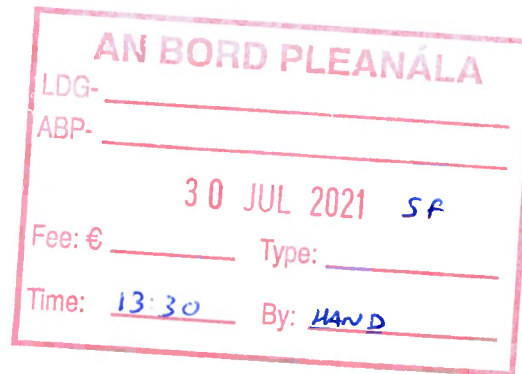


The Secretary,
 An Bord Pleanála,
 64 Marlborough Street,
 Dublin 1.



Date: 30th July 2021

Dear Sir/ Madam,

RE: RESPONSE TO THIRD PARTY APPEAL OF THE NOTIFICATION OF DECISION OF MEATH COUNTY COUNCIL TO GRANT PERMISSION FOR A DEVELOPMENT COMPRISING THE CONSTRUCTION OF DATA STORAGE FACILITY AND ASSOCIATED DEVELOPMENT ON A SITE AT THE IDA DROGHEDA BUSINESS AND TECHNOLOGY PARK, DONORE ROAD, DROGHEDA, CO. MEATH

MEATH COUNTY COUNCIL REG. REF.: 21/663

AN BORD PLEANÁLA REF.: 310729-21

1.0 INTRODUCTION

- 1.1 On behalf of the applicant, **Tunis Properties LLC**, 251 Little Falls Drive, Wilmington DE 19808, we, John Spain Associates, 39 Fitzwilliam Place, Dublin 2, hereby submit a response to the third party appeal of the notification of decision of Meath County Council dated the 4th of June 2021 under Reg. Ref.: 21/663 to grant planning permission for development on a site at Drogheda IDA Business and Technology Park, Donore Road, Drogheda, Co. Meath.
- 1.2 This appeal response is submitted in reply to correspondence received from An Bord Pleanála dated **5th of July 2021**, enclosing a copy of the third party appeal submitted by An Taisce (hereinafter 'the appellant'). A copy of this correspondence from the Board is included as Appendix 1.
- 1.3 This document provides a coordinated response to all points raised within the third party appeal, which was submitted by **An Taisce – The National Trust for Ireland**, with an address of **Tailors' Hall, Back Lane, Dublin 8, D08 X2A3**. Hereinafter, the appeal submitted by An Taisce will be referred to as 'the appeal'.

Managing Director: John P. Spain BBS MRUP MRICS ASCS MRTPI MIPI

Executive Directors: Paul Turley BA MRUP Dip Environmental & Planning Law MRTPI Rory Kunz BA (MOD) MScERM MAT&CP Dip EIA Mgmt. MIPI
 Stephen Blair BA (Mod) MRUP MIPI MRTPI Mary Mac Mahon MSc TCP Pg Dip MSP Pg Dip Env Eng Dip Env Plg Law Dip Mgmt Dip EIA & SEA B Soc Sc MIPI

Senior Associate Directors: Blaine Cregan B Eng BSc MSc Luke Wymer BA MRUP Dip Plg & Env Law Dip PM Prof Cert Env Mgmt MIPI

Associate Directors: Meadhbh Nolan BA MRUP MRTPI Kate Kerrigan BA MSc MRTPI

John Spain Associates Ltd. trading as John Spain Associates. Directors: J. Spain, S. Spain.
 Registered in Ireland No. 396306. Registered Office: 39, Fitzwilliam Place, Dublin 2. VAT No. IE 6416306U

- 1.4 The proposed development was described as follows in the public notices submitted with the application:
- *“Construction of a two storey (with mezzanine levels at both storeys) data storage facility building with a maximum overall height of c. 25 metres, containing data halls, associated electrical and mechanical Plant Rooms, a loading bay, maintenance and storage space, office administration areas, screened plant and solar panels at roof level, all within a building with a total gross floor area (GFA) of c. 28,566 sq.m;*
 - *The proposed data storage facility building will be located to the north of the data storage facility building previously permitted under Reg. Ref.: LB/191735 and to the south of the gas insulated switchgear substation compound proposed under An Bord Pleanála Ref: 308628-20.*
 - *Emergency generators (26 no.), emission stacks and associated plant are provided in a fenced compound adjacent to the data storage facility, along with a single emergency house supply generator;*
 - *MV Building (with a GFA of 249 sq.m), water storage tanks, diesel tanks and filling area, all located adjacent to the proposed data storage facility building;*
 - *Construction of associated internal access roads and circulation areas, provision of temporary construction access arrangements, footpaths, provision of 50 no. car parking spaces and 26 no. cycle parking spaces within a bicycle shelter;*
 - *Landscaping and planting, bin store, and all associated site works including underground foul and storm water drainage, and utility cables, on an application site area measuring 3.58 hectares.”*
- 1.5 The planning application was accompanied by an Environmental Impact Assessment Report (EIAR).
- 1.6 A copy of the Notification of Decision to Grant permission for the proposed development is attached as Appendix 2 of this appeal response. The date of the notification of decision of Meath County Council is the 4th of June 2021.
- 1.7 This response to the third-party appeal has been completed by the project team, in particular with inputs from the Operator of the proposed development along with the contributors to the EIAR; AWN Consulting in conjunction with specialist subcontractors. Please refer to the submitted EIAR at Section 1.6 for a detailed list of expert contributors and details of their qualifications and expertise. Input to the appeal response on legal matters was provided by Matheson solicitors. The overall response has been co-authored and coordinated by John Spain Associates, with input from the Applicant where relevant.
- 1.8 Based on the responses to the grounds set out in the third-party appeal submitted, it is respectfully requested that An Bord Pleanála upholds the decision of the Planning Authority to grant planning permission for the proposed development.
- 1.9 The background to the proposed development and the Operator of the proposed development is briefly summarised in Section 2. Section 3 provides a summary of the Meath County Council decision to grant permission, while Section 4 introduces the third-party appeal submitted on the current application and provides a robust and evidence-based response to the third party appeal on a thematic basis. The response seeks to break the appeal into its constituent parts and key points, with each being rebutted comprehensively under the relevant heading.
- 1.10 For a detailed justification of the proposed development in planning policy terms please refer to the documentation submitted with the planning application, notably Section 6.0, 7.0, and 8.0 of the Planning Report prepared by John Spain Associates

and submitted with the application. The response document makes specific reference to the documentation submitted with the application (including the EIAR) where relevant.

- 1.11 In this appeal response, 'data storage facility' (as the proposed development was described in the application) is used interchangeably with, and has the same meaning as 'data centre'.

2.0 DATA CENTRES & THE OPERATOR OF THE PROPOSED DEVELOPMENT

- 2.1 Data centres are at the core of cloud computing and enable customers to access on-demand compute, storage, databases and other IT solutions without owning or maintaining their own data centres and servers. Organisations of every type, size, and industry sector are using the cloud, and data centres are a key component of a modern economy and society. They enable business and consumer technologies which have become a key part of our daily lives – helping us connect, communicate, discover, work and learn with increasing ease and efficiency. This has never been truer than throughout the COVID '19 pandemic when data centres have enabled us to learn, work and stay connected.
- 2.2 As set out in Section 1.1 of the EIAR, the proposed development will be operated by Amazon Data Services Ireland Ltd.(ADSIL), the Irish entity of Amazon Web Services (AWS) which is part of the Amazon.com, Inc group of companies. AWS operate the world's most comprehensive and broadly adopted cloud platform, offering customers hundreds of services from data centres globally. AWS enables government agencies, large enterprises, start-ups and individuals to leverage the cloud to lower costs, become more agile, and innovate faster.
- 2.3 AWS's Customers use the services they deliver from their data centres to run some of Ireland's best-known businesses. They also help tens of thousands of small Irish businesses to access the kinds of sophisticated enterprise IT capabilities that historically were only available to the biggest companies. These companies use AWS technologies to reduce costs, innovate, grow, and scale their operations. Their data centres also provide the cloud services that enable public services and support international institutions and not-for-profits. AWS's services have played a key role in mitigating the impact of the Covid-19 crisis, by providing cloud-based telehealth services that has benefited Irish patients in hard-to-reach areas and those with mobility issues, and through supporting genomics and wider health research efforts, including those used to track variants of the virus and run the national track and trace systems.
- 2.4 The strategic importance of data centre infrastructure provision is recognised in the 'Project Ireland 2040 Ireland's National Planning Framework', published in 2018, which commits to the *"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."*
- 2.5 The '2019 Government Cloud Computing Advice Note', published by the Office of the Government Chief Information Officer (OGCIO) within the Department of Public Expenditure and Reform (DPER) sets out the strategic importance of data centres to Ireland's overarching enterprise policy *"...organisations no longer decide on whether to move to cloud for new or existing systems. The decision to be made now is what, how and when to move to cloud and which particular systems are suitable for cloud."* It adds that *"The pace of and demand for digitalisation is accelerating and the way in which government adopts the infrastructure required to support new technologies needs to change. Traditional server room or data centre models will not be sufficient in the longer term. An increasing number of services will be available only through the cloud."* And that *"All new government systems should be developed*

to exploit the opportunities presented by cloud deployment, where possible, and all existing systems will be reviewed for cloud capability."

- 2.6 The '2020 Programme for Government' commits to developing a new digital strategy, which will *"further develop Ireland's leadership in new digital technologies, including cloud computing"*.
- 2.7 IDA Ireland's 2021 – 2024 strategy 'Driving Recovery and Sustainable Growth' notes particular areas identified for growth including cloud computing and big data: *"Specific areas of opportunity include cloud computing, artificial intelligence (AI), 5G, big data, disruptive service platforms, advanced manufacturing, cell and gene therapy, connected health, industrial automation and renewable energy."* All of these sectors require a robust, reliable, and low-latency data centre infrastructure to deliver the best possible service.
- 2.8 Ireland (Dublin) was AWS's first infrastructure region outside of the United States of America and since then has grown to four availability zones since its 2007 launch. AWS investments have helped the Irish economy to grow. A recent Economic Impact Study of AWS's investments in Ireland, undertaken by Indecon International Economic Consultants, established that in the past decade, AWS has directly invested €4.4 billion in Ireland with an economic output effect of €7.5 billion. In 2020, AWS generated growth in economic output of €1.45 billion and is forecast to exceed €1.5 billion in 2021, 2022 and 2023. These figures demonstrate that AWS's spending on goods and services has a positive impact on the domestic economy, creating new opportunities and prosperity across many businesses and communities. Please refer to Appendix 3 for a summary of the Indecon Report.
- 2.9 AWS supports more than 8,700 jobs, including over 3,000 direct AWS employees, almost 4,000 in contractor and supplier companies linked to our data centres and 1,700 jobs linked to our Irish investment. In July 2020 AWS announced an additional 1,000 jobs over two years. Based on IDA figures, AWS has been in the top ten largest job creators in the IDA client base in each of the past four years. In 2019 it ranked third nationally among this group.
- 2.10 AWS presence in Ireland has generated business for an estimated over 550 Irish supplier and sub-supplier businesses across the economy, including major construction contractors, mechanical and electrical suppliers, professional services, and a wide range of services provided by local businesses.
- 2.11 The proposed development represents an important part of the next phase of AWS's investment in Ireland.

3.0 NOTIFICATION OF MEATH COUNTY COUNCIL TO GRANT PERMISSION

- 3.1 On the 4th of June 2021, the Planning Authority, Meath County Council, issued a decision to grant permission for the proposed development. The decision to grant permission was subject to 15 conditions in total.
- 3.2 The applicant welcomes the decision of Meath County Council to grant planning permission for the proposed development, which accords with the planning policy context and which will deliver a data storage facility development representing significant investment and new employment creation for the area.

4.0 RESPONSE TO GROUNDS OF APPEAL

4.1 The following sets out a response to the grounds of the third party appeal of the decision to grant permission issued by the Planning Authority. As noted previously, the response has been set out under a series of headings, corresponding with the main themes of the appeal submitted in order to avoid undue repetition.

4.2 The headings under which the response has been formulated are as follows:

- Alleged Overconcentration of Datacentre Development in Ireland
- Alleged Requirement for Commensurate Renewable Energy Supply
- Assessment of Indirect Emissions within the EIAR Submitted
- Cumulative Assessment of Climate Impact
- Alleged Dilution of Renewable Energy Penetration
- Alleged Impact on the National Grid

Alleged overconcentration of Data Centre Development in Ireland

4.3 The appeal states that Ireland hosts an “*enormous and disproportionate amount of Western Europe’s data infrastructure*” and that the clustering of data centre development, ultimately impacts on energy demand.

4.4 It is stated in the appeal that there are 70 data centres using 900MW of electricity in Ireland at present, with eight under construction which will use an additional 250MW. It is further stated that data centres currently consume 11% of Ireland’s total grid electricity and that this is projected to rise to 31% by 2027. The appeal alleges that there has been ‘uninhibited’ data centre development in Ireland to date.

4.5 It is respectfully submitted that the foregoing grounds of appeal fail to recognise the fact that Ireland is expressly recognised as an appropriate and sustainable location for data centre development in planning policy terms. As set out below and in further detail within the Planning Report and EIAR that accompanied the application, the proposed development accords fully with the relevant national, regional, and local planning policy, which directly support the delivery of data centre development in Ireland.

4.6 In response to the foregoing points, it is noted that the National Planning Framework (the NPF) under National Strategic Outcome 6, has identified Ireland as “*a sustainable international destination for ICT infrastructures such as data centres and associated economic activities*”. This objective recognises the fact that Ireland is a sustainable destination for development of this nature, which is not an optional form of development having regard to the important role which data centres and ICT play in the global economy.

4.7 The NPF at ‘National Strategic Outcome 6’ goes on to state that:

“Ireland is very attractive in terms of international digital connectivity, climatic factors and current and future renewable energy sources for the development of international digital infrastructures, such as data centres. This sector underpins Ireland’s international position as a location for ICT and creates added benefits in relation to establishing a threshold of demand for sustained development of renewable energy sources.”

4.8 Similarly, the regional planning policy context (as set out in section 6 of the Planning Report submitted with the current application) provides unequivocal support for the delivery of ICT infrastructure and data centres in Ireland.

- 4.9 The Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly (RSES for the EMRA) set out several objectives which are directly relevant to and supportive of the proposed development. The consistency of the proposed development with these policy documents is set out within Section 6 of the Planning Report prepared by John Spain Associates and within Section 3.2 of the EIAR that accompanied the application.
- 4.10 Regional Policy Objective (RPO) of the RSES for the EMRA states the following:
- "Local Authorities shall:*
- *Support and facilitate delivery of the National Broadband Plan.*
 - *Facilitate enhanced international fibre communications links, including full interconnection between the fibre networks in Northern Ireland and the Republic of Ireland.*
 - *Promote and facilitate the sustainable development of a high-quality ICT network throughout the Region in order to achieve balanced social and economic development, whilst protecting the amenities of urban and rural areas.*
 - *Support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations.*
 - *Promote Dublin as a demonstrator of 5G information and communication technology."*
- 4.11 In addition, the development of data centres is encouraged and supported across a number of Government policy documents and statements. The '2018 Government Statement on Data Centres' sets out the strategic importance of data centres to Ireland's overarching enterprise policy and their role in attracting employment and investment to Ireland within the technology sector. It notes that: *"Data centres' desire for green electricity supply could stimulate supply and technology innovation in the renewable energy sector that attracts investment in Ireland and increases the pace of transition to low carbon technologies."*
- 4.12 The introduction to the IDA Ireland's 2021 – 2024 strategy 'Driving Recovery and Sustainable Growth' notes particular areas identified for growth including cloud computing and big data (which are enabled by data centres such as the proposed development). The strategy states that *"Specific areas of opportunity include cloud computing, artificial intelligence (AI), 5G, big data, disruptive service platforms, advanced manufacturing, cell and gene therapy, connected health, industrial automation and renewable energy."*
- 4.13 It is submitted that in planning terms, it is not a question of a 'disproportionate' number of data centres in Ireland relative to other places. Planning policy at national, regional, and local level supports the delivery of data centre developments in Ireland, and at locations such as the proposed development site, as demonstrated by the previous grant of permission for the first phase of data centre development on the wider landholding at this location under Reg. Ref.: RA191735, and the recent grant of permission by An Bord Pleanála for supporting electricity transmission infrastructure on the wider landholding under ABP Ref.: 308628-20.
- 4.14 Given the national, regional, and local planning policy support, the delivery of such uses (which are not considered to represent an 'optional' form of development given their centrality to the digital and wider economy) it is submitted that Ireland represents an optimal location for the proposed development. This is implicit in the

extract from the National Planning Framework above, recognising Ireland as a sustainable international destination for ICT infrastructure such as data centres.

- 4.15 The Board have previously recognised the fact that data centres are not an optional form of development, for example in the consideration of the Apple data centre development at Athenry, Co. Galway (ABP Reg. Ref.: PL07.245518). In that case, the Board's Inspector stated at paragraph 12.6.3 that *"it is clear to me that the facility proposed by Apple is not an optional form of development in the modern world, at least in an international context."*
- 4.16 In the case of the proposed development, and other data centre developments, these proposals are assessed against information in relation to the specific sites in question and, also, in relation to extended regions and environments (as a result of environmental assessments and screenings). In relation to impacts on specific environmental media such as air and water, many of the same statutory/regulatory environmental quality objectives or emission limits are applied in modelling, in assessing environmental impact and are reflected in the conditions attached to the grants of permission for development of this nature.
- 4.17 The various different data centre proposals which have been subject to planning applications to date have been considered under statutory development plans that, while specific to each planning authority area, contain similar mixes and profiles of planning policies and objectives as frameworks against which each proposed data centre development (including the current proposed development) is assessed.
- 4.18 Various regional and national plans and programmes that set the framework for local planning policy and development consent applications (including for data centre proposals) have been the subject of prior environmental assessment at a strategic level (SEA). Local planning policy, including the Meath County Development Plan, supports the delivery of development of this nature at the subject site (as outlined within the Planning Report submitted with the application to the Planning Authority).
- 4.19 In addition, various data centre development proposals have been authorised by the same planning authority and by An Bord Pleanála on appeal, including the first phase of development on adjoining lands (Reg. Ref.: RA191735). To date the Board, across a range of specific proposals that have differed in terms of site, scale and design, has brought to its assessment of each, its understanding of the role and operation of data centres in Ireland, as set out in planning policy at a national, regional, and local level as outlined above, including the strong policy support provided in the National Planning Framework.
- 4.20 As set out above and within the application, the proposed development is strongly supported by national, regional and local policy. As the Board will be aware from the range of case law including most recently the decisions of the High Court in *An Taisce v An Bord Pleanála and Ors*¹ regarding the Kilkenny Cheese Limited plant, while an appellant may disagree with the policy context as it currently stands, an appeal or challenge to a particular development proposal is not an appropriate avenue to instigate a collateral attack on policies (which strongly support the delivery of the proposed development at national, regional, and local levels as set out previously).
- 4.21 The original High Court judgment in the Kilkenny Cheese case² held that attacking policy through attacking a development is not *"legally appropriate"*. Paragraph 44 of the original judgment states that:

¹ [2021] IEHC 254; [2021] IEHC 422

² [2021] IEHC 254

"Confronted with unchallenged policy documents and the highly regulated procedure for an individual planning consent, the applicant is trying to use the latter process to indirectly challenge the former. While that is forensically understandable as a tactic for "pushing the boat out", the reason that it isn't legally appropriate is that general, programmatic policies are not capable of being subjected to the same sort of site-specific regulation as planning applications."

- 4.22 Paragraph 47 of the original judgment also states that *"many of the obligations of planning law relate only to individual projects. The high standards of scrutiny of particular development consents don't apply to more general issues arising from overall programmes that are not site-specific in the same way."*
- 4.23 In the judgment for leave to appeal, the High Court (Humphreys J) noted that *"because the legal grounds for challenging any government policy document are relatively scanty compared to those available to challenge an individual planning decision, the applicant is taking advantage of the latter grounds in order to make a point that in effect amounts to contesting the outcomes envisaged by the underlying policy. Worth trying once from an applicant's point of view, but ultimately not a legally valid approach".*³ The judgment clearly states that it is not a *"legally valid"* approach to take advantage of the grounds for challenging an individual planning decision *"in order to make a point that in effect amounts to contesting the outcomes envisaged by the underlying policy"*.⁴
- 4.24 The policy issues raised in the *Kilkenny Cheese* case and the grounds raised within the appellant's appeal against the subject application are directly analogous. In *Kilkenny Cheese*, the Court considered that An Taisce was really concerned with challenging the Government's policy to increase the national dairy herd, noting that *"the applicant's focus is on the increase in the dairy herd, which is specifically envisaged as a matter of government policy"*⁵, rather than raising a specific issue with the development of the cheese factory the subject of the permission. Similarly, in this appeal, An Taisce is expressly focusing its challenge on the Government's policy to encourage data centre development in Ireland generally (for example, An Taisce *"assert the need to resolve grid capacity issues and give way to forthcoming policy formation"*), rather than simply considering issues with this specific proposed development. Thus, the decision in the *Kilkenny Cheese* case confirms that the approach taken by An Taisce in this appeal is not legally valid and the Board should not have regard to those arguments as a reason for refusal.
- 4.25 In conclusion it is submitted that the appellant's contention that Ireland accommodates an overconcentration of data centre development (which is not accepted) is not based in evidence, is incorrect, and has no bearing on the decision to grant permission for the proposed development. As set out above the proposed development is strongly supported by the existing planning policy to which the Board must have regard.

Alleged Requirement for Commensurate Renewable Energy Supply

- 4.26 The appeal states that *"new data centre development should only be considered if it provides a new, directly linked supply of renewable energy or matches its energy consumption with a commensurate or greater contribution to Ireland's energy supply"*.

³ Para 24, [2021] IEHC 422

⁴ Para 24, [2021] IEHC 422

⁵ Para 24, [2021] IEHC 422

- 4.27 This section of the appeal response has been prepared with input from AWN Consulting and from the applicant.
- 4.28 With regard to the argument that the development should not be allowed to proceed unless equivalent renewable generation capacity is provided either on site or at another location, it is noted that this is not the correct approach in planning terms as there is no requirement for such an approach under any of the relevant policy, guidelines, or under the Planning & Development Act 2000 (as amended).
- 4.29 In relation to the contention that the applicant should offset the power demand of the proposed development by developing new renewables infrastructure directly linked to the development, it is noted that such an approach has no basis in planning policy at national, regional, or local level. The EIAR submitted includes an assessment of the energy demand associated with the proposed development (refer to Section 9.7.2.2 and 9.7.2.3 of Chapter 9 Air Quality and Climate, and Sections 14.5.2, 14.6.2 and 14.8.2 of Chapter 14 Material Assets).
- 4.30 However, without prejudice to that position and with regard to the assertion that proponents of data centre development should match their energy consumption *“with a commensurate or greater contribution to Ireland’s renewables supply”* the Operator of the proposed development, AWS, has in fact made commitments to the delivery of several large-scale renewable energy projects, with the express intent of contributing a commensurate level of renewable energy to their existing and future operations in Ireland.
- 4.31 In this regard, we refer the Board to section 8 of the Planning Report submitted with the application to the Planning Authority. It is set out therein that AWS has engaged in a commitment to achieve net zero carbon by 2040, ten years ahead of the Paris Agreement. As part of this effort, the AWS has now announced a total of 232 renewable energy projects globally with the capacity to generate 10,000 megawatts of energy.
- 4.32 It is further set out within section 8 of the Planning Report that AWS announced a new 115-megawatt windfarm in County Galway in July 2020, now under construction, this project is expected to become operational by May 2023. This project is in addition to two earlier projects announced in 2019 – a 91 megawatt windfarm in Donegal (set to come online in December 2021) and a 23 megawatt windfarm in Cork (operational since February 2021). These new renewable energy projects are all directly financed by AWS via corporate power purchase agreements (CPPAs)⁶. AWS intends to enable further projects in Ireland in the future. Additional details on AWS’s renewable energy commitments are outlined at Section 4.96-4.101 of this response document.
- 4.33 As set out above and within the application, AWS has taken significant steps towards the delivery of new renewable energy capacity in support of the energy requirements of their operations in Ireland. The foregoing appears to have been overlooked by the appellant in their review of the current proposals.
- 4.34 In addition to the explanation of AWS’s commitment to the development of renewables set out within the Planning Report, we refer the Board to the following sections of the EIAR submitted, which provide further detail:

⁶ A Corporate Power Purchase Agreement (CPPA) is a long-term contract under which a business agrees to purchase electricity directly from an energy generator. Such structured provide financial certainty for the utility companies and the developers, which removes a significant roadblock to financing and building new renewable facilities

- Chapter 1 (Introduction), Section 1.3
- Chapter 2 (Description of Development), Sections 2.4, 2.4.1, 2.4.2
- Chapter 3 (Planning & Development Context), Table 3.4
- Chapter 9 (Air & Climate), Sections 9.5.2.2, 9.7.2.3
- Chapter 14 (Material Assets), Sections 14.7.2, 14.8.2

- 4.35 We respectfully refer the Board to the above sections of the EIAR submitted, in addition to section 8 of the Planning Report prepared by John Spain Associates for further details.
- 4.36 In conclusion it is submitted that the appellant's contention that *"new data centre development should only be considered if it provide a new, directly linked supply of renewable energy"* has no basis in planning policy, and it is set out that the Operator, AWS is contributing significantly to the delivery of additional renewable energy supply to power its operations.

Assessment of Indirect Emissions within the EIAR Submitted

- 4.37 The appeal includes extracts from section 9.7.2.2 of the EIAR submitted with the application, in relation to the CO₂ emissions arising from the electricity required to operate the proposed development.
- 4.38 The appeal argues that data centres will contribute significantly to greenhouse gas emissions in Ireland, impacting on the ability of the State to meet its climate obligations. The appeal states that *"progress in decarbonising Ireland's electricity supply notwithstanding, the projected exponential rate of data centre projects built in urban and semi-urban areas around the country is inconsistent with national climate and environmental policy objectives"*.
- 4.39 The appeal notes the impact of the proposed development, in combination with the first phase of development permitted on site, and an indicative potential future phase of development on site, and contests the conclusion in the EIAR that the impact would be indirect, long-term, negative, and slight.
- 4.40 As set out within this section of the response, there is no basis for this ground raised by the appellant, and the EIAR prepared in respect of the proposed development included a robust assessment of the proposals, including in relation to CO₂ emissions arising from the electricity required to operate the proposed development.
- 4.41 This section of the appeal response was prepared with input from AWN Consulting.
- 4.42 In response to the foregoing point, as set out within the EIAR submitted (section 9.7.2.2) (and acknowledged within the current appeal), the energy generated to serve the proposed development will fall within the scope of the EU Emissions Trading Scheme (ETS).
- 4.43 Emissions from electricity generation used to power all data centres in Ireland are included in the ETS. Thus, they are not included in the Effort Sharing Decision which covers all non-ETS emissions and thus any necessary increase in electricity generation due to data centre demand will have no impact on Ireland's obligation to meet the EU Effort Sharing Decision⁷.
- 4.44 In order to meet the commitments under the Paris Agreement, the European Union (EU) enacted 'Regulation (EU) 2018/842 on binding annual greenhouse gas

⁷ Available at: https://ec.europa.eu/clima/policies/effort_en

emission reductions by Member States, contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No. 525/2013' (the Effort Sharing Regulation).

- 4.45 These Regulations aim to deliver, collectively by the EU in the most cost-effective manner possible, reductions in GHG emissions from the Emission Trading Scheme (ETS) and non-ETS sectors amounting to 43% and 30%, respectively, by 2030 compared to 2005. The ETS is an EU-wide scheme which regulates the GHG emissions of larger industrial emitters including electricity generation, cement manufacturing and heavy industry. The non-ETS sector includes all domestic GHG emitters which do not fall under the ETS scheme and thus includes GHG emissions from transport, residential and commercial buildings and agriculture. Ireland's obligation under the Regulations is a 30% reduction in non-ETS GHG emissions by 2030 relative to its 2005 levels.
- 4.46 Following on from the recently published European Climate Law⁸, and as part of the EU's "Fit for 55" legislative package where the EU has committed to a domestic reduction of net greenhouse gas emissions by at least 55% compared to 1990 levels by 2020, the Effort Sharing Regulation is proposed to be strengthened with increased ambition by the year 2030. The proposal⁹ for Ireland is to increase the GHG emission reduction target from 30% to 42% relative to 2005 levels.
- 4.47 In relation to the conclusion within Chapter 9 (section 9.7.2.2) of the EIAR that the impact of the Proposed Development on climate will be "*indirect, long-term, negative and slight*", it is noted that the Institute of Environmental Management and Assessment (IEMA) guidance note on Assessing Greenhouse Gas Emissions and Evaluating their Significance (IEMA 2017) advises that all carbon emissions contribute to climate change and in the absence of a defined threshold (e.g. national sector-specific targets and trajectories), any increase (or decrease) in carbon emissions may be considered as significant. In contrast, where emissions can be compared to an existing carbon budget (in this case the EU-wide ETS), the percentage impact the project will contribute to climate change can be determined. Consequently, the greater the project's carbon budget, the greater its significance.
- 4.48 The ETS is a "cap and trade" system where an EU-wide limit, or cap, is set for participating installations. Thus, the geographical location of a given development within the EU is not relevant as there is only one EU-wide target which is applicable to the ETS and thus the cumulative direct and indirect climate assessment of relevance in this context is the GHG emissions associated with the EU under the ETS. When viewed in this context, on an EU-wide basis, where the ETS market in 2018 was approximately 1,655 million tonnes CO₂eq, the impact of the emissions from the proposed development will be less than 0.02% of the total EU-wide ETS market. Thus, where there is a medium sensitivity environment and the magnitude of impact of the scheme is small, this equates to a slight impact.
- 4.49 In terms of the specific references to CO₂ emissions within the appeal, the emissions of the development will be associated with the EU under the ETS as outlined in Section 9.7.2.2 of the EIAR. Thus, the CO₂ national emission figures under the Effort Sharing Legislation, which excludes the ETS, will not be compromised by the proposed development.

⁸ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law')

⁹ COM(2021) 555 Final Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 2018/842 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement (dated 14/07/2021)

- 4.50 As outlined in Section 9.7.2.3 of the EIAR, NO_x emissions associated with the electricity demand over the course of one year (i.e. 1,261 GWh based on 144MW for 8,760 hours per annum) will equate to 420 tonnes per annum which is 0.65% of the National Emission Ceiling limit for Ireland from 2020 onwards. Similarly, as outlined in Section 9.7.2.3 of the EIAR, SO₂ emissions associated this electricity over the course of one year (1,261 GWh) will equate to 159 tonnes per annum which is 0.38% of the National Emission Ceiling limit for Ireland from 2020. Additionally, as outlined in Section 9.7.2.3 of the EIAR, NMVOC emissions associated this electricity over the course of one year (1,261 GWh) will equate to 478 tonnes per annum which is 0.87% of the National Emission Ceiling limit for Ireland from 2020.
- 4.51 Thus, as outlined in Section 9.7.2.3 of the EIAR, the NO_x, SO₂ and NMVOC indirect emissions associated with the operation of the proposed development are indirect, long-term, negative, and slight with regards to regional air quality. This is likely to be a worst-case assessment because, as discussed in Section 2.4 of Chapter 2 of the EIA Report, the Operator's current electricity supplier's fuel mix consists of energy from wind farms they own and operate, third party renewable energy projects that they have long term power purchase agreements in place with and Guarantees of Origin (GOs) as described in Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009, rather than based on the current national fuel mix.
- 4.52 It should be noted that the projected CO₂ emissions (as quoted in Section 9.7.2.2 of the EIAR) associated with the proposed development are calculated based on the 2018 grid mix¹⁰. It is also likely that the national fuel mix will rapidly decrease in carbon intensity as the grid reaches the 70% in renewables predicted for 2030. Therefore, the servicing of the proposed development entirely from the national grid will allow for a reduction in the emissions associated with the proposed development over time. This fact was acknowledged in the Board's consideration and subsequent recent grant of permission for the data centre development under MCC Reg. Ref.: RA/191735 and ABP Ref.: 307546 at Bracetown and Gunnocks, near Clonee. The Inspector's Report stated:
- "Notwithstanding the anticipated demand for energy to serve the data centre project along with the additional demand consequent on the omission of the energy centre and taking account of the EU-wide Emission Trading Scheme (ETS), I am satisfied that this issue will be ultimately addressed as Ireland moves towards meeting its objective of providing 70% of its energy from renewable sources by 2030 in accordance with the targets set in the Climate Action Plan, 2019."*
- 4.53 It was further noted by the Inspector that the "Government Statement on the Role of Data Centre's in Ireland's Enterprise Strategy" states that "The increased renewable electricity requirement linked to energy intensive investments will be mainly delivered by the development of the new Renewable Energy Support Scheme (RESS) which will also reflect falling costs across a range of renewable technologies and an ambition to increase community & citizen participation in renewable energy projects".
- 4.54 The appropriate emission ceilings for NO_x, SO₂, NMVOC and PM_{2.5} are outlined in Section 9.2.1.3 of the EIAR, i.e. the "Gothenburg Protocol" as follows:

"In 1999, Ireland signed the Gothenburg Protocol to the 1979 UN Convention on Long Range Transboundary Air Pollution. In 2012, the Gothenburg Protocol was revised to include national emission reduction commitments for the main air pollutants to be achieved in 2020 and beyond and to include emission reduction commitments for PM_{2.5}. In relation to Ireland, 2020 emission targets are 25 kt for

¹⁰ This was based on the latest available reporting from 2020, which utilises the 2018 grid mix for the purposes of calculations.

SO₂ (65% below 2005 levels), 65 kt for NO_X (49% reduction), 43 kt for VOCs (25% reduction), 108 kt for NH₃ (1% reduction) and 10 kt for PM_{2.5} (18% reduction).

European Commission Directive 2001/81/EC and the National Emissions Ceiling Directive (NECD), prescribes the same emission limits as the 1999 Gothenburg Protocol. A National EPA Programme for the progressive reduction of emissions of these four transboundary pollutants has been in place since April 2005 (DEHLG, 2004; 2007). The data available from the EU in 2020 (EPA, 2020b) indicated that Ireland complied with the emissions ceilings for SO₂ in recent years but failed to comply with the ceilings for NMVOCs, NH₃ and NO_X. Directive (EU) 2016/2284 "On the Reduction of National Emissions of Certain Atmospheric Pollutants and Amending Directive 2003/35/EC and Repealing Directive 2001/81/EC" was published in December 2016. The Directive applies the 2010 NECD limits until 2020 and establish new national emission reduction commitments which will be applicable from 2020 and 2030 for SO₂, NO_X, NMVOC, NH₃, PM_{2.5} and CH₄. In relation to Ireland, emission targets applicable from 2020 are 25 kt for SO₂ (65% on 2005 levels), 65 kt for NO_X (49% reduction on 2005 levels), 43 kt for VOCs (25% reduction on 2005 levels), 108 kt for NH₃ (1% reduction on 2005 levels) and 10 kt for PM_{2.5} (18% reduction on 2005 levels). In relation to 2030, Ireland's emission targets are 10.9 kt (85% below 2005 levels) for SO₂, 40.7 kt (69% reduction) for NO_X, 51.6 kt (32% reduction) for NMVOCs, 107.5 kt (5% reduction) for NH₃ and 11.2 kt (41% reduction) for PM_{2.5}."

- 4.55 There is no "emission ceiling" for electricity GHG emissions as they are captured under the ETS. Section 9.2.1.4 of the EIAR submitted with the current application details the relevant legislation surrounding the ETS and Effort Sharing legislation.
- 4.56 It is respectfully submitted that this section of the current appeal response supports the conclusion of the EIAR submitted with the application, that the proposed development will have an *"indirect, long-term, negative and slight"* impact on the environment in relation to climate as stated in Section 9.7.2.2 of the EIAR.
- 4.57 The appeal (at Page 3) states that the projected rate of data centre development in Ireland *"is inconsistent with national climate and environmental policy objectives"*. The appeal goes on to state that the trajectory of data centre development and associated greenhouse gas emissions is *"not conducive to the achievement of Ireland's legally binding EU renewable energy targets or the realisation of its national climate policy goals"*.
- 4.58 These points in the appeal do not acknowledge or measure the significant potential for GHG avoidance/displacement associated with the location of data centres in Ireland and fail to recognise that data centres represent a significantly more efficient means of data storage when compared to a distributed model of enterprise data storage by individuals and companies (or 'enterprise sites'). AWS data centres are more energy efficient than enterprise sites due to comprehensive efficiency central to the design of the proposed development. Moving storage, computing and other ICT services to the AWS cloud promotes energy efficiency. In a June 2020 report, the International Energy Agency noted: *"Hyperscale data centres are very efficient large-scale cloud data centres that run at high capacity, owing in part to virtualisation software that enables data centre operators to deliver greater work output with fewer servers. The shift away from small, inefficient data centres towards much larger cloud and hyperscale data centres is evident in the shrinking share of data centre infrastructure in total energy demand..."*¹¹

¹¹ IEA Report on Data Centres and Data Transmission Networks (June 2020) Available at: <https://www.iea.org/reports/data-centres-and-data-transmission-networks>

- 4.59 AWS are committed to energy efficiency as a core part of their operations. Across their business, from design through to operations, they relentlessly focus on achieving enhanced efficiency. As set in paragraph 8.13 of the planning report submitted with the current application *"The Operator's customers in Ireland, and around the world, are also able to support their own goals to become sustainable by moving to the cloud. In fact, the results of a recent study¹² of US enterprise data centres by 451 research found The Operator's data centres to be 3.6 times more energy efficient than the traditional alternative and achieved an 88% reduction in carbon footprint for workloads that moved from on-premises data centres to The Operator's Cloud Network, helping their customers to become greener in the cloud."*
- 4.60 This energy saving accrues across the sector and continues to show gains. A study published in 2020 by Science¹³ Magazine, found that while cloud computing productivity has grown globally by 550% between 2010 and 2018, energy consumption rose in tandem during the same period by just 6%, demonstrating the energy efficiency improvements of the industry, most notably by hyperscale data centres.
- 4.61 Having regard to the foregoing, it is submitted that this ground of appeal put forward by the appellant is without basis, and it is noted that a robust assessment of indirect emissions associated with the proposed development has been provided within the EIAR submitted, to enable the Board as competent authority to conduct an EIA of the proposed development.

Cumulative Assessment of Climate Impact

- 4.62 The appeal states that the assessment of cumulative impacts within the EIAR submitted was not sufficient to meet the requirements of the EIA Directive. It is further stated that the appellant's concerns were not afforded sufficient consideration in the Planner's Report prepared by the Planning Authority. This section of the appeal response was prepared with input from AWN Consulting.
- 4.63 In summary, as set out below the cumulative assessment provided within the EIAR which accompanied the application, fully accords with the requirements of the EIA Directive, domestic legislation, and guidance on the preparation of Environmental Impact Assessment Reports. Therefore, the argument put forward by the appellant is without basis.

Sufficiency of Cumulative Assessment within the EIAR and Cumulative Assessment of Potential Future Third Phase of Development

- 4.64 In relation to the contention that the assessment of cumulative impacts within the EIAR was insufficient, it is noted that the cumulative air quality and climatic impact of proposed development in combination with the permitted first phase of development (permitted under Reg. Ref.: RA191735) and the indicative future third phase of development on the wider landholding have been considered in Section 16.6 of Chapter 16 Cumulative Impact of the EIAR.
- 4.65 A thorough examination of the surrounding area (as described in Section 3.4, Chapter 3 Planning and Development Context of the EIAR), which considered

¹² Report by Black and White, 2019, Available at: <https://d39w7f4ix9f5s9.cloudfront.net/e3/79/42bf75c94c279c67d777f002051f/carbon-reduction-opportunity-of-moving-to-aws.pdf>

¹³ Masanet, Eric; Shehabi; Arman, Lei; Nuo, Smith, Sarah; Koomey, Jonathan; "Recalibrating global data center energy-use estimates", Sciencemag.org, February 28, 2020, Vol. 367, Issue 6481; ("Expressed as energy use per compute instance, the energy intensity of global datacenters has decreased by 20% annually since 2010....").

granted planning permissions in the Drogheda and Rathmullan areas, was undertaken by the EIA consultants (i.e. AWN Consulting). Given the context of the location of the proposed development, there exists limited development of significance which could have been taken into account for the cumulative air quality or climatic assessment. The cumulative assessment has taken account of all relevant existing, permitted, and proposed development in the area, which in combination with the proposed development, could have produced a cumulative impact.

- 4.66 The appeal states that the potential future data centre (the third phase of development on the wider landholding) has not been considered in relation to cumulative impacts. The appeal states *"while the existing data centre on site is considered in conjunction with the data centre in question with regard to cumulative emissions, the third data centre proposed for the site is not. This omission renders the climate assessment incomplete."* The appellant is mistaken in this assertion and the potential future third phase of development has been assessed cumulatively within the EIAR submitted.
- 4.67 With regard to climate impact, in Appendix 9.3 of the EIAR there is a detailed cumulative air quality assessment whilst in Section 9.7.2.2 the following is stated:
- "The Proposed Development in conjunction with the Permitted Development and future indicative development, will consume 96MW (this was a typographical error and should read 144MW¹⁴) per year in total which translates to 1,261 GWh annually. This equates to approximately 473,040 tonnes of CO₂eq per year. This will have an indirect, long-term, negative and slight impact on climate."*
- 4.68 As stated above, there was a typographical error in the above quoted paragraph of the EIAR and the reference to 96MW should have instead referred to 144MW. For clarity, the CO₂ emissions associated with the permitted development, the current proposed development, and the potential future third phase of data centre development on the wider landholding are as follows:
- Permitted Development (under Reg. Ref.: RA191735) - 48MW of power this equates to 420 GWh annually based on the assumption of the national fuel mix. This translates to approximately 157,680 tonnes of CO₂eq per year.
 - Proposed Development - 48MW of power this equates to 420 GWh annually based on the assumption of the national fuel mix. This translates to approximately 157,680 tonnes of CO₂eq per year.
 - Indicative Third Phase - 48MW of power this equates to 420 GWh annually based on the assumption of the national fuel mix. This translates to approximately 157,680 tonnes of CO₂eq per year.
- 4.69 As highlighted previously, the above figures represent a worst case scenario as it is likely that the national fuel mix will rapidly decrease in carbon intensity as the grid reaches the 70% in renewables predicted for 2030.
- 4.70 In terms of air quality, the cumulative and indirect impact assessment is discussed in the main body of Chapter 9 taking into account the potential future third phase of development on the wider landholding.

¹⁴ In section 16.11 of the EIAR relating to Material Assets the correct figure of 144MW is reported. Also, in Section 9.7.2.3 "Regional Air Quality" the correct figure of 144MW is reported as follows: *the NOX emissions associated with this electricity over the course of one year (i.e. 1,261 GWh based on 144MW for 8,760 hours per annum) will equate to 420 tonnes per annum which is 0.65% of the National Emission Ceiling limit for Ireland from 2020 onwards.*

4.71 Section 9.2.3.1 of the EIAR submitted states:

"Air dispersion modelling was carried out by AWN Consulting Ltd. using the United States Environmental Protection Agency's regulated model AERMOD (Version 19191). AERMOD is recommended as an appropriate model for assessing the impact of air emissions from industrial facilities in the EPA Guidance document "Air Dispersion Modelling from Industrial Installations Guidance Note (AG4)" (2020a).

The modelling of air emissions from the site was carried out to assess the concentrations of nitrogen dioxide (NO₂) beyond the site boundary and the consequent impact on human health.

The assessment was undertaken in order to quantify the impact of the Proposed Development and the existing baseline level of pollutants on ambient air quality concentrations. In addition to the assessment of the Proposed Development, a further cumulative scenario has been modelled to assess the combined impact from the Proposed Development and the back-up diesel generators associated with an indicative future data storage building (Building 3) at the same site, to be located to the north of the Proposed Development (see Appendix 9.3)".

- 4.72 The cumulative impact scenario assessed the combined impact of the proposed development as outlined above as well as the emergency operation and scheduled testing of 26 additional no. back-up diesel generators associated with an indicative future data centre building at the same landholding, to be located to the north of the proposed development (see Appendix 9.3 of the EIAR).
- 4.73 The cumulative impact of the proposed development with the permitted development and the indicative future development on the overall landholding have been considered for each environmental aspect (i.e. Population and Human Health, Land, Soils, Geology and Hydrogeology, Hydrology, Biodiversity, Air Quality and Climate, Noise and Vibration, Landscape and Visual, Archaeology, Traffic and Transportation, Material Assets, and Waste Management) in Sections 16.2 -16.12 of Chapter 16 (Cumulative Impact), with references included therein as appropriate to each to the impacts identified within each chapter of the EIAR.
- 4.74 A thorough examination of planned, permitted and existing developments in the surrounding area was undertaken. A list of the other developments considered in the cumulative Impact assessment is provided in Appendices 3.1, 3.2 and 3.3 of Chapter 3 (Planning and Development Context). The cumulative assessment has taken into account all relevant existing, permitted, and proposed development in the area, which in-combination with the proposed development, could have produced a cumulative impact.
- 4.75 It is noted that apart from the indicative future development (the potential third phase of data centre development, and electricity transmission development) on the wider landholding, there are no other known developments which could result in a cumulative impact on the environment during construction or operational phases.
- 4.76 As noted in Section 2.2.4 and 2.2.6 of Chapter 2 within the EIAR (Description of the proposed development), the permanent power supply to the proposed development will be provided via a (now) permitted new 110kV gas insulated switchgear (GIS) substation in conjunction with a dropdown mast-feed off an existing 110kV overhead power line in the northwest corner of the wider landholding.
- 4.77 The provision of the substation and connection to the 110kV overhead line was subject to its own application to An Bord Pleanála under section 182A of the 2000

Act. An EIAR was submitted to An Bord Pleanála in November 2020 as part of the application, which was approved by the Board, with conditions, on 28th April 2021 (ABP Ref. 308628).

- 4.78 Construction work on the development permitted under ABP Ref. 308628 commenced at the end of Q2 2021, with construction and commissioning targeted to be completed by the end of Q3 2022. The proposed development is not targeted to commence construction until Q2/Q3 2023 (subject to grant of planning permission) and as such, the permanent power supply infrastructure will already be in place and fully operational. Therefore, the construction phase of the permitted electricity transmission development will not overlap with the construction of the proposed development.
- 4.79 The cumulative impact of operation of the permitted electricity transmission development with proposed development have been considered for each environmental aspect (i.e. Population and Human Health, Land, Soils, Geology and Hydrogeology, Hydrology, Biodiversity, Air Quality and Climate, Noise and Vibration, Landscape and Visual, Archaeology, Traffic and Transportation, Material Assets, and Waste Management) in Sections 16.2 -16.12 of Chapter 16 (Cumulative Impact), with references included therein as appropriate to each to the impacts identified within each chapter of the EIAR.
- 4.80 The cumulative assessment has been undertaken in Chapter 16 (Cumulative Impact) of the EIA Report to the extent possible, having regard to information available on the indicative future data centre development and the 110kV substation and 110kV grid connection to the north of the site and other planned, permitted and existing developments in the vicinity.

Consideration of Cumulative Impact by the Planning Authority

- 4.81 The appeal raises a concern that the Planner's Report completed by the Planning Authority did not adequately deal with the concerns of the appellant as raised within their observation on the planning application. This is contested as the Planning Authority considered the EIAR submitted and conducted an EIA of the proposed development as documented within the Planner's Report. In any event it is respectfully submitted that this is a moot point. The Board will consider the current application *de novo* and will undertake its own Environmental Impact Assessment of the proposed development as the competent authority, including consideration of the points raised within the observations on the application and within the current appeal.
- 4.82 It is noted that there is a typographical error in the last paragraph of Page 25 of the Meath County Council's Planner's Report. In that paragraph it states that "*the use of electricity in conjunction with the existing data centre would indirectly result in emissions of some 473,040 tonnes of CO_{2eq} per annum*". However, in fact this figure (as set out within Section 9.7.2.2 of the EIAR) relates to the permitted development, the proposed development, and the future indicative development on the wider landholding.
- 4.83 As set out above, the EIAR, which the Planning Authority did consider in carrying out Environmental Impact Assessment of the proposed development, contains the correct information which clearly demonstrates that the indicative future phase of development on the wider landholding was cumulatively assessed.
- 4.84 As set out previously within this response document, section 9.7.2.2 of the EIAR itself included a typographical error, and should have stated that the combined permitted, proposed, and indicative future developments will consume 144MW per year (and not 96MW as stated). It is respectfully requested that the Board take

account of this correct figure in carrying out their Environmental Impact Assessment of the proposed development.

Consideration of the Development in Combination with other Data Centre Developments

- 4.85 In relation to the assessment of cumulative impacts, we note the contention within the observation made by the appellant to the Planning Authority, which stated that the applicant ought to consider the impact of the proposed development cumulatively with all other existing and permitted data centre developments, regardless of their location in Ireland. The observation stated that it is *"insufficient to simply look at nearby development and or the effects on microclimate, especially when renewable energy targets are set for Ireland are on a nationwide basis"*.
- 4.86 In response to this argument, it is noted that there is nothing in the Environmental Impact Assessment Directive to suggest that what is envisaged is an approach which would require the proponents of development to specifically consider developments that are as geographically disparate as the previous submission by the appellant describes. There is no provision of the Directive that suggests that such a national or sectoral approach is required.
- 4.87 That there is a realistic geographic extent to the exercise of cumulative assessment and that it involves projects having a reasonable degree of proximity to each has been clear from the approach of the Commission and the European Court from early in the EIA regime. In Case C-392-96 (Opinion of Advocate General La Pergola, delivered on 17 December 1998), the proceedings brought by the Commission (against Ireland) asserted that Ireland's practice of setting land area thresholds (for the purpose of the application of EIA to certain land uses such as afforestation, peat extraction and land reclamation) had incorrectly transposed Article 4(2) of the Directive. The Commission's principal concern with Ireland's approach was its potential for incremental and cumulative effects to be missed and, in highlighting that concern, it is clear that the Commission (and the Advocate General) envisaged that, for the purpose of such cumulative assessment, 'projects' comprised projects in geographic proximity to each other.
- 4.88 At paragraph 9 of his Opinion the Advocate General, summarising and adopting the Commission's stance, stated: *'Likewise, the Irish Authorities did not take due account of the way in which projects of the classes at issue may, because of their progressive effects over time (hereinafter 'incremental effects'), have a significant impact on the environment even though they do not exceed the thresholds set. Moreover, where various interested parties undertake a number of separate projects, none of which exceeds the thresholds, but which are carried out at the same time and in adjoining areas, their cumulative and incremental effects may cause environmental damage and should not therefore be exempted from prior assessment under the Directive.'* [emphasis added]. Elsewhere the Advocate General's Opinion, in relation to cumulation of effects, refers to projects which *"as a whole, affect the same area"* (para 37) and (also at para. 37) the Opinion refers to the need to assess *'the full impact of the operation to which the projects, viewed individually or collectively, subject a section of the environment which is recognized as deserving of protection'*.
- 4.89 At paragraph 40, the Advocate General, in accepting that cumulative or incremental effects are within the ambit of the Directive, referred to *"the aggregation of the individual project with other projects in the sensitive area of its location."* [emphasis added]. This approach of the Advocate General to cumulative effects went unquestioned by the main Court in its decision (Judgment delivered 21 September 1999). In Case C-404-09 [*Commission -v- Spain*, judgment delivered 24 November 2011], the Court of Justice disagreed with Spain that a cumulative assessment (of

the effects of an open cast mine with other previously permitted such mines) was unnecessary and a critical factor for the Court was that the mines were all "situated in proximity to each other"¹⁵ [see in particular paragraph 80 of case C-404-09.]. It is clear from the decision of the Court there that the condition of proximity (of all three open-cast mines projects to each other) served an important purpose relevant to the Directive - by enabling the identification and *measurement* (cumulatively) of effects on *specific environmental factors* (e.g. a specific population of flora or fauna in a region, a host habitat, a transit route, a critical area or environmentally sensitive location etc).

4.90 There is a significant number of non-minor sources of carbon emissions in Ireland and the type of approach advocated in the submission by the appellant in relation to cumulative effects at the national and sectoral scales is principally the role of Strategic Environmental Assessment and higher-level policies. It is not considered relevant for project-specific Environmental Impact Assessments. Such an approach would require applicants to engage in an extremely onerous, open-ended, and spiralling series of assessments and measurements that is not mandated or envisaged by the Directive; nor by any of the relevant guidance. This is not a matter which is required to be addressed for the proposed development or for any individual proposal.

4.91 For example, the EPA Daft Guidance on the preparation of Environmental Impact Assessment Reports states the following:

"Separate assessments may substantially address climate and those assessments should be referred to where appropriate. For example; assessment of climate change effects at a higher decision-making level in a SEA or consideration of effects of climate change on a project in a Flood Risk Assessment. See EU 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment' for more on this."

4.92 The relevant guidance emphasises the importance of providing the information that is available to project developers in relation to climate such as the direct GHG emissions as well as other proximate sources, and the national GHG emissions (which represent the collective emissions from all sources nationally) as well as national GHG reduction targets.

4.93 It is submitted that the requirements of the EIA Directive and associated guidance and national policy with respect to the assessment of cumulative impacts have been fully met within the documentation submitted to date, and that the Board have sufficient information to conduct an Environmental Impact Assessment of the proposed development in accordance with the Directive.

Alleged Dilution of Renewable Energy Penetration

4.94 The appeal argues that notwithstanding the fact that the development will be subject to an emissions permit and will form part of the EU Emissions Trading Scheme (ETS), the development will increase demand for electricity overall and thereby reduce the level of renewable power available to non-ETS sectors. This section of the appeal response was prepared with input from the applicant.

4.95 In this regard we note the responses set out in the following paragraphs provide details pertaining to the steps the Operator of the proposed development has taken to realise significant new renewable energy generation, commensurate to their electricity demand in the State. Therefore, it is not correct to state that the proposed

¹⁵ Para. 82 of the Judgement refers.

development would result in the dilution of the impact of renewables on non-ETS sectors.

- 4.96 The Operator recognises that human-induced climate change is a real and serious threat and that action is needed; Amazon has a strong focus on sustainability and has programs in place to reduce its carbon footprint. In 2019, Amazon co-founded The Climate Pledge, a commitment to net zero carbon by 2040. Since then, a growing list of major companies and organizations have joined The Climate Pledge. As part of this commitment, AWS is investing and innovating in efficiency in every aspect of their operations and is on a path to be powered by 100% renewable energy by 2025 – five years ahead of its original 2030 commitment.
- 4.97 Due to their nature, data centres require access to power at national grid level. In the vast majority of cases, through lack of physical space and the urban context of where data centres are located, it is not possible or appropriate to meet all power needs through on-site renewables. To meet its net zero carbon commitment and 100% renewable energy goal, AWS is working to decarbonise the electricity that powers its facilities.
- 4.98 Amazon has announced more than 230 renewable energy projects, with the potential to generate 10 gigawatts (GW) of electricity and deliver more than 24 million megawatt hours of clean electricity annually. Amazon is the largest corporate renewable energy buyer in Ireland, Europe, and globally. To date, they have announced 2.8GW of projects in Europe, including solar and wind projects in France, Germany, Italy, the Netherlands, Spain, Sweden, the UK, and importantly, Ireland.
- 4.99 As of June, 2021 Amazon has announced twenty three new renewable energy projects in Europe, making the operator the largest corporate purchaser of renewable energy in Europe. These renewable wind and solar projects will deliver clean energy onto the grids in Ireland, the UK, Sweden, Finland, Italy, France, Netherlands Germany and Spain, without imposing additional costs to consumers in any of these countries.
- 4.100 As set out previously at section 4.32 of this response document, this includes three utility scale wind projects connected to the Irish grid and providing 229MW of new renewable capacity. These projects will help decarbonize the Amazon's own operations while supporting Ireland's renewable Energy Targets. Ireland has a set a target to have 70% of electricity to come from renewable sources by 2030 with 15% of this to be delivered by Corporate Power Purchase Agreements (CPPA). Amazon has led the way and is now the largest corporate buyer of renewable energy in Ireland, Europe and the world.
- 4.101 To set a high bar for sustainability, AWS enables 'net new' projects on the grids on which it operates (i.e. these projects provide new sources of renewable energy to the grid, which accelerates the path to a decarbonised electricity grid).
- 4.102 In conclusion it is respectfully submitted that the foregoing ground of appeal is without any basis in planning policy, and in any event is strongly contested with reference to the Operator's actions to achieve net zero carbon across their business by 2040 and being powered by 100% renewables by 2025.

Alleged Impact on the National Grid

- 4.103 The appeal states that the connection of data centres to the national grid has resulted in negative impact on the national electric grid. In this regard, An Taisce acknowledge that the proposed development is outside the Greater Dublin Area. The appeal states "*while we acknowledge that the subject proposal is outside the Greater*

Dublin Area; An Taisce nevertheless highlights the precarious condition of the national electric grid, which is being placed under increasing pressure from data centre grid connections.” The appeal goes on to make reference to a current Commission for the Regulation of Utilities (CRU) consultation, and makes reference to media coverage.

- 4.104 This section of the current appeal response has been prepared with input from the applicant.
- 4.105 In considering the appropriate site for the proposed development, the Applicant has taken account of national, regional, and local planning policy and the Government Statement ‘The Role of Data Centres in Ireland’s Enterprise Strategy’¹⁶ which states that the *“Government endorses, supports and promotes the appropriate and timely delivery of data centres across the regions”*.
- 4.106 The location of the proposed development also took cognisance of the 2019 Climate Action Plan¹⁷, which commits to *“Implement energy actions under the Government Statement on the Role of Data Centres in Ireland’s Enterprise Strategy to ensure that large demand connections are regionally balanced to minimise grid reinforcements”*.
- 4.107 The site selection process is outlined in Section 4.3 of the EIAR. In selecting the chosen site, which can accommodate a potential of 3 data centres, the Operator consulted with various stakeholders including the Industrial Development Agency (IDA), EirGrid and Irish Water. On the basis of these consultations and other matters outlined in the EIAR, the site was selected, and the previously permitted first data centre and associated power infrastructure are now being constructed.
- 4.108 EirGrid, the state-owned company that manages and operates the transmission grid across the island of Ireland operate a two stage process for data centre connections under their ‘Data Centre Connection Offer Process and Policy’¹⁸. EirGrid provide their customers with a connection method during Stage 1. This connection method is reserved by EirGrid for that customer while planning permission is being secured by the customer. Stage 2 commences only once planning permission is achieved by the customer. The connection offer then issues to the customer after Stage 2 and if accepted will book that customer’s required capacity on the transmission system. This new EirGrid policy seeks to reduce speculative connection applications while allowing EirGrid to better forecast demand requirements.
- 4.109 The appropriateness of the subject site to accommodate a development of this nature is also evidenced in the direct precedent for data centre development at this location (under Reg. Ref.: LB191735). Additionally, permission has been granted by the Board under section 182A of the Act for the development of electricity transmission infrastructure to serve development at this location including the permitted, currently proposed, and potential future development (ABP Ref.: 308628-20 refers). On the basis of these permissions, the electrical infrastructure to serve the proposed development is permitted on site, as is the first phase of data centre development on the landholding.

¹⁶ The Role of Data Centres in Ireland’s Enterprise Strategy (June 2018). Available at: <https://www.enterprise.gov.ie/en/Publications/Publication-files/Government-Statement-Data-Centres-Enterprise-Strategy.pdf>

¹⁷ Climate Action Plan 2019. Available at: <https://assets.gov.ie/25419/c97cdecddf8c49ab976e773d4e11e515.pdf>

¹⁸ EirGrid Data Centre Connection Offer Process and Policy (17 July 2020). Available at: https://www.eirgridgroup.com/site-files/library/EirGrid/Data-Centre-Connection-Offer-Process-and-Policy_v2_July-2020.pdf

- 4.110 As set out in EIAR (Section 16.1 refers) *“subject to planning approval, the Proposed Development is targeted to commence construction in Q2/3 2023 and be fully operational by Q2/Q3 2026”*. AWS acknowledges the short term unexpected generation challenges on the grid, which AWS understands are expected to be resolved in the short term. Regarding longer term constraints, there are a number of steps being taken to resolve these matters. These include the continued development of renewable energy via the government planned RESS 2 support scheme¹⁹, the operator’s desire to continue to invest in CPPAs in Ireland and EirGrid’s revised grid plan “Shaping our Electricity Future” which sets out how the grid will support both delivering additional economic growth while achieving the transition to have 70% of electricity generated by renewable sources by 2030.
- 4.111 The appeal states *“we would also assert the need to resolve grid capacity issues and give way to forthcoming policy formation prior to the granting of approval for the proposed data centre”*.
- 4.112 In response to this, it is noted that were Planning Authorities and An Bord Pleanála to reject all data centres planning applications on the grounds outlined in the appeal, then no data centre (or other large industrial energy user for that matter) would be able to secure planning permission, thereby stalling economic growth.
- 4.113 Furthermore, in relation to this ground of appeal and the reference to ‘forthcoming policy formation’, it is noted that there are existing national, regional, and local planning policy documents that provide a framework for the consideration of the proposed development. The current application must be decided on the basis of the existing policy context. Taking the possible contents of any forthcoming unpublished policy into consideration in relation to the proposed development would place the planning process in a de facto state of limbo, as there will always be some possible future change in the policy context.
- 4.114 There are a range of plans in place from national to local level which provide ample planning policy and guidance on the delivery, location, and development of data centres including the proposed development (for example the NPF, RSES, and the Meath County Development Plan as set out within Sections 7 and 8 of the Planning Report submitted with the application). Therefore, the Board would not be precluded from granting permission for the proposed development and any such decision would not be premature in planning policy terms. As has been set out within the Planning Report and EIAR submitted, and reiterated within this appeal response, the proposed development accords with the planning policy set out within the NPF, the RSES for the EMRA, and the Meath County Development Plan.
- 4.115 It was stated by the An Bord Pleanála Inspector in respect of the Apple data centre appeal (An Bord Pleanála Ref. PL07.245518) that:
- “in making an assessment of the merits of specific proposals such as that currently under assessment the decision has to be made in the context of the nature of the facility, the clear need for such facilities and the necessity that it would locate somewhere. In the absence of a clear policy on this form of development at a national level it is in my opinion very difficult for a body such as An Bord Pleanála to make a decision that this form of development is not acceptable in principle.”*
- 4.116 It is noted that the Board’s decision in respect of the Apple data centre development was made prior to the introduction of the National Planning Framework and the RSES for the EMRA, which now provide an enhanced planning policy framework

¹⁹ Renewable Electricity Support Scheme RESS 2 Auction Timetable (22 June 2021) Available at: [http://www.eirgridgroup.com/site-files/library/EirGrid/RESS-2-Auction-Timetable-\(R2AT\).pdf](http://www.eirgridgroup.com/site-files/library/EirGrid/RESS-2-Auction-Timetable-(R2AT).pdf)

and strong policy support for the provision of data centre development in Ireland. In light of the compliance of the proposed development with these planning policy documents, it is submitted that the Board should uphold the decision of the Planning Authority to grant permission for the proposed development.

- 4.117 The appellant's suggestion that the Board should "*resolve grid capacity issues and give way to forthcoming policy formation prior to the granting of approval for the proposed data centre*" is not well founded. It is respectfully submitted that the Board is obliged to consider an application for planning permission in the context of existing law, policy and guidelines, and not proposals for potential changes of policy. In the case *Element Power Ireland Ltd v An Bord Pleanála* [2017], the Board took a lack of policy into account in refusing permission and that approach was found by the High Court to be invalid. The Court held that the Board was obliged to consider an application for planning permission in the context of existing law, policy and guidelines, and not proposals for potential change. At paragraph 49, the Court noted that:

"The Board must operate within the four corners of the statutory framework established under European law and the relevant domestic legislation, particularly the 2000 Act and planning regulations, existing statutory guidelines, and local policy as set out in existing county development plans. The court may look at what might be said to be required or excluded, by implication, by virtue of the subject of matter, scope and purpose of this framework. The Board cannot take decisions based on considerations that fall outside this framework, or based on documents that are preliminary, scoping, proposed, consultative, or otherwise lack the status of statutory guidelines that the Board is obliged to consider."

- 4.118 Additionally, at paragraph 51, the Court stated "*nothing...in s.143 [of the Planning and Development Act 2000], authorises the Board to take into account drafts, or the prospect of new or modified government or local authority policy or objectives. I do not discern any provision in the 2000 Act which would entitle the Board to base a decision to refuse permission on the absence of national or local strategy or policy.*"
- 4.119 Furthermore, in relation to the impact of the proposed development on the national grid, it is noted that the EIAR submitted included an assessment of impacts on Material Assets, including electricity supply. It has been concluded that the cumulative impact in terms of material assets will be 'not significant'. This is based on the contents of Section 16.11 of the EIAR (Material Assets) of Chapter 16 (Cumulative Impacts), and described in Chapter 14 (Material Assets).
- 4.120 The proposed development accords fully with national, regional, and local planning policy. Further, the application follows the process as set out by the Energy Regulator for electricity connections. The absence of, or potential changes to policies is not material consideration when the proposed development accords with existing policy.
- 4.121 As set out above, there are two separate processes in place in the context of the proposed development. Firstly, the need to secure planning permission to construct the development as provided for under the Planning and Development Act, 2000 (as amended), and secondly the requirement to secure a connection agreement with EirGrid in respect of the electricity required to serve the proposed development. The securing of a connection agreement with EirGrid requires planning permission for a data centre development to be in place in advance. On this basis, any decision by the Board to grant permission for the proposed development would merely allow the developer to move on to the next stage of the EirGrid connection process. The implementation of the development will ultimately be dependent on the securing of

a connection agreement, which in turn is dependent on the availability of power from the national grid.

5.0 CONCLUSION

- 5.1. This response to third party appeals is submitted on behalf of the applicant, Tunis Properties LLC, in relation to the decision of the Planning Authority, Meath County Council, to grant permission for the proposed development at the Drogheda IDA Business and Technology Park, Donore Road, Drogheda, Co. Meath.
- 5.2. We trust the Board will afford the grounds and arguments set out herein due consideration in determining this appeal. Should you have any queries or require any further information please do not hesitate to contact the undersigned.

Yours faithfully,



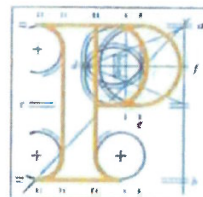
John Spain Associates
39 Fitzwilliam Place
Dublin 2
D02 ND61

**APPENDIX 1 – COPY OF CORRESPONDENCE FROM AN BORD PLEANÁLA
ENCLOSING THE APPEAL BY AN TAISCE**

Our Case Number: ABP-310729-21

Planning Authority Reference Number: 21663

Your Reference: Tunis Properties LLC



An
Bord
Pleanála

John Spain Associates
39 Fitzwilliam Place
Dublin 2
D02 ND61



Date: 05 July 2021

Re: Two-storey data storage facility containing data halls, electrical and mechanical plant rooms, loading bay maintenance and storage space, office administration areas, internal roads and circulation areas, car parking and cycle parking spaces and associated site works. An Environmental Impact Assessment Report (EIAR) will be submitted with the planning application. Drogheda IDA Business & Technology Park, Donore Road, Drogheda, Co Meath

Dear Sir / Madam,

Enclosed is a copy of an appeal under the Planning and Development Act, 2000, (as amended).

As a party to the appeal under section 129 of the Planning and Development Act, 2000, (as amended), you may make submissions or observations in writing to the Board within a **period of 4 weeks** beginning on the date of this letter.

Any submissions or observations received by the Board outside of that period shall not be considered and where none have been validly received, the Board may determine the appeal without further notice to you.

Please quote the above appeal reference number in any further correspondence.

Yours faithfully,

Yvonne McCormack
Administrative Assistant
Direct Line: 01-8737151

BP05

Tel	Tel	(01) 858 8100
Glaao Áitiúil	LoCall	1890 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902

**APPENDIX 2 – COPY OF THE DECISION OF MEATH COUNTY COUNCIL TO GRANT
PERMISSION FOR THE PROPOSED DEVELOPMENT**

Meath County Council
Planning Department
Buvinda House
Dublin Road
Navan
Co. Meath C15 Y291
REG: 00172770



Phone: 046 909 7000 Fax: 046 909 7001

Planning & Development Act 2000 – 2020
NOTIFICATION OF DECISION

TO: Tunis Properties LLC,
John Spain Associates
39 Fitzwilliam Place
Dublin 2



PLANNING REGISTER NUMBER: 21/663
APPLICATION RECEIPT DATE: 12/04/2021
FURTHER INFORMATION DATE:

In pursuance of the powers conferred upon them by the above-mentioned Act, Meath County Council has by Order dated 04.6.2021 decided to **GRANT** PERMISSION to the above named for development of land, in accordance with the documents submitted namely:- the proposed development consists of the following: construction of a two storey (with mezzanine levels at both storeys) data storage facility building with a maximum overall height of c. 25 metres, containing data halls, associated electrical and mechanical Plant Rooms, a loading bay, maintenance and storage space, office administration areas, screened plant and solar panels at roof level, all within a building with a total gross floor area (FGA) of c. 28,566 sq.m. The proposed data storage facility building will be located to the north of the data storage facility building previously permitted under Reg. Ref: LB/191735 and to the south of the gas insulated switchgear substation compound proposed under An Bord Pleanála Ref: 308628-20. Emergency generators (26 no.), emission stacks and associated plant are provided in a fenced compound adjacent to the data storage facility, along with a single emergency house supply generator. MV Building (with a GFA of 249 sq.m), water storage tanks, diesel tanks and filling area, all located adjacent to the proposed data storage facility building. Construction of associated internal access roads and circulation areas, provision of temporary construction access arrangements, footpaths, provision of 50 no. car parking spaces and 26 no. cycle parking spaces within a bicycle shelter. Landscaping and planting, bin store, and all associated site works including underground foul and storm water drainage, and utility cables, on an application site area measuring 3.58 hectares. An Environmental Impact Assessment Report (EIAR) has been prepared and will be submitted to the Planning Authority with the planning application at Drogheda IDA Business & Technology Park, Donore Road, Drogheda, Co Meath, subject to the 15 conditions set out in the Schedule attached.

DATE: 04.6.2021

M. Long
On behalf of MEATH COUNTY COUNCIL

Provided there is no appeal against this DECISION a grant of planning permission will issue at the end of six weeks.

THIS NOTICE IS NOT A GRANT OF PERMISSION AND WORK SHOULD NOT COMMENCE UNTIL GRANT OF PLANNING PERMISSION HAS ISSUED

NOTE:

1. Any appeal against a decision of a Planning Authority under Section 34 of the Planning and Development Act, of 2000-2020 may be made to An Bord Pleanála. Any person may appeal **WITHIN FOUR WEEKS** beginning on the date of the decision.
2. Appeals should be addressed to An Bord Pleanála, 64 Marlborough Street, Dublin 1. An appeal by the applicant should be accompanied by this form. **In the case of a third party appeal, the acknowledgement from the Planning Authority of receipt of the submission or observation made by the person to the Planning Authority at application stage should be submitted and the name of the person, particulars of the proposed development and the date of the decision of the Planning Authority should be stated.**

Guide to Fees payable to the Board

- a. Appeal against a decision of a planning authority on a planning application relating to commercial development¹ made by the person by whom the planning application was made, where the application included the retention of development is € 4,500 or € 9,000 if EIA R/ NIS involved².
- b. Appeal against a decision of a planning authority on a planning application relating to commercial development¹, made by the person by whom the planning application was made, other than an appeal mentioned at (a) is € 1,500 or € 3,000 if EIA R / NIS involved².
- c. Appeal against a decision of a planning authority on a planning application made by the person by whom the planning application was made, where the application included the retention of development, other than an appeal mentioned at (a) or (b) is € 660.
- d. Appeal other than an appeal mentioned at (a), (b), (c) or (f)³ is € 220
- e. Application for leave to appeal is € 110.
- f. Appeal following a grant of leave to appeal € 110.
- g. Any first party appeal solely against contribution conditions under section 48 or 49 of the 2000 – 2020 Acts, as amended, attracts a fee of €220 irrespective of the nature of the application

An appeal will be invalid unless accompanied by the appropriate fee and evidence of payment of submission fee to the Planning Authority.

Submissions or observations to An Bord Pleanála by or on behalf of a person (other than the applicant) as regards an appeal made by another person must be submitted within four weeks of receipt of the appeal by An Bord Pleanála and must be accompanied by a fee of € 50.

Footnote

¹ Commercial development includes 2 or more dwellings. See Board's order determining fees and its appeal guide.

² The higher fee applies where an Environmental Impact Assessment Report(EIA R) or Natura Impact Statement (NIS) was submitted to the planning authority under section 172(1) and / or 177T of the 2000 - 2020 Planning Act or article 103(1) of the 2001-2020 Planning Regulations, as amended except where the appeal relates solely to a section 48 / 49 development / supplementary development contribution scheme and/or a special financial contribution. (refer to (g) above).

³ Applies to:- (i) All third party appeals except where the appeal follows a grant of leave to appeal; (ii) First party normal planning appeals (section 37) not involving commercial or unauthorised development, or an EIA R; (iii) All other appeals (non-section 37).

While every care has been taken to ensure the accuracy and completeness of this information, it is the responsibility of any person / body making an appeal to ensure that their appeal is accompanied by the correct fee.

For more information on Appeals you can contact An Bord Pleanála at:

Tel: 01 - 8588100 or LoCall: 1890 275 175

Fax: 01 – 8722684

E-mail: bord@pleanala.ie

Web: www.pleanala.ie

Schedule of Conditions:

1. The development hereby permitted shall be carried out and completed in accordance with the plans and particulars lodged with the Planning Authority on the 12/04/21 except where conditions hereunder specify otherwise. Where such conditions require details to be agreed with the Planning Authority, the applicant shall agree such details in writing with the Planning Authority prior to commencement of development and the development shall be carried out and completed in strict accordance with the agreed particulars.

REASON: To ensure a satisfactory standard of development in accordance with the approved plans.

2. All mitigation measures and monitoring in respect of the development hereby permitted shall be implemented as outlined in the Environmental Impact Assessment Report (EIAR) and other plans and particulars date received 12/04/21 and in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions hereunder. The developer shall appoint a professional person with appropriate ecological and construction expertise as Environmental Manager to ensure that the mitigation measures identified in the above documents are implemented in full.

REASON: In the interests of clarity and environmental protection.

3. (a) Prior to the commencement of the development hereby permitted, the applicant shall agree a Construction Stage Traffic Management Plan with the planning authority.

(b) The applicant shall implement the remedial and mitigation measures identified in section 13.18 of the EIAR.

REASON: In the interests of road safety and convenience of road users.

4. Building materials, design detail and textural finishes shall be in accordance with the submitted drawings and documentation. Any changes to the materials, detailing and finishes to the buildings from that detailed on the drawings date received 12/04/21 shall only proceed with the written agreement of the planning authority. In the event of such changes being made by the developer, details including samples, where deemed necessary, of the revised materials, colours and textures of all the external finishes to each component of the scheme shall be made available for the Planning Authority for their consideration.

REASON: In the interests of visual amenity.

5. (a) The site shall be landscaped in accordance with the scheme submitted to the planning authority on the 12/04/21. All hard and soft landscaping shall be implemented in full, within the first planting season following completion of the development.

(b) Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development, shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the Planning Authority.

REASON: In the interests of visual amenity.

6. Prior to the commencement of development on site the applicant shall submit a lighting design for the written agreement of the Planning Authority, this design shall include the internal lighting of the site and include measures for the minimising of obtrusive light and glare. The lighting design shall be in accordance with "Meath County Councils: Public lighting Technical Specification & Requirements" The proposed landscape design and layout shall take into consideration the agreed public lighting design and no existing or new trees shall be planted within falling distance of a public lighting column.

REASON: In the interest of public safety and residential amenity.

7. All measures as outlined in the Construction Environmental Monitoring Plan (CEMP) shall be fully implemented for the duration of the construction phase. The CEMP shall include but not be limited to operational controls for dust, noise and vibration, waste management, protection of soils and groundwaters, protection of flora and fauna, site housekeeping, emergency response planning, site environmental policy, environmental regulatory requirements and project roles and responsibilities. The CEMP shall also address extreme of weather (drought, wind, precipitation, temperature extremes) and the possible impacts on receptors and mitigation of same. The CEMP shall be treated as a live document and communicated to all site personnel.

REASON: In the interest of appropriate environmental management.

8. Appropriate preventative measures should be detailed within the CEMP to ensure that non-native invasive species (aquatic and/or terrestrial) are not introduced into the site. These measures should follow as relevant the manual 'The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads' by NRA (2010) and take cognisance of 'The Best Practice Management Guidelines' produced by Invasive Species Ireland (Maguire et al, 2008).

REASON: In the interest of appropriate environmental management.

9. The following requirements and standards shall apply to waste management arising during the construction and operation of the proposed development:
- (a) The Applicant shall prepare a Waste Management Plan (WMP) for the proposed development for the written agreement of the Planning Authority prior to the commencement of any site activity. The WMP shall include but not be limited to project description, legislation requirements, demolition waste, construction phase waste, categories of construction waste, anticipated hazardous waste, non-construction waste, segregation of waste streams, estimated waste generated, waste hierarchy and adherence to same, roles and responsibilities and communication of WMP, details of recovery and disposal sites, details of waste hauliers, record keeping and documentation, waste audit procedures. The WMP shall be prepared in accordance with “Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects” (2006) and “Guidelines for the Management of Waste from National Road Construction Road Projects” (Rev. 2014), the WMP shall also take cognisance of the current Regional Waste Management Plan in particular to the upper tiers of the Waste Hierarchy. All waste generated on site shall be recovered/ disposed off at an authorised facility and transported by an authorised collector. The WMP shall be treated as a live document and communicated to all relevant personnel.
 - (b) All waste generated during construction, including surplus excavation material to be taken off-site, shall be only recovered or disposed of at an authorised site which has a current Waste Licence or Waste Permit in accordance with the Waste Management Acts, 1996 to 2008. This shall not apply to the reuse of excavated material within the applicant’s site boundary.
 - (c) The applicant shall ensure that all waste removed from the site is collected and transported by an authorised collector. The applicant shall ensure that all activities pertaining to the collection and transportation of waste are as detailed on the waste collection permit.
 - (d) The applicant shall manage all waste streams during the construction and commissioning stage of the project in accordance with the DOECLG “ Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects” (2006) and shall take cognisance of the current Regional Waste Management Plan in particular to the upper tiers of the Waste Hierarchy.
 - (e) The Applicant shall provide to the Local Authority, on completion of the works, a comprehensive report detailing the management of the all waste streams generated during the construction and commissioning stages of the project. This shall include but not be limited to type of waste streams, amount of each waste stream generated, destination of waste streams (including final destination if applicable), percentage of waste re-used, recycled, recovered and disposed, and prevention and minimisation initiatives undertaken.

- (f) In the event it is necessary to import soil and stone or topsoil for any element of the proposed development to Applicant shall ensure a Certificate of Registration or Waste Facility Permit as per the Waste Management (Facility and Registration) Regulations 2007, as amended is secured in advance of the works.

REASON: In the interest of effective and efficient waste management.

10. The following standards and requirements shall apply in relation to air and climate change during the construction and operation of the proposed development:
 - (a) Dust emissions shall not exceed 350mg/m²/day.
 - (b) The Applicant shall also include in the CEMP mitigation measures for extreme weather conditions that may affect air quality, in this case extreme high temperatures resulting in drought conditions, and where there may be restrictions on the use of water for conventional dust suppression.
 - (c) The Applicant shall record the actual construction vehicle and plant emissions to air, this shall include all plant used on site and all deliveries to and from the site for the duration of the construction of the project.
 - (d) The Applicant, contractor and sub-contractors shall endeavour to utilise low energy and low emissions vehicles and plant where possible, this shall be detailed in the CEMP.
 - (e) Burning of waste, including green waste, is prohibited on site.
 - (f) Should a developed area, either existing or future, become suitable for a district heating system the Applicant shall provide the necessary infrastructure, technology and plant from the Data Centre to the boundary of the site for connection by others.

REASON: In the interest of air quality management and climate change adaptation.

11. The following requirements shall apply regarding surface water and groundwater protection during the construction and operation of the proposed development:
 - (a) The Applicant shall agree, in writing, with the Local Authority a protocol for reporting and managing accidental spillages during construction and operation stage that may cause soil contamination or ground or surface water pollution.
 - (b) All hydrocarbons, chemicals and oils storage tanks required for the construction and decommissioning stages shall be bunded to a volume not less than the greater of the following:
 - i. 110% of the capacity of the largest tank within the bunded area; or
 - ii. 25% of the total volume of substance which could be stored within the bunded area.

- (c) Refuelling of plant and machinery shall take place at dedicated refuelling areas only as detailed in the CEMP.
- (d) The Applicant shall ensure adequate supply of spill kits and hydrocarbon absorbent pads are stocked on site
- (e) The dedicated bunded area shall be located at least 30m from watercourses.
- (f) The applicant shall include as part of the Construction Environmental Management Plan measures to ensure silts, washwaters, chemical, etc. are not discharged to ground or surface waters.

REASON: In the interest of surface and groundwater protection.

12. The following requirements shall apply regarding noise and vibration during the construction and operation of the proposed development:

- (a) During the construction phase noise levels at noise sensitive locations shall not exceed 70dB(A) between 0700 to 1900 hours Monday to Friday and 0800 to 1400 hours Saturday and 45dB(A) at any other time. Noise exceedance activities must be agreed in writing with Meath County Council prior to the activity taking place.
- (b) The construction works shall be carried out in accordance with the noise guidance set out by BS 5228-1:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites and the NRA Guidelines for the treatment of Noise and Vibration in National Roads Schemes.
- (c) The applicant and/or his contractor shall establish protocol for informing residents at noise sensitive receptors of scheduled noise emitting activities outside normal working hours and shall maintain for inspection a noise complaints register.
- (d) The applicant and/or his contractor shall give consideration to utilising low noise and vibration emitting construction plant and tools.
- (e) The applicant shall, at a minimum for construction noise, employ noise mitigation measures as detailed in the outline CEMP, these shall be developed as necessary.
- (f) During the day to day operational phase noise levels when measured at noise sensitive receptors as identified in the EIAR shall not exceed the following limits:
 - i. 55dB $L_{Aeq, 15min}$ (daytime),
 - ii. 50dB $L_{Aeq, 15min}$ (evening) and;
 - iii. 45dB $L_{Aeq, 15min}$ (night time)

- (g) Testing of the emergency generators shall take place between the hours of 08.00 and 17.00 Monday to Friday, testing shall not be permitted on Saturdays, Sundays or public holidays.
- (h) Vibration from the construction activities shall be limited to the following:
 - i. At Less than 10Hz, 8mm/s
 - ii. At 10 to 50 Hz, 12.5mm/s
 - iii. At 50 to 100Hz, 20mm/s

This is the allowable vibration (in terms of peak particle velocity) at the closest part of sensitive property to the/a source of vibration.

REASON: In the interest of noise and vibration management.

13. The following requirements shall apply in relation to land and soils:

- (a) Prior to the construction of the building the applicant shall prepare an earthworks schedule/plan and programme (either as part of the WMP or as a separate document) for written agreement with the Planning Authority identifying the extent of 17 05 04 material on site and its treatment, should material be required to be removed from site, the programming of the removal, the waste carriers and destination sites requires detailing. The Applicant shall ensure there is a robust document tracking system to trace all movements of 17 05 04.
- (b) The applicant shall include, in the CEMP, mitigation measures for extreme weather conditions that may affect earthworks moving and stockpiling, in this case extreme high temperatures resulting in drought conditions, and where there may be restrictions on the use of water for conventional dust suppression and heavy precipitation which may result in slope instability or fines run-off from stockpiled material.

REASON: In the interest of protection of land from pollution.

14. Prior to commencement of any development works on the subject lands, the applicant shall prepare a detailed Environmental Emergency Response Plan for the construction and commissioning stage of the proposed project. This shall be treated as a live document and communicated to all site personnel.

REASON: In the interest of appropriate environmental management.

15. No additional signage shall be erected on the lands or buildings without the appropriate authorisation of the planning authority.

REASON: In the interests of visual amenity.

Informative(s)

- (i) It should be clearly understood that the granting of Planning Permission does not relieve the applicant/developer of their responsibilities of complying with any other statutory codes affecting the proposal.
- (ii) This permission does not confer title. It is the responsibility of the applicant/developer to ensure that they control all the lands necessary to carry out the proposed development.
- (iii) This permission does not alter or extinguish or otherwise affect any existing or valid right of way crossing, impinging or otherwise pertaining to these lands.
- (iv) No muck, dirt, debris or other material should be deposited on the public road or verge by machinery or vehicles travelling to or from the site during the construction phase. The applicant/developer should arrange for vehicles leaving the site to be kept clean.
- (v) The applicant/developer is responsible for the full cost of repair in respect of any damage caused to any adjoining public roadway arising from the construction work and should make good any such damage forthwith to the satisfaction of Meath County Council.
- (vi) During construction the applicant/developer should provide adequate off carriageway parking facilities for all traffic associated with the proposed development, including delivery and service vehicles/trucks. There should be no parking along the public road.
- (vii) All waste generated during construction, including surplus excavation material to be taken off-site, should be only recovered or disposed of at an authorised site which has a current Waste Licence or Waste Permit in accordance with the Waste Management Acts. This does not apply to the reuse of excavated uncontaminated soil and other naturally occurring material within the applicant's site boundary.
- (viii) In accordance with the Wildlife Acts, any hedgerow removal necessary to improve the site entrance should be carried out outside of the main bird nesting season (March 1st to August 31st, inclusive).
- (ix) Where the applicant proposes to connect to a public water/wastewater network operated by Irish Water, the applicant must sign a connection agreement with Irish Water prior to the commencement of the development and adhere to the standards and conditions set out in that agreement.

Note 1: In the interest of Public Health and Environmental Sustainability, Irish Water Infrastructure capacity requirements and proposed connections to the Water and Waste Water Infrastructure will be subject to the constraints of the Irish Water Capital Investment Programme.

Note 2: All work to comply with current Irish Water Code of Practice for Water and for Waste Water.

(x) All work should comply fully with the Greater Dublin Strategic Drainage Study (GDSDS) Regional Drainage Policies Volume 2, for New Developments.

(xi) Planning Compliance must be submitted (hard copies not required) in the following format:

a. House Extensions and Single Residential Units (urban and rural)

Forward by e mail to planning@meathcoco.ie and shall include a cover letter outlining relevant compliance issues together with appropriate drawings in PDF format.

b. All Other Planning Compliance

Forward to Planning Compliance, Planning Department, Buvinda House, Dublin Road, Navan, C15 Y291 and shall include a cover letter outlining relevant compliance issues together with a CD that includes all relevant maps and drawings in PDF format (high resolution).

APPENDIX 3 – INDECON REPORT SUMMARY

