grey Plover [A141] Sanderling [A144] Dunlin [A149] Bar-tailed Godwit [A157] Curlew [A160] Redshank [A162] Wetland & Waterbirds [A999]	c1.77km	Hydrologically connected to the subject site via the Moyne Stream which discharges to Killala Bay approximately 3.25km downstream into Killala Bay/Moy Estuary SAC. The habitat on site is not suitable for the QI species but indirect effects could occur from pollution during construction works. Emissions from generators and dust during construction period on air quality.	Yes
Lacken Saltmarsh & Kilcummin Head SAC (site code: 000516)	Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows [1330] Mediterranean salt meadows [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	c.7.5km north	No hydrological connection to this site. Due to separation distance, QI's would not be impacted from air quality during construction or operational stage.	No
Bellacorick Bog Complex SAC	Dystrophic lakes and ponds [3160]	c.10.7km to west at closest point	It is not hydrologically linked to development site.	Screen out

(site code: 001922)	Northern Atlantic wet heaths [4010] Blanket bogs (* if active bog) [7130] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Geyer's Whorl Snail [1013] Marsh Saxifrage [1528]		Air Pollution Information System (APIS) grid range of average nitrogen deposition recorded between 3.7-4.6 kg/ha/yr (2021) at the bog.	
Glenamoy Bog SAC (site code: 000500)	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Marram Dunes (White Dunes) [2120] Fixed Dunes (Grey Dunes)* [2130] Humid Dune Slacks [2190] Machairs (* in Ireland) [21A0] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] Juniperus communis formations on heaths or calcareous grasslands [5130] Blanket bogs (* if active bog) [7130]	c.13km to north west of site at closest point.	It is not hydrologically linked to development site. APIS grid range for nitrogen deposition recorded between 3-6 kg/ha/yr (2021).	Screen out

	Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150] Salmon [1106] Petalwort [1395] Marsh Saxifrage [1528] Slender Green Feather-moss [6216]			
River Moy SAC (site code: 002298)	Lowland hay meadows [6510] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex [91A0] Alluvial forests [91E0] White-clawed Crayfish [1092] Sea Lamprey [1095] Brook Lamprey [1096] Salmon [1106] Otter [1355]	c.7.5km	No identified QI species on or close to the site. No hydrological connection to the subject site. The impact of emissions of NOX, and nitrogen and acid deposition (as N) on ambient ground level concentrations within designated habitat sites within 20 km of the facility was assessed using AERMOD. The 20 km distance was selected based on maximum extent of the impact zone from the air emissions onsite. After 20 km, the ambient air concentration of NOX, and nutrient and acid deposition due to emissions from the facility are imperceptible.	No

			Air quality would not be an issue due to Best Practice measures.	
Lough Conn & Lough Cullin SPA (site code: 004228)	Tufted Duck [A061] Common Scoter [A065] Common Gull [A182] Greenland White-fronted Goose [A395] Wetland and Waterbirds [A999]	c.10.5km	No identified QI species on or close to the site. No hydrological connection to the subject site. Given the separation distance air quality would not be an issue.	No

¹ Summary description / cross reference to NPWS website is acceptable at this stage in the report

² Based on source-pathway-receptor: Direct/ indirect/ tentative/ none, via surface water/ ground water/ air/ use of habitats by mobile species

³ if no connections: N

Given the proximity of the site to Killala Bay/Moy Estuary SAC and SPA , potential effects could occur due to surface and ground water run off during construction and operation, and foul water discharge during operation, which would all require management to avoid impacts on the Qualifying Interests.

The NIS makes reference to the background concentration of NO_x, nitrogen and acid deposition at Killala Esker pNHA which is referenced in the EIAR. This esker is c.0.8km to the north of the subject site and comprises calcareous grassland, estuaries, Atlantic salt meadows, shifting dunes, fixed coastal dunes and humid dune slacks. It has a grid average concentration of NO_x of 1.7 µg/m³, 4.4 kg/ha/yr of nitrogen deposition, and 0.3 kg/ha/yr of acid deposition (APIS 2023). This habitat would be similar to Glenamoy Bog & Bellacorick Bog complex and would have a sensitivity to nitrogen. However, the NIS concludes as the nitrogen deposition flux for the worst-case year is 4.837 kg/ha/yr for the proposed development and would be below the range in worst-case critical loads of 5-10 kg/ha/yr (APIS, 2023), there would be no effects from nitrogen deposition on the habitats.

Notwithstanding this conclusion, I note that the observations from An Taisce raised concerns in relation to air quality impacts and in particular NO₂ and NO_x emissions arising from the use of the back-up generators and the development. According to the NIS the impact of emissions of NO_x, and nitrogen and acid deposition (N) on ambient ground level concentrations within designated habitat sites within 20 km of the facility was assessed using AERMOD. The 20 km distance was selected based on maximum extent of the impact zone from the air emissions onsite. After 20 km, the ambient air concentration of NO_x, and nutrient and acid deposition due to emissions from the facility are imperceptible.

I note from the NPWS site synopses for Glenamoy Bog & Bellacorick Bog Complex SACs the main threats to the integrity of the sites are turf-cutting, afforestation and overgrazing has impacted on the sites in some places which has led to damage to parts of blanket bog, heath and mohair habitats.

According to APIS the nitrogen deposition levels at Glenamoy Bog Complex SAC is recorded as having a grid concentration of NO_x of between 2.9-6 kg/ha/yr (APIS 2021) at the closest pint to the subject site.

The nitrogen deposition values for Killala Esker at 0.8km from the site would be below the worst case range of 5-10kg/ha/yr (APIS 2023) for the various habitats for this bog (Table 8.11 of EIAR). This bog is c.13km west of the subject site at its closest point, while the prevailing winds are from the west and southwest. Given the existing levels are on average across the bog below the critical level as stated by APIS and given the intervening distance it is therefore considered there would be no likely significant effect on the habitats from the development, and it has therefore been screened out.

Nitrogen deposition levels at Bellacorick Bog Complex SAC is recorded as having a grid concentration of between 3.7-4.6 kg/ha/yr (APIS 2021). This bog is c.10km west of the subject site at its closest point and given the existing levels are below the critical level as stated by APIS, the prevailing wind and the intervening distance it is therefore considered there would be no effect on the habitats from the development, and it has therefore been screened out.

The 25 on-site back up generators would each have an associated stack built to a height of 21.164m above ground to provide for adequate dispersal of pollutants and would use HVO when required by the relevant SO and would have a total of 73MW of generation capacity (400 hours per year). Although the 25 no. back-up generators could give rise to additional NO₂ & NO_x emissions, I note that they would only operate for a short period of time during a temporary power outage. Without prejudice to the assessment of the AA, I note that the EIAR air dispersion modelling and results, concluded that the modelling was in line with best practice and that the modelled dispersal patterns reflected those for other similar locations. I am satisfied that the emissions are unlikely to exceed statutory limit values for NO₂ & NO_x within a 20km radius of the site, with no adverse impacts on local or regional air quality anticipated from the emissions.

There is no hydrological connection between the subject site and Lackan Saltmarsh & Kilcummin Head SAC, River Moy SAC or Lough Conn & Lough Cullin SPA. Significant impacts from air quality and NO_x deposition have been ruled out due to the intervening distance and standard best practice measures, air quality would not be an issue at these sites.

The NIS did not consider any additional sites other than Killala Bay/Moy Estuary SAC and SPA within a wider sphere of influence. I agree that no further range of European Sites is necessary for consideration in relation to this proposed development, due to the nature of the proposed development and separation distances.

Significant impacts from noise, disturbance and dust have been ruled out due to the intervening distance.

Step 3: Describe the likely effects of the project (if any, alone or in combination) on European Sites

The proposed development would not result in any direct effects on either the SAC or SPA as it relates to Killala Bay/Moy Estuary. However, due to the size, scale and proximity of the proposed development to the sites, indirect impacts generated by the construction and operation of the proposed development require consideration. Sources of impact and likely significant effects are detailed in the table below.

Table 2: AA Screening matrix

Site Name Qualifying Interest	Possibility of significant effects (alone) in view of the conservation objectives of the site	
	Impacts	Effects
Site 1: Killala Bay/Moy Estuary SAC (site code: 000458)	Direct: None Indirect: Deterioration of surface & ground water quality arising from pollution during site construction & operation.	Alteration/fragmentation of habitats. Water quality may be negatively affected.

	Effects on air quality from emissions of NOx, nitrogen, acid and dust deposition. No high risk invasive plant species is identified within the site, therefore no impact on qualifying interests.	
	Likelihood of significant effects from proposed development (alone): Yes	
	If No, is there a likelihood of significant effects occurring in combination with other plans or projects ? N/A	
	Possibility of significant effects (alone) in view of the conservation objectives of the site	
	Impacts	Effects
Site 2: Killala Bay/Moy Estuary SPA (site code: 004036)	As above	As above
	Likelihood of significant effects from proposed development (alone): Yes	
	If No, is there a likelihood of significant effects occurring in combination with other plans or projects ? N/A	
	Possibility of significant effects (alone) in view of the conservation objectives of the site	
Step 4: Conclude if the proposed development could result in likely significant effects on a European site		
Based on the information provided in the screening report, site visit, review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result in significant effects on Killala Bay/Moy Estuary SAC & SPA. I generally concur with the applicant's findings that such impacts could be significant in terms of the stated conservation objectives of the SAC and SPA when considered on their own and in combination with other projects and plans.		
Screening Determination		
Significant effects cannot be excluded		
In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information considered in this AA screening, I conclude that it is not possible to exclude that the proposed development alone will give rise to significant effects on Killala Bay/Moy Estuary SAC and Killala Bay/Moy Estuary SPA in view of the sites conservation objectives.		
It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development is required.		

Appropriate Assessment			
The requirements of Article 6(3) as related to AA of a project under part XAB, section 177V of the Planning & Development Act, 2000 (as amended), are considered fully in this section			
Taking account of the preceding screening determination, the following is an AA of the implications of the proposed data centre in view of the relevant conservation objectives of Killala Bay/Moy Estuary SAC & Killala Bay/Moy Estuary SPA based on scientific information provided by the applicant. The information relied upon includes the following: - Appropriate Assessment Screening Report and Natura Impact Statement dated November 2024, prepared by Moore Group, - EIAR Report dated November 2024, - Outline Construction Management Plan (CMP) dated November 2024, - Resource Waste Management Plan & Flood Risk Assessment contained within EIAR - Provisions of the publicly available NPWS website (www.npws.ie) accessed on 21st October 2025. I am satisfied that the information provided is adequate to allow for AA. All aspects of the project which could result in significant effects are considered and assessed in the NIS and associated documentation and mitigation measures designed to avoid or reduce any adverse effects on site integrity are included and assessed for effectiveness.			
Submissions/observations			
Name of European Site: Killala Bay/Moy Estuary SAC (site code: 000458)			
Summary of Key issues that could give rise to adverse effects (from screening stage)			
• Impacts from surface water runoff/discharges during construction • Impacts from surface water runoff/discharges during operation • In-combination impacts.			
QI features likely to be affected [habitat / species code]	Conservation objectives – attributes and targets (as relevant – summary)	Potential adverse effects	Mitigation measures (summary) – See NIS section 3.6
Narrow-mouthed Whorl Snail [1014]	To maintain favourable conservation condition.	This species does not occur in the zone of influence of the proposed development and is located at a distance of removal that it will not be affected.	
Sea Lamprey [1095]	To maintain favourable conservation condition.	Impact on water quality from pollution & potential adverse effect on habitat & prey species	Standard mitigation measures for construction and operational works close to surface and ground waters, adherence to CEMP, & site specific measures in CIRIA Report C532 Control of water pollution & dust emissions from construction sites, waste management plan. .

Harbour Seal [1365]	To maintain favourable conservation condition.	Indirect effects on water quality, particularly in regard to prey abundance.	As above
Estuaries [1130]	To maintain favourable conservation condition.	Changes in ground & surface water quality.	Standard mitigation measures for construction and operational works close to surface and ground waters, adherence to CEMP, & site specific measures in CIRIA Report C532 Control of water pollution & dust emissions from construction sites, waste management plan. Emissions via nitrogen levels and dust would be in accordance with relevant quality standards for worst case year standards for nitrogen and acid deposition and PM ₁₀ levels.
Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain favourable conservation condition.	Changes in air quality as a result of emissions of NOx, nitrogen, acid deposition & dust	
Annual vegetation of drift lines [1210]	To maintain favourable conservation condition.		
Salicornia and other annuals colonizing mud and sand [1310]	To maintain favourable conservation condition.		
Atlantic salt meadows [1330]	To maintain favourable conservation condition.		
Embryonic shifting dunes [2110]	To restore favourable conservation condition		
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes') [2120]	To restore favourable conservation condition		
*Fixed coastal dunes with herbaceous vegetation ('grey dunes') [2130]	To restore favourable conservation condition		
Humid dune slacks [2190]	To maintain favourable conservation condition.		

The above table is based on the documentation and information provided on the file and I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests. Minor possible downstream construction effects can be eliminated through standard outline CMP measures and the mitigation measures set out in the NIS.

Assessment of issues that could give rise to adverse effects view of conservation objectives

The potential for adverse effects is at worst case construction impacts resulting in some water quality deterioration. This would be via the Moyne Stream discharging to the Killala Bay & Moy Estuary.

(i) Water quality degradation

Potential impacts on water quality from run-off via the Moyne Stream to Killala Bay & Moy Estuary were identified.

Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and other related pollutants.

(ii) Emissions to air and deposition

Air quality would be controlled via regular monitoring and Best Practice construction measures and has therefore been discounted.

The nitrogen deposition flux for the worst-case year for the development is 4.837 kg/ha/yr and is below the range in worst-case critical loads of 5-10 kg/ha/yr (APIS, 2023) for the QIs.

The acid deposition (as N) flux for the worst-case year is 0.331 keq/ha/yr and is below the worst case maximum critical load range of 0.714 – 5.589 keq/ha/yr for the QIs.

Mitigation measures and conditions

Standard measures to ensure that no contaminated water (ground or surface) shall be allowed without running through silt traps and other measures to prevent suspended solids reaching the bay. In addition, standard control measures are set out to ensure no fuels, oil, or other materials can contaminated adjoining watercourses or groundwater.

In combination effects

I am satisfied that in-combination effects with plans and projects that could act in combination with the proposed development are detailed and assessed.

Name of European Site: Killala Bay/Moy Estuary SPA (site code: 004036)

The proposed development and adjacent environment does not provide suitable nesting, foraging or commuting habitat for any of the species listed as conservation objectives of the Killala Bay/Moy Estuary SPA.

Summary of Key issues that could give rise to adverse effects (from screening stage)

- Impacts from surface water runoff/discharges during construction
- Impacts from surface water runoff/discharges during operation
- In-combination impacts.

Qualifying Interest features likely to be affected	Conservation Objectives Targets and attributes (summary- inserted)	Potential adverse effects	Mitigation measures (summary) See NIS section 3.6
Ringed Plover [A137] Golden Plover [A140] Grey Plover [A141] Sanderling [A144] Dunlin [A149] Bar-tailed Godwit [A157] Curlew [A160] Redshank [A162]	To maintain favourable conservation condition.	The lands are outside the core foraging range of the species. Possible impacts through water pollution downriver during construction.	Standard mitigation measures for construction works close to surface & ground water of the NIS
Wetland & Waterbirds [A999]		The wetlands are c. 3.15km from the site as the crow flies. Possible effects from concentration of surface run off.	Standard mitigation measures for construction works close to surface & ground water.

Assessment of issues that could give rise to adverse effects in view of conservation objectives:

Potential impacts on water quality from run-off via the Moyne Stream to Killala Bay & Moy Estuary were identified.

Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and other related pollutants.

In-combination effects

Table 3 of the NIS considered a significant number of planning applications within the vicinity of the subject site. I am satisfied that in-combination effects have been assessed adequately in the NIS. The applicant has demonstrated satisfactorily that no significant residual effects will remain post the application of mitigation measures and there is therefore no potential for in-combination effects.

Appropriate Assessment Conclusion: Integrity test

Following an examination, analysis and evaluation of the NIS, all associated material submitted and taking account all observations, I consider that adverse effects on site integrity of the Killala Bay/Moy Estuary SAC and SPA can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- Detailed assessment of all construction, operational and maintenance impacts, specifically those that could result in a deterioration of water quality along the coast.
- The proposed development will not affect the attainment of conservation objectives of the Killala Bay /Moy Estuary SAC & SPA.
- Effectiveness of mitigation measures proposed and the adoption of the outline CMP.

Appendix 2 Water Framework Directive (WFD) Screening

WFD IMPACT ASSESSMENT STAGE 1: SCREENING			
Step 1: Nature of the Project, the Site and Locality			
An Bord Pleanála ref. no.	322575-25	Townland, address	Mullafarry & Tawnaghmore Upper, Killala. Co.Mayo.
Description of project		Construction of data centre, 25 backup generators fuelled by HVO and associated works. It is stated in the WFD assessment in the development description there is no required bulk diesel store on site. A WFD Assessment was undertaken for the proposed development & is contained in Appendix 6.3 of chapter 6 of the EIAR relating to Hydrology.	
Brief site description, relevant to WFD Screening		The site is a greenfield site comprising c.10.58 hectares of undeveloped agricultural lands to the south of Killala Business Park and c.1.8km south of Killala town. The land slopes from the northern to the southern boundary which abuts Mullafarry Road by c.20m. It is estimated c.22,648m³ of topsoil and a further 36,150m³ of subsoil and 22,648m³ of rock would be removed from the site. The subsoil would be reused as fill material. There is a disused area of land to the immediate east of the site which contains a reservoir associated with the former Asahi factory. This reservoir was used by the Asahi factory to receive raw water from Lough Conn, c.10.5km south of the subject site. A drainage ditch extends along the southern boundary of the site parallel with Mullafarry Road which discharges into the Moyne 34 Stream (Moyne_010WFD surface waterbody) located c.3.2km downstream. The Moyne 34 Stream flows in a north easterly direction and discharges to Killala Bay coastal waterbody a further 3.25km downstream where the receiving environment is designated as part of the Killala Bay/Moy Estuary SAC, and the Killala Bay/Moy Estuary SPA. The Moyne surface waterbody (IE_WE_34M190890) has a 'Moderate' status related to its ecological status or potential. The most recent Sub-Catchment Assessment (2019) carried out by the EPA on the Abbeytown_SC_010 Sub-Catchment states there are no significant pressures on the Moyne_010 WFD surface water body.	

	The ground water body (GWB) underlying the site is the Bellacorick-Killala GWB (IE_WE_G_0041) which is a poorly productive bedrock aquifer (accessed EPA website 24/9/2025). This GWB has a WFD status of good (2016-2021) and a WFD risk score of 'Not at Risk' of not achieving good status. There are no groundwater protection zones located within the subject site or in the immediate vicinity. A group scheme borehole was identified c.1.5km north of the site (well no.1131NWW004). However, the latest GSI and EPA websites indicate there is no ground water protection zone associated with this supply. The GSI website classifies the bedrock aquifer beneath the subject site as a 'Locally Important Aquifer' which is described as bedrock which is 'Moderately Productive only in Local Zones'. There is no potential for temporary dewatering or contamination to impact on any group or public water scheme due to the discrete nature of fracturing within the bedrock aquifer. Aquifer classification of the site is "Rock at or near Surface or Karst" (X) for the majority of the site and to north and west. South and east portion is classified as "Extreme" (E) and "High" (H) to immediate south of the site. Excavation works would increase the aquifer vulnerability during construction. There are 2 principal subsoils types within the subject site comprising 'Bedrock outcrop or subcrop (Rck)', for the majority of the site and 'Till derived from limestones(TIs)', underlying the southern and eastern portions of the site. Further areas of bedrock outcrops or near surface outcrops occur in the west and east of the site. The extraction would not go below ground water level. Site investigation carried out in August & September 2024 associated with the Proposed Development identified ground conditions dominated by brown sandy slightly gravelly silty CLAY with cobbles. Bedrock encountered at the 0.5 & 0.8mbgl at centre of the site & north east of site and groundwater ingresses in the south east of the site at 1.60mbgl na d1.2mbgl within the bedrock interface but did not occur near the proposed data centre building to the north of the site.
Proposed surface water details	Surface water discharge to be managed to greenfield run off rates and treated through oil interceptor. No surface water infrastructure within the site. Surface water would discharge to the existing drainage ditch to south of the site post attenuation. Proposed stormwater drainage network includes SuDs measures.
Proposed water supply source & available capacity	Uisce Eireann water capacity register for Killala (accessed 25/9/25) states capacity available subject to Level of Service improvement required.

Proposed wastewater treatment system & available capacity, other issues	Development would employ 32 staff on site per shift over a 24 hour basis. The proposed peak effluent discharge for the development is calculated at 0.25 l/s. All foul water would be collected in a sealed piped system to a 24 hour holding tank. A pumping station and adjoining rising main would send the foul water to the Killala WWTP (D0067), 500m east of the site. A Pre connection Enquiry submitted to Uisce Eireann (UE). No response from Uisce Eireann to application. UE WWTP capacity register (accessed 24/9/25) has spare capacity and latest AER report the plant is complaint with Waste water discharge licence and complaint with ELVs. Annual maximum hydraulic loading is less than peak capacity PE 2,300.					
Others?	Dewatering may be required during the excavation and ground works to achieve foundation base level of 2.5mbgl. Temporary crossing of the drainage ditch during construction works. Site lies within Flood Zone C.					
Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	Distance to (m)	Water body name(s) (code)	WFD Status (2016-2021)	Risk of not achieving WFD Objective e.g.at risk, review, not at risk	Identified pressures on that water body	Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)
River Waterbody	c.0.579 km south.	Moyne_010 IE_WE_34M190890	Moderate	Under review	None identified	Hydrologically connected to surface watercourse.
Coastal Waterbody	C3km north east	Killala Bay IE_WE_420_0000	Good	Not at Risk	N/A	Hydrologically connected via surface run off & groundwater
Groundwater waterbody	Underlying site	Bellacorick-Killala IE_WE_0041	Good	Not at Risk	N/A	Hydrologically connected via groundwater
Step 4: Detailed description of any component of the development or activity that may cause a risk of not achieving the WFD Objectives having regard to the S-P-R linkage.						

CONSTRUCTION PHASE

No.	Component	Water body receptor (EPA Code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measure	Residual Risk (yes/no) Detail	Determination** to proceed to Stage 2. Is there a risk to the water environment? (if 'screened' in or 'uncertain' proceed to Stage 2.
1.	Surface	Moyne_010 IE_WE_34M190890	Yes – via surface water run off into drainage ditch & Moyne stream	Hydrocarbon spillages/ Siltation. Temporary crossing of drainage ditch for foul sewer	Best practice construction practices CEMP	No	Screened out
2.	Coastal	Killala Bay IE_WE_420_0000	Yes – via surface water run off to Moyne stream	Hydrocarbon leakages & discharge of foul water from temporary toilet facilities	Licensed operator for removal of waste. CEMP practice measures.	No	Screened out- dilution factor due to distance involved
3.	Ground	Bellacorick-Killala IE_WE_0041	Yes- via underlying aquifer & indirect pathway to surface water via Moyne stream	Excavation works could increase aquifer vulnerability.	Best practice measures including capping significant areas of the site by hardstanding & due to discrete nature of fracturing	No	Screened out

					/low permeability of bedrock.		
OPERATIONAL PHASE							
	Component	Waterbody Receptor (EPA code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measure	Residual Risk (yes/no) Detail	Determination to proceed to Stage 2. Is there a risk to the water environment? (if 'screened' in or 'uncertain' proceed to Stage 2.
1	Surface	Moyne_010 IE_WE_34M190890	Yes via run off from hardstanding areas & wastewater discharge	Hydrocarbon spillages result in contamination	SuDs features, hydrocarbon interceptors, hydrobrakes, swales, berms & attenuation ponds. Waste water would discharge to WWTP.	No	Screened out
2	Coastal	Killala Bay IE_WE_420_0000	Yes- via discharge to WWTP & drainage ditch.	Impact on water quality	WWTP has available capacity. All waste to be collected and stored in holding tank to provide 24 hour storage	No	Screened out WWTP has capacity and development proposes holding tank & buffering capacity na dilution due to distance.

2.	Ground	Bellacorick-Killala IE_WE_0041	Yes via spillage /leaks	HVO spillages. Leaks from oil refuelling	HVOs for generators to be supplied in double lined/bunded tanks & stored in hardstanding floors. Refuelling area to be drained to foul sewer. No groundwater abstraction.	No	Screened out
DECOMMISSIONING PHASE							
	NA						