



Planning Report

PROPOSED GRID SUBSTATION AND ASSOCIATED ELECTRICITY TRANSMISSION LINE CONNECTIONS – NAAS, CO. KILDARE

Strategic Infrastructure Development Application

IE000544 F01 Herbata 01 December 2025





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Appendix A **ABP SID Determination Letter**

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RPS Planning Report submitted as Further

Information under Reg. Ref. 2460787

1 Introduction

RPS Group Ltd (RPS), West Pier Business Campus, Dún Laoghaire, County Dublin, A96 N6T7, in association with a multidisciplinary team, has been instructed by the Applicant, Herbata Limited (Herbata), to prepare this Planning Report to accompany a Strategic Infrastructure Development (SID) application to An Coimisiún Pleanála (ACP) for a proposed development in the townland of Halverstown, at Naas, County Kildare.

This application is made in accordance with the provisions of section 182A (1) of the Planning and Development Act, 2000 (as amended) (the Planning Act).

The proposed development includes the provision of a-:

- 110kV GIS Building/Grid Substation Control Building c. 1,252sqm and c. 15.5m in height;
- 4 no. medium voltage (MV) output switch rooms (each MV will be c. 5.5m in height and c. 84sqm in area);
- 4 no. 110kV dual output step down transformers (5.7m in height) separated by isolators;
- 1 no. dropdown tower (maximum 17m in height);
- Upgrade of an existing tower;
- Undergrounding of a 110kV transmission line, including section under R409;
- Removal of 2 no. existing wooden polesets;
- Internal Road Layout;
- Boundary Fences and landscaping;
- Underground Services (Watermain, Surface Water, Foul, Power); and
- All associated site services and ancillary works.

The subject site currently comprises c. 3.15 ha of agricultural lands to the west of the M7 and Naas town.

The development of the substation and associated electrical infrastructure is necessary to provide for the development of an associated data centre. The overall development includes two main elements, namely:

- (a) The substation, comprising a grid substation and 110kV transmission connection. These elements are subject of the SID application to ACP, and that application is referred to hereafter as "the Substation Application" or the "proposed development" throughout this Planning Report
- (b) The data centre, comprising 6 no. two storey data centre buildings, an administration/management building, car parking, landscaping, energy infrastructure and other associated works. These elements are the subject of a planning application submitted to Kildare County Council (KCC) (Reg. Ref. 2460787) which is referred to hereafter as "the Data Centre Application". As ACP is aware, KCC issued a decision to grant planning permission for the Data Centre Application on 20 August 2025, subject to 77 no. conditions, which decision to grant planning permission has been appealed to ACP. The Data Centre Application is currently under consideration de novo by ACP under case reference ACP-323677-25.

There is a separate statutory development consent process for each of these elements, with which Herbata must comply. The data centre element requires planning permission pursuant to section 34 of the Planning Act, while the substation element is "Strategic Infrastructure Development" within the meaning of the Planning Act and requires approval from ACP under section 182A of the Planning Act (instead of a regular planning permission under section 34 of the Planning Act).

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It was therefore necessary for Herbata to make two distinct applications, one to KCC (under **Reg. Ref. 2460787**) in respect of the data centre (i.e. the Data Centre Application) (which is now under consideration de novo by ACP on appeal, under case reference **ACP-323677-25**), and one now to ACP in respect of the substation (i.e. the Substation Application). This is not at all unusual and is in compliance with legislation.

The Data Centre Application and the Substation Application together constitute the "Project" for the purposes of Environmental Impact Assessment (EIA) and Appropriate Assessment (AA) and in that regard, included with this application is an Environmental Impact Assessment Report (EIAR), including the EIAR Addendum, the Appropriate Assessment Screening Report, Natura Impact Statement (NIS) and a short document giving an account of the Environmental Impact Assessment and Appropriate Assessment materials. References to the Project in the EIAR including the EIAR Addendum, the AA Screening Report, NIS and the Account of Accompanying Environmental Impact Assessment and Appropriate Assessment Materials should be read as references to the two applications taken together for EIA and AA purposes as one project.

The extent of the two applications is shown in Figure 1-1.

It can be seen that the two applications overlap (*inter alia* where undergrounding the existing 110kV transmission line) and are integrated and consistent.

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Figure 1-1: KCC and SID Applications

Source: RKD

The proposed development shall enhance the local electricity transmission network and is designed to support current power demand and future growth within the area inclusive but not limited to the power requirements for the applicant's application for planning permission for the proposed data storage facility development which is currently under consideration de novo by ACP on appeal

A full description of the proposed development is set out in **Section 6** of this report.

The documentation provided has been prepared within inputs from the following team members:

- RPS (Planning & Environmental);
- RKD (Architecture);
- HDR (Engineering);
- Donnachadh O'Brien & Associates Consulting Engineers (DOBA);
- Brady Shipman Martin Landscape Architects (BSM); and

in consultation with McCann FitzGerald LLP who have acted as legal advisors in the preparation of this application.

This Planning Report presents the proposed development and associated works in the context of relevant planning legislation, policies, objectives and development management standards. This report is set out under the following sections:

- Section 1: Introduction;
- Section 2: Background;
- Section 3: Site Location and Context;
- Section 4: Planning History;
- Section 5: Pre-Application Consultation;
- Section 6: Proposed Development;
- Section 7: Planning Policy Context and Appraisal;
- Section 8: Environmental Assessments; and
- Section 9: Conclusion.

This Planning Report should be read in conjunction with all plans and particulars submitted as part of the application and listed in the *List of Enclosures* submitted under separate cover, including the EIAR, EIAR Addendum, *Account of Accompanying Environmental Impact Assessment and Appropriate Assessment Materials*, *AA Screening Report* and NIS. Further, the *Planning Report* (see **Appendix B**) and *the Addendum Planning Report* (see **Appendix C**) that forms part of the Data Centre Application is included with this application.

2 Background

The proposed development shall support current power demand and future growth within the area having spare 110kV circuits if required. The proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.

This Substation Application is also designed to enable suitable electricity network connectivity to a proposed data storage facility, which was the subject of a separate planning application to KCC under **Reg. Ref. 2460787**, which as ACP is aware is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**.

The Data Centre Application comprises c. 37.5 ha of agricultural lands to the north, east and south of the SID subject site. This proposed data centre planning application submitted to KCC now under appeal de novo to ACP includes the provision of:

- 6 no. data centre buildings;
- Administration / management and water treatment building;
- Incoming gas supply compounds;
- District heating facilities; and
- Car parking, security building, landscaping, and all associated site works.

2.1 The Need for the Proposed Development

The substation development is to be made of two elements, the first being a new node on the Irish electricity grid at Naas, which will be handed over and be operated by EirGrid as the Transmission System Operator (TSO); the second element will comprise the transformation to a lower voltage to enable distribution to the proposed data centre development, which was the subject of a separate planning application to KCC (under **Reg. Ref. 2460787**) which as ACP is aware is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**. Further detail on the Data Centre Application is provided in **Sections 1 and 6** of this report.

The purpose of the proposed electricity grid substation is therefore:

- To allow EirGrid in the future to use the spare circuit breakers provided within the new grid substation to feed further capacity in the Naas/Kildare area. The proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.
- To allow the generation provided for the data centre development to export power to the Irish Electricity Grid as and when required.
- To allow the battery storage provided for the data centre site to provide frequency stability to the Irish Electricity Grid as and when required.
- To allow the data centre site to draw new renewable power from the grid.

2.2 Statutory Consents / Approvals required for Data Centre and Substation

The Data Centre Application was the subject of a planning application to KCC under **Reg. Ref. 2460787**. This does not comprise SID; either under section 37A (Seventh Schedule) or section 182A of the Planning Act. As set out above, KCC issued a decision to grant planning permission for the Data Centre Application on 20 August 2025, subject to 77 no. conditions, which decision to grant planning permission has been appealed to ACP. The Data Centre Application is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**.

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The on-site 110kV substation and loop-in infrastructure which will facilitate export of the generated electricity to the National Grid, comprises of electricity transmission development, is SID and accordingly falls under the provisions of section 182A of the Planning Act. This was confirmed by ACP (**Ref. 315659-23**) in the enclosed correspondence in **Appendix A**.

Accordingly, the substation, comprising a grid substation and 110kV transmission connection are the subject of this SID application to ACP, and this application as mentioned above is referred as the Substation Application or the "proposed development" throughout this Planning Report.

Due to the nature of the overall Project, the Data Centre Application (which was the subject of the KCC decision to grant planning permission and is currently under consideration de novo by ACP on appeal under case reference ACP-323677-25), and this Substation Application have been assessed within the enclosed EIAR and EIAR Addendum, AA Screening Report, NIS and Account of Accompanying Environmental Impact Assessment and Appropriate Assessment Materials and other reports, as appropriate. As also mentioned above, those two applications together constitute "the Project" for Environmental Impact Assessment and Appropriate Assessment purposes.

The enclosed EIAR, EIAR Addendum, AA Screening Report, and NIS are also before the ACP in the context of the appeals in relation to the Data Centre Application, under case reference **ACP-323677-25**.

As with any large infrastructure proposed development of this nature which is considered and assessed for EIA and AA purposes with the Data Centre Application, there may be future consequential changes or amendments required to the final design of the substation development arising from the terms of any grant of planning permission for the Data Centre or other regulatory requirements, including those of Eirgrid. In the event that this arises, it can be addressed by the Applicant in the future. In this context it can be noted that this is a site that is well serviced in terms of its very close proximity to electricity infrastructure with 110kV and 220kV lines traversing the site.

3 Site Location and Context

The site is located on the western side of the M7 motorway, between Junctions 9a and 10, and will be accessed to the north by the R409 which provides a direct link to the centre of Naas, c.2.5km to the east (see **Figure 3-1**). The red line boundary has an area of c. 3.15 ha. These lands are currently in agricultural use and are largely flat.

The subject SID application is bound to the north, east and south by the Data Centre Application, with the R409 (Caragh Road) and the Osberstown Business Park and Osberstown Wastewater Treatment Plant further north. The subject site includes a small area of the R409 and lands immediately to the north of the R409. The M7 Business Park is located further south of the site, adjacent to the Data Centre Application boundary. The M7 motorway is located to the east of the site, and the west of the site is bound by agricultural lands. The Newhall Retail Park is located to the south of the site, on the east side of the M7 motorway. There has been significant development in the locality in recent years, particularly light industry, logistics and services. Lands to the east, on the other side of the motorway, form part of the Naas Northwest Quadrant.



Figure 3-1: Local Site Location Context Map

Source: Google Maps, RPS annotation.

4 Planning History

A desktop search was undertaken of KCC's online planning enquiry system and the ACP website to review planning permissions on the subject site.

4.1 Planning History at the Site

Part of the subject site is within the boundary for the data centre application **Reg. Ref. 2460787** referenced above in **Sections 1 and 2**. The application for permission for the data centre was submitted to KCC on the 13th August 2024. On the 4th October 2024 KCC issued a request for further information. Further information was submitted on the 23rd June 2025. On the 24th June 2025, KCC issued a letter stating the further information was significant. Subsequently, additional statutory notices were published, and an additional 5-week consultation period ran until 30th July 2025. A decision to grant planning permission was issued by KCC on 20th August 2025, and this decision is currently under consideration de novo by ACP on appeal under reference number **ACP-323677-25** (First Party Appeal from Herbata Limited and Third Party Appeals from (i) An Taisce and (ii) Friends of the Irish Environment CLG and Friends of the Earth Ireland (jointly)).

No additional recent planning history within the subject site boundary has been identified on KCC's online planning enquiry system or on the ACP website.

4.2 Planning History at Adjacent Sites

There is an extensive planning history in the vicinity of the site along the M7, on lands south of the subject site at the M7 Business Park and east of the site at Osberstown Business Park. These applications have been in relation to developments within the business parks.

5 Pre-Application Consultation

Pre-application consultations with An Bord Pleanála (now ACP) have been completed under **ABP Ref. 315659-23**.

ABP have confirmed in correspondence dated 5th July 2023 that the new substation compound, a medium voltage switchgear and control equipment building, a building housing indoor high voltage (HV) gas insulated switchgear (GIS) equipment, high voltage busbar connections, and step-down power transformers and underground cables connecting the proposal to the existing 110kV overhead lines in Halverstown, Naas, Co. Kildare is SID within the meaning of section 182A of the Planning Act. This confirmation is enclosed in **Appendix A**.

Extensive consultation has been undertaken in the preparation of the EIAR for the project. These are described in Chapter 3 of the EIAR.

6 Proposed Development

The proposed development comprises a new electricity grid substation development made of two elements, the first being a new node on the Irish electricity grid at the subject site, which will be handed over and be operated by EirGrid as the TSO; the second element will comprise the transformation to a lower voltage to enable distribution to the new proposed data centre These two elements together comprise the Substation Application, the subject of the application for approval to ACP. The Data Centre Application, as explained above, was the subject of a separate planning application to KCC (under **Reg. Ref. 2460787**) which is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**.

The Substation Application consists of the following:

- 110kV GIS Building/Grid Substation Control Building c. 1,252sqm and c. 15.5m in height;
- 4 no. medium voltage (MV) output switch rooms (each MV will be c. 5.5m in height and c. 84sqm in area);
- 4 no. 110kV dual output step down transformers (5.7m in height) separated by isolators;
- 1 no. dropdown tower (maximum 17m in height);
- Upgrade of an existing tower;
- Undergrounding of a 110kV transmission line, including section under R409;
- Removal of 2 no. existing wooden polesets;
- Internal Road Layout;
- Boundary Fences and landscaping;
- Underground Services (Watermain, Surface Water, Foul, Power); and
- All associated site services and ancillary works.

The site area for the proposed works is 3.15ha. The site layout is shown in **Figure 6-1** below.

It should be noted that the subject proposed development is integrated with the proposed data centre development. The proposed substation will be accessed via the data centre access and internal road network. The water, wastewater and surface water servicing of the proposed substation ties into data centre services. The proposed data centre landscaping forms a coherent part of the wider landscaping arrangements proposed for the entire project (substation and data centre).

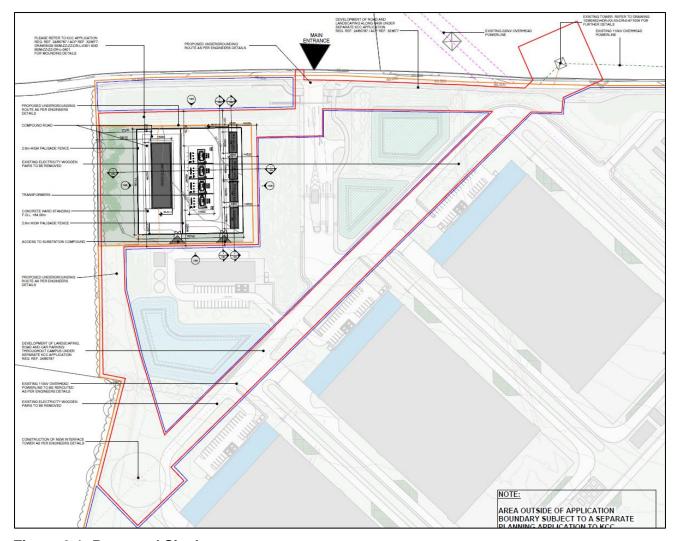


Figure 6-1: Proposed Site Layout

Source: RKD

An existing overhead 110kV transmission circuit currently enters the site from the north and west sides of the development site. The proposed underground 110kV cable circuit will run between the existing tower, the proposed 110kV GIS grid substation and the proposed line/cable (L/C) dropdown tower. There are proposed upgrades to the existing tower to facilitate the underground 110kV cable.

The obsolete sections of the existing overhead 110kV lines between the existing tower and the proposed dropdown tower including the 2 no. existing wooden polesets will be removed from the site.

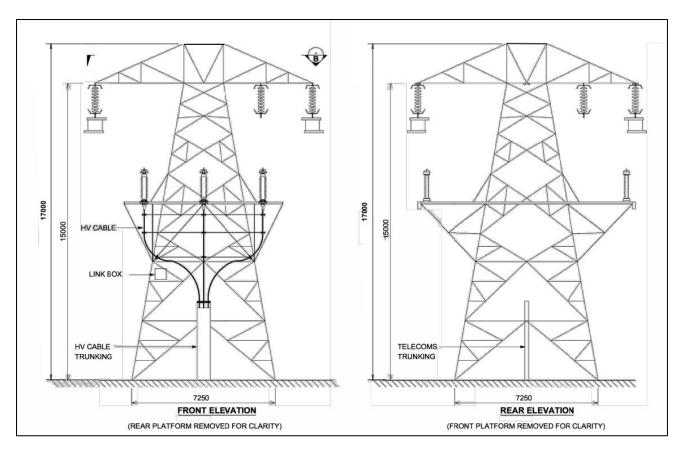


Figure 6-2: Proposed Dropdown Mast Elevation

Source: HDR

The new circuit will terminate in an overhead L/C interface compound containing air-insulated electrical equipment mounted on concrete plinths. Adjacent to the L/C interface compound, an overhead line tower is proposed to facilitate connection of the new underground cables to the existing 110kV overhead lines. The proposed overhead line tower will be c. 17m in height, set on top of concrete foundations.

The proposed development includes enabling works, services diversions, connections to the proposed grid substation, landscaping, security fencing and berms, provision of internal access arrangements within the grid substation compound.

The proposed new Grid Substation is based on EirGrid's standard arrangements for 110kV based switchgear. EirGrid also have standard arrangements for GIS that they use on their network, these require the switchgear to be housed in a 2-storey building to enable safe operation and cable entry. **Figures 6-3** and **6-4** show these standard arrangements have been adopted for an 8-bay GIS Grid Station.

Using this standard arrangement for a GIS Grid Station, the substation on the data centre development has been arranged to have two sections, the first to fully incorporate the arrangement of the EirGrid 8-bay GIS Grid Station and the second section to incorporate the local distribution and step-down transformers for the distribution to the Data Centre Application (which application is as mentioned previously currently being considered de novo by ACP on appeal). The design of the substation is in keeping with the main data centre buildings, using flat composite panels in light grey colour. Much of the site will be partially hidden through proposed landscaping including berming and planting. To the west of the site, existing hedgerows are to be maintained and augmented to further hide the views from neighbouring site. The quality of the design is considered further in the enclosed under separate cover *Architectural Design Statement* prepared by RKD.

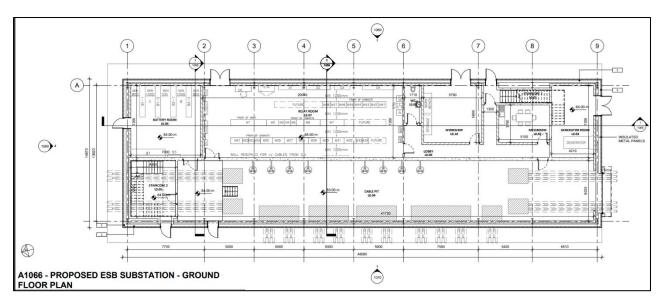


Figure 6-3: Ground Floor 8-bay GIS Station

Source: RKD

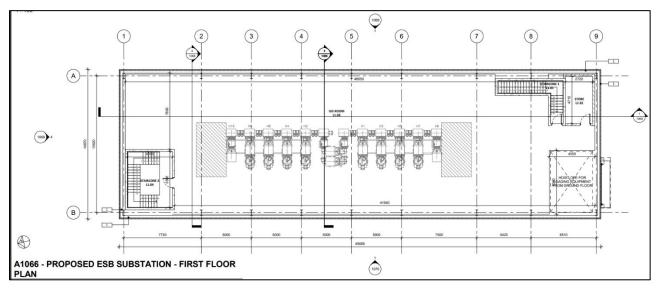


Figure 6-4: First Floor 8-bay GIS Station

Source: RKD

A palisade boundary fence of 2.4m in height around the entire compound and landscaping on the western boundary as shown in the enclosed drawings prepared by BSM are proposed. The proposed landscaping forms a coherent integrated design with that proposed under the subject SID application as shown in **Figure 6.5** and the Data Centre Application landscaping shown in **Figure 6.6**.

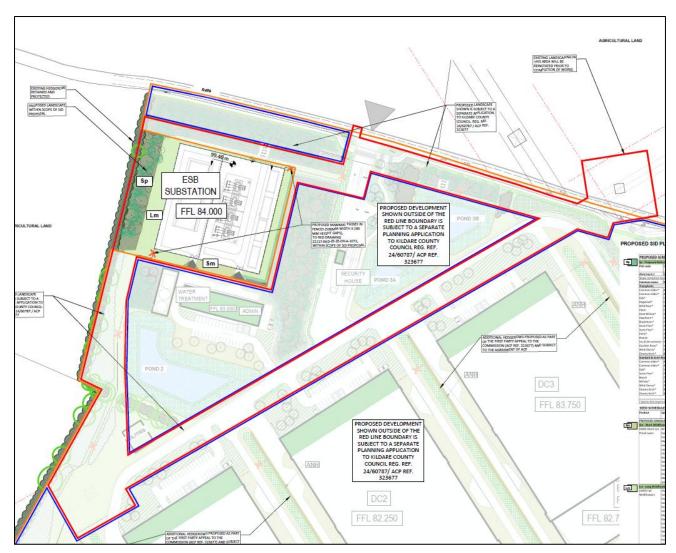


Figure 6-5: Substation Application Proposed Landscaping

Source: BSM



Figure 6-6: Project Landscaping Masterplan

Source: BSM

6.1 Data Centre Energy Sources

It is proposed, as part of the Data Centre Application that from the outset of operations that the proposed data centre will have a minimum of **50%** of the energy required provided from renewable sources. This renewable energy is to be largely procured via CPPAs.

Each DCB will have solar PV panels with a total area of 3,600m² on the roof, apart from DCB 4 which will have 1,800m² of solar PV, contributing to the overall energy requirements.

Generation of electricity on site is proposed using highly efficient gas turbines for the majority of the generation, with top up from gas engines. These facilities shall be provided in the plant area of DCB. GNI have in their *Vision 2050* document set out how they could achieve a zero dependency on gas from fossil fuels.

The electricity production and storage capacity proposed as part of the Data Centre Application provides a backup energy source and in addition adds resilience to the wider network, having the capacity to provide immediate export of energy to the national grid.

7 Planning Policy Context and Appraisal

This section of the *Planning Report* sets out a summary of the relevant national, regional, and local planning policies, objectives, development management standards and guidance documents against which the Substation Application will be assessed and demonstrates how the Substation Application development is consistent with these policy and guidance documents.

This SID proposal comprises of an electricity substation which will power the grid and also the proposed neighbouring data centre campus that comprises a planning application to KCC (under **Reg. Ref. 2460787**) which is now under consideration de novo by ACP on appeal under case reference **ACP-323677-25**. Therefore, key policy with regard to data centres is also reported.

7.1 National Planning Policy Context

7.1.1 National Planning Framework

The *National Planning Framework* (NPF) sets out the overall national planning policy objectives and targets for the country over the next 20 years. The *National Planning Framework First Revisions* (NPF First Revision) was approved by the Government on 8th April 2025 and was subsequently approved by both Houses of the Oireachtas on 30th April 2025.

The NPF First Revision provides a framework to guide public and private investment "to create and promote opportunities for our people, and to protect and enhance our environment". Ten National Strategic Outcomes (NSOs) articulate the primary objectives of the NPF First Revision, while National Policy Objectives (NPOs) outline more precise ambitions and targets.

NSO 6 supports the development of the ICT sector and recognises the development of data centres as a key part of this:

• "NSO 6 - A Strong Economy Supported by Enterprise, Innovation and Skills:

"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. These factors help to underpin Ireland's international position as a leading location for ICT, which contributes to wider synergies in the economy as indigenous and multinational enterprises develop linkages and benefit from the potential of regional clustering."

NSO 8 supports for the enhancement of the national electricity transmission grid:

• "NSO 8 - Transition to a Carbon Neutral and Climate Resilient Society:

Reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres.

District heating networks will be developed, where technically feasible and cost effective, to assist in meeting renewable heat targets and reduce Ireland's GHG emissions"

The Substation Application contributes to the fulfilment of these objectives through the delivery of enhanced transmission infrastructure supporting the development of the surrounding area and the increased usage of renewable sources in electricity generation and the adjoining data centre buildings which are subject to the Data Centre Application under consideration by KCC.

The Data Centre Application as supported by the subject Substation Application proposes the provision of a new data centre facility at an appropriate location which is specifically zoned for this

The NPF First Revision identifies upgrades to the national electricity grid as a National Policy Objective:

"National Policy Objective 71 -Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development."

The proposed development directly enhances the national electricity grid infrastructure.

The NPF First Revision identifies district heating as a National Policy Objective:

"National Policy Objective 68 - Support the growth and development of efficient district heating, electrification of heating, and utilisation of geothermal energy"

The Data Centre Application includes proposals specifically to facilitate the delivery of district heating in Naas.

7.1.2 National Development Plan

The *National Development Plan Review 2025* (NDP) was published on the 22nd July 2025. The NDP sets out sets out departmental capital ceilings to 2030 and overall capital investment out to 2035. Over the coming months, individual Ministers will set out their priority programmes and projects within their capital allocations.

Notwithstanding the detail to be provided from these Government Departments, within the NDP electricity grid infrastructure is identified as a priority and €3.5 billion in equity funding is being provided to ESB and Eirgrid in 2025 to fund enhanced energy grid capacity and expand electricity transmission and distribution network infrastructure.

The proposed development enhances the electricity grid and accords with an identified infrastructure priority of the NDP.

7.1.3 Climate Action Plan 2025

The Climate Action Plan 2025¹ (CAP25), which as set out in 3.1 of CAP25 is to be read in conjunction with the Climate Action Plan 2024, is the most recent approved Climate Action Plan, and is the third Climate Action Plan to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021.

CAP25 implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to reduce emissions by 51% by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. CAP25 sets out how Ireland can accelerate the actions that are required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

Between 2018 and 2023, as referenced in CAP 2025, electricity emissions decreased by 26.2%, The CAP25 notes that work is ongoing to reinforce the electricity grid and that such work is vital to supporting the continued transition to clean energy.

The proposed substation enhances the local electricity grid and will have the flexibility to facilitate the export of energy to the national grid if and when required.

There are no specific actions in CAP25 relating specifically to the development of data centres. The proposed substation supports the development of the neighbouring data centre campus (a LEU), which makes provision for on-site renewable energy production and on-site energy storage. The substation shall also support CPPAs which will enable new and additional sustainable sources of energy generation to serve the data centre. The remaining energy requirement shall be met by gas, a transitionary fuel, from the national gas grid.

¹ https://assets.gov.ie/static/documents/Climate Action Plan 2025 updated cover.pdf

As ACP will be aware, section 15(1) of the *Climate Action and Low Carbon Development Act 2015* (as amended) (the "2015 Act") provides that a relevant body (which includes ACP) shall perform its functions, insofar as practicable, in a manner consistent with the most recent approved Climate Action Plan and with the other plans, policies, and objectives set out in section 15(1)(a) to (e) of the 2015 Act. The most recent approved Climate Action Plan is currently CAP25 (to be read in conjunction with CAP24), however it may be that a further Climate Action Plan (such as, for example, a Climate Action Plan 2026) is approved before the Commission comes to make its decision in relation to this SID Application, in which case that new Climate Action Plan 2026 would become the "most recent approved Climate Action Plan" for the purposes of section15 of the 2015 Act.

The provisions of the *Climate Action Plan 2025* (read in conjunction with the *Climate Action Plan 2024*), and the other matters specified in section 15(1) of the 2015 Act, are considered in Chapter 16 of the EIAR, and its Addendum, and ACP can be satisfied that in granting approval, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved Climate Action Plan (currently CAP25, which must be read in conjunction with CAP24), and the other matters specified in section 15 of the 2015 Act.

7.1.4 Policy Statement on Security of Electricity Supply

The *Policy Statement on Security of Electricity Supply* was published by the Government in 2021. Ensuring continued security of electricity supply in the context of up to 80% of electricity consumption coming from renewable sources by 2030 is considered a priority at national level.

The Policy Statement recognises:

"there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply"

The Policy Statement goes on to note that the Government has approved:

"the development of new conventional generation (including gas-fired and gasoil/distillate-fired generation) is a national priority and should be permitted and supported in order to ensure security of electricity supply and support the growth of renewable electricity generation

the connection of large energy users to the electricity grid should take into account the potential impact on security of electricity supply and on the need to decarbonise the electricity grid;

it is appropriate for additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply;

it is appropriate for additional natural gas transmission and distribution grid infrastructure to be permitted and developed in order to support security of electricity supply."

The Substation Application shall upgrade electricity grid infrastructure, and the proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.

The associated proposed Data Centre Application includes gas powered turbines and energy storage infrastructure which accords with the policy statement.

7.1.5 Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy

The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy² sets out the national policy for the development of data centres. The statement recognises the fundamental importance of data centres and that they comprise: "Core digital infrastructure and play an indispensable role in our economy and society".

The statement identifies the many advantages arising from the location of data centres within Ireland, including:

- Assist people and businesses to fully realise the benefits of digitalisation;
- Data can drive research and innovation;
- The direct generation of employment; and
- Secures the presence of the global technology sector in Ireland.

The importance of Ireland's technology sector to the economy and society is set out in the Government Statement, accounting for €52 billion (16%) of gross value added and employing 140,000 people, which is equivalent to 6% of total national employment with 40% growth over the last five years.

The Statement states the following statement in relation to the electricity infrastructure requirements of planned and projected data centre development:

"Currently, a large portion of existing and planned data centres that are due to connect to the electricity system are expected to be in the Dublin area. Based on existing data centres, committed expansion and expected growth, total demand could treble within the next ten years. A consistent and supportive whole of government approach will be brought to the realisation of the transmission and distribution assets required to support the level of data centre ambition that we adopt."

The Substation Application seeks to provide the transmission infrastructure required to provide electricity for the development of the area, including the adjoining data centre buildings which are subject to a Data Centre Application which is currently under consideration de novo by ACP on appeal. The proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.

7.1.6 Large Energy Users Connection Policy – Proposed Decision Paper

The Large Energy Users Connection Policy – Proposed Decision Paper³ was published by the Commission for Regulation of Utilities (CRU) on 18th February 2025 and a consultation period ran until 4th April 2025. The purpose of this proposed decision paper is to set out a potential pathway for connection applications for new data centre customers to the electricity grid with due regard to security of supply and network constraints while minimising, where possible, potential impacts on national renewable energy targets and carbon emissions.

With regard to the electricity network the proposed substation shall deliver enhanced transmission infrastructure. The proposed 8-bay substation format provides 4 no. bays as spare for future development in and around the Naas area.

The associated proposed data centre development will not be reliant upon existing electricity generation to power the proposed data centre. The proposed data centre is proposed to I be

² https://enterprise.gov.ie/en/publications/government-statement-on-role-of-data-centres-in-enterprise-strategy.html

³ https://consult.cru.ie/en/consultation/review-large-energy-users-connection-policy

powered by on-site renewable electricity generation (solar PV), renewable electricity procured through CPPAs from new renewable energy generators, and highly efficient onsite gas turbines. The connection to the electricity grid will enable (1) the delivery of the electricity procured through the CPPAs to the proposed development and (2) the on-site generation to be exported to the grid.

Further detail on the manner in which the proposed data centre is compliant with the *Large Energy Users Connection Policy* is provided in the *Energy Strategy Report* prepared by *BOS Energy Ltd* and the *Energy Policy Compliance Report - Updated* prepared by HDR, which are included at Appendix 4.3 and 4.3 respectively to the EIAR Addendum. These documents were submitted to KCC in response to the KCC further information request and are also therefore before ACP in relation to the Data Centre Application, which is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**.

7.2 Regional Planning Policy Context

7.2.1 Eastern and Midland Regional Spatial and Economic Strategy

The Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES)⁴ outlines the spatial and economic policies and targets for the region. The RSES is a strategic plan and investment framework to shape the future development of the region to 2031 and beyond.

The RSES, prepared in accordance with the NPF, sets the context for each local authority within the Eastern and Midland Region to develop county and city development plans in a manner that will ensure that national, regional and local plans align. Regional Strategic Outcomes (RSOs) provide a framework for city and county development plans and align with international, EU and national policy.

The RSES provides support for the enhancement of the national electricity transmission grid, as follows:

- "RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.
- **RPO 10.22:** Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people."

Naas is designated as a key town with the RSES and there is clear support for the growth and development of the town. The upgrade of electricity infrastructure underpins this growth:

- "RPO 4.51: Strengthen the local employment base including through the development of MERITS, Millennium Park in the North West Quadrant and the regeneration of underutilised lands including industrial lands in the northeast of the town.
- "RPO 4.53: Support an enhanced role and function of Naas as the County town of Kildare, particularly as a hub for high quality employment, residential and amenities".

The RSES also supports the development of the ICT sector and recognises the development of data centres as a key part of this:

⁴ https://emra.ie/final-rses/

"RPO 8.25 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."

The Substation Application contributes to the fulfilment of these objectives through the delivery of enhanced transmission infrastructure supporting the resilience of the network, and the increased usage of renewable sources in electricity generation.

The delivery of enhanced transmission infrastructure supports the development of Naas and the North West Quadrant in addition to supporting the adjoining data centre buildings which are subject to the Data Centre Application (which is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**).

7.3 Local Planning Policy Context

7.3.1 Kildare County Development Plan 2023-2039

The *Kildare County Development Plan 2023-2029* (the Development Plan)⁵ serves as the key planning policy document for the County and includes policy objectives and development standards. The Development Plan supports economic development, enhancement of electrical infrastructure and the provision of data centres within the county. This section will identify the relevant policies and objectives from the Development Plan and illustrate how the how the proposal will be consistent with the same.

7.3.1.1 Employment and Economic Development

Chapter 4 of the Development Plan relates to Resilient Economy and Job Creation with the aim: "To provide for the future well-being of the residents of the county by creating a strong and resilient economic base, providing expanded opportunities for employment and facilitating a good quality of life within vibrant and attractive places to live, work, visit and invest." Further to this are objectives for the development of Naas. The following objectives are relevant to the proposal:

- "RE O1: Facilitate and support the growth of the economy in Kildare and the Greater Dublin Area in a sustainable manner, and in accordance with the Regional Spatial and Economic Strategy.
- **RE O22:** Promote the Key Town of Naas as a primary centre of high-quality employment in the County so that its significant residential population will have employment opportunities within easy distance of their homes, thereby reducing outbound commuting."

The Substation Application shall deliver enhanced transmission infrastructure supporting the economic development of Naas and the North West Quadrant.

7.3.1.2 Electricity Infrastructure

Chapter 7 of the Development Plan relates to Energy & Communications with the aim: "To encourage and support energy and communications efficiency and to achieve a reasonable balance between responding to EU and National Policies on climate change, renewable energy and communications and enabling resources to be harnessed in a manner consistent with the proper planning and sustainable development of the county". Of particular relevance, we note the following policy and objectives:

• "EC P19: Support the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid to provide for the future physical and economic development

⁵ https://kildarecoco.ie/AllServices/Planning/DevelopmentPlans/

of Kildare. Such projects shall be subject to AA screening and where applicable, Stage 2 AA. The developments will have regard for protected species and provide mitigation and monitoring where applicable."

- RE 014: Work with EirGrid and ESB Networks to support the provision of a resilient electricity supply and distribution system to accommodate the future economic growth of the county and to facilitate the transition of heat and transport from fossil fuels to electricity.
- **EC 064:** Support and safeguard the efficient and reliable supply of electricity to all homes and businesses in County Kildare.
- **EC 065:** Support the reinforcement and strengthening of the electricity transmission and distribution network, including the installation of Battery Energy Storage System plants2, Synchronous Condenser plants, and associated dispatchable power plants associated with high energy users, to facilitate planned growth and transmission/distribution of a renewable energy focused generation, at appropriate locations and in consultation with relevant stakeholders, where they are adjacent and/or proximate to the grid network.
- **EC 070:** Facilitate the development of grid reinforcements including grid connections and a trans-boundary network into and through the county and between all adjacent counties. Such projects shall be subject to AA screening and where applicable, Stage 2 AA. The developments will have regard for protected species and provide mitigation and monitoring where applicable."

The Substation Application shall deliver enhanced transmission infrastructure. The proposed 8-bay substation format provides 4 no. bays as spare for future development in and around the Naas area.

7.3.1.3 Data Centre Development

The Development Plan supports acknowledges that data centres contribute to job creation during construction, maintenance and from associated areas such as research and development, data analytics, customer service, technical support, marketing and sales. The following policies and objectives are relevant to the Substation Application:

• "Policy EC P18: Support the accommodation of Data Centres at appropriate locations in line with the objectives of the National Planning Framework and the principles for Sustainable Data Centre Development of the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy (July 2022) subject to appropriate Transport, Energy and Environmental Assessments and all relevant planning conditions. The location of data centres shall be situated where they will not have a potential likely significant effect on a European Site. Such developments shall be subject to an AA Screening Report, and where applicable, Stage 2 AA. They shall have regard for any hydrological connection shared with a European Site and shall account for any potential likely significant effects and provide mitigation and monitoring where appropriate.

One of the functions of the Substation Application is to provide for the energy requirements of the Data Centre Application in adjacent land zoned for data centre development, as discussed under **Section 7.3.2** of this Planning Report.

7.3.1.4 Applications Proximate to Overhead Lines

Section 15.11.23 of the Development Plan states that;

"In relation to development proposals proximate (within 23 metres) to overhead electrical infrastructure, developers / applicants should contact ESB in advance of completing or finalising designs etc. (i.e. prior to pre-planning stage), so as to ensure that the relevant clearances are maintained from any overhead electricity infrastructure."

The applicant has liaised with ESB and the relevant clearances are maintained from overhead electricity infrastructure (existing 220kV line).

7.3.2 Naas Local Area Plan 2021-2027

The *Naas Local Area Plan 2021-2027* (Naas LAP)⁶ sets out an overall strategy for the proper planning and sustainable development of Naas, with regard to the other relevant plans and policies.

7.3.2.1 Data Centre

The Naas LAP supports the development of data centres within Naas:

"This Plan promotes Naas as a sustainable international destination for ICT infrastructures such as data centres, in line with Regional Policy Objective 8.25. Two locations have been zoned for Data Centre/Warehouse locations within this Plan. Land has been designated between Junction 10 and Junction 9a, located centrally between two of the motorway junctions. The site will be served by the local road network which would disperse traffic between motorway interchanges to reduce any impacts on the motorway network..... Naas has been chosen as a suitable location for data centre development in recognition of its status as a Key Town. The sites identified in this LAP have the ability to cater for space extensive enterprises contiguous to the existing urban form, proximate to electricity and telecommunication infrastructure. These lands are identified exclusively for Data Centres, to ensure the location of these types of proposals are controlled proximate to serviced areas of the county. The Council will not consider any alternative use on these lands, other than those associated with Data Centres."

Objective EDO 1.12 states:

- "(a) Facilitate the location of Data Centre development on land designated P: Data Centre at Caragh Road South and Jigginstown for the identified land use only subject to appropriate environmental assessments, heat mapping, transport impact assessments and consideration of the cumulative impact on the electricity network supply capacity and targeted reductions in greenhouse gas emissions.
- (b) Any data centre project will be required to include measures to generate energy (sustainable, then renewable in the first instance) on site as part of the overall development proposal."

The development of a substation at the subject site, as proposed, supports the proposed Data Centre (which is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**), and therefore, fully accords with the development of data centres within Naas as provided for in the Naas LAP.

7.3.2.2 Land Use Zoning

Chapter 11 of the Naas LAP sets out the Land Use Zoning, with the aim: "to manage and deliver new development to ensure that it occurs in an orderly and efficient manner in accordance with proper planning and sustainable development."

As shown in **Figure 7-1**, the subject site is zoned 'P(1) – Data Centre' in the Naas LAP. The objective of Land Use Zoning Objective 'P' is "To provide for Data Centre development and their associated infrastructure only". The only use considered by the Naas LAP to be 'Permitted in Principle' in lands zoned 'P' is Data Centres and associated infrastructure. Utility Structures are the only land use 'Open for Consideration'. The Substation Application will deliver infrastructure associated with the development of a data centre.

The subject site is one of only two sites to have been zoned for Data Centres in Naas. The Naas LAP notes that, "These lands are identified exclusively for Data Centres, to ensure the location of

⁶ https://kildarecoco.ie/AllServices/Planning/LocalAreaPlans/LocalAreaPlans/NaasLocalAreaPlan2021-2027/

these types of proposals are controlled proximate to serviced areas of the county. The Council will not consider any alternative use on these lands, other than those associated with Data Centres."

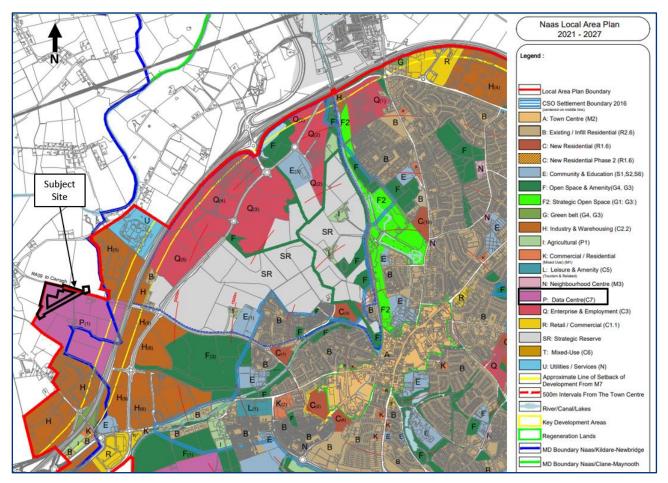


Figure 7-1: Land Use Zone Map

Source: Naas Local Area Plan, RPS Annotation.

7.3.2.3 Employment

The Naas LAP recognises that Naas is designated a "Key Town" and an important employment centre within the County and more widely. The need to generate new employment within the town and in particular in sectors such as IT is identified through objectives, as follows:

- "EDO 1.1: Encourage economic development and employment growth in Naas in accordance with its designation as a Key Town, while adhering to the overall Economic Development Strategy of the Plan.
- **EDO 1.2**: Promote enterprise and employment development in the Northwest Quadrant, focusing on high-tech manufacturing, research and development, ICT, food science and production, large scale offices, public administration, banking, tourism and bloodstock, within a high quality campus/park type development."

The project will directly support the generation of c. 225 no. jobs in the ICT sector at the proposed data centre campus and the Substation Application will also support employment more widely through the provision of an enhanced local electricity transmission network.

7.3.2.4 Electricity Infrastructure

Policy I4 of the Naas LAP is to "promote and facilitate the development and renewal of energy and communications networks in Naas, while protecting the amenities of the town." An 'Action' of Policy I4, includes: "To liaise with EirGrid in relation to the rationalisation of transmission infrastructure and/or underground routing of overhead powerlines in Naas."

The Substation Application shall enhance the energy network in accordance with Policy I4 and will deliver the undergrounding of a section of the existing 110kV line, which fully accords with the action above.

7.3.2.5 Heat Waste Utilisation

Waste heat is identified in Naas LAP as the single largest low-carbon source of energy available in the Region that is not being used. Data centres generate significant levels of excess heat which can be used in district heating systems. There are a number of objectives in the Naas LAP pertaining to data centres and the production of heat waste:

- "WH 1.1: Support developments which deliver energy efficiency and the recovery of energy that
 would otherwise be wasted through the use of district heating systems, particularly in the
 Northwest Quadrant and sites designated specifically for Data Centres, ensuring such
 developments will not negatively impact upon the surrounding landscape, environment,
 biodiversity or local amenities.
- WH 1.2: Ensure that all significant development proposals on the sites, designated for Data Centres carry out an Energy Analysis and explore the potential for the development of low carbon district heating networks."

The proposed Data Centre Application includes proposals specifically to facilitate the delivery of district heating in Naas.

8 Environmental Assessments

As set out in **Section 1** above, the Substation and the Data Centre together constitute the "Project" for Environmental Impact Assessment and Appropriate Assessment purposes.

An EIAR in respect of the Project has been prepared by RPS with input from a multidisciplinary team of competent experts and is submitted along with this Substation Application and was submitted to KCC (under **Reg. Ref. 2460787**) as part of the Data Centre Application. An EIAR Addendum was provided in response of the Request for Further Information (RFI) under **Reg. Ref. 2460787** from Kildare County Council (dated 4th October 2024). As ACP is aware, the Data Centre Application is currently under consideration de novo by ACP on appeal under case reference **ACP-323677-25**. The EIAR and EIAR Addendum prepared in respect of the Project are also before ACP in the context of that appeal.

The EIAR and EIAR Addendum consider and assess the likely significant effects of the Project on the environment and contains the information required by Annex IV to the EIA Directive and Schedule 6 to the Planning and Development Regulations, 2001 (as amended), to assist the competent authority in carrying out an Environmental Impact Assessment in respect of the Project.

An AA Screening Report and Natura Impact Statement (NIS) have been prepared by RPS and are included in the application documentation. The enclosed NIS was provided in response to the RFI from Kildare County Council (dated 4th October 2024). Both the AA Screening Report and NIS are also before ACP in the context of the appeals in relation to Data Centre Application, under case reference **ACP-323677-25**.

These assessments were completed in compliance with EU and Irish law and relevant European Commission and national guidelines to determine whether or not Likely Significant Effects on any European site could be excluded as a result of the Data Centre Application.

The AA Screening Report concluded, that following an examination, analysis and evaluation of all relevant information, on the basis of objective information and in light of best scientific knowledge and applying the precautionary principle, it could be concluded that the Project, either individually or in combination with other plans and projects, and in the absence of mitigation, was not likely to have a significant effect on any European Site(s), in view of the sites conservation objectives, and that there was no reasonable scientific doubt in relation to this conclusion.

However, in response to Item 4 of the RFI issued by KCC on 4 October 2024, in circumstances where KCC was not satisfied that impacts on the integrity of European Sites can be screened out, an NIS has been prepared and provides an in depth examination, analysis and evaluation of the potential impacts of the Project on European sites and presents findings and conclusions with respect to the Project in light of the best scientific knowledge in the field. This NIS will inform and assist the competent authority in carrying out an Appropriate Assessment as to whether or not the Project will adversely affect the integrity of any European sites, either alone or in combination with other plans and projects, in view of the sites' conservation objectives.

As set out in Section 4.6 of the NIS, it has been objectively concluded by the authors of the NIS, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Project and the effective implementation of the mitigation measures proposed, that the Project will not adversely affect (either directly or indirectly) the integrity of any European site in view of sites' conservation objectives, either alone or in combination with other plans or projects and there is no reasonable scientific doubt in relation to this conclusion.

An Account of Accompanying Environmental Impact Assessment and Appropriate Assessment Materials has also been prepared, to provide the reader with a summary of the supporting information (EIAR, EIAR Addendum, AA Screening Report, and NIS) accompanying this SID application, and to assist the reader by setting out the process and timeline associated with the connected planning application for the data centre (i.e. the Data Centre Application), which is currently under consideration de novo by ACP on appeal, under case reference **ACP-323677-**

REPORT

25. Further, as set out in more detail in Section 2 of the *Account of Accompanying Environmental Impact Assessment and Appropriate Assessment Materials*, this SID Application reflects a minor change to the associated red line boundary, compared to that illustrated within the supporting information accompanying the Data Centre Application. This minor change adds c.42sqm to the overall size area, and is to fully encapsulate the extent of the area of works associated with the connection to an existing watermain only and does not represent a change in respect of the proposed pipeline infrastructure nor the operational phase of the substation.

In this regard, we confirm the watermain services were included in the Project description in the EIAR (see Section 4.2.4.6 of EIAR) and in the AA Screening Report and NIS (see Section 3.1.4.3 of NIS), and the design and location of the pipeline, the point of connection, the water supply strategy and the associated impacts, have been fully considered within the EIAR and Addendum to the EIAR and in the AA Screening Report and NIS.

As set out in Section 2 of the *Account of Accompanying Environmental Impact Assessment and Appropriate Assessment Materials*, this minor change does not result in any change to the physical design or construction of the Project such as would in any way alter the assessment of impacts on matters considered within the EIAR and the EIAR Addendum or result in any new or different impacts. Similarly, this does not result in any change to the physical design or construction of the Project (as a whole, both SID and Data Centre Applications) such as would in any way alter the assessment of impacts on matters considered within the Natura Impact Statement.

9 Conclusion

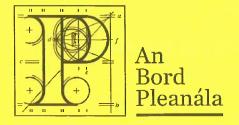
The proposed development comprises a new electricity grid substation development made up of two elements, the first being a new node on the Irish electricity grid at the subject site, which will be handed over and be operated by EirGrid as the TSO; the second element will comprise the transformation to a lower voltage to enable distribution to the proposed data centre. These two elements together comprise the Substation the subject of this Substation Application for approval to ACP. The proposed data centre, as outlined above, was the subject of a separate planning application to KCC (Reg. Ref. 2460787) which is currently under consideration de novo by ACP on appeal under case reference ACP-323677-25.

This substation development is designed to support current power demand and future growth within the area, inclusive, but not limited to the power requirements for the proposed Data Centre Application. Indeed, the substation shall provide 4 bays as spare for future development in and around the Naas area.

The proposal is in accordance with the policies and objectives of national, regional and local planning policy. It has been demonstrated within this report, as well as within the accompanying drawings, documents, and EIAR (including EIAR Addendum and Account of Accompanying Environmental Impact Assessment and Appropriate Assessment, AA Screening Report and NIS that the proposal provides a suitable use of the subject lands and accords with good planning and sustainable development.

Appendix A

ABP SID Determination Letter



Board Direction BD-012742-23 ABP-315659-23

The submissions on file and the inspector's report were considered at a Board Meeting held on 04/07/2023

The Board decided that the proposed development falls consisting of a 110kV electrical substation and associated infrastructure for the purposes of connecting a planned data centre to the existing 110kV overhead line network within the townland of Halverstown, Naas, Co. Kildare, as set out in the plans and particulars received by An Bord Pleanála, falls within the scope of section 182A of the Planning & Development Act, 2000 (as amended), and that any planning application should be made directly to An Bord Pleanála.

The applicant shall be informed that the application documentation should be forwarded to the following prescribed bodies:

- 1. Minister of Housing, Local Government and Heritage
- 2. Minister for Environment, Climate and Communications
- 3. Minister for Agriculture, Food and the Marine
- 4. Kildare County Council
- 5. EirGrid
- 6. ESB
- 7. Commission for Regulation of Utilities
- 8. Irish Water
- 9. An Chomhairle Ealaíon
- 10. Fáilte Ireland
- 11. An Taisce
- 12. Heritage Council

13. Health & Safety Authority

Additional notifications should also be made where considered appropriate.

Peter while

Board Member

Date: 04/07/2023

Peter Mullan

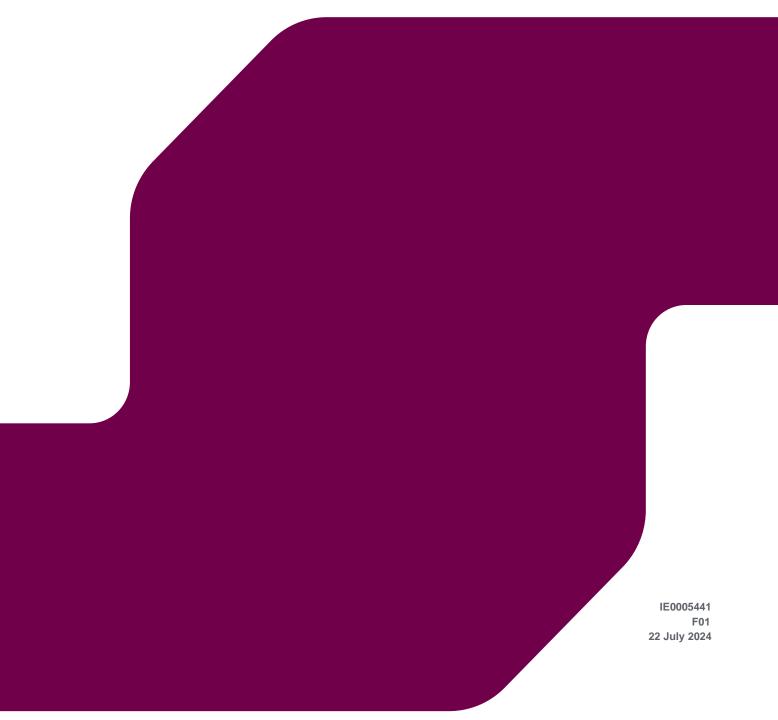
Appendix B

RPS Planning Report under Reg. Ref. 2460787



HERBATA DATA CENTRE CAMPUS, NAAS

Planning Report



Document status								
Status	Revision	Purpose of document	Authored by	Reviewed by	Approved by	Review date		
Final	F01	Planning	CG	MH	KK	22/07/2024		

Approval for issue	
KK	22 July 2024

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		Energy Limited Letter and Report titled 'Herbata Data Centre Sources of Energy'			
Appe	ndix B				
Anna		ils of Eirgrid and CRU Engagement			
Appe	ndix C	, ate Neutral Data Centre Pact Sign Up Criteria			
Anne	ndix D	· · · · · · · · · · · · · · · · · · ·			
ppo		Layout Report			
Appe	ndix E				
		Roads Correspondence			
Appe	ndix F				
	KCC	Correspondence Regarding Scales			

Appendix G

Draft Substation Planning Report

EXECUTIVE SUMMARY

The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy published in July 2022 sets out national policy for the development of data centres and recognises the fundamental importance of data centres and that they comprise:

"Core digital infrastructure and play an indispensable role in our economy and society".

Irish policy identifies the many advantages arising from the location of data centres within Ireland, including:

- Assist people and businesses to fully realise the benefits of digitalisation;
- Data can drive research and innovation;
- The direct generation of employment; and
- Secures the presence of the global technology sector in Ireland.

This Data Centre Application is located on lands zoned specifically for data centre use in the statutory local area plan and its development will support economic activity and employment in a designated key town.

The Data Centre Application aligns with national, regional and local policy supporting the ICT sector and data centres as a key component of this sector. At construction and operation phases the Data Centre Application will generate significant direct, indirect and induced employment.

The innovative approach to energy generation and storage means the Data Centre Application does not require energy from the national electricity network. Indeed, the Data Centre Application will add resilience to national energy production and storage capacity. The corporate power purchase agreements, onsite gas turbines and gas engines will enable the export of energy generated on-site to the wider network and provide capacity as an Autoproducer to Eirgrid.

The proposed gas turbines and engines will be fuelled from Gas Networks Ireland (GNI) gas network ultimately comprising of biomethane, abated natural gas and hydrogen for the turbines in line with GNI objectives to ensure that there is a zero dependency on gas from fossil fuels. The proposed gas turbines and engines will also be fuelled from Anaerobic Digestion through long term supply arrangement. The energy storage component shall enable more efficient use to be made of renewable energy now being produced.

The use of corporate power purchase agreements will ensure that from the outset a minimum of 30%, but over a year on average 40% of energy requirements will be met from new renewable energy generation not operational at the time of receipt of planning permission.

It is considered that the Data Centre Application accords with sustainable development objectives and adopts an exemplary approach to data centre development within the State.

IE0005441 | Herbata Data Centre | F01 | 22 July 2024

1 INTRODUCTION

This report has been prepared by RPS on behalf of Herbata Limited (the applicant) to accompany a planning application to Kildare County Council (KCC) for a Data Centre Application in the townlands of Halverstown, Jigginstown and Newhall at Naas, County Kildare.

The Data Centre Application includes the provision of:

- 6 no. data centre buildings (DCBs);
- Administration / management and water treatment building;
- Incoming gas supply compounds, including a gas injection point and fuel storage facilities;
- District heating facilities; and
- Car parking, security building, landscaping, and all associated site works.

The subject site currently comprises c. 37.51 ha of agricultural lands to the west of the M7 and Naas town.

The overall data centre development includes two main elements, namely:

- (a) The data centre, comprising 6 no. two storey DCBs, an administration/management building, car parking, landscaping, energy infrastructure and other associated works. These elements are the subject of the planning application submitted to KCC, and that application is referred to hereafter as "the Data Centre Application".
- (b) The substation, comprising a grid substation and 110kV transmission connection. These elements are subject of the Strategic Infrastructure Development (SID) application to An Bord Pleanála (ABP), and that application is referred to hereafter as "the Substation Application".

There is a separate statutory development consent process for each of these elements, with which Herbata must comply. The data centre element requires planning permission pursuant to Section 34 of the Planning and Development Act 2000 (as amended) (the Planning Act), while the substation element is "Strategic Infrastructure Development" within the meaning of the Planning Act and requires approval from ABP under Section 182A of the Planning Act (instead of a regular planning permission under Section 34 of the Planning Act).

It is therefore necessary for Herbata to make two distinct applications, one to KCC in respect of the data centre (i.e., the Data Centre Application) and one to ABP in respect of the substation (i.e., the Substation Application). This is not at all unusual and is in compliance with legislation. The Draft Substation Planning Report is available in **Appendix G**.

The Data Centre Application and the Substation Application together constitute the "Project" for the purposes of the Environmental Impact Assessment and associated Environmental Impact Assessment Report (EIAR) and Appropriate Assessment, and references to the "Project" in this EIAR should be read as references to those two applications taken together as one project.

Pre-application consultations with ABP have been completed (ABP Ref. 315659-23). ABP have confirmed in correspondence dated 5th July 2023 that the Substation Application, comprising of the new substation compound, a medium voltage switchgear and control equipment building, a building housing indoor high voltage (HV) gas insulated switchgear (GIS) equipment, high voltage busbar connections, and step-down power transformers and underground cables connecting the proposal to the existing 110kV overhead lines in Halverstown, Naas, Co. Kildare is strategic infrastructure within the meaning of Section 182A of the Planning Act.

The extent of the two applications is shown in Figure 1-1.



Figure 1-1: KCC and SID Applications.

Source: RKD

The Data Centre Application accords with the land use zoning set out in the *Naas Local Area Plan 2021-2027* (Naas LAP) and will deliver local employment, anchor the ICT sector more firmly within Naas and the Greater Dublin Area and underpin new, additional sustainable energy production.

This Planning Report provides a description of the existing site and its context, a description of the Data Centre Application, an evaluation of key planning policies and objectives pertaining to the development, a review of recent planning history concerning the subject site and identifies additional consents and assessments that may be required. This Planning Report is set out in the following sections:

- Section 1: Introduction;
- Section 2: Subject Site;
- Section 3: Data Centre Application;
- Section 4: Planning Policy Appraisal;
- Section 5: Planning History;
- Section 6: Pre-Planning Consultation;
- Section 7: Additional Assessments and Consenting Processes; and
- Section 8: Conclusion.

Herbata Limited is bringing forward an innovative data centre design, based on the generation of green onsite energy and connection to other sustainable energy sources to serve the Data Centre Application. The Data Centre Application does not require energy from existing power being generated and distributed on the national electricity grid and in fact will have the capacity to export energy onto the grid, thereby adding resilience to the national electricity production and distribution infrastructure.

2 SUBJECT SITE

2.1 Site Location & Description

The Data Centre Application red line boundary has an area of c. 37.51ha. The inclusion of the Substation Application site gives a total area for the Project of c. 38.67ha. These lands are currently in agricultural and residential use and are largely flat with a gentle slope running generally north to south. The site is located on the western side of the M7 motorway, between Junctions 9a and 10, and is bound to the north by the R409 which provides a direct link to the centre of Naas, c. 2.5km to the east (see **Figure 2-1**).

The 'M7 Business Park' is located immediately to the south of the site and the 'Osberstown Business Park' is located to the north of the R409 (Caragh Road). The Osberstown Wastewater Treatment Plant is located further north. The site is bounded to the east by the M7 motorway and to the west by agricultural lands. The 'Newhall Retail Park' is located to the south of the site, on the east side of the M7 motorway. There has been significant development in the locality in recent years, particularly in the light industry, logistics and services sectors. Lands to the east, on the other side of the motorway, form part of the Naas Northwest Quadrant.



Figure 2-1: Local Site Location Context Map Source: Google Maps, RPS annotated.

The site is currently mainly in agricultural use and comprises a number of fields which are bounded by hedgerows. There is a cluster of farm buildings located within the site, accessed from the R409. There are a number of agricultural entrances to the lands from the R409. There are 3 no. one-off houses located within the subject site fronting on to the R409 and a number of agricultural buildings in the centre of the site. As part of the Data Centre Application the agricultural buildings and the dwellings will be demolished. The Bluebell Stream runs along the southern boundary of the site.

Two overhead power lines currently cross the site (110kV and 220kV). The 110kV line crosses the northwestern corner of the site and the 220kV crosses the eastern part of the site.

A recorded monument is located within the south-eastern area of the site: Recorded Monument Ref. no. KD019-028, classified as a 'Fulacht Fia'.

The R409 along the northern boundary of the site has no existing dedicated pedestrian / cyclist infrastructure. Footpaths are provided on both sides of the R409 approximately 100m east of the M7 boundary of the site, which then connect to a network of pedestrian and cycle ways travelling along the R409 and Millennium Park Road (R445) towards the town of Naas and surrounding commercial areas.

The nearest bus stops to the site are located approximately 1.8km to the southeast along the R445 at Newhall Retail Park. The bus stops around Newhall Retail Park providing a half hourly service between Kildare/Newbridge and Dublin City Centre (126 Go-Ahead service), and a half hourly service between Kildare/Portlaoise and Maudlings/Dublin Airport (726 Dublin Coach service). There is also a 2-3 hourly service between Newbridge and Sallins Train Station (821 TFI Local Link service) which passes by the site along the R409 but does not have any nearby designated stops.

The nearest train station is Sallins/Naas, approx. 4.5km to the north-east. There is a half hourly service from Dublin Heuston and a connecting bus service between the station and Naas.

The existing site layout is shown in Figure 2-2.

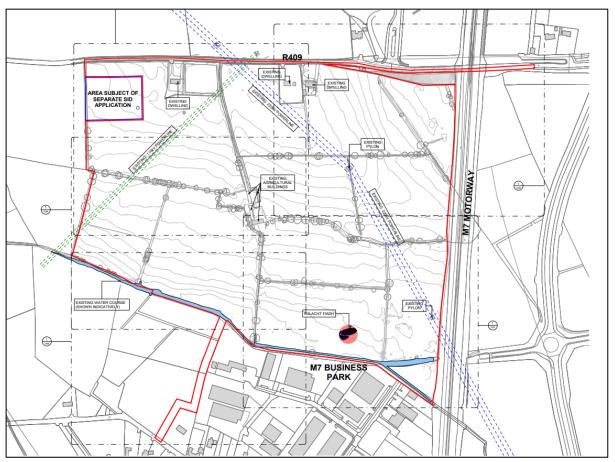


Figure 2-2: Existing Site Layout

Source: RKD

3 DATA CENTRE APPLICATION

3.1 Introduction

The Data Centre Application comprises 6 no. DCBs of c. 27,261m² internal area each. These buildings will store digital data remotely. Facilities such as those proposed underpin contemporary social and economic activity. As stated in the *Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy* 2022:

"This is the infrastructure that lies behind all digital aspects of our social and work lives, including video calling, messaging and apps, retail, banking, travel, media, and public service delivery in areas such as healthcare and welfare...

Data centres, along with connectivity and cyber security, are important infrastructure enablers in an open modern economy, facilitating digital transformation of SMEs and associated productivity and competitiveness gains."

Furthermore, data centres offer the opportunity to further embed the ICT sector in the Irish economy and provide innovative approaches and funding streams for the provision of increased sustainable energy generation facilities.

The Data Centre Application and the associated development are described further below.

3.2 Energy Sources for Data Centre Application

The powering of the proposed data centre by renewable energy sources is a key objective of the applicant and is required by national, regional and local policy. Set out briefly below are the proposed energy sources for the data centre. More technical detail is provided elsewhere in the enclosed documentation. The data centre will be powered from the following energy sources:

- On-site solar panels;
- On-site gas turbines; and
- Off-site solar / wind farms;

These generation facilities will be augmented by on-site battery energy storage systems (BESS).

The Data Centre Application also includes district heating proposals.

3.2.1 On-site solar panels

Each DCB will have solar PV panels with a total area of 3,600m² on the roof. The solar PV panels have a minimum peak output of 500kW for supporting the technology elements and a further 20kW for supporting the admin/support functions. Further detail is provided in the *Energy Efficiency and Climate Change Adaptation Design Statement* prepared by HDR.

3.2.2 On-Site Turbines

The proposed data centre will have its primary source of power generation on-site. Generation of electricity is proposed on site using highly efficient gas turbines for the majority of the generation, with top up from gas engines. These facilities shall be provided in the plant area of each DCB. The proposed turbines have the capacity to operate with hydrogen.

This is in line with recent EU and Irish Government direction on the use of gas for power generation as a transition fuel. It also avoids any negative impact from the Data Centre Application on the public electricity distribution system, as no additional demand is placed on the external grid and indeed the Data Centre Application allows for any excess power to be exported to the grid to underpin a more sustainable supply of electricity. The onsite gas turbines and gas engines will enable the export of energy generated on-site to the wider network and provide capacity as an Autoproducer to EirGrid.

Gas will be sourced from the Gas Networks Ireland (GNI) gas network. Above ground installation (AGI) compounds will be located on the site to allow connection to GNI's infrastructure.

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GNI's gas supply is based on using imported and Irish natural gas from various sources, however GNI have also published their *Vision 2050* where they set out how they could achieve a zero dependency on gas from fossil fuels. The replacement is based on the use of biomethane, abated natural gas and the use of hydrogen. The supply by GNI of non-fossil fuel gas will further reduce the greenhouse gas (GHG) production impacts of the Data Centre Application and as detailed in the *Energy Policy Compliance Report* prepared by HDR it is projected by 2039 the proposed data centre would operate at Net Zero Carbon.

3.2.3 Off-site solar / wind farms

Corporate Power Purchase Agreements (CPPAs) will be used to procure sustainable energy from new wind / solar farms. These CPPAs will directly fund the construction of new wind and solar farms, delivering new sustainable energy and adding to the robustness of national energy supply.

Discussions have taken place with various solar and wind renewable energy suppliers with a view to supplying energy through CPPAs. As demonstrated in the letter and report from BOS Energy Limited (see **Appendix A**), it is clear that there is sufficient capacity available from suppliers to meet the 30% operational renewable energy target set out in the *Kildare County Development Plan 2023-2029*. The process and technical aspects of CPPAs are considered more fully in the report from BOS Energy Limited in **Appendix A**. CPPAs will be finalised following a grant of permission (along with a connection agreement with EirGrid). If KCC are so minded a condition may be attached to a grant of permission requiring the CPPAs to be secured in advance of the proposed development becoming operational. Wording for such a condition is provided below:

"Prior to the commencement of the operation of the development, the applicant shall submit for the written agreement of the Planning Authority details of a Corporate Purchase Power Agreement that the developer has entered into which demonstrates that at least 30% of the energy consumed by the development on site is matched by new renewable energy generation in line with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy.

REASON: In the interests of sustainable development."

3.2.4 On-site battery energy storage systems

For the purposes of providing uninterrupted and conditioned power, each DCB will have a dedicated BESS. The storage capacity provides a backup energy source and in addition adds resilience to the wider network, having the capacity to provide immediate export of energy to the national grid, or the capacity to store excess electricity generated externally, if required.

3.2.5 Heat Recovery and District Heating

Two of the gas turbines are proposed to have waste heat thermal boilers installed within their exhaust flues in order to recover the medium to high grade heat from the turbines. Each turbine has a nominal electrical output rating of 5MWe, the available maximum heat output is assumed at 10MWth per turbine, with a total capacity of 20MWth possible when both turbines are available and running. The heat from the thermal boilers will be pumped via heat exchangers to the perimeter of the data centre campus, to enable district heating pipework to be connected to future users. Further detail on the district heating proposals is set out in the enclosed *Feasibility Assessment Herbata Data Centre Campus - District Heating Network* report prepared by HDR.

3.3 Description of Data Centre Application

The Data Centre Application comprises 6 no. two storey DCBs, an administration / workshop and water treatment building, car parking, landscaping, fuel storage and gas turbines, energy storage and other associated works as shown in the proposed site layout drawing (see **Figure 3-1** and enclosed proposed site layout drawings). The key elements of the Data Centre Application are set out below:

• The demolition of 3 no. of dwelling houses and associated garages along the R409 and farm outbuildings / agricultural buildings at the centre of the site (total floor area 1,591m²).

- The construction of 6 no. two storey DCBs, each including data hall, administration block, electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, external plant area and associated ancillary development. DCB 5 will also include infrastructure for district heating within the external plant area.
- Each data hall will be 18m in height at parapet level and 19m in height at flue and 27,261m² in area.
- The administration blocks associated with each data hall will be 15m in height and 2,505m² in area.
- The external screened plant area will be 18m in height and 6,164m² in area, with exception of DCB 5 which will be 6,375m² in area. Gas turbines and gas engine and BESS will be provided within the plant area.
- Adjacent to each data centre will be a sprinkler tank compound (408m² in area) comprising of 3 no. above ground sprinkler pump containers, (1 no. 192m³, 1 no. 268.8m³ and 1 no. 336m³ containers) and a fuel compound (330m² in area) comprising 1 no. 34m³ fuel pump container and 6 no. 64m³ tanks.
- Solar panels with a total area of 3,600m² will be provided on the roof of each data centre and rainwater harvesting included in the development.
- A GNI compound (60.8 m² in area) with 1 no. kiosk (3m in height and 19.5m² in area) with a Biomethane gas injection point.
- An AGI compound (1,753.1m² in area) with 4 no. kiosks each of 3m in height and 51.5 m² in area.
- District heating building (5m in height and 341m² in area) district heating plant and in ground piping for district heating system.
- Security hub building at main entrance (4.1m in height and 42m² in area).
- A single storey admin workshop / office (504m² in area) and water treatment plant (315m² in area) building (4.8m in height) and associated hydrant pump compound (352m² in area) comprising of a hydrant pump room (5m in height and 80m² in area) and 2 no. hydrant pump room storage (5m in height and c. 50m² in area).
- A new access from the R409 and a new emergency access / egress from the L2030 via the M7 Business Park and including a bridge over Bluebell stream.
- A cycle path and footpath along the south side of the R409 along the length of the campus site's road frontage and extending east to existing cycle and pedestrian facilities.
- A bus stop is also to be provided on the R409.
- Construction of a temporary construction access off R409 and temporary construction compound within the boundary of the site.
- Ancillary site development works that will include swales, detention & attenuation ponds and the installation of pipes and connections to the public water supply, foul and storm water drainage networks, and the installation of utilities. Other ancillary site development works will include hard and soft landscaping, including planted mounding, lighting, fencing (2.4m) / integrated boundary treatments, bat houses, smoking shelters, signage, central services road and internal access roads, loading bays, gates, 210 no. car parking spaces and 104 no. bicycle parking spaces. The development will be integrated into the surrounding landscape with native woodland planting to all frontages, including a 30 40m landscaped buffer along the M7.

The Substation Application including the undergrounding of the existing 110kV line and construction of a substation forms part of the overall Project for Environmental Impact Assessment and Appropriate Assessment Purposes, but for the reasons set out in **Section 1** of this Planning Report, will be subject to a separate SID planning application to ABP. The Data Centre Application is shown in **Figure 3-1**.

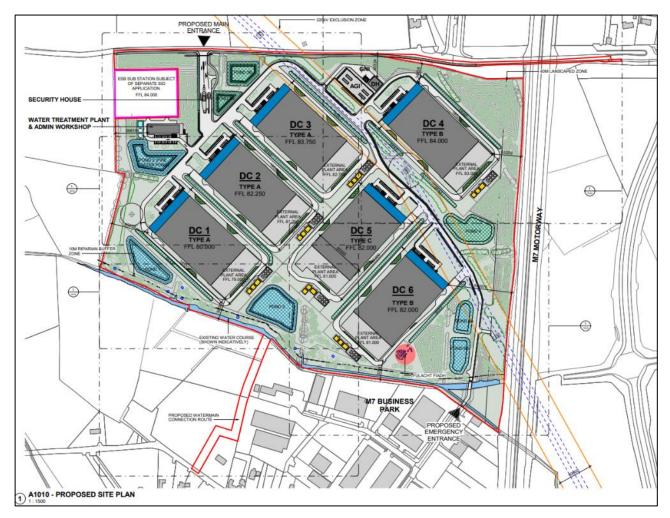


Figure 3-1: Proposed Site Layout

Source: RKD

3.4 Data Centre Buildings

6 no. two-storey DCBs are proposed, each with a total cumulative floor area of 27,261m² and overall height to parapet of 18m. Each proposed DCB is rectangular in shape with an admin block located at the front, 8 no. data halls in the middle and external plant yard to the rear. Each DCB will have the capacity to support 30MW of IT equipment. The admin block of 15m in height overlooks the car parking area and bicycle shelter located to the front of each DCB. 30 no. car spaces in total are provided at each DCB, including 2 no. accessible spaces and 9 no. EV spaces. Ducting infrastructure will be provided for all spaces. Additionally, 16 no. sheltered bicycle parking spaces are provided at each DCB.

The enclosed external plant area to the rear of the building contains the equipment required for the functioning of date halls, including gas turbines. There is a compound of modular design located to the rear of each building which comprises of a fuel compound, sprinkler pump room and 2 no. water storage tanks. These compounds will be enclosed behind a solid screened barrier with acoustic absorption on the inside face to a similar height to the main buildings. Each building also has space for 2 no. loading bays and there is a service road around the perimeter of each building to allow for access to the external plant area and fuel compound to the rear.

The buildings will be steel-framed with insulated metal faced cladding panels to the facade. The entrance area will have large, glazed windows. Each DCB will have solar panels at roof level with a total area of c. 3,600m².

Further detail on the design and layout of each DCB is provided in the *Architectural Design Statement* and architectural drawings prepared by RKD Architects.

3.5 Ancillary Buildings

The Data Centre Application includes for the construction of a security building at the entrance and a water treatment plant and admin workshop building to the west of the main entrance. The design of these buildings is consistent in materials and general design with the DCB.

3.5.1 Security Building

The security block will be located at the main entrance into the site and has a floor area of c.42m² and height of 4m and will house a small office for 2 security personnel, a kitchenette, control panels area and an accessible WC.

3.5.2 Administration / Workshop and Water Treatment Building

The administration / workshop and water treatment plant will occupy a single building with a total area of 819m². The administration / workshop will have a floor area of 504m² and the water treatment plant will have an area of 315m².

This building houses an administration workshop for any maintenance of plant required on site. It also houses an administration office, kitchenette, WC & shower facilities, conference room, managers office and campus control room.

3.5.3 District Heating Building

A district heating building of 341m² and 5m in height is proposed adjacent to the AGI.

3.5.4 Smoking Shelters

7 no. smoking shelters of $9m^2$ each are proposed proximate to the entrance to each DCB and the admin / workshop building.

3.5.5 Bat Houses

A number of c. 16m² bat houses are proposed throughout the Data Centre Application as shown on the Proposed Site Plan drawings prepared by RKD.

3.6 Landscaping & Boundary Treatment

Within the Data Centre Application, the existing boundary trees and hedgerows will be retained where possible and protected and augmented with additional native tree and hedge planting where necessary. The external boundary hedgerows and trees will largely be maintained. Additional landscaping and screening will be provided along the site boundaries and within the site.

Along the eastern boundary of the site to the M7, there will be a 30m wide landscaped buffer provided. On the remaining boundaries a minimum 10m buffer will be provided, which will consist of earth mounding and native, screen woodland planting to help integrate the development into the landscape, mitigate visual effects and increase site biodiversity. The principal elements of the landscape design approach will include the following measures:

- Provision of temporary fencing during construction in accordance with BS5837: 2012 for the protection of all trees, hedgerows and vegetation to the perimeter of the site;
- Retention and utilisation of subsoil and topsoil for the creation of landscape mounding, up to 6.5m high, to the site boundary with the M7 and for reinstatement of disturbed landscape areas;
- Provision of security fencing with native hedge planting to boundaries;

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- Provision of mixed, native woodland planting, including evergreen and deciduous tree species, planted
 to the perimeter landscape buffer and mounding, see Figure 3-2 below for example to the M7
 boundary;
- Internal landscaped areas will include SuDS features including detention/attenuation basins, swales, biofiltration planters and permeable paving integrated with suitable landscape planting and seeding including native grassland meadows; and,
- Planting and grassland management will follow the *All-Ireland Pollinator Plan* and Guidance documents, helping to increase site biodiversity, with a maintenance programme for the woodland screen planting to ensure establishment.

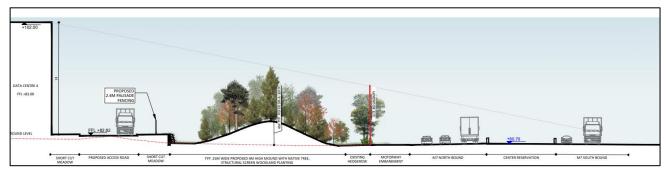


Figure 3-2: Sketch section to M7 / eastern boundary illustrating proposed mounding and native woodland screen planting.

Source: BSM

Landscaping proposals include:

- **5.4 ha** Structural Screen Native Woodland (c. 23,760 trees);
- 1 ha Native Scrub (2-3m high) Planting (c. 4,400 small trees/hedging);
- 1,000+ Advanced Perimeter Trees; and
- 200+ Advanced Trees planted internally.

Further detail is provided in the Landscape Statement prepared by BSM.

A 2.4m black palisade security fence is proposed around each DCB and the perimeter of the built-up area of the site. Timber post and rail fencing is proposed around the ponds for safety reasons and a 1.2m agricultural timber post and wire mesh fencing is proposed along the southern boundary to the north of the Bluebell Stream. Full details of proposed boundary treatment can be seen on drawing no. 22217-RKD-ZZ-ZZ-DR-A-1400, prepared by RKD Architects.

3.7 Proposed Energy Supply Infrastructure

3.7.1 On-Site Turbines

The proposed data centre will have its primary source of power generation on-site. Generation of electricity is proposed on site using highly efficient gas turbines for the majority of the generation, with top up from gas engines. These facilities shall be provided in the plant area of DCB.

Gas will be sourced from the GNIs gas network. AGI compounds will also be located on the site to allow connection to GNI's infrastructure.

GNI's gas supply is based on using imported and Irish natural gas from various sources, however GNI have also published their *Vision 2050* where they set out how they could achieve a zero dependency on gas from fossil fuels. The replacement is based on the use of biomethane, abated natural gas and the use of hydrogen. The supply by GNI of non-fossil fuel gas will further reduce the greenhouse gas (GHG) production impacts of the Data Centre Application.

The proposed turbines have the capacity to operate with hydrogen. This flexibility, further future proofs the Data Centre Application, providing an opportunity to use hydrogen, a sustainable energy source, as soon as it may become available.

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Turbines operate at Medium Voltage (MV) level and are coupled with BESS to provide low emission 365/24/7 support to critical loads.

3.7.2 Battery Energy Storage System

For the purposes of providing uninterrupted and conditioned power, each DCB will have a dedicated BESS. This system will consist of individual modules connected in parallel, with the total quantity of modules for each building as required to match the load of the data centre. These modules will be housed in outdoor-rated enclosures and will be located in each building's exterior plant compound. The BESS will consist of rack mounted lithium iron phosphate battery modules connected to a DC bus. Rectification from AC to DC is achieved via an input inverter and conversion back to AC is achieved via an output inverter. The inverters are contained within the BESS enclosures. Each BESS enclosure contains its own dedicated cooling and fire protection systems. The Data Centre Application includes a significant energy storage component. An energy storage unit for each DCB (6 no. in total) is proposed.

The storage capacity provides a back-up energy source and in addition adds resilience to the wider network, having the capacity to provide immediate export of energy to the national grid, or the capacity to store excess electricity generated externally, if required.

3.7.3 Onsite Solar Power Generation

It is proposed to provide solar panels on the roofs of each of the DCBs. The area of the panels of each roof is c. 3.600m², giving a total area of 21,600m². Further detail is provided in the *Energy Efficiency and Climate Change Adaptation Design Statement* prepared by HDR.

3.7.4 Biogas Injection Point

It is proposed to provide a biogas injection point. This will facilitate the injection of renewable gas into the gas network and supports the objective of GNI to achieve a non-fossil fuel based gas network by 2050.

3.7.5 Off-site solar / wind farms

The Data Centre Application and the associated Substation Application (subject to separate SID consenting process) facilitate connection with off-site solar / wind farms. CPPAs will be used to procure sustainable energy from new wind / solar farms. These CPPAs will directly fund the construction of new wind and solar farms, delivering new sustainable energy and adding to the robustness of national energy supply. Further detail on these CPPAs is provided in **Section 3.2** and in the letter and report prepared by BOS Energy included in **Appendix A**. From the outset of operations it is proposed that 30% of the energy requirements will be met from new renewable wind / solar generation procured by CPPA.

3.8 Water Supply and Storage

The proposed cooling system for the DCBs is based on direct air cooling, which will be used for over 90% of the year. During the remaining period, water may be needed to trim the cooling temperatures within the data halls by use of adiabatic cooling techniques. At peak, usually a couple of weeks in the summer, elevated amounts of water are required. It is proposed to provide water for the industrial processes via rainwater harvesting from the data hall building roofs. Significant amounts of underground tanked water storage will be provided for each building. A back-up supply for process demand will be provided by retaining a permanent volume of water in the proposed attenuation ponds on the site.

Drinking water will be provided via a new connection to the public watermains, full details of which are contained in the *Planning Engineering Report* prepared by HDR and DOBA. A confirmation of feasibility letter from Uisce Éireann is enclosed.

3.9 Surface and Foul Water Drainage

Wherever possible, surface water will be collected and stored in rainwater harvesting tanks for the cooling systems in each building. Any excess and other surface water will be held on site in attenuation ponds sized to cater for the overall site. Connections to the local foul water network will be required for normal welfare

provision but also for wastewater from the cooling systems used. This is further detailed in the enclosed *Planning Engineering Report* prepared by HDR and DOBA.

3.10 Transport and Access

The main access into the site will be via a new entrance on the R409, at the north-eastern boundary. There will be an emergency access to the south of the site from the L2030 via the M7 Business Park. This emergency includes a new bridge over the Bluebell Stream.

The R409 along the northern boundary of the site has no existing pedestrian or cyclist infrastructure. Footways are provided on both sides of the R409 approximately 100m east of the M7 boundary of the site, which then connects to a network of pedestrian and cycle ways travelling along the R409 and R445 Millennium Park Road towards the town of Naas and surrounding commercial areas respectively. It is therefore proposed, as part of the Data Centre Application, to provide a 1.8m off road cycle path and 2.0m footpath along the southern side of the R409. This new facility will provide a link between the proposed vehicular access junction into the site and the existing shared pathway located on the eastern side of the bridge over the M7. The segregated pedestrian and cyclist facilities will be reduced to a 2m shared pedestrian / cycle path as it crosses over the M7.

The Data Centre Application includes the provision of a new bus stop on the R409, approximately 100m to the east of the main access into the site and will be constructed in accordance with Kneeling Bus Option 1 (National Cycle Manual p. 164). Further details of the proposed bus stop are provided in the enclosed drawings prepared by DOBA.

The proposed R409 upgrades and main access into the site have been subject to a *Road Safety Audit* (which is enclosed as Appendix J to the Planning Engineering Report) prepared by Bruton Consulting Engineers. As set out in the *Road Safety Audit* all items identified have been fully addressed through the provision of additional information or the incorporation of the recommendation of the auditors into the proposed design.

An internal access road network with footpaths is proposed to serve all the buildings on site. This is fully described in the enclosed drawings and the *Planning Engineering Report* prepared by HDR and DOBA.

3.11 Car and Bicycle Parking

As part of the Data Centre Application, it is proposed to provide a total of 210 no. car parking spaces at the site including 14 no. disabled spaces and 63 no. EV spaces.

Each DCB will have 30 no. spaces to the front of the building which will include 2 no. accessible spaces and 9 no. EV spaces.

30 no. car spaces are provided at the admin workshop and water treatment plant area to include 2 no. accessible spaces and 9 no. EV spaces.

A total of 104 no. cycle parking spaces are proposed at the site. 16 no. bicycle spaces will be located at each DCB and 8 no. bicycle spaces at the admin workshop building. These cycle spaces are sheltered and convenient to building entrances.

This provision of bicycle parking at the overall site has been discussed with the KCC Roads, Transportation & Public Safety Department. Correspondence between the design team and KCC Roads, Transportation & Public Safety Department is included in the appendices of the enclosed Planning Engineering Report.

As set out in **Section 4.9.7** of this Planning Report the proposed car and bicycle parking is considered to accord with Development Plan standards. Further detail on parking provision is provided in the enclosed *Transport Assessment* and *Mobility Management Plan* prepared by Systra.

3.12 Built Heritage

A recorded monument is located within the south-eastern area of the site: recorded monument Ref. no. KD019-028, classified as a 'Fulacht Fia'. The monument is described as follows;

"Some 30m N of a small, NW-flowing stream in well-drained, level pasture. Described in 1985 as horseshoe-shaped mound (diam. c. 6m N-S; H. 1m) open towards the S (SMR file). No obvious surface trace survived in 2000, but the area, although recently drained with a plastic

field-pipe (Wth 0.5m; D 0.3m) just N of the site was still wet and rushy to the SE of the site. Subsurface features may survive intact."

There is no visible trace of the recorded monument but remains may exist underground. A 20m radius no dig zone is proposed for this part of the site and is incorporated into the landscaping plan. Further detail on the Fulacht Fia and the design measures are provided in the enclosed EIAR.

3.13 District Heating

Two of the gas turbines are proposed to have waste heat thermal boilers installed within their exhaust flues in order to recover the medium to high grade heat from the turbines. The heat from the thermal boilers will then be pumped via heat exchangers to the perimeter of the data centre campus, to enable district heating pipework to be connected to the identified uses.

A Feasibility Assessment Herbata Data Centre Campus - District Heating Network prepared by HDR in enclosed. This sets out the potential output from the Data Centre Application, possible uses and a number of recommendations for how this may be progressed.

3.14 Lighting

New external lighting will be provided to the following areas:

- Access roads within the site;
- · Car park; and
- Site security lighting (including emergency escape lighting).

Lighting design strategy will be developed to complement the new landscape design and be integrated into the existing surroundings. The site will operate as a 'Dark' site with minimal and controlled lighting at the entrance / parking areas, together with low level lighting around the site only used for emergency. Light impacts are minimised by the use of luminaires with good optical distribution, use of glare shields, selecting suitable luminaire height, dimmable light source and good lighting control.

A *Lighting Assessment Report* prepared by HDR is enclosed and provides additional detail on lighting arrangements.

There are also lighting proposals at the proposed pedestrian and cyclist upgrade of the R409. The upgrades are considered in the enclosed *Outdoor Lighting Report* prepared by Sabre Electrical Services.

3.15 Fire Safety

The proposed fire strategy for the proposed buildings on site have been developed to achieve compliance with Part B (Fire Safety) of the Second Schedule of the Building Regulations 1997-2014 (the Building Regulations). All individual buildings will be subject to obtaining a Fire Safety Certificate (FSC) through the Building Control process (i.e., data centres, utility buildings, etc.), the FSC applications will demonstrate full compliance with Part B of the Building Regulations. External plant items shall be designed to achieve compliance with the Safety Health and Welfare at Work Act 2005.

The development of individual buildings has been reviewed by GSP Fire as the design evolved to ensure compliance with Part B of the Building Regulations. The following sections of the Building Regulations have been incorporated into the design using Technical Guidance Document B as the basis of design:

- B1 Means of Escape;
- B2 Internal Fire Spread: Linings;
- B3 Internal Fire Spread: Structure;
- B4 External Fire spread; and
- B5 Access and facilities for the fire service.

In collaboration with the gas generation and battery storage design team, a *Fire Hazard Report* was prepared setting out the fire risks and mitigating measures proposed to remove or reduce the risk to acceptable levels. These measures included:

- Suppression systems to BESS units and Generators;
- Fire detection and monitoring systems;
- Assessment of Access to and within compounds;
- Space separation measures; and
- Passive fire protection measures.

The process included liaising with the Kildare Fire Authority which included submission of the fire hazard report and drawings for their review, follow up review meetings, discussions and incorporating feedback.

GSP Fire are satisfied that the proposals meet the performance requirements of the Building Regulations and subsequently a Fire Safety Certificate shall be submitted and issued for each individual building.

A *Fire Hazard Report* prepared by GSP Fire is enclosed as an appendix to the EIAR and provides additional detail on fire safety.

3.16 Details of Operations

The DCB will be accessible 24 hours a day, 7 days a week, for maintenance and for service vehicles. However, the standard working hours will be 8.00am to 6.00pm.

The proposed data centre has been flexibly designed to enable one tenant per DCB, or indeed one tenant to occupy multiple DCBs. Ancillary office space is provided in each DCB, so that personnel can be permanently on site.

Each DCB will have an associated staff of approximately 28 people. In addition, there are visitor and other staff meaning that the total expected number of daily operational staff and customers / visitors related to the entire Data Centre Application would be between 350 and 400, with c. 225 no. people working at the proposed facility. This level of employment is somewhat lower than that which was originally envisaged but is nonetheless significant.

The security building will be manned on a 24/7 basis.

3.17 Construction Phasing

The construction works associated with the development will be undertaken in three phases as indicated in **Figure 3-3**. There will also be an initial demolition and excavation phase associated with removing existing structures on site along with the levelling and reprofiling of soil.

3 no. residential dwellings and a number of agricultural sheds are proposed to be demolished.

Construction access is to be provided from the R409. On completion of construction, this construction access will be removed and landscaped as per enclosed landscaping proposals prepared by BSM.

The outline construction phasing proposals, which are subject to end-user requirements, are summarised below.

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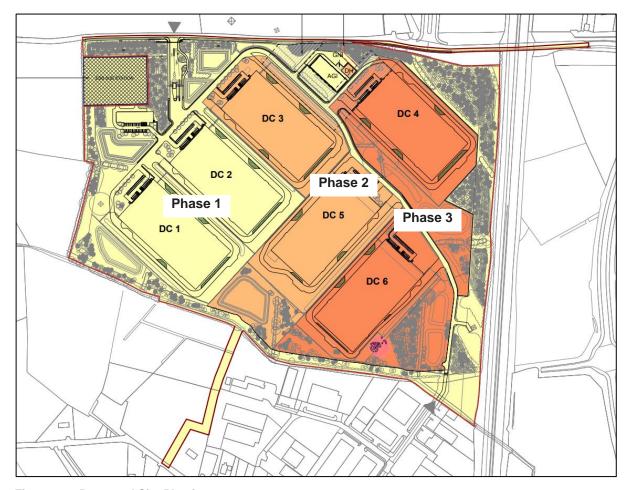


Figure 3-3: Proposed Site Phasing

Source: RKD

3.17.1 Phase 1

- · Enabling works;
- Construction of DCB 1 and DCB 2 along with their associated infrastructure;
- Construction of Substation Application and cable undergrounding (subject to separate SID application);
- Construction of AGI building, water treatment plant, admin workshop and security building;
- Construction of internal service roads and footpaths, vehicular access and parking;
- Improvements to R409 and Bus Stop; and
- Boundary fencing and landscaping of the site.

3.17.2 Phase 2

- Construction of DCB 3 and DCB 5, along with their associated infrastructure; and
- Construction of district heating building.

3.17.3 Phase 3

• Construction of DCB 4 and DCB 6, along with their associated infrastructure.

3.18 Duration of Permission

A 10-year permission is being sought due to the nature and scale of this development. The logistics of construction on this scale means that their delivery must be programmed on a phased basis over the duration of a 10-year planning permission. Phased construction also has the benefit of delivering consistent employment for locally based construction personnel.

It is envisaged that construction will take 8-9 years. Further detail is provided in the enclosed *Construction Traffic Management Plan*. Phased construction also provides resilience against the vagaries of the business cycle and is a standard practice for data centres of this scale. Further details on the phasing arrangements are provided in **Section 3.17**.

3.19 Substation and Undergrounding of 110kV Power Lines

A request was made on 30th January 2023 to ABP under Section 182E of the Planning Act to enter into a pre-application consultation with ABP in relation to the application for grid development (the Substation Application) to facilitate the Data Centre Application.

On 5th July 2023, ABP issued a determination (ABP Ref. 315659-23) confirming that the proposed grid development meets the relevant criteria and constitutes SID under Section 182A of the Planning Act. As part of the Substation Application, the existing 110kv overhead powerlines located in the north-eastern corner of the site will be undergrounded and a GIS Substation will be provided on site. The proposed 8-bay EirGrid standard GIS substation and partial undergrounding of EirGrid's 110kV overhead lines will therefore be the subject of a separate SID planning application to ABP as it involves changes to electricity transmission.

The Substation Application and undergrounding shall provide directly for the proposed data centre in addition to delivering wider community benefits, as it allows for:

- The reduction in above ground grid infrastructure in the area;
- Connectivity to the data centre campus for both import and export of electricity; and
- Development outside of the site to be enabled by the provision of spare 110kV circuits if required.

4 PLANNING POLICY APPRAISAL

4.1 Introduction

Set out below is a consideration of national, regional and local planning policy pertinent to the Data Centre Application. The accordance of the Data Centre Application with these policies is also set out.

4.2 National Planning Policy Context

4.2.1 European Union Taxonomy

The European Union (EU) Taxonomy, launched in 2020, provides definitions of how economic activities can be considered environmentally sustainable. It is designed to help shift investment flows to finance decarbonisation, create investment security, and prevent greenwashing and creates a common classification system for sustainable economic activities.

The European Commission has included gas under the transitional activity category of the Taxonomy Regulation to "allow us to accelerate the shift from more polluting activities, such as coal generation, towards a climate-neutral future, mostly based on renewable energy sources."

The Data Centre Application accords with EU legislation in using gas as one of the proposed energy sources and directly supporting the decarbonisation of gas through the proposed gas injection point. The Data Centre Application also supports decarbonisation through CPPA (see **Section 3.7.5**), and the report and letter prepared by BOS Energy included in **Appendix A**, providing a robust income source for sustainable energy producers, thereby supporting the financing and delivery of new wind / solar power generators.

4.2.2 National Planning Framework

The National Planning Framework (NPF) sets out the overall national planning policy objectives and targets for the country over the next 20 years. It provides a framework to guide public and private investment "to create and promote opportunities for our people, and to protect and enhance our environment".

Ten National Strategic Outcomes (NSOs) articulate the primary objectives of the NPF, while National Policy Objectives (NPOs) outline more precise ambitions and targets.

NSO 5 of the NPF relates to the creation of "A Strong Economy Supported by Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation. The following objective, relating to ICT infrastructure (including datacentres) is included under NSO 5:

"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."

The Data Centre Application proposes the provision of a new data centre facility at an appropriate location which is specifically zoned for this use.

NSO 5 also states:

"Ireland is very attractive in terms of international digital connectivity, climatic factors and current end 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."

The NPF identifies district heating as part of a key future growth enabler for Irish cities:

"Improving sustainability in terms of energy, waste and water, to include district heating and water conservation".

The NPF supports renewable energy under NPO 55:

"Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050."

It is proposed to provide water for the industrial processes via rainwater harvesting from the data hall building roofs. The Data Centre Application will facilitate the delivery of district heating and supports decarbonisation through CPPA (see **Section 3.7.5**), and the report and letter prepared by BOS Energy included in **Appendix A**, providing a robust income source for sustainable energy producers, thereby supporting the financing and delivery of new wind / solar power generators. The proposed development also supports the use of hydrogen, see the enclosed *Energy Policy Compliance Report* prepared by HDR.

Having regard to the above, the NPF clearly supports the location of ICT infrastructure in Ireland, and the Data Centre Application is therefore considered to be in accordance with national planning policy. NSO 5 also states that ICT establishes a demand threshold for renewable energy sources which is an added benefit.

4.2.3 Climate Action Plan 2024

The Climate Action Plan 2024 (CAP24) is the annual update to Ireland's Climate Action Plan. CAP24 was approved by the government on 21st May 2024.

CAP24 implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. CAP24 sets out how Ireland can accelerate the actions that are required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

With reference to 'manage electricity demand growth', Section 12.4.1.3 of CAP24 states that "The overarching objective of managing electricity demand growth is to ensure, through a combination of energy efficiency and flexible electricity demand, that economic growth can be supported by low-carbon or no-carbon energy demand growth".

Demand growth from Large Energy Users (LEU), such as data centres is discussed in CAP24. CAP24 Section 12.4.1.3 states: "The demand side strategy should accelerate the rollout of local flexibility markets by the Distribution System Operator, as required to meet renewable electricity and carbon abatement targets, and contain measures to incentivise Large Energy Users to increase the flexibility in their electricity demand." Additionally, CAP24 has a 2024 Action to: "incentivise and enable large energy users to participate in flexible demand initiatives designed to enable low/zero carbon demand growth".

Further, 'Managing energy demand in the commercial sector, with a potential focus on data centre power demand' is mentioned as an example of additional actions in energy efficiency and demand management, mentioned in 5.6.1 of CAP24.

The proposed Data Centre, (a LEU), makes provision for on-site renewable energy production and on-site energy storage. CPPAs will also enable sustainable sources of energy generation to serve the development. The remaining energy requirement shall be met by gas, a transitionary fuel moving to net zero, from the national gas grid. In addition, the proposed data centre will have the flexibility to export energy to the national grid if and when required.

4.2.4 Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy

The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy published in July 2022 sets out national policy for the development of data centres. The statement recognises the fundamental importance of data centres and that they comprise:

• "Core digital infrastructure and play an indispensable role in our economy and society".

The statement identifies the many advantages arising from the location of data centres within Ireland, including:

- Assist people and businesses to fully realise the benefits of digitalisation;
- Data can drive research and innovation;
- The direct generation of employment; and
- Secures the presence of the global technology sector in Ireland.

The importance of Ireland's technology sector to the economy and society is set out, accounting for €52 billion (16%) of gross value added and employing 140,000 people – equivalent to 6% of total national employment with 40% growth over the last five years.

The Data Centre Application is therefore wholly consistent with the Government Statement providing support for data centres. This is considered further below including how the Data Centre Application aligns with each of the Government Policy's six core principles, which are as follows:

- (i) Economic benefit
- (ii) Grid capacity and efficiency
- (iii) Renewable additionality
- (iv) Co-location or proximity with future-proof electricity supply
- (v) Decarbonised data centres by design
- (vi) SME access and community benefits

These six core principles are dealt with separately in the following sections.

4.2.4.1 Economic Benefit

"Economic Impact: The Government has a preference for data centre developments associated with strong economic activity and employment. In particular, it favours developments in regional locations, aligned with the National Planning Framework and Regional Spatial and Economic Strategies, which will embed the technology sector in locations and communities that can benefit from this investment, employment and spill over effects. In assessing economic impact, the totality of the Irish-based economic impact should be considered and factors such as associated total corporate employment, exports, wage levels, Irish materials/services purchased taken into account.

The availability of digital infrastructure should serve our national digitalisation objectives, drive innovation, productivity and skills across our economy aligned to the National Digital Strategy."

The Data Centre Application will directly employ c. 225 staff. This employment is significant in itself, but more importantly delivers additional indirect and induced employment and further secures the region as a key European hub for data centres and cements more firmly the ICT sector within the Irish economy.

In 2018 a study was undertaken on behalf of IDA Ireland titled *A Study of the Economic Benefits of Data Centre Investment in Ireland*¹. The report found that in the period 2010 to 2018 data centre operators had invested a total of €2.96billon on construction and €1.59billon of operating expenditure.

In terms of employment, the study estimated an average of 5,700 Full-Time Equivalent (FTE) jobs per year during 2010-2018, including 1,800 FTEs on an ongoing basis to facilitate the operation of Irish data centres annually. These roles are typically high-skilled, well-remunerated roles that require significant training and educational and professional qualifications.

The Data Centre Application is aligned with the policies of the NPF and the Regional Spatial and Economic Strategy for the Eastern and Midland Regional Assembly (RSES).

NSO 5 of the NPF relates to the creation of "A Strong Economy Supported by Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation.

The following objective, relating to ICT infrastructure (including datacentres) is included under NSO 5:

"Promotion of Ireland as a sustainable International destination for ICT infrastructures such as data centres and associated economic activities."

The NPF further states under NSO 5:

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¹ Source: file:///C:/Users/michael.higgins/Downloads/IDA-Ireland-Economic-Benefits-of-Data-Centre-Investment-Final-May182018%20(1).pdf

"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 of threshold of demand for sustained development of renewable energy sources."

Having regard to the above, the NPF clearly supports the location of ICT infrastructure in Ireland.

The Data Centre Application proposes the construction of 6 no. DCBs in a location which is well suited and serviced to accommodate such a use and on lands explicitly zoned for such a use.

The Data Centre Application is therefore considered to be wholly in accordance with national planning policy.

Regional Policy Objective (RPO) 8.25 of the RSES states the following:

"Local Authorities shall:

 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."

RPOs 4.51 and 4.53 of the RSES pertain specifically to Naas support the strengthening of the local employment base and Naas being a hub for high quality employment.

More locally, this employment underpins the growth and development of Naas as a designated "key town" in the Greater Dublin Area. Technology, IT and digital/tech has been identified as a key sectoral opportunity within Naas in local public policy. The Data Centre Application contributes to the development of this sector and further underpins the Mid-Eastern Region Innovation Think Space (MERITS) building, which aims to provide a purpose built, 'coworking' incubation and accelerator space, for technology entrepreneurs and technology businesses, specifically those involved in the digital economy, internationally traded services, and high-tech manufacturing. The Data Centre Application is therefore considered to accord with local planning policy.

The Baringa report, commissioned by IBEC, *Green Data: A vision for sustainable data centres in Ireland*² notes:

"The data centre industry is also a major contributor to Ireland's economy, attracting an estimated €10bn of investment over the past 10 years, and averaging over 25% growth per year. There are over 90,000 jobs in computing, almost universally relying on data centre services. Jobs in the computer services sector have grown faster than jobs in other sectors over the past decade (Figure 1). In the wider economy, Ireland now boasts over one million jobs in digitally-intensive industries.

Ireland's tech industry has taken off as data centre capacity has grown, and 15% of the gross value added (GVA) in the Irish economy now comes from Information & Communications. This is a particularly export-focused sector, with computer services now accounting for 33% of total Irish exports."

It is therefore evident that the Data Centre Application supports national, regional and local policy and will result in strong economic activity and employment in Naas, a key-town, and the surrounding area.

4.2.4.2 Grid Capacity and Efficiency

"Grid Capacity and Efficiency: The Government has a preference for data centre developments that make efficient use of our electricity grid, using available capacity and alleviating constraints. Data centres should engage collaboratively with the respective system operators to understand capacity availability and required grid services across geographic locations, and where connection can be facilitated, provide grid services such as to best utilise available infrastructure to the benefit all electricity customers."

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² Source: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.baringa.com/globalassets/insights/low-carbon-futures/green-data-a-vision-for-sustainable-data-centres-in-ireland/green-data-vision-for-sustainable-data-centres-in-ireland-1.pdf

It is noted that the subject site is located on a 110kV line and is therefore readily integrated into the electricity grid network.

As set out in **Section 3** of this submission, the primary source of power generation is on-site gas turbine with top up from the gas engines. The Herbata Data Centre will not take any power from the existing grid unless excess capacity is available. The on-site power generation capacity is in excess of that required for the operation of the data centre and provides an opportunity for the export of energy to the national grid if and when required. The Data Centre Application directly addresses electricity generation constraints.

The proposed BESS provides a back-up energy source for onsite activity and in addition adds resilience to the wider network, having the capacity to provide immediate export of energy to the national grid, or store energy from the national grid if required.

This is a highly effective and efficient format linked also to the ability of the electrical systems to provide capacity back to the grid and/or provide fast acting short term grid frequency response services. This ability has come about from a key electrical design format change, by moving the battery elements out of traditional UPS systems and locating them alongside the generating turbines at a higher voltage; this gives much better access to allow grid support.

Through CPPAs, (see **Section 3.2**) the Data Centre Application is directly driving increased renewable energy generation within the State and is alleviating constraints.

The proposed 8-bay EirGrid standard GIS substation and partial undergrounding of EirGrid's 110kV overhead lines will be subject of a separate SID planning application to ABP. This element of the overall project will deliver clear benefits through allowing connectivity to the data centre campus for both import and export of electricity and will allow for development outside of the site to be enabled by having spare 110kV circuits if required.

The applicant has directly and positively engaged with EirGrid and the Commission for Regulation of Utilities (CRU) in the preparation of this planning application. Separate meetings with EirGrid and CRU both took place on 6th October 2021. EirGrid welcomed the energy proposals. CRU also welcomed the proposed approach and offered full co-operation in bringing the proposed innovative solution to fruition in what they described as solving a problem that imminently needs to be dealt with in Ireland. Further detail of these meetings is provided in **Appendix B**.

4.2.4.3 Renewable Additionality

"Renewable Additionality: The Government has a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland. Developments should provide clear additionality in renewable energy delivery in Ireland, whether through new generation, repowering or otherwise increasing in-country renewable energy capacity—proportionate to the impact of their energy demand."

The powering of the Data Centre Application is described in **Section 3** of this report. It is considered that the Data Centre Application will deliver additional renewable energy.

The proposed gas turbines and engines will be fuelled from GNI's gas network comprising of increasing levels of biomethane, abated natural gas and hydrogen, with the aim of being completely decarbonised by 2050. The provision of a biomethane gas injection point provides for local provision of decarbonised gas from the commencement of operation of the data centre.

As noted elsewhere in this report the proposed turbines have the immediate capacity to operate with hydrogen. This flexibility future proofs the Data Centre Application, providing an opportunity to use hydrogen, a sustainable energy source, as soon as it may become available.

Solar PV panels are proposed onsite with minimum peak output of 500kW for supporting the technology elements and a further 20kW for supporting the admin/support functions.

Renewable energy purchased through CPPAs with new solar and/or wind providers mean the Data Centre Application is effectively funding the delivery of additional renewable energy. The applicant will secure CPPAs and has engaged BOS Energy Limited to procure and negotiate same on their behalf. This is further detailed in **Appendix A**. If KCC are so minded a condition may be attached to a grant of permission requiring the CPPAs to be secured in advance of the proposed development becoming operational. Wording for such a condition is provided below:

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"Prior to the commencement of the operation of the development, the applicant shall submit for the written agreement of the Planning Authority details of a Corporate Purchase Power Agreement that the developer has entered into which demonstrates that at least 30% of the energy consumed by the development on site is matched by new renewable energy generation in line with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy.

REASON: In the interests of sustainable development."

Through generating solar energy onsite, facilitating the injection of biomethane gas / hydrogen into the network and the funding via CPPAs new solar and wind generation off-site, the Data Centre Application is delivering additional renewable energy.

4.2.4.4 Co-Location or Proximity with Future-Proof Energy Supply

"Co-Location or Proximity with Future-Proof Energy Supply: The Government has a preference for data centre developments in locations where there is the potential to co-locate a renewable generation facility or advanced storage with the data centre, supported by a CPPA, private wire or other arrangement. Where the combination of technologies at a generation facility is built to match the demand capacity factor (e.g. endeavouring to match the maximum port capacity with export capacity), the same infrastructure may be able to assist both demand customers and generation facilities (wind/solar/battery farm). This would make efficient use of grid investments, reduce curtailment and potentially enable significant decarbonisation of the data centre. The Government also encourages the co-location of downstream value-adding activities that can make use of carbon, excess heat and other outputs from the data centre activity, such as for horticultural activities or district heating schemes."

The Data Centre Application includes an advanced energy storage facility (BESS) and gas turbines which will be powered by biomethane, abated natural gas and the use of hydrogen. Solar PV panels are proposed onsite with minimum peak output of 500kW for supporting the technology elements and a further 20kW for supporting the admin/support functions.

The Data Centre Application is effectively a co-located data centre and renewable generation facility / advanced storage facility.

In addition, CPPAs with proximate new solar and/or wind providers via the grid mean the Data Centre Application is an exemplar of the capacity for the decarbonisation of the data centre sector.

The Data Centre Application incorporates a district heating proposal. This will provide for the offtake of high-grade heat which could be used for future district heating on proximate lands. A *Feasibility Assessment Herbata Data Centre Campus – District Heating Network* prepared by HDR in enclosed. This sets out the potential output from the Data Centre Application, possible uses and a number of recommendations for how this may be progressed.

4.2.4.5 Decarbonised Data Centres by Design

"Decarbonised Data Centres by Design: The Government has a preference for data centres developments that can demonstrate a clear pathway to decarbonise and ultimately provide net zero data services. It is expected that data centres will align with the EU Climate Neutral Data Centre Pact energy efficiency and water use targets and set themselves targets to achieve zero-carbon electricity use at all hours. System operators will work with large energy users to facilitate accurate hourly emissions reporting, grid carbon-intensity transparency, and allow data centre to optimise computing loads to maximise use of renewables and minimise carbon emissions (as per Action 99 of Climate Action Plan 2021)."

As outlined in **Section 3**, the Data Centre Application has a clear pathway to decarbonise and ultimately provide net zero data services. Initially, over 30% of energy requirements will be met through onsite solar PV and CPPAs with new solar and/or wind providers.

The remaining energy requirements will be met through an innovative energy production process. The proposed battery storage and efficient gas turbines provides for cleaner, more resilient electricity production in the immediate term. Going forward GNI are committed to the decarbonising of the gas network through the use of biomethane and abated natural gas. The Data Centre Application includes a gas injection point to further expedite this process.

This considered strategy means the Data Centre Application is on a clear pathway to decarbonisation and from the outset will use only sustainable or transitionary energy sources.

4.2.4.6 SME Access and Community Benefits

"SME Access and Community Benefits: The Government has a preference for data centre developments that provide opportunities for community engagement and assist SMEs, both at the construction phase and throughout the data centre lifecycle. Data centres should provide benefits for regional locations and their surrounding areas through place-making, community engagement and collaboration with local and regional stakeholders to ensure they offer value to the communities in which they locate."

The Data Centre Application is being brought forward by a locally based business which is fully committed to the employment of local people at the construction and operational stage. In the first instance, the Data Centre Application will have significant benefits for SMEs in the area during the construction process.

The operation of the facility will generate demand for a range of services and employment. The Data Centre Application shall support an extensive ecosystem of operations, maintenance and service providers. Many of these shall be locally based SMEs.

The Substation Application (subject to a separate SID consent process) will also support the development of other SME businesses by providing spare 110kV circuits if required.

The Data Centre Application will also benefit the community through enhanced cycle and pedestrian facilities to be provided on the R409.

The applicant has included the development of on-site infrastructure specifically to power a future district heating scheme which will benefit local communities. A *Feasibility Assessment Herbata Data Centre Campus – District Heating Network* prepared by HDR in enclosed. This sets out the potential output from the Data Centre Application, possible uses and a number of recommendations for how this may be progressed.

The delivery of the Data Centre Application will entail the payment of development contributions and commercial rates which will benefit the local community through enhanced local services and provisions.

The Data Centre Application is considered to accord with this principle by providing significant economic benefits to the community and SMEs in the vicinity of the proposal in the construction and operational phase.

4.2.5 Policy Statement on Security of Electricity Supply

The *Policy Statement on Security of Electricity Supply* was published by the Government in 2021. Ensuring continued security of electricity supply in the context of up to 80% of electricity consumption coming from renewable sources by 2030 is considered a priority at national level.

The Policy Statement recognises that:

"There is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply"

The Policy Statement goes on to note that the Government has approved:

"The development of new conventional generation (including gas-fired and gasoil/distillate-fired generation) is a national priority and should be permitted and supported in order to ensure security of electricity supply and support the growth of renewable electricity generation

the connection of large energy users to the electricity grid should take into account the potential impact on security of electricity supply and on the need to decarbonise the electricity grid;

it is appropriate for additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply;

it is appropriate for additional natural gas transmission and distribution grid infrastructure to be permitted and developed in order to support security of electricity supply."

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The Data Centre Application will directly delivery gas powered turbines, energy storage infrastructure and enhanced grid infrastructure, all of which accord with the policy statement. The Data Centre Application will not require energy from the national grid and will not impact on the existing power supply.

4.2.6 National Hydrogen Strategy

The *National Hydrogen Strategy* was published in July 2023 and seeks to ensure decarbonised gases such as renewable hydrogen will have a key role in our future energy system. The strategy sets out several actions to be delivered over the coming years to enable the development of the hydrogen sector in Ireland.

The Data Centre Application has been future proofed to utilise hydrogen as it becomes more available. The proposed turbines have the capacity to operate with hydrogen.

This flexibility, further future proofs the Data Centre Application, providing an opportunity to use hydrogen and a pathway to minimise GHG emissions as set out in the enclosed *Energy Policy Compliance Report* prepared by HDR.

4.2.7 Ireland's National Biomethane Strategy

Ireland's National Biomethane Strategy was published in May 2024. The Strategy supports the significant expansion of biomethane gas production in Ireland, targeting the delivery of up to 5.7 TWh of indigenously produced biomethane by 2030. Part of the vision, as articulated in this Strategy for the use of the biomethane is electricity generation. The Strategy sets out a whole series of 'actions' to deliver this, including:

- "1A Develop a Biomethane Sustainability Charter to support the delivery of environmentally sustainable biomethane in Ireland
- 1C Develop a process to certify the end use of non-grid injected biomethane
- 5B Engage with GNI and CRU to review and finalise the biomethane grid connection policy and economic test including the need for financial bonds and costs for grid connections."

The Data Centre Application includes a biomethane injection point, which directly supports the vision and actions set out in the *Ireland's National Biomethane Strategy*. The proposed data centre has the potential to utilise biomethane and accords fully with the aims and objectives of *Ireland's National Biomethane Strategy*.

4.3 Regional Planning Policy Context

4.3.1 Regional Spatial and Economic Strategy for Eastern and Midlands Regional Assembly

Within the RSES, it is recognised that a guiding principle for the development of data centres is to "align to national strategy and approach for data centres – right location for use and energy demand." RPO 8.25 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 infrastructure **such as data centres*** and associated economic activities at appropriate locations.

Promote Dublin as a demonstrator of 5G Information and communication technology."

(* Our emphasis)

It is submitted that the subject site is an appropriate location for the development of a new ICT infrastructure development having regard to the site's zoning, its strategic and accessible location in close proximity to the 110kV and 220kV national grid and to potential sites which may benefit from district heating.

Naas is designated as a "key town" in the RSES. There are a number of objectives set out in the RSES supporting the growth and development of Naas, including:

"RPO 4.53: Support an enhanced role and function of Naas as the County town of Kildare, particularly as a hub for high quality employment, residential and amenities.

RPO 4.51: Strengthen the local employment base including through the development of MERITS, Millennium Park in the North West Quadrant and the regeneration of underutilised lands including industrial lands in the north east of the town."

The delivery of c. 225 no. jobs directly in the IT sector accords with the policy vision for growth in key towns of the RSES.

4.4 Local Planning Policy Context

4.4.1 Kildare County Development Plan 2023-2029

The *Kildare County Development Plan 2023-2029* (KCDP) was adopted in December 2022 and took effect on 28th January 2023.

Naas is designated a "Key Town". These are large towns which are economically active that provide employment for their surrounding areas and have a wide catchment. Technology, IT and the digital/tech sector are all identified as sectoral opportunities within the town.

"RE 022 Promote the Key Town of Naas as a primary centre of high-quality employment in the County so that its significant residential population will have employment opportunities within easy distance of their homes, thereby reducing outbound commuting."

Naas is also located within the Sallins-Naas-Newbridge Economic Cluster supported by:

"RE 034 Promote and facilitate the development of the Sallins-Naas-Newbridge Economic Cluster, including the proposed Naas to Newbridge Strategic Economic and Employment Zone, by supporting identified key sectoral opportunities along with requisite targeted infrastructural investment, in accordance with the Regional Spatial and Economic Strategy 2019- 2031."

The delivery of c. 225 no. jobs in the IT sector accords with the policy vision for growth in key towns and will help provide employment opportunities for those living in the local area.

4.4.1.1 Data Centres

Chapter 4 of the KCDP deals with *Resilient Economy & Job Creation*. Section 4.16 specifically refers to the provision of data centres within the county. Policy RE P11 and EC P18 state that KCC will;

"Support the accommodation of Data Centres at appropriate locations in line with the objectives of the National Planning Framework and the principles for Sustainable Data Centre Development of the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy (July 2022) subject to appropriate Transport, Energy and Environmental Assessments and all relevant planning conditions. The location of data centres shall be situated where they will not have a potential likely significant effect on a European Site. Such developments shall be subject to an AA Screening Report, and where applicable, Stage 2 AA. They shall have regard for any hydrological connection shared with a European Site and shall account for any potential likely significant effects and provide mitigation and monitoring where appropriate."

The KCDP clearly provides for and supports the provision of data centres in Co. Kildare. The Data Centre Application is for a data centre on a site zoned specifically for this land use. The compliance of the proposed development with the National Planning Framework and the principles for Sustainable Data Centre Development of the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy is set out in Section 4.2.2 and Section 4.2.4. Environmental reports assessing the proposed development are enclosed.

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Further support and guidance on the development of data centres is provided by the following objectives:

"RE O71 Require that any application for a data centre will be subject to all relevant and cumulative environmental assessments and planning conditions and shall take account of the cumulative visual impact of the proposed connections of the data centre with electricity transmission, renewable energy and broadband infra- structure in the area.

RE 072 Require data centres to consider the use of sustainable renewable sources of energy to fuel their operations in whole in the first instance or in part (minimum of 30%) where this is not possible and where it has been satisfactorily demonstrated not to be possible, subject to all relevant and cumulative environmental assessments and planning conditions."

The subject application includes an EIAR and AA Screening Report which consider both the proposed data centre and the associated Substation Application including the undergrounding which is subject to a separate consenting process. The EIAR includes a visual assessment, the preparation of which, including the viewpoint locations, was agreed with KCC.

In accordance with RE O72 consideration of the use of sustainable renewable sources of energy has guided the subject development. As detailed in **Section 3** of this Planning Report, onsite solar PV panels and CPPAs with new solar / wind farms / biomethane gas producers will ensure over 30% of energy requirements (c. 40% over a year) will be met by new sustainable renewable sources of energy from the commencement of operations. This is considered to be a sustainable and prudent approach to the powering of the facility, ensuring a high level of new renewable energy use from the outset, providing back up to the grid and a pathway to carbon zero energy. This is further detailed in the BOS Energy Report included in **Appendix A.**

The remaining energy requirement shall be met by gas, a transitionary fuel, from the national gas grid. GNI is on a pathway to decarbonising their gas network by 2050 by injecting renewables gas (biomethane), abated natural gas, and hydrogen into the gas network.

The Data Centre Application includes a biomethane gas injection point. This will allow for the pumping of renewable biomethane gas to power the Data Centre Application directly or to feed in the wider gas network.

The delivery of the GNI objectives will ensure the proposed data centre is powered completely by sustainable fuel sources.

Further information on the energy requirements and how these will be sustainably met are set out in the enclosed *Planning Engineering Report* prepared by HDR.

Chapter 7 of the KCDP deals with *Energy Communications* and contains the following relevant objectives (EC O59-EC 063);

"EC 059 Consider applications for data centres having regard to the following criteria:

- Accessibility/ease of connection to power
- Availability of renewable energy to power any proposed data centre.
- · Availability of high-powered fibre optic infrastructure
- Transport/road accessibility
- · Compatibility of surrounding land uses/zoning
- Avoidance of designated sites including specifically avoidance of development of data centres where they would adversely affect the integrity of a European Site
- · Availability of significant landbanks
- Noise
- Visual impact
- Flood risk

Such developments shall be subject to an AA Screening Report, and where applicable, Stage 2 AA. They shall have a regard for any hydrological connection shared with a European Site and shall account for any potential likely significant effects and provide mitigation and monitoring where appropriate."

All of these criteria have been fully considered in the current planning application. The enclosed *Energy Policy Compliance Report* prepared by HDR considers ease of connection to power and the availability of renewable energy.

The existing and proposed fibre optic infrastructure is described in the enclosed *Planning Engineering Report* prepared by HDR and is shown on drawing 10360452-HDR-XX-XX-DR-C-082220.

The proposed development includes enhanced pedestrian/ cycle facilities and a new bus stop on the R409. Transport and accessibility is considered within the enclosed *Mobility Management Plan* prepared by Systra, contained in Appendix L of the *Planning Engineering Report* and the *Transport Assessment* prepared by Systra.

The Data Centre Application is on lands zoned for data centre use, detailed further in **Section 4.8** of this Planning Report and the zoning is considered to be compatible with surrounding land uses.

An EIAR, including a *Landscape and Visual Impact Assessment* (LVIA), *Flood Risk Assessment and AA Screening Report* are also included in the application documentation which address the environmental and visual impacts of the proposal.

"EC 060 Require that any application for a data centre shall take account of the cumulative visual impact of the proposed connections of the data centre with electricity transmission, renewable energy and broadband infrastructure in the area."

The subject application includes an *EIAR*, inclusive of LVIA, which considers the visual impact of both the data centre and the associated Substation Application including the undergrounding which is subject to a separate consenting process.

"EC 061 Require data centres to include strong energy efficiency measures to reduce their carbon footprint in support of national targets towards a net zero carbon economy, through the use of sustainable sources of energy generation in the first instance and then the use of renewable sources of energy to power their operations, where on site demand cannot be met in this way, to provide evidence of engagement with power purchase agreements (PPA) In Ireland. All data centre developments shall provide evidence of sign up to the Climate Neutral Data Centre Pact."

The proposed data centre includes provision for the sustainable powering of the facility through solar PV panels on the roofs of the DCBs. The proposed onsite solar PV panels have a minimum peak output of 500kW for supporting the technology elements and a further 20kW for supporting the admin/support functions.

The applicant is committed to the tenets of the Climate Neutral Data Centre Pact. The Climate Neutral Data Centre Pact may be signed by trade associations representing data centre operators and companies that own or operate data centres within the European Union, as shown in **Appendix C**. Herbata Limited intend to sign up to the Climate Neutral Data Centre Pact once they satisfy the above criteria (i.e., the data centre campus is built, and they own / operate same).

CPPAs will also enable sustainable sources of energy generation. The applicant will secure CPPAs and has engaged BOS Energy Limited to procure and negotiate same on their behalf. This is further detailed in **Appendix A**. If KCC are so minded a condition may be attached to a grant of permission requiring the CPPAs to be secured in advance of the proposed development becoming operational. Wording for such a condition is provided below:

"Prior to the commencement of the operation of the development, the applicant shall submit for the written agreement of the Planning Authority details of a Corporate Purchase Power Agreement that the developer has entered into which demonstrates that at least 30% of the energy consumed by the development on site is matched by new renewable energy generation in line with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy.

REASON: In the interests of sustainable development."

To further support sustainable development, the Data Centre Application includes provision for district heating.

"EC 062 All data centre development applications shall have regard to the DECLG guidance document 'Towards nearly Zero Energy Buildings in Ireland – Planning for 2020 and Beyond', which promotes the increase of near Zero Energy Buildings (nZEB)."

The enclosed *Energy Efficiency and Climate Change Adaptation Design Statement* prepared by HDR considers this fully. This Statement details the assessment process and estimated CO2 savings achieved through the integration of passive design, energy efficiency measures and Low and Zero Carbon (LZC) technologies.

"EC O63 Ensure that all significant development proposals for Data Centres are accompanied by an Energy Analysis that explores the potential for the development of low carbon district heating networks."

The proposed data centre includes provision for district heating. This is further detailed in the enclosed. A *Feasibility Assessment Herbata Data Centre Campus - District Heating Network* report prepared by HDR.

As set out in **Section 4.1** of this Planning Report, the Data Centre Application is considered to accord with national policy on the development of data centres and the proposed energy storage and the use of biomethane, abated natural gas and the use of hydrogen for the turbines will ensure that there is the lowest dependency on fossil fuels in the future.

4.4.1.2 Resilient Economy and Job Creation

There are a number of objectives pertaining to economic development set out in Chapter 4 of the KCDP. The following objectives focusing on entrepreneurship and climate change are set out:

"Objective RE O1: Facilitate and support the growth of the economy in Kildare and the Greater Dublin Area in a sustainable manner, and in accordance with the Regional Spatial and Economic Strategy.

Objective RE 02: Continue to promote Kildare, together with the Kildare Local Enterprise Office and national development agencies, as a strategically located economic and employment hub within the Greater Dublin Area and support and facilitate the development of an environment that fosters innovation, enterprise and entrepreneurship but also maintains a core focus on issues around climate change and biodiversity.

"RE O14 Work with EirGrid and ESB Networks to support the provision of a resilient electricity supply and distribution system to accommodate the future economic growth of the county and to facilitate the transition of heat and transport from fossil fuels to electricity.

RE 022 Promote the Key Town of Naas as a primary centre of high-quality employment in the County so that its significant residential population will have employment opportunities within easy distance of their homes, thereby reducing outbound commuting."

The Data Centre Application will deliver significant new employment at construction and operational stages and support a key sector of the economy in Kildare. The Data Centre Application is in accordance with the KCDP objectives regarding economic and employment growth.

The Substation Application (subject to a separate SID application) will deliver an enhanced electricity grid with the potential for importing energy from the proposed data centre and will also support the development of other SME businesses by providing spare 110kV circuits if required.

4.4.1.3 Transport

There are a number of objectives pertaining to transport which are relevant to the Data Centre Application.

"RE O9 Seek to ensure that any significant future employment developments in the vicinity of the strategic road network will be accompanied by a mobility management plan that seeks to provide for an appropriate level of non-car based transport options, utilising the strategic public transport network."

The proposed development includes enhanced pedestrian/ cycle facilities and a new bus stop on the R409. A *Mobility Management Plan,* contained in Appendix L of the *Planning Engineering Report* prepared by Systra, is included in the planning application documentation.

Chapter 5 of the KCDP deals with *Sustainable Mobility & Transport* and contains the following relevant objectives;

"TM O31 Ensure the delivery of robust and efficient cycle and walking infrastructure in Naas by enhancing permeability and improving linkages between Naas Town Centre, surrounding residential and employment areas, Sallins Railway Station and the Northwest Quadrant."

It is a stated target of the Council, as set out in TM T2 to;

"As a minimum, increase the current modal shares of trips to work by walking to 20% and cycling to 10% during the lifetime of this Plan."

The Data Centre Application includes enhanced pedestrian and cycle facilities along the R409 and a bus stop.

"TM O111 All non-residential development proposals will be subject to maximum car parking standards (and minimum cycle parking standards as a limitation to restrict car parking provision and achieve modal shifts to sustainable modes of transport."

Car parking standards for the Data Centre Application type are not set out in the Development Plan.

The proposed car parking provision follows a detailed assessment of need, and a consideration of how sustainable transport modes may be promoted (see enclosed *Mobility Management Plan* and *Transport Assessment* prepared by Systra). The proposed quantum of parking is far below that which might be considered the maximum provision through the application of car parking standards for similar types of development but is considered appropriate in this instance.

The Development Plan does not outline appropriate cycle parking standards for a data centre. In the context warehousing has been used as a general guide along with a detailed assessment of need and a consideration of how sustainable transport modes may be promoted (see enclosed *Mobility Management Plan* prepared by Systra). It is considered the quantum and quality of bicycle parking will promote cycling to work and will meet demand generated.

TM O117 of Chapter 5 *Sustainable Mobility Transport*, sets out the standard for EV parking in the KCDP and is as follows:

"New buildings or buildings undergoing major renovations (other than a dwelling) shall install at least one recharging point and ducting infrastructure for at least one in every 5 car parking spaces to enable the subsequent installation of recharging points for electric vehicles."

The Data Centre Application includes 63 no. electric car charging spaces (30% of total spaces) and ducting shall be provided to provide for the provision of additional car charging spaces if required according fully with the KCDP standards.

4.4.1.4 District Heating

The KCDP supports the role out of district heating:

"RE O75 Promote net zero-carbon and carbon reduction in economic development through innovative design, low-carbon technology, use of Combined Heat and Power (CHP) and roll out of district heating and other renewable energy projects. All these actions are outlined within the National Climate Action Plan 2021."

"EC O36 Promote and encourage the use of district heating systems in new residential and commercial developments where such development does not have a negative impact on the surrounding environment, landscape, biodiversity or local amenities."

EC P13 Promote the appropriate development of waste heat technologies and the utilisation and sharing of waste heat in areas where feasibility is demonstrated for its use in the delivery of low carbon district heating technology."

The Data Centre Application includes infrastructure specifically for the delivery of district heating as set out in **Section 3** of this Planning Report. The project team met with KCC to discuss these proposals on 12 October 2023. Further detail on the potential for district heating arising from the Data Centre Application is set out in the enclosed *Feasibility Assessment Herbata Data Centre Campus - District Heating Network report* prepared by HDR.

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4.4.1.5 Solar Power

"EC 018 Encourage and support the use of appropriately scaled solar energy in residential, commercial and industrial developments. The incorporation of solar technologies into the built fabric of existing buildings will also be encouraged where it does not materially affect the character of the structure or adjoining structures."

"EC O19 Promote the development of solar energy infrastructure for on-site energy use, including solar PV and solar thermal technologies. On-site battery storage projects shall be considered subject to fire safety, environmental safeguards and the protection of natural or built heritage features, biodiversity views and prospects."

"EC O23 Support the installation of solar collectors and panels for the production of heat or electricity in commercial and industrial buildings in line with relevant design criteria, building regulations and technical guidance documents."

"EC 024 Require the submission of a Glint and Glare Assessment as part of any solar energy development proposal where there is likely to be any impact on neighbouring uses, transportation and aviation safety."

Solar PV panels are proposed onsite with minimum peak output of 500kW for supporting the technology elements and a further 20kW for supporting the admin/support functions.

The visual impact of the proposed Solar PV is found to be minimal, as concluded in the LVIA in Chapter 11 of the EIAR and the enclosed *Glint and Glare Assessment* prepared by Pagerpower Urban & Renewables, contained as an Appendices of the EIAR.

4.4.1.6 Biodiversity

Chapter 12 of the KCDP sets out objectives and policies in relation to biodiversity and the protection of existing trees and hedgerows where possible;

"BI O26 Prevent, in the first instance, the removal of hedgerows to facilitate development. Where their removal is unavoidable, same must be clearly and satisfactorily demonstrated to the Planning Authority. In any event, removal shall be kept to an absolute minimum and there shall be a requirement for mitigation planting comprising a hedge of similar length and species composition to the original, established as close as is practicable to the original and where possible linking to existing adjacent hedges. Ideally, native plants of a local provenance and origin should be used for any such planting. Removal of hedgerows and trees prior to submitting a planning application will be viewed negatively by the planning authority and may result in an outright refusal."

"BI O29 Require the undertaking of a comprehensive tree survey carried out by a suitably qualified arborist where development proposals require felling of mature trees; the tree survey shall assess the condition, ecological and amenity value of the tree stock proposed for removal as well as mitigation planting and a management scheme. It should be noted that rotting and decaying trees are an integral part of a woodland ecosystem and can host a range of fungi and invertebrates, important for biodiversity. While single or avenue trees that are decaying may be removed, others that are part of group or cluster may be subject to retention."

***BI O30** Ensure a Tree Management Plan is provided to ensure that trees are adequately protected during development and incorporated into the design of new developments."

The Data Centre Application largely maintains and augments existing hedgerows around the perimeter of the site. Internal hedgerows are proposed to be removed to facilitate the construction of the Data Centre Application. A significant landscaping corridor of 30 - 40m width of native screen woodland and scrub woodland is proposed along the M7 corridor. This is fully detailed in the *Landscaping Plan* prepared by BSM.

A *Tree Survey and Arboricultural Impact Assessment Report* have been prepared by BSM and are also enclosed, which provide full details of trees at the site and proposals for same and additional planting.

4.4.1.7 Development Management Standards

Chapter 15 of the KCDP contains the *Development Management Standards* and the relevant standards are set out in the following sections.

4.4.1.7.1 Car Parking

Section 15.7.8 of the KCDP sets out the car parking standards for developments in the county. Data centres are not specifically referenced. In such cases the KCDP states, "the default parking rate will be calculated based on those of a comparable use and / or as part of a Transport and Traffic Assessment."

In this instance it is proposed to provide 210 no. car parking spaces in total. The rationale underpinning this proposed quantum is set out in the enclosed *Transport Assessment* prepared by Systra.

The quantum of car parking proposed is considerably below the maximum parking level set out for 'Office Park' within the KCDP and is considered to be an appropriate quantum, particularly in consideration of the generous bicycle parking provision proposed.

4.4.1.7.2 Bicycle Parking

Minimum bicycle parking standards are set out in Table 15.4 of the KDCP. There is no set standard for data centres, but for warehousing and industry/manufacturing 1 no. space per 100m² gross floor area is the standard. The standard for offices is 1 no. space per 50m². Changing/drying areas, toilets and lockers should also be provided in association with shower facilities. KCDP stipulates that 2 no. showers should be provided for office developments between 500m² and 1000m² and 1 no. shower is to be provided per additional 1000m² thereafter.

With there being no prescribed standard for data centres the provision of bicycle parking was discussed with KCC at the Pre-Planning stage. Given the distinct nature of the development the provision of bicycle parking has been guided by staffing levels is, as discussed with KCC, 16 no. spaces per DCB and 8 no. spaces at the Site Administration building.

The provision of 104 no. bicycle parking spaces equates to c. 1 no. space for 2 no. employees. In addition, lockers are to be provided for all staff and showers are provided in each DCB.

This is considered to more than adequately meet projected demand and will promote sustainable transport patterns as further considered in the enclosed MMP prepared by Systra.

4.4.1.7.3 Public Transport

Section 15.7.3 of the KCDP deals with *Public Transport* and states the following in relation to the provision of bus stops;

- "New / improved bus stops shall be of a suitable 'raised' design in order to assist mobility-impaired passengers in boarding/leaving the vehicle;
- Bus shelters should be sited and designed taking account of the needs of the bus users and the visual sensitivity of the location of the proposed shelter. All bus shelters shall be designed with the security of the user in mind, including adequate lighting."

The Data Centre Application includes the provision of a new bus stop on the R409. The bus stop will be raised from the road level. It is not proposed to provide a bus shelter at this location.

4.4.1.8 Building Line

Section 15.7.7 of the KCDP sets out information on building lines required from the different types of roads in the county in rural areas. The proposed facility fronts on to the M7 and the R409 where the required minimum set backs are 91m and 31m respectively. It is also stated that "in situations where there is an established building line, new houses, where appropriate, shall conform to the established building line."

A building line of c. 35 m is maintained with the R409 to the north of the Data Centre Application.

The Data Centre Application is essentially an infill site along the M7 with Business Parks located on the adjacent sites to the north and south. A set back of c. 51m from the DCB No. 4's external plant yard and

over 75m from the DCB is proposed with the M7. Buildings in the adjacent Osberstown Business Park and the Osberstown wastewater treatment plant are within c. 50m of the motorway. In the wider Naas area, there are many buildings within 91m of the motorway, including the Monread shopping centre and the M7 Business Park. The Data Centre Application is considered to be consistent with local building lines.

There has been extensive consultation with KCC at the pre-planning stage on the proposed site layout and the set back from the M7. A *Site Layout Report* which was submitted to KCC and informed these discussions in included in **Appendix D**. Following consideration of this report KCC Roads Planning Section indicated they considered the proposed set back as proposed should be included in the planning application (see **Appendix E**).

4.4.1.9 Employment Uses

Section 15.9.1 of the KCDP states that the following should be submitted as part of any application for industrial/commercial/business development;

• "Details of the nature and scale of the proposed operation, to include opening hours and anticipated traffic levels.

Please see **Section 3** of this report.

Availability of adequate services to cater for the development, or the ability of the applicant to
provide these services in a manner which does not adversely impact on surrounding properties or
the broader environment.

Please see enclosed *Planning Engineering Report* prepared by HDR.

 Proposals for the safe storage and disposal of waste in a manner which is visually and environmentally acceptable.

Please see enclosed Operational Waste Management Plan prepared by RPS.

• Storage should generally be confined to the rear of the premises; height should be such that the materials stored are adequately screened either by the building unit or an alternative screening method.

Storage is to rear of premised and is screened. Please see enclosed *Architectural Design Statement* prepared by RKD.

• Compatibility of existing adjacent land uses with the Data Centre Application, and mitigation measures to preserve and protect the amenity of the adjacent uses, should this be necessary.

The Data Centre Application is located on lands zoned exclusively for the development of a data centre and adjacent to existing commercial facilities (M7 Business Park and Osberstown Business Park).

• Availability of adequate sight lines (or a demonstration by the applicant to provide same) as per the relevant NRA Standards and safe road access for anticipated levels of traffic to be generated by the Data Centre Application. Generally, only one vehicular access point will be permitted.

The sightlines are in accordance with TII standards. This is further detailed in the Engineering Report prepared by HDR and DOBA. Access is from the R409. There is a clear visibility distance of a minimum of 160m for vehicles accessing the R409 from the Data Centre Application. An additional emergency access only is provided to the L2030 via the M7 Business Park

 Adequate parking and circulation areas should be provided by the applicant within the curtilage of the Data Centre Application, unless otherwise agreed with the planning authority.

An appropriate quantum of car parking is proposed. Further detail is provided in the enclosed *Transport Assessment* prepared by Systra.

4.4.1.10 Industry and Warehousing Development

Section 15.9.2 of the KCDP provides detail on design principles for *Industry and Warehousing* as set out below:

"Individual buildings should exhibit a high quality of modern architectural design and finish (including the use of colour). Prominent corner-face of buildings shall be appropriately articulated:

The considered architectural design and finish is of a high quality as detailed in the enclosed *Architectural Design Statement prepared by RKD.*

• In the case of two or more industrial / warehouse units, a uniform design is required for boundary treatments, roof profiles and building lines;

The design, boundary treatment, roof line and building line are detailed in the enclosed *Architect Design Statement* prepared by RKD architects and *Landscape Statement* prepared by BSM. The 6 no. DCBs are consistent in scale, appearance and building line.

- Areas between the building and road boundary may include car parking spaces provided adequate screen planting is incorporated into the design proposal;
- Adequate provision shall be made on the site for parking of vehicles, storage and stacking space. Storage and stacking areas shall be located to the rear of the building or, where such facilities are located at the side, provision for screening shall be made;

Car parking provision, generally at the front of each DCB, is detailed in the enclosed *Transport Assessment* prepared by Systra. Storage and stacking areas are located to the rear of the building.

• The building line from adjoining land-uses will be determined at Local Area Plan level having regard to the nature of uses and site-specific matters, or in accordance with Section 15.7.7 of this Plan:

The Data Centre Application is located between the M7 Business Park and the Osberstown Business Park. As such the building line is appropriate.

• The front building line shall be as determined in consultation with the planning authority and, where required, the existing roadside boundary shall be set back;

The building line has been fully considered in **Section 4.9.8** of this report.

- Any industrial or commercial development shall not be injurious to the residential amenity of adjoining properties;
- A landscaping plan shall be included with any planning application which details landscaped areas to the front of the building line and the provision of a buffer zone (minimum 5-10 metres) where the development adjoins another zoning or where it would impact on the amenities of adjoining land uses;

A Landscaping Statement and Landscape Masterplan have been prepared by BSM and are included in the application documentation.

• Proposals shall be submitted to incorporate Sustainable urban Drainage Systems (SuDS) and other nature-based surface water drainage solutions as part of all plans and development proposals. Priority shall be given to SuDS that incorporate green infrastructure and promote biodiversity including green roofs, walls and rain gardens, with underground retention solutions only being considered when all other options have been exhausted.

Details of the proposed SuDS features are set out in the *Planning Engineering Report* prepared by HDR / DOBA and included in the application documentation.

• Other measures that address climate change shall include the encouragement and support of solar and wind energy as part of any proposals.

Section 3.2 of this report sets out the sustainable approach guiding the Data Centre Application in some detail, including:

- Solar panels are proposed on DCB roofs;
- A biomethane gas injection point is proposed;
- CPPA are to be entered into with wind / solar farms; and
- District heating provisions are proposed.
 - Signage shall be an appropriate scale and designed into the scheme.

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A single sign of considered size and design is proposed.

Any mechanical plant or air handling units shall be appropriately screened."

The plant to the rear of the DCBs is screened and the visual impacts of the Data Centre Application are fully considered in the LVIA in the EIAR.

The appropriateness and quality of the design and how it accords with the KCDP standards are set out in the enclosed *Architectural Design Statement* prepared by RKD architects.

4.4.1.11 Applications Proximate to Overhead Lines

Section 15.11.23 of the KCDP states that;

"In relation to development proposals proximate (within 23 metres) to overhead electrical infrastructure, developers / applicants should contact ESB in advance of completing or finalising designs etc. (i.e. prior to pre-planning stage), so as to ensure that the relevant clearances are maintained from any overhead electricity infrastructure."

The applicant has liaised with ESB and the relevant clearances are maintained from overhead electricity infrastructure.

4.4.1.12 Energy Efficiency and Climate Change Adaptation Design Statement

Section 15.9.3.2 of the KCDP states that:

"Development proposals for Industrial, Warehousing, Business and Technology Park developments in excess of 1,000 m² of commercial floor space should be accompanied by an Energy Efficiency and Climate Change Adaptation Design Statement," and should "detail how any on-site demolition, construction and long-term management of the development will be catered for and how energy and climate change adaptation considerations have been inherently addressed in the design and planning of the scheme." Such developments shall have regard to;

- the requirements of the current Building Regulations Part L Conservation of Fuel and Energy (2008 and 2011), and
- the DECLG guidance document 'Towards nearly Zero Energy Buildings in Ireland Planning for 2020 and Beyond.'

"New development proposals shall show how energy efficiency is achieved through siting, layout, design and incorporate best practice in energy technologies, conservation and smart technology."

An Energy Efficiency and Climate Change Adaptation Design Statement prepared by HDR in accordance with section 15.9.3.2 of the KCDP is enclosed.

"EC P14 Require high levels of energy conservation, energy efficiency and the use of sustainable and renewable energy sources in new and existing buildings."

The Data Centre Application is considered to deliver energy efficiency as detailed in the enclosed *Energy Efficiency and Climate Change Adaptation Design Statement* prepared by HDR through the integration of passive design, energy efficiency measures and Low and Zero Carbon (LZC) technologies.

"EC P19: Support the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid to provide for the future physical and economic development of Kildare Such projects shall be subject to AA screening and where applicable, Stage 2 AA. The developments will have regard for protected species and provide mitigation and monitoring where applicable."

The associated Substation Application will directly enhance the local electricity transmission network by having spare 110kV circuits if required.

"EC P21: Support the infrastructural renewal and development of the gas networks in the county, subject to proper planning, heritage, environmental and amenity requirements."

The Data Centre Application includes a gas injection point. This directly contributes to the enhancement of the gas network.

4.4.1.13 Design Statement

Section 15.3 of the KCDP states that *Design Statements* are required for commercial developments over 1,000m² and should include:

- "• A clear explanation of the design process including options considered.
- A demonstration of how the development adheres to the relevant provisions of the County Development Plan, including explicit reference to the Urban Design Standards Checklist, as outlined in Table 14.2.
- Any relevant Local Area Plan, Masterplan, or other placemaking strategy affecting the site.
- Where relevant, the design statement should demonstrate how the development adheres to the guidance and principles set out in the 'Urban Design Manual' (DoEHLG, 2009), particularly to show where and how the 12 Criteria (as per the 'Urban Design Manual A Best Practice Guide') have each been considered.
- A site and area appraisal including photographs of the site and its surroundings accompanied by illustrations such as photomontages, perspectives, and sketches, along with summaries of relevant studies and details of any recent consultations.
- In urban areas, a demonstration of how the development responds to the established urban structure, movement and accessibility, land uses, density, urban grain, visual context and built form.
- A demonstration of how existing and new green infrastructure features will be integrated into the scheme.
- Detailed proposals for open space illustrating how the provision of such areas have been designed in from the beginning.
- A comprehensive high quality open space and landscape design plan including specifications, prepared by suitably qualified professionals.
- A statement setting out how energy efficiency and other climate mitigation measures have been incorporated into the Data Centre Application."

An *Architectural Design Statement* addressing these items has been prepared by RKD architects and is submitted with the planning application.

4.4.1.14 Childcare Facilities

Section 15.5.2 of the KCDP states that "childcare facilities will also be required to be provided in large-scale employment centres with an excess of 100 employees."

The Data Centre Application shall generate more than 100 no. jobs. The provision of c. 225 no. jobs over a 35ha site in proximity to other low density employment generators is not considered to be a "*large scale employment centre*". It is therefore considered that there is no requirement to provide a childcare facility at this location.

Within the Chapter 14 of the EIAR, is concluded that the surrounding area is well served by childcare facilities, pre-schools and schools there are a large number of childcare facilities in the immediate surrounds.

The demographic profile of the area has been considered in the enclosed EIAR. No particular requirement for additional childcare facilities has been identified.

4.4.2 Naas Local Area Plan 2021-2027

The Naas LAP sets out an overall local strategy for the proper planning and sustainable development for the town of Naas.

4.4.2.1 Data Centres

The Naas LAP supports the development of data centres within Naas and there are two sites exclusively zoned for data centre use within the town, including the subject site. The designation is specific, stating that no other land use will be considered at these sites:

"This Plan promotes Naas as a sustainable international destination for ICT infrastructures such as data centres, in line with Regional Policy Objective 8.25. Two locations have been zoned for Data Centre/Warehouse locations within this Plan. Land has been designated between Junction 10 and Junction 9a, located centrally between two of the motorway junctions. The site will be served by the local road network which would disperse traffic between motorway interchanges to reduce any impacts on the motorway network..... Naas has been chosen as a suitable location for data centre development in recognition of its status as a Key Town. The sites identified in this LAP have the ability to cater for space extensive enterprises contiguous to the existing urban form, proximate to electricity and telecommunication infrastructure. These lands are identified exclusively for Data Centres, to ensure the location of these types of proposals are controlled proximate to serviced areas of the county. The Council will not consider any alternative use on these lands, other than those associated with Data Centres."

The Data Centre Application comprises a data centre on lands identified in the Naas LAP for this purpose and no other purpose and is therefore in compliance with land use zoning policy.

4.4.2.2 Land Use Zoning

As illustrated in **Figure 4-1**, the subject site is zoned 'P(1) – Data Centre' in the Naas LAP. Naas LAP seeks "*To provide for Data Centre development and their associated infrastructure only*" for Land Use Zoning Objective 'P'. The subject site is one of only two sites to have been zoned for Data Centres in Naas. The only use considered by the Naas LAP to be '*Permitted in Principle*' in lands zoned 'P' is Data Centres.

The development of the subject site as proposed, fully accords with the land use zoning objectives for this area as set out in the Naas LAP.

"Objective EDO 1.12:

- (a) Facilitate the location of Data Centre development on land designated P: Data Centre at Caragh Road South and Jigginstown for the identified land use only subject to appropriate environmental assessments, heat mapping, transport impact assessments and consideration of the cumulative impact on the electricity network supply capacity and targeted reductions in greenhouse gas emissions.
- (b) Any data centre project will be required to include measures to generate energy (sustainable, then renewable in the first instance) on site as part of the overall development proposal."

All necessary supporting assessments have been undertaken and are included in the application documentation, including AA Screening Report, EIAR, Transport Assessment, Feasibility Assessment Herbata Data Centre Campus - District Heating Network and an Energy Efficiency and Climate Change Adaptation Design Statement.

As outlined in **Section 3** of this report solar power generation onsite forms part of the proposed development.

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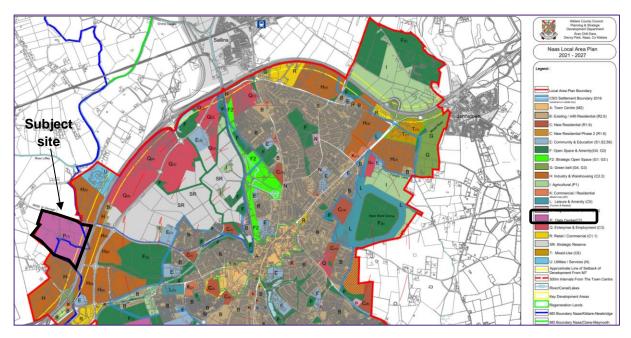


Figure 4-1: Land Use Zone Map Source: Naas Local Area Plan, RPS Annotation.

4.4.2.3 Employment

The Naas LAP recognises that Naas is a designated a "Key Town" and an important employment centre within the County and more widely. The need to generate new employment within the town and in particular in sectors such as IT is identified:

"EDO 1.1: Encourage economic development and employment growth in Naas in accordance with its designation as a Key Town, while adhering to the overall Economic Development Strategy of the Plan."

"EDO 1.2: Promote enterprise and employment development in the Northwest Quadrant, focusing on high-tech manufacturing, research and development, ICT, food science and production, large scale offices, public administration, banking, tourism and bloodstock, within a high quality campus/park type development."

The Data Centre Application will generate c. 225 jobs in the ICT sector directly and support employment in the sector more widely.

4.4.2.4 Heat Waste Utilisation

Waste heat is identified in Naas LAP as the single largest low-carbon source of energy available in the Region that is not being used. Data centres generate significant levels of excess heat which can be used in district heating systems. There are a number of objectives in the Naas LAP pertaining to data centres and the production of heat waste:

"WH 1.1: Support developments which deliver energy efficiency and the recovery of energy that would otherwise be wasted through the use of district heating systems, particularly in the Northwest Quadrant and sites designated specifically for Data Centres, ensuring such developments will not negatively impact upon the surrounding landscape, environment, biodiversity or local amenities."

"WH 1.2: Ensure that all significant development proposals on the sites, designated for Data Centres carry out an Energy Analysis and explore the potential for the development of low carbon district heating networks."

As detailed in **Section 3**, it is proposed to provide for district heating from heat recovery boilers on a number of the turbines brought to heat exchangers and then piped to the edge of the site. Connections can then be provided for the distribution of heat suitable for district heating.

Further detail is provided in the enclosed *Feasibility Assessment Herbata Data Centre Campus - District Heating Network* report prepared by HDR.

4.4.2.5 Green Infrastructure

The protection of the environment is a key principle of the Naas LAP. A number of the objectives regarding green infrastructure will guide the Data Centre Application.

"NE 2.2: Protect trees and woodlands of particular amenity value, identified in the Naas Green Infrastructure Map (Map 7.1), from damage and/or degradation."

The protected hedgerows indicated in Map 7.1 (see **Figure 4-2**) of the Naas LAP will not be impacted by the Data Centre Application.

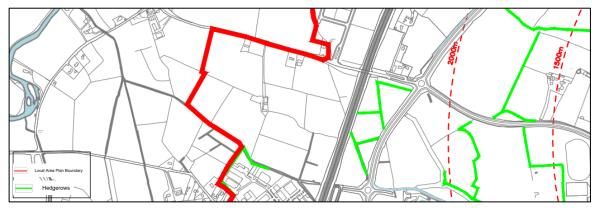


Figure 4-2: Green Infrastructure - Extract from LAP Map 7.1

Source: Naas Local Area Plan.

Other pertinent objectives and actions are set out below:

"NE 5.4: Ensure new development proposals have regard to the future function and variety of open spaces with a view to making provision for new areas of biodiversity, tree planting and / or pollinator friendly planting."

As detailed in **Section 3**, a 30 - 40m wide landscape buffer along the M7 is proposed and the site itself will also be landscaped in accordance with a landscaping detail prepared by BSM, which focus on promoting biodiversity in new and existing areas.

"Actions: To liaise with EirGrid in relation to the rationalisation of transmission infrastructure and/or underground routing of overhead powerlines in Naas."

The undergrounding of a section of a 110kV line is proposed under the Substation Application.

5 PLANNING HISTORY

A desktop search was undertaken of KCC's online planning enquiry system to review planning permissions on the subject site. There is no record of any recent planning applications having been made on the subject site.

5.1.1 Planning History at the Site

There is no recent relevant planning history at the subject site.

5.1.2 Planning History at Adjacent Sites

There is an extensive planning history in the vicinity of the site along the M7, on lands south of the subject site at the M7 Business Park and north of the site at Osberstown Business Park. These applications have been in relation to developments within the Business Parks.

5.1.3 Set back from the M7 – Planning Precedence

With regard to the set back of development from the M7 there are a number of recent development proposals which have permitted within c. 50m of the roadway.

5.1.3.1 KCC Reg. Ref. 18/454

On 20th July 2018 permission was granted for 20 no. Light Industrial Warehouse Units including all associated site works, roads and services at the Monread Road, Naas, Co. Kildare (Phase 2 of a 3 phase development – phase 1 granted under **Reg. Ref. 17574**). A set back from the motorway of 35m was proposed.

The KCC Planner's report states:

"One of the central issues relates to the set back from the Motorway. Table 17.8 of the CDP 2017 – 2023 requires a building line of 91m. It is noted however, that the applicant has submitted examples of precedent development where the set back has been permitted to be less than the 91m specified in the Plan. A question arises therefore as to whether the Planning Authority is satisfied with the applicant's proposed 35m set back. In this regard, it is noted that the submission from TII raises no issue with regard to set back and similarly, the Roads Section. The report of the NRO indicates given that the Data Centre Application is within the Naas Urban Area and will be served by a new access off the local road network, in Naas, the application has no impact on the national road network."

5.1.3.2 KCC Reg. Ref. 17/574 / ABP Ref. PL09.249304

On 13th March 2018 permission was granted for 16 no. Light Industrial Warehouse Units including all associated site works, roads and services at the Monread Road, Naas, Co. Kildare. A set back from the motorway of 35m was proposed.

With regard to the proposed set back the KCC's Report states:

"One of the central issues relates to the set back from the Motorway. Table 17.8 of the CDP 2017 – 2023 requires a building line of 91m. It is noted however, that the applicant has submitted numerous examples of recent developments within Naas, where the set back has been permitted to be less than the 91m specified in the Plan. A question arises therefore as to whether the Planning Authority is satisfied with the applicant's proposed 35m set back. In this regard, it is noted that the submission form TII raises no issue with regard to set back and similarly, the Roads Section. The set back is mentioned in the report of the NRO, however, the issue is not raised as a request for Further Information."

The KCC's Report concludes:

"it is considered, having regard to the location of the site in close proximity to the M7 motorway, the previous zoning of the site for industrial uses in the Naas Environs Plan, and the character of the immediate area, that the principle of the Data Centre Application is acceptable"

With regard to the proposed set back the ABP Inspector's Report states:

"The National Roads Office (NRO) referred to the fact that the setback distance from the motorway was 35m, rather than 91m required in Table 17.8 of the Plan, which provides information on the setback distances for different classes of roads.

The planned upgrade to the M7 motorway in this general area is due to get underway in Q1 this year. I note that the Roads and Transportation Section had no objections to the proposal, and Transport Infrastructure Ireland commented that they had no objection.

I note that the Plan states the setback distances must be conformed with 'where developments are permitted in rural areas'. If this was a rural area, then the 91m should apply. The Plan also states that 'Building lines in developed areas will be determined having regard to the historic urban grain of the area'. I note that the developments along the Monread Road are substantially below the 91m setback and have therefore set a precedent for the area. Having regard to the fact that the M7 works are permitted by the Board and about to start, I do not consider the reduced setback to be an issue."

6 PRE- APPLICATION CONSULTATIONS

The Applicant and the project team have liaised with the relevant departments of KCC in advance of lodgement of this application. A number of Pre-Planning consultations took place with KCC including meetings on 23rd November 2022, 16th March 2023 and 24th May 2023.

The meetings were attended by KCC representatives and by representatives from the applicant company, the project Architects, Engineers, Environmental Consultants, Landscape Designers and Planners. In addition, a number of meetings were held with individual departments within KCC and the various team disciplines.

The Data Centre Application has been guided by discussions with KCC and a number of design aspects address specifically items discussed with KCC:

- Green Walls: An integrated green wall system was discussed with KCC Parks Department and noted to be a more sustainable solution to providing vertical vegetation and screening of structural elements within the Data Centre Application, alongside a robust, resilient and deliverable perimeter boundary treatment of structural screening woodland, scrub and hedgerows.
- Building Set back: The building set back has been increased as part of the design process. The set back has been discussed with KCC and is supported by KCC Roads planning department (see Appendices A and B);
- District Heating: Provision for district heating forms part of the development proposals. This is fully detailed in the *Feasibility Assessment Herbata Data Centre Campus District Heating Network* report prepared by HDR. The proposals were further discussed in a meeting with KCC on 12th October 2023;
- Car parking provision: The provision of car parking proposed has been discussed with KCC and is supported by KCC Roads planning department (see Planning Engineering Report for further detail;
- Traffic modelling and TIA: The M7 junctions 9a and 10 are included in the modelling exercise and included as part of the traffic impact assessments in accordance with KCC, who liaised with the Kildare National Road Office (representing TII) in making this recommendation;
- LVIA viewpoints: The LVIA viewpoints as included in the enclosed EIAR have been discussed and agreed with KCC; and
- Fire safety: The quantum of gas to be stored onsite has been significantly reduced. In order to meet standby requirements biofuel / diesel storage of is now proposed.

Members of the project team have also liaised with statutory bodies where necessary (including the National Parks and Conservation, Uisce Eireann, Eirgrid, ESB, Bord Gais etc) by correspondence during the course of the EIA Report preparation.

EIA contributors/authors have incorporated all relevant advice and comments received from consultees into the relevant chapters of the EIA Report as appropriate.

With regard to the Substation Application the project team met with ABP on 15th March 2023. On 5th July 2023 ABP issued a determination (ABP Ref. 315659-23) confirming that the proposed grid development meets the relevant criteria and constitutes SID under Section 182A of the Planning Act.

6.1 KCC Confirmation on Drawing Scales

The drawings listed below are at a different scale to the scale of 1:200 as stipulated by Article 23(1)(b) of the Planning and Development Regulations 2001, as amended ("a scale of not less than 1:200 (which shall be indicated thereon), or such other scale as may be agreed with the planning authority prior to the submission of the application in any particular case,").

The noted scales were considered appropriate due to the large size of the proposed development. The scales were agreed with the planning authority prior to the submission of the application, as per email from *Elaine Donohoe @kildarecoco.ie* on 2nd August 2023 (see **Appendix F**).

 Proposed Site Sections – Sheet 1 (drawing no. 22217-RKD-ZZ-ZZ-DR-A-1017) and Proposed Site Sections – Sheet 2 (drawing no. 22217-RKD-ZZ-ZZ-DR-A-1018) are at a scale of: 1:1000/1:500 @ A0;

- Proposed Site Elevations Sheet 1 (drawing no. 22217-RKD-ZZ-ZZ-DR-A-1021) and Proposed Site Elevations Sheet 2 (drawing no. 22217-RKD-ZZ-ZZ-DR-A-1022) are at 1:1000/1:500 @ A0;
- Campus Road Surfacing Layout (drawing no. 10360452-HDR-XX-XX-DR-C-112255) is at a scale of: 1:1000 @ A0;
- Campus Road Layout (drawing no. 10360452-HDR-XX-XX-DR-C-112250) is at a scale of: 1:1000 @ A0; and
- Site Contour Plan (drawing no. 10360452-HDR-XX-XX-DR-C-112210) is at a scale of: 1:1000 @ A0.

7 ADDITIONAL ASSESSMENTS AND CONSENTING PROCESSES

7.1 Environmental Impact Assessment Report

Data Centres are not in themselves a class of development for the purposes of EIA. However, the Data Centre Application comprises an infrastructure project that would exceed the area thresholds set out in Class 10 of Part 2 of the Fifth Schedule of the Planning and Development as which relates to 'Urban development which would involve an area greater than 2 hectares in the case of business district, 10 hectares in the case of other parts of a built up urban area and 20 hectares elsewhere.'

In the case of the Data Centre Application, the site has a stated area of 37.51ha and therefore is above the threshold set out in Class 10(b)(iv).

In this regard, an EIAR in respect of the Project has been prepared by RPS with input from a multidisciplinary team of competent experts and is submitted along with this Data Centre Application to KCC and will also be submitted to ABP as part of the Substation Application.

The EIAR considers and assesses the likely significant effects of the Project on the environment and contains the information required by Annex IV to the EIA Directive and Schedule 6 to the Planning and Development Regulations, 2001 (as amended), to assist the competent authority in carrying out an Environmental Impact Assessment in respect of the Project.

7.2 Appropriate Assessment

An AA Screening Report has been prepared by RPS in respect of the Project and has been submitted with this application and will be submitted with the Data Centre Application. The AA Screening Report concludes, for the reasons set out in that report, that the Project is not directly connected with or necessary to the management of any European site, and that following an examination, analysis and evaluation of all relevant information, on the basis of objective information and in light of best scientific knowledge and applying the precautionary principle, it can be concluded that the Project, either individually or in combination with other plans and projects, and in the absence of mitigation, is not likely to have a significant effect on any European Site(s), in view of the sites conservation objectives, and that there is no reasonable scientific doubt in relation to this conclusion.

7.3 Strategic Infrastructure Development

A request was made on 30th January 2023 to ABP under Section 182E of the Planning Act to enter into a pre-application consultation with ABP in relation to the Substation Application, the undergrounding of an existing 110kV transmission cable along with associated and ancillary works.

On 5th July 2023 ABP issued a determination (ABP Ref. 315659-23) confirming that the proposed grid development meets the relevant criteria and constitutes SID under Section 182A of the Planning Act.

7.4 Data Centre Grid Connection Processing

The applicant will be seeking consent to connect to the grid. CRU published the *Direction to system operators related to Data Centre grid connection processing* in November 2021. The Direction sets out criteria that system operators, EirGrid and ESB Networks are now required to consider in assessing data centre connection applications, to determine whether to make a connection offer:

"The location of the data centre applicant with respect to whether they are within a constrained or unconstrained region of the electricity system.

The ability of the data centre applicant to bring onsite dispatchable generation (and/or storage) equivalent to or greater than their demand, which meets appropriate availability and other technical requirements as may be specified by the relevant SO, in order to support security of supply.

The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by the relevant SO in times of system constraint through

the use of dispatchable on-site generation (and/or storage) which meets appropriate availability and other technical requirements as may be specified by the relevant SO, in order to support security of supply.

The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by the relevant SO, in times of system constraint, in order to support security of supply."

The Data Centre Application does not require the use of energy from existing sources via the grid but will instead generate energy onsite or import energy from new sources. The accordance of the Data Centre Application with these criteria for assessment is set out in the enclosed *Energy Policy Compliance Report* prepared by HDR.

7.5 Gas Connection

Gas will be sourced from the GNIs gas network. The Data Centre Application includes AGI compounds which will allow connection to GNI's infrastructure. The gas pipeline connecting to the proposed AGI compounds will be provided by GNI and is not part of the subject development. However, the cumulative impacts of the pipeline works are considered and assessed in the EIAR. An application to GNI has already been made for the whole data centre campus. GNI have given confirmation that sufficient gas is available.

7.6 Section 50 Arterial Drainage

The consent of the Commissioners of Public Works is required by bodies and persons proposing to carry out construction/alteration works on bridges and culverts. The Data Centre Application includes a bridge over the Bluebell Stream to facilitate emergency access.

The design team have liaised with the Commissioners of Public Works with regard to the proposals and will submit a request and procure consent from the Commissioners of Public Works prior to commencing works.

7.7 Industrial Emissions Directive Licence

The thermal input of the facility as a whole will exceed 50MV. Therefore, the development will require an Industrial Emissions Directive 2010/75/EU (IED) licence.

An application to the Environmental Protection Agency (EPA) for the IED license will be submitted post planning.

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8 CONCLUSION

The Data Centre Application aligns with national, regional and local policy supporting the ICT sector and data centres as a key component of this sector. At construction and operation phases the Data Centre Application will generate significant direct, indirect and induced employment.

The innovative approach to energy generation and storage means the Data Centre Application does not require energy from the national electricity network. Indeed, the Data Centre Application will add resilience to national energy production and storage capacity. The onsite gas turbines and gas engines will be capable of exporting excess electricity to the wider network.

The proposed gas turbines and engines will be fuelled from GNI's gas network ultimately, comprising of biomethane, abated natural gas and the use of hydrogen for the turbines in line with GNI objectives to ensure that there is a zero dependency on gas from fossil fuels at the subject data centre as GNI objectives are met.

The energy storage component shall enable more efficient use to be made of renewable energy now being produced. Such an approach is considered to align fully with national policies and commitments and specifically the *Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy*.

The proposed Data Centre use at this site accords with the local land use zoning objective set out in the Naas LAP which has explicitly identified this location as being appropriate for a data centre.

It is considered that the Data Centre Application accords with sustainable development objectives and adopts an exemplary approach to data centre development within the State.

Appendix A

BOS Energy Limited Letter and Report titled 'Herbata Data Centre Sources of Energy'



Herbata Limited 4C Sycamore House, Millennium Park, Naas, Co. Kildare W91 T6WE

Date: 18th September 2023

Dear Ian

I am happy to confirm my acceptance of the engagement to act for Herbata Limited, to secure Power Purchase Agreements (PPAs) from renewable energy supply sources to satisfy the requirements of the data centre campus in accordance with the objectives of the Kildare County Development Plan 2023-2029 in that regard.

I have over 25 years' experience in the Energy Sector including in relation to various forms of PPAs and associated agreements with renewable generators including wind, hydro and solar, and support various Energy participants and Renewable Energy developers in the negotiation of PPAs here in Ireland and also across Europe. I have experience with developers such as Amarenco Group, Orsted and Statkraft, and institutional investors such as Gresham House and Brookfield, all of which actively seek and enter into PPAs, and I am very confident that Herbata Limited will be in a position to access the required renewable energy supply to satisfy the requirements of the data centre campus.

As you are aware, European policy (which is being implemented in Ireland) will see significant growth in renewable supply over the next number of years. Certain of that supply will be supported through government lead schemes such as the current Renewable Energy Support Scheme (RESS). However, that scheme was subject to EU state aid approval, which imposed various conditions on the terms and conditions for RESS, and as a consequence RESS is not suitable for many proposed projects.

As I outline below, there will be a range of PPAs available for Herbata, but a purchase commitment for a period of at least 15 years is required, and at a price level that underwrites the renewable developers' investment. In light of the construction timelines that apply to these projects, the earliest possible engagement will prove the best strategy in securing the renewable energy supply from these projects.

Renewable Market Development

It is clearly stated Government and European policy to promote and support the transition from fossil fuel based energy to renewable energy supply. This support includes the upgrading of the electrical network to facilitate this supply transition and in 2024 there will be modification to the planning process to facilitate more efficient decision making for applications associated with renewable developments.

While government support will be available (eg via RESS) this is likely to encourage Corporate supported PPAs (CPPAs); as was observed in the outcome of the most recent RESS 3 auction, these support schemes are more suited to larger scale developments. Therefore, this presents an opportunity to enter CPPAs for smaller scale projects, and for those projects for which the RESS scheme does not provide adequate support or the conditions of which inhibit the project development.



There is nearly a threefold growth in supply from various renewables sources projected between now and 2030 including from solar, onshore and offshore wind. This expected growth is evidenced by recent EirGrid Outlook 2022-2031, certain of the detail of which is outlined in Table 1 below.

All these new assets will require a PPA, either through the RESS scheme or via a corporate with an offtaker which has a demand of 10MW or more, to help support the investment. Given the challenges of RESS and its terms and (restrictive) conditions, Corporates such as the Herbata facility are providing a more attractive solution to renewable developers while providing a price hedge for the offtaker against what become a very volatile commodity.

Table 1 - Forecasted Renewable Generation

At year end:	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Wind Onshore*	4480	4630	4790	4940	5100	5250	5400	5550	5700	5850
Wind Offshore*	25	25	25	25	25	25	725	2865	5000	7140
Small Scale Hydro	26	26	26	26	26	26	26	26	26	26
Biomass and Biogas	24	24	24	24	24	24	24	24	24	24
Biomass CHP	30	30	30	30	30	30	30	30	30	30
Industrial	9	9	9	9	9	9	9	9	9	9
Conventional CHP	129	129	129	129	129	129	129	129	129	129
Solar PV	167	333	500	667	833	1000	1167	1333	1500	1667
Total	4890	5206	5533	5850	6176	6493	7510	9966	12418	14875

Table A3-2 Partially/Non-Dispatchable plant in Ireland (MW)

Source: Eirgrid Capacity Outlook 2022-2031

In addition to the increase in supply from renewable sources, there will also be a significant increase in the availability of green gas produced from anaerobic digestion (AD) utilising a mix of crop, animal and food waste. These AD facilities provide circular economic investment by producing biomethane which is anticipated to displace circa. 15% of the current commercial and industrial natural gas needs. At the same time, utilising slurry as an input fuel and producing environmentally beneficial fertilisers to be returned to the farming sector assists in managing obligations under the recent changes in the Nitrates Act.¹

While there is currently no government support for the development of these facilities, all AD facilities will be seeking out corporates such as the Herbata project to support their development through long terms CPPAs.

This arrangement in turn will allow end users to operate on site generation supplied from green gas, and in full compliance with EPA and EU Renewable Energy Regulation RED II scheme obligations; the associated Green Gas Certs will obviate the need for users to pay carbon tax under the EU Missions Trading Scheme (ETS).

^{1 &}lt;a href="https://www.gov.ie/en/publication/f1d01-fifth-nitrates-action-programme-2022-2025/#::":text=Ireland%27s%20Nitrates%20Action%20Programme%20is,pollution%20arising%20from%20agricultural%20sources.">https://www.gov.ie/en/publication/f1d01-fifth-nitrates-action-programme-2022-2025/#::":text=Ireland%27s%20Nitrates%20Action%20Programme%20is,pollution%20arising%20from%20agricultural%20sources."



GNI estimates that over the next 10years there will significant growth in AD facilities and associated output with estimate of 2.5 GWh by 2030 – see Table 2 below.

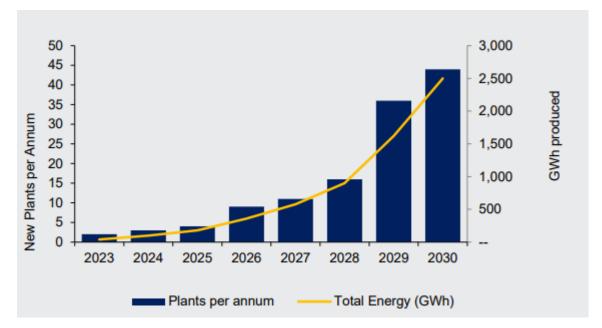


Table 2 – Forecasted Biomethane production (Green Gas)

Source: GNI Biomethane Sustainability Report 2021

Private Wire Opportunity

The Government recently issued a consultation on permitting Private Wire development in line with stated EU Policy which allows large electricity users to directly connect their facilities located on 3rd party land. This development – when implemented – will permit users to directly connect to renewable facilities located offsite. Therefore, these facilities (expected to be predominantly solar projects) will further support the transition away from fossil fuels generation as well as providing users with supply from renewable source and achieving net zero at the site.

Demand Side Management

In addition to being supplied from renewable electricity sources and Ads, Data Centres offer valuable support to the grid in the form of Demand Side Management (DSM). In January of this year the Irish Government released its (updated) Climate Action Plan, contained within which was a requirement to increase demand flexibility to 30% of demand by 2030. This will only be achieved through the support of larger users with this contribution significantly supporting grid stability in the demand area.

Summary

Considering the above described market opportunity context, and the (ever increasing) EU and Irish policy to support the transition to renewable sources, Herbata will be in a very strong position to access sources of renewable energy to meet its onsite energy needs and in turn support the transition to which stated government polices are seeking to achieve.

I trust the above summary provides the detailed outline of activity in renewable sector and I am presently engaged in arranging renewable supply to the Herbata facilities to more than meet its energy needs.



Brian O'Shea

Kind Regards

brian@bosenergy.ie



HERBDATA DATA CENTRE SOURCES OF ENERGY

A. BOS ENERGY LTD

Brian O' Shea of BOS Energy Ltd has over 25 years' experience in the Energy Sector, extending back to the late 1990's prior to the introduction of competition or regulation. This experience extends across more than 23 years with Bord Gais Energy Ltd and the past number of years as an advisor across the industry both electricity and gas sectors as BOS Energy Ltd.

Brian has concluded multiple forms of energy agreements during this period including various forms of Power Purchase Agreement (PPA) building a PPA portfolio of more than 500MW with renewable generators including wind, hydro and solar and now supports various Energy participants and Renewable Energy developers in the negotiation of PPAs here in Ireland and also across Europe.

As per engagement letter with Herbata Limited of earlier this year where BOS Energy Ltd will support Herbata in securing offtake from renewable assets and to this end BOS Energy Ltd has extensive relationships within the renewable development community in Ireland and across both electricity and gas.

Below is a clear Energy Strategy for the proposed Data Centre project to secure energy from renewable sources and to which BOS Energy Ltd will be able to support the implementation of same.

B. MARKET SUMMARY

The Gas and Electricity Grid operates on a "Pool" based system whereby all generation is delivered into a single system (pool) and offtake is from this same system (pool), this results in all forms of energy, be that renewable or otherwise, being comingled.

It is, as a result of this commingling, that the Europe Union (EU) devised a certification system which independently verifies the source and output of energy from renewable assets, thereby allowing parties to trace the origin of their energy supply back to the production facility, the energy equivalent of 'farm to fork'. This certification process for electricity referred to as Guarantees of Origin (GO) is now fully implemented and operational in each jurisdiction across the EU as evidence of supply from renewable source.

The GO equivalent for Gas, from renewable sources, is now also accepted by the Environmental Protection Agency (EPA), in Ireland, as evidence of renewable gas consumption on site and thereby avoiding the requirement to procure Carbon Credits (EUAs) under the Emission Trading Scheme (ETS) for the volume certified, to which all Data Centres as party to the ETS are subject to compliance of ETS rules as overseen by the EPA.

Current legislation does not permit private wire connections between end users' site and third-party lands and while onsite rooftop solar is exempt from planning the typical roof will only, at best, provide a few MW of capacity which when adjusted for sunlight hours will only provide a fraction of site requirements.

Given the limitations of both planning and absence of legislation permitting private wire connections, renewable supply is sourced through Corporate Power Purchase Agreement (CPPAs) in locations providing the most favourable condition and then delivered into the grid with this production being evidenced as renewable by the associated GOs issued from the respective Grid Operators.

CPPAs are entered into by end users to directly purchase and support the production from renewable sources and receive the associated GOs as the evidence of renewable supply.



C. SUMMARY OF ENERGY SUPPLY STRATEGY

Herbata plans to have the ability to produce all energy needs onsite and capability to be independent of the Grid, but in line with Kildare County Council policy and to provide Eirgrid with support services, Herbata will (i) procure a minimum of 30% of site requirements from renewable generation plus (ii) make available to Eirgrid the onsite generation capability providing much needed generation particularly during periods of stress on the Grid system.

Each Data Centre Building will require on average 36MW¹ base load demand across the 12month period up to a maximum of 40MW at any one time.

Considering the Data Centre imports from the Grid will be circa. 30% in any month this equates to equivalent of 10.8MW² baseload supply for each Data Centre Building to achieve 100% renewable supply from Grid. To achieve this target in each month will require entering CPPAs for 35MW of Wind and 35MW of Solar being sustainable renewable power, which amount should ensure that the 10.8MW of baseload in the month but is expected to achieve circa. 40% over a 12month period (see below Table 2 – Volume).

Given the variable nature of both Wind and Solar and market costs associated in managing the surplus and deficit production from these sources, Herbata will seek to manage this volatility through use of onsite stable generation. This on-site generation be in the form of Battery or dispatchable asset with a goal to source the input fuel from Green Gas produced from Anaerobic Digestion (AD) as and when they come onstream between now and 2030.

Supply from AD will require Herbata to enter long term agreements to support the AD project but this price stability will also provide price certainty for the facility.

This portfolio approach to supply will provide resilience and stability to the energy needs of the site but also provide the Export Dispatch capability from the site as will be required by Eirgrid. Herbata will in turn provide support to the Grid through exporting on site generation during periods when grid generation is challenged and assisting to stabilise grid by adjusting imported consumption during periods of high renewable supply and will continuously facilitate Grid requirements in line with evolving grid needs, known as Demand Side Management

Herbata will continuously be seeking to source the energy needs from sustainable renewable sources applying a supply portfolio strategy with the initial mix of Wind and Solar through CPPAs, as described above, to ensure that 100% of Grid imported energy will be from renewable production. The Strategy will also seek for onsite generation to utilise renewable fuels as they become available with ultimate goal of achieving net zero carbon consumption through close monitoring of CO₂/KWh usage.

D. ENERGY SUPPLY STRATEGY

Herbata will source renewable energy from a portfolio of supply arrangements which will include the following:

- 1. On site solar production and battery for short term stabilisation and storage,
- 2. Electricity from renewable sources contracted through Corporate Power Purchase Agreement (CPPAs) directly with the Generator, both wind and solar to ensure 100% of the imported energy off taken from the Grid will be renewable sourced supply,
- 3. In addition to the 30% of needs from gird the remaining 70% is being provided from onsite Generation utilising Hydrogenated Vegetable Oil (HVO) initially but quickly seeking to supplement with Green Gas

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¹ MW is Mega Watts

² 36MW * 30% = 10.8MW



Production from Biomethane producing facility such as Anaerobic Digestion (AD) facilities as they come online, or natural gas where the above fuels are not available (see below Table 3 of projected AD growth).

4. Further developing and evolving the strategy with the ultimate goal of Net Zero Supply through use of available renewable energy both electricity and input fuel for onsite production.

In addition to CPPAs onsite energy will also seek to utilise renewable fuels such as Biomethane through supporting the development of renewable projects including AD facilities and in doing so support a circular economy.

1. On Site Solar

It is proposed to maximise the suitable roof top with solar panels which will equate to 0.5MW per each Data Centre Building of onsite solar installed generation. This capacity is expected to provide 480MWh.pa of production equating to circa 1% of overall demand.

2. Renewable Corporate Power Purchase Agreements

CPPAs are a contract between Renewable Generating assets such as wind and solar and final end users such as Data Centres. This energy is delivered into the Grid by the renewable assets and equivalent amount off taken by the end users. The evidence of supply is completed through a Guarantee of Origin (GO) issued by the Gird operators for each MWh³ of energy produced by the renewable assets.

Herbata plans to secure off site energy from renewable sources through CPPAs. These will be a mix of Wind and Solar to provide better overall production portfolio. This approach will facilitate smoothing of production from these renewables given that Wind production is predominantly winter weighted and Solar is summer weighted (see below Table 3 – Graph).

Herbata will source 100% of Grid imported energy for each Data Centre Building from a combination of circa 35MW of Wind and circa 35MWpdc of solar which will complement each other providing a consistent supply above 100% throughout the year taking account the variable production profile of these asset types (see below Table 2 – Volume).

These CPPAs for each Data Centre Building will be entered into prior to operational requirements and from a newly renewable energy generation not operational at time of receipt of planning and therefore additional renewable supply to the Grid. The timing for entering these CPPA will align with the construction program and with a 2year plus lead time which will in turn will also align with the renewable asset's construction program.

It is important that Herbata develops early relationships with various Renewable Developers to ensure access to their pipeline of assets to enter CPPA on receipt of planning consent.

Given the construction asset's will be over an 8year period from now to 2032 this will align with the projected growth in renewable assets being developed in Ireland (see below Table 1).

3. On Site Green Generation

To support Net Zero strategy Herbata must plan to be a strong supporter of Biomethane production from offsite Anaerobic Digestion (AD) facilities, delivered to site through onsite injection point or off taking from the Gas Network. It is anticipated that there will be significant growth in AD facilities forecasted between now and 2030 (see below Table 4). These fuels will provide the renewable form of feedstock for operating onsite

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 $^{^{3}}$ MWH – Mega Watt Hour – volume produced in an hour



generation which will supply on site energy needs as well as assisting the management of intermittency typically associated with wind and solar.

This intermittency will be known in advance of each day through support of specialist providers and advanced forecasting tools to manage the supply across the portfolio of sources. This forecast will enable advance management and scheduling of available on-site generation, grid imports and any grid export needs to ensure smooth supply and cooperation with Eirgrid.

AD facilities produce Biomethane from, for example, agricultural and food waste this provide stable form of fuel supply while also reducing the agricultural methane level from national herd, plus converts the agricultural waste to a fertiliser to be returned to the farming community and reducing the level of nitrates applied to the land which further meets with the recently enacted Nitrates Acts.

Biomethane as a replacement fuel for Natural Gas is commonplace in Europe but requires government subsidies however no such support exist today in Ireland. It is the intention of Herbata to support this renewable source through long term supply arrangement with AD producers at a price level to support their production and injection into the grid and reducing the level of imported and fossil gas in Ireland.

This On-Site Generation will provide support to Eirgrid as part of their grid stabilisation program in the Kildare and wider region caused by both Supply or Demand events, this support will include both stand by availability as well as providing various Ancillary Service needs of the Grid, with the site being able to export generation to the Grid during periods of low renewable energy production.

4. Net Zero Supply

It is important that Herbata further increase the source of renewable energy and increasing the volume through CPPAs and AD supply will be a key strategy in achieving this target. Given the impending growth in Offshore wind and the growth penetration of renewable mix coming on the Grid there will be opportunities to support Grid in their management of renewable supply by increasing use during periods of high renewable productions while providing a source of supply during periods of low renewable production.

Herbata must continuously monitor and benchmark on site energy on a CO₂/KWh basis ultimately targeting Net Zero CO₂/KWh through application of portfolio of supply approach.

To achieve Net Zero target will require ensuring all Grid supplied energy, electricity and gas, is sourced from renewable sources through CPPAs while also ensuring on site generation uses renewable feedstock such as HVO, Biomethane and Hydrogen when these become available.

It will be a key objective of the strategy to continuously increasing the percentage above minimum of 30% of energy produced from renewable sources and increase the source of renewable fuels utilised on site as and when they become available and try achieve a Net Zero target. To this end Herbata initial CPPAs volume will be targeting a minimum of 30% in any month which is expected to achieve 40% across a 12month period with this target further increasing this value through use of renewable fuels on site.



APPENDIX

Table 1 - Forecasted Renewable Generation [MW]

This is the Eirgrid projection of growth from new renewable assets between now and 2031

At year end:	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Wind Onshore*	4480	4630	4790	4940	5100	5250	5400	5550	5700	5850
Wind Offshore*	25	25	25	25	25	25	725	2865	5000	7140
Small Scale Hydro	26	26	26	26	26	26	26	26	26	26
Biomass and Biogas	24	24	24	24	24	24	24	24	24	24
Biomass CHP	30	30	30	30	30	30	30	30	30	30
Industrial	9	9	9	9	9	9	9	9	9	9
Conventional CHP	129	129	129	129	129	129	129	129	129	129
Solar PV	167	333	500	667	833	1000	1167	1333	1500	1667
Total	4890	5206	5533	5850	6176	6493	7510	9966	12418	14875

Table A3-2 Partially/Non-Dispatchable plant in Ireland (MW)

Source: Eirgrid Capacity Outlook 2022-2031

Table 2– Estimate Demand & CPPA production volume profile.

This table seeks to demonstrates the production profile of Wind 35MW (winter dominant) and Solar 35MW (summer dominant) over the course of a year and when coupled together will provide a more consistent supply throughout the year. It establishes the level of Wind and Solar to be contracted to achieve 100% of renewable supply off the Grid which represents 30% minimum in a month of site needs but nearly 40% across a 12month period.

	Demand	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dook Domos	Peak Demand per Hall (est)		40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Peak Delliai	' ' '	40.00												
	Demand (est)	315,360	26,784	24,192	26,784	25,920	26,784	25,920	26,784	26,784	25,920	26,784	25,920	26,784
Installed Capacity [MW]	Production Est.	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
35.00 V	Wind est [MWh]	90,080	10,763	7,836	7,611	7,347	5,779	3,733	3,944	6,497	7,665	8,305	10,651	9,947
35.00	Solar est [MWh]	32,374	798	1,686	2,891	3,902	4,484	4,228	4,267	3,590	2,843	2,081	987	618
T	otal est [MWh]	122,454	11,561	9,521	10,502	11,250	10,263	7,961	8,211	10,087	10,509	10,386	11,638	10,565
	% of Demand	39%	43%	39%	39%	43%	38%	31%	31%	38%	41%	39%	45%	39%
Base	load Equivalent	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Wind [MW]		14.47	11.66	10.23	10.20	7.77	5.19	5.30	8.73	10.65	11.16	14.79	13.37
	Solar [MW]	3.70	1.07	2.51	3.89	5.42	6.03	5.87	5.74	4.83	3.95	2.80	1.37	0.83
	Total [MW]		15.54	14.17	14.12	15.62	13.79	11.06	11.04	13.56	14.60	13.96	16.16	14.20



Table 3- Estimate Demand & CPPA production profile - Graph.

This graph demonstrates the production profile of Wind (winter dominant) and Solar (summer dominant) over the course of a year and when coupled together will provide a more consistent supply throughout the year.

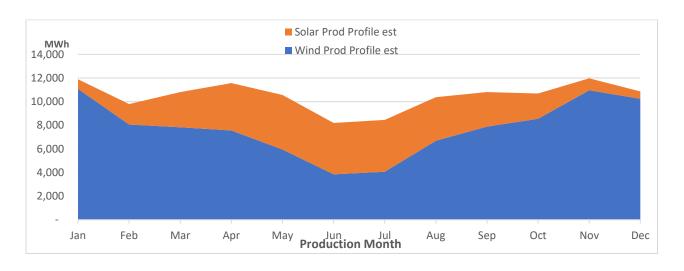
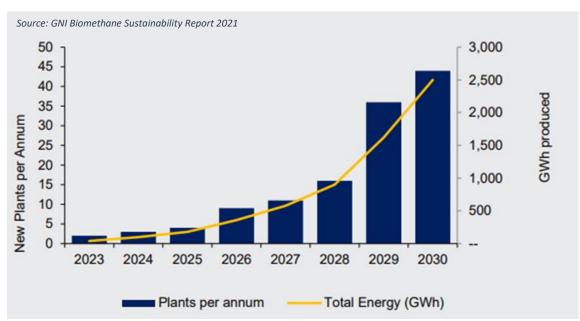


Table 4 – Forecasted Biomethane production (Green Gas)

Gas Networks Ireland estimate of growth in biomethane production and installation to 2030



Appendix B

Details of Eirgrid and CRU Engagement

CRU & EirGrid Engagement

In the early stages of organising the planning approach for this Herbata Data Centre Project our attention was drawn to the potential shortage of power supply for data centres in Ireland and the approach being taken by the Commission for Regulation of Utilities (CRU) to circumvent this major issue for the country by their issue of the draft consultation paper on the Proposed Direction to the System Operators related to Data Centre Grid Connection, published on 8th June 2021.

From understanding and recognising these forthcoming difficulties for the CRU and EirGrid we immediately realised that these issues were from the Herbata Data Centre perspective;

- 1. Real & relative
- 2. Issues that needed to be dealt with, and
- 3. An issue that we must address from the initial stages of our planning process.

Having read and studied the CRU consultation paper of 8th June 2021 we researched and identified a partner in e2 Mission Critical with a genuine product to overcome this imminent energy crisis for Data Centres. This furthermore has the ability to stabilise the EirGrid network in the immediate region of the Data Centre while also from an environmental perspective providing a true path to zero emissions over a given period of time.

Having completed all our initial research on e2 Mission Critical for the Herbata Data Centre we looked for meetings with both EirGrid and the CRU.

The meeting with EirGrid took place in person on 6th October 2021 and was attended by Eoin Clifford & John Lowry from EirGrid, James Richmond from e2 Million Critical and Gerry Prendergast from Herbata Data Centre, Naas.

While the EirGrid attendees welcomed our solution with their initial reaction, they also went on to point out that this solution was not alone required for the Herbata Data Centre in Naas but should also be required for all the existing data centres already built in Ireland, even as part of their back up requirements because they pointed out how this solution could stabilise and protect the Grid if applied unilaterally.

Following the meeting with EirGrid later that day (Wednesday 6th October 2021) an on line meeting took place with the CRU. Attending this meeting were Karen Trant, Stuart Coleman, Grainne Black and Michelle Whelan from the CRU, James Richmond and his technical staff from e2 Mission Critical and Gerry Prendergast from Herbata Data Centre. The CRU staff were most interested in the Herbata approach in partnership with e2 Mission Critical to provide an independent power supply energy source for this data centre to be constructed. In fact, the CRU welcomed the Herbata – e2 Mission Critical Solution as it precisely matched the requirements as indicated in their consultation document on the Proposed Direction to the System Operators relating to Data Centre Grid Connection, as issued on 8th June 2021.

At the time of this meeting it is fair to say that the CRU very much welcomed our approach and offered us full co-operation in bringing our innovative solution to fruition in what they described as solving a problem that imminently needs to deal with in Ireland.

Following these meetings, we appointed a professional team involving a number of specialist consultants to design and innovate this unique solution to providing the power for this Herbata Data Centre in a standalone manner.

While there have been numerous additions to this initial standalone power solution for the Herbata Data Centre Project such as;

- 1. The use of Renewable Green Energy Sources
- 2. A pathway to zero emissions over a realistic time frame
- 3. The GNI approach to providing a green energy fuel supply for generation.

It is important to note that all of these requirements/initiatives are readily usable in the e2 Mission Critical power generation solution as proposed for this Herbata Data Centre Project.

Appendix C

Climate Neutral Data Centre Pact Sign Up Criteria



Union (Pact Operators). Quotes from the signatories are available here.

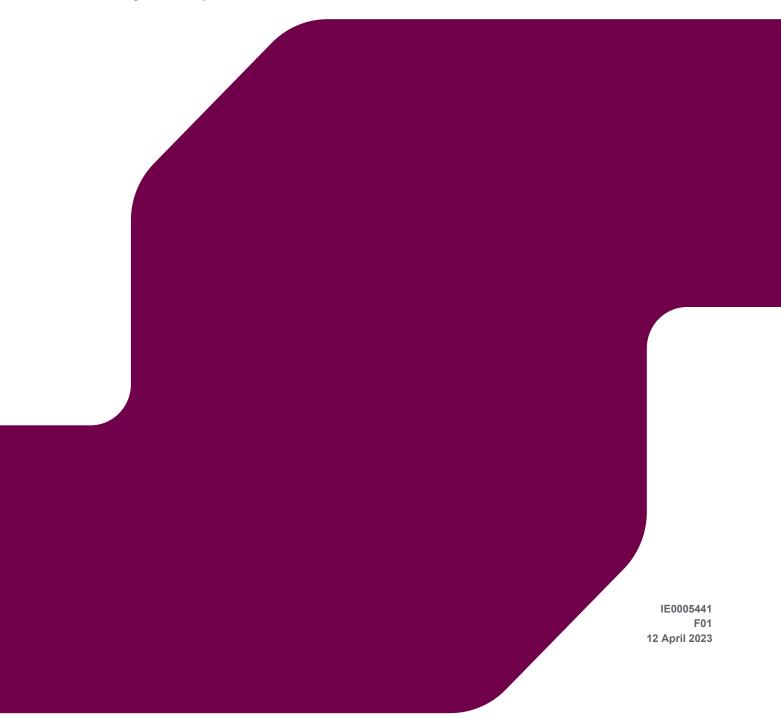
Appendix D

Site Layout Report



HERBATA DATA CENTRE

Site Layout Report



Site Layout Report

Document status										
Status	Revision	Purpose of document	Authored by	Reviewed by	Approved by	Review date				
Final	F01	Planning	МН	KK	KK	13/04/2023				

Approval for issue

13 April 2023

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Site Layout Report

1 INTRODUCTION

This report has been prepared by RPS with input from RKD (Project Architect), DOBA (Project Engineer) and BSM (Project Landscaper) on behalf of Herbata Limited to set out the rationale for the site layout and proposed development of a data centre at Halverstown, Jigginstown and Newhall, Naas, County Kildare.

At a pre-application meeting with Kildare County Council (KCC) on the 16th of March 2023 the site layout and the proposed building set back of 57m from the M7 was discussed. This report informs further these discussions and sets out the rationale for the proposed site layout including the setback from the M7 and its accordance with the proper planning and development of the site and Naas.

- The subject site, adjacent development and the proposed development is described in Section 2.
- The rationale underpinning the proposed site layout is set out in Section 3.
- The proposed landscaping arrangements, particularly along the M7 is outlined in Section 4.
- Planning policy guiding the proposed development is set out in Section 5.
- A consideration of pertinent planning precedents is set out in Section 6.
- A brief summary is provided in Section 7.

2 SUBJECT SITE & PROPOSED DEVELOPMENT

2.1 Site Location

As illustrated in **Figure 2-1**, the subject lands are approximately 37ha in extent and are located on the western side of the M7 motorway, positioned between Junctions 9a and 10. The site is bound to the north by the R409 road which provides a direct link to the centre of Naas, c.2.5km to the east.

The lands are located between the existing 'M7 Business Park' and 'Osberstown Business Park'. The Osberstown Wastewater Treatment Plant is located nearby to the north. The site is bounded to the east by the M7 motorway and to the west by agricultural lands. The 'Newhall Retail Park' is located to the south of the site, on the east side of the M7 motorway.



Figure 2-1 - Local Site Location Context Map (Source: Google Maps, RPS annotated)

There has been significant development in the locality in recent years, particularly light industry, logistics and services.

2.2 Proposed Development

The proposed development comprises 6 no. two storey data centre buildings, an administration / management building, car parking, landscaping, gas storage and gas turbines, energy storage and other associated works as shown in the proposed site layout (see **Figure 2-2**). The key elements of the proposed development are set out below:

- Site Area 37ha
- 6no. Data centres comprising
 - Two storey buildings

Site Layout Report

- 7.5m highest floor above ground
- Buildings c.18m in height overall
- Building areas (approx.)
- Admin space 2,400 sqm
- Data hall 24,600 sqm
- External yard (2 levels) 3,000 sqm (per level)
- Separate administration / management building (indicated in blue below)
- 400no. carparking spaces
- Primary access and exit via the R409.

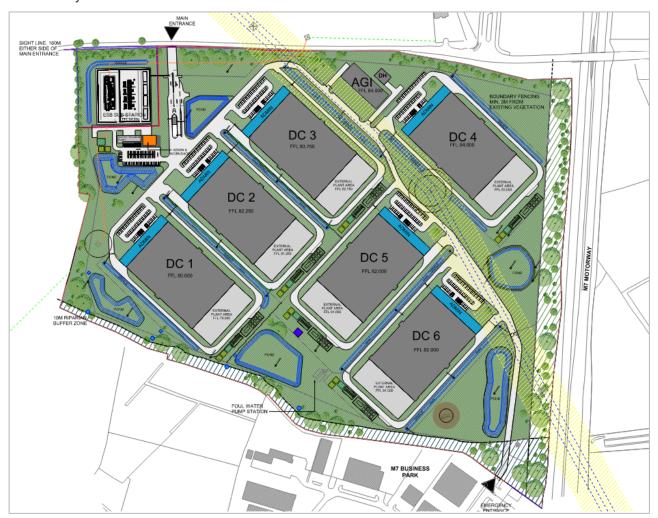


Figure 2-2: Proposed Site Layout

2.3 Adjacent Development

The subject site is located within Naas and there is existing development in the general vicinity running along the M7 / N7. The set back of existing development from the M7 / N7 varies significantly, with many developments being set back c.30-50m from the national primary road (see **Figures 2-3** and **3-1**), including:

- Osberstown Business Park;
- Osberstown Cottages;
- M7 Business Park;

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Site Layout Report

- Monread Shopping Centre; and
- The Globe Retail Park, Monread Rd.

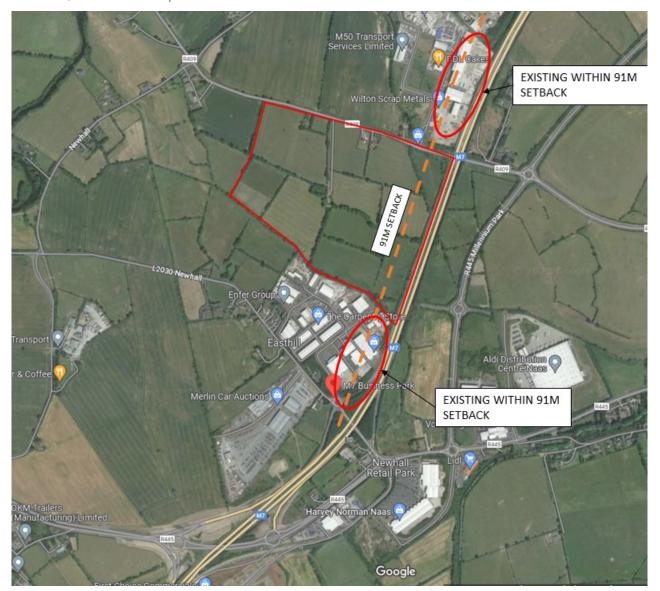


Figure 2-3: Existing Development within 91m of M7 adjacent to subject site

The proposed development will be setback from the M7 consistent with the existing building line.

3 DESIGN RATIONALE

3.1 Building Overview

Each Data Centre building comprises of 3 distinct sections all divided over two levels.

- 1. Admin area;
- 2. Data hall; and
- 3. External plant area.

The admin area comprises of a mixture of storage, welfare and support spaces. Each of the Data Centre will have 8 no. separate data halls with an electrical capacity to support up to 30MW of IT equipment load. The external plant area will house electrical plant and equipment. This compound will be fully enclosed behind a louvred screen wall.

The buildings will be steel framed with insulated metal faced cladding panels to the façade. The entrance area will have large, glazed windows. The roofs of the data centre buildings will be provided with a reflective finish to improve solar reflectivity and better sustainability.

3.2 Site Layout

The primary components of the development are set out in **Section 2.2** above. The design rationale for the current site layout has been to mitigate and minimise the disturbance to the local flora and fauna. There are also some site constraints that have influenced the proposed design approach:

- Existing hedgerows, that will be retained where possible, especially on the boundaries of the site.
- Fulacht fia located on the south-east area of the site according to the National Monument Service. It has
 been identified and recorded with the reference number KD019-028. There is no obvious visible trace of
 it but remains may still exist underground. There is a 20m radius no dig zone proposed for this area.
- Bluebell Stream located along the south boundary of the site, surrounded by many existing trees and shrubs. A 10m riparian buffer is proposed to ensure the preservation of the ecology within this site and to maintain green and blue corridors.
- Motorway M7. A 40m setback has been proposed from the M7 Motorway. Existing hedgerows along this
 boundary are to be maintained and additional trees & shrubbery are proposed to help maintain a visual
 and noise buffer, and to allow for any potential expansion of the motorway.
- 220kv Overhead power lines crossing the site subject. There is a 63m no dig zone underneath the
 overhead power lines that traverse the site. No buildings are to be developed underneath these power
 lines.
- 110kv Overhead power lines located to the northern corner of the site. These are to be rerouted
 underground to allow for the development of a GIS Substation on site. The GIS substation and partial
 undergrounding of EirGrid's 110kV overhead lines will be subject of a separate Strategic Infrastructure
 Development (SID) planning application to An Bord Pleanála as it involves changes to electricity
 transmission.

These have been carefully taken into consideration for the positioning of each building, locating them in the most sympathetic location possible and stepping them in line with the existing site levels and contours to reduce the cut and fill requirements.

In addition to above, the proposed site layout reduces the pressure on the site boundary by minimising the disruption to perimeter hedgerows. This also facilitates increased greens space, additional room for biodiversity and additional space for rainwater attenuation within the site.

The current orientation of the buildings helps to minimises the visual impact along all boundaries including the along the M7 motorway section. Where achievable there is a fully landscaped 40m wide buffer zone between the motorway and any site infrastructure including roads or fencing. Refer to landscape section for full details.

The vehicular and pedestrian site entrance is located to the north corner of the site ensuring that adequate sight lines can be achieved for all traffic leaving the complex. An emergency entrance is located to the south of the site, entered through the M7 Business Park.

3.3 Setback from the Motorway

As noted above, the west side of the site borders the M7 motorway and is bounded by the M7 Business Park to the southeast and Osberstown Business Part to the northeast.

The site layout as defined in **Section 3.2** maximises the setback from the motorway. Data Centre building 4 is the closest building to the motorway. The building is orientated 50 degrees off the motorway and as a result there is only minimum encroachment of one corner inside the 91m setback. The closest corner of the building stands 83m back from the motorway and due to the orientation of the building, only a very small proportion of the building is within 91m. The external plant screen around the yard is 57m at the closes point see **Figure 3.1** for full details.

Although the new development has minimum encroachment beyond the 91m setback it is important to note the existing developments to the north and south of the Herbata campus do not comply with the setback requirement as indicated in the images in orange below and are closer to the motorway than the proposed Herbata development.

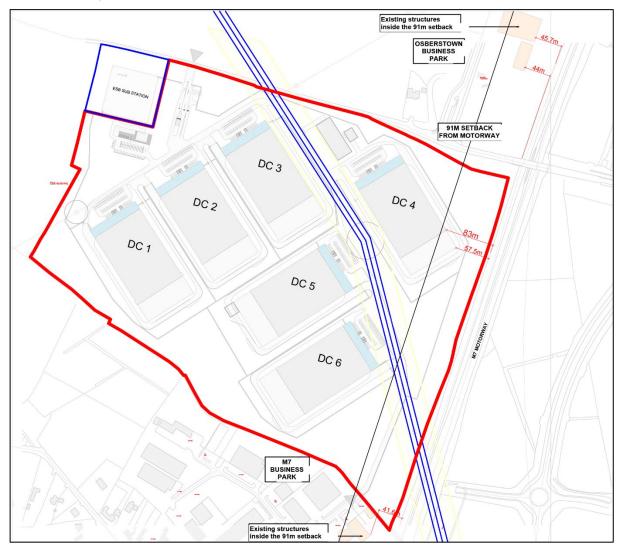


Figure 3-1: Site Plan Indicating 91m Setback

4 PROPOSED LANDSCAPING

4.1 Existing Landscape Conditions & Context

The M7 adjoins the eastern boundary of the site. This is a two-way motorway with three lanes (plus hard shoulders) running north/south. Separating the site and M7 corridor is an existing hedge with timber post and rail fence. The existing hedge ranges in height from c.1 to 8m high and consists of predominately *Crataegus monogyna* (Hawthorn) and *Fraxinus excelsior* (Ash), see **Figure 4-1**.

Immediately south of the site lies the M7 business park with the closest buildings c. 22m from the edge of the M7, with limited landscape or screen planting. At the southern end of the site, there is an overhead 220kv powerline crossing the motorway and into the site, in a southeast to northwest direction. The overhead powerline sets height limits for existing vegetation and therefore reduce the height of the hedgerow to approximately 1-3m for c.110 linear meters. The grade of the hedgerow is generally consistently level or above the height of the motorway as it continues parallel, except for the section of hedgerow below the powerlines, where it locally grades below the motorway by 1-2m, see **Figure 4-2**.

At the northern end of the site the R409/Carragh Road bridge crosses the motorway connecting to Millennium Park on the eastern side of the M7. To the north lies Osberstown Industrial Park with buildings at c.44m from the motorway edge and Osberstown wastewater treatment plant c.46m away from the motorway edge.



Figure 4-1 Existing boundary hedgerow to M7



Figure 4-2 - Existing boundary hedgerow to M7 with 220kV overhead powerline

4.2 Proposed Landscape Treatment

The proposed development site is zoned 'P(1) – Data Centre' in the Naas Local Area Plan 2021-2027. The proposed landscape masterplan (see extract **Figure 4-3**) proposes to retain and protect all existing hedgerows along the eastern boundary to the M7. The retention, augmentation and enhancement of the existing hedgerows will include filling in/gapping up of weak or low sections of peripheral hedgerows and allowing them to thicken up and grow to a total height of 3.0 to 3.5m high (or managed at existing height if higher than this) to ensure that views of the development from the M7 are screened.

Inside the hedge line, a c.30-40m wide, native screen woodland and scrub woodland planting belt is proposed, with planted on raised mounds ranging in height from 3-4 meters (with varying 1:2 to 1:3 slopes) parallel to the hedgerow, see

The proposed mounding will help provide increased height and immediate screening between the M7 and the data campus environment. The mounding will take into account the retention of remaining retained trees and hedgerows and fit the earthworks accordingly.

The mounding will be planted with a mixture of native and adaptive deciduous and evergreen trees. The proposed planting will generally be established in line with normal landscape planting techniques, i.e., 'whips' and 'feathered trees' which adapt readily to disturbed ground conditions. These will be planted at average 1.m centres. A minimum of 15% of evergreen trees and shrubs will be mixed through the planting to minimise impact during winter months. Evergreen plants will be supplied as container grown stock.

Larger 'standard' and semi-mature trees (up to 5m tall) will be used closer to the building and footpaths to give a more immediate impact. Semi-mature Pine trees (3-4m tall) will be planted to the in groups along the mounds to augment visual screening of the built development.

Woodland screen planting trees and shrubs to be planted will be selected from the following list of species. Trees will be minimum 1.2m high, planted at 1.2m centres, feathered, individually staked and protected with rabbit proof guards.

Table 4-1: Proposed Planting

Tree Planting				
Alder	Alnus glutinosa	Pine	Pinus sylvestris	
Willow	Salix spp.	Birch	Betula pubescens	
Birch	Betula pendula, B	Blackthorn	Prunus spinosa	
	pubescens			
Hawthorn	Crataegus monogyna	Oak	Quercus robor	
Wild cherry	Prunus avium, P. padus	Beech	Fagus sylvatica	
Understorey Planting				

Site Layout Report

Hazel	Corylus avellana	Dogwoods	Cornus sanguinea	
Wild Rose	Rosa spp.	Holly	llex aquifolium	
Guelder rose	Viburnum opulus	Elder	Sambucus nigra	
lvy	Hedera helix			

Any failures in planting within the first year will be replaced by the appointed landscape contractor. All planting areas will be maintained weed free to help the establishment of the tree cover with the objective of providing full canopy cover of the planting areas within the first five years. The landscape will be implemented, managed and maintained for five years to ensure 100% coverage of the site. The planting is to be carried out within the first planting season (November-March) after construction works.

Beyond the proposed woodland planting, a security fence will run parallel, which will separate the screen woodland planting from the data centre buildings and infrastructure. Around the buildings, the landscape treatment will include short and long meadow grassland, swales, green walls, biofiltration planting, detention basins and ponds.

Within the 220kv powerline wayleave, a native scrub planting (hawthorn, blackthorn, hazel, holly with maximum height of 3m) is proposed. A corridor of 4 metres will be left clear as meadow grassland for ESB maintenance access from within the site.

With these extensive areas of mounding and planting the proposed development will be substantially screened from the M7.

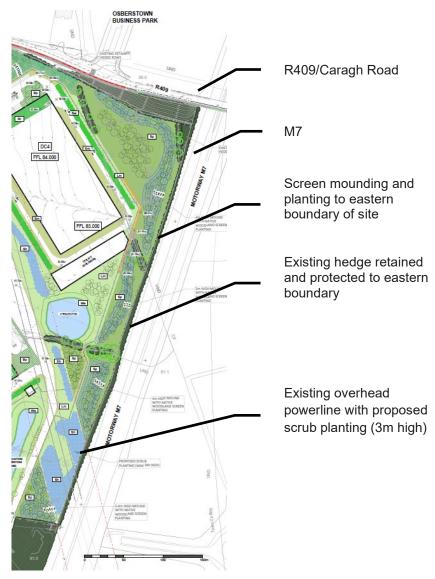


Figure 4-3 Proposed landscape masterplan eastern boundary to M7

Site Layout Report

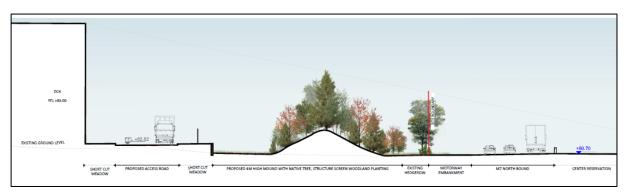


Figure 4-4 Proposed landscape section to eastern boundary and M7

5 PLANNING POLICY APPRAISAL

5.1 Spatial Planning and National Roads - Guidelines for Planning Authorities

Spatial Planning and National Roads - Guidelines for Planning Authorities (January 2012), prepared by the department of the Environment, Community and Local Government includes a land use and transportation planning checklist which states:

"Are there appropriate objectives concerning impact mitigation measures, such as noise barriers, set back landscaping and/or buffer zones between areas of land where development is proposed and existing and proposed national roads, the cost of which should be borne by the developer?"

The Guidelines do not set out a defined set back from national roads. Neither does any other TII guidance document that we are aware of require a 91m setback from a roadway.

The proposed development includes a high quality 30-40m wide, native screen woodland and scrub woodland planting b running along the M7 as described in **Section 4**. It is anticipated that the proposed development site shall operate well within the constraints of the best practice guidance noise limits. The Environmental Impact Assessment Report which is being prepared shall provide detail this further.

It is considered the proposed development accords with the tenets of these guidelines.

5.2 Kildare County Development Plan 2023-2029

The *Kildare County Development Plan 2023-2029* (KCDP) was adopted in December 2022 and took effect on the 28th of January 2023.

Section 15.9.2 of the KCDP provides detail on design principles for Industry and Warehousing. A number of these as set out below are pertinent to set backs and building lines:

- "• In the case of two or more industrial / warehouse units, a uniform design is required for boundary treatments, roof profiles and building lines;
- Areas between the building and road boundary may include car parking spaces provided adequate screen planting is incorporated into the design proposal;
- The building line from adjoining land-uses will be determined at Local Area Plan level having regard to the nature of uses and site-specific matters, or in accordance with Section 15.7.7 of this Plan:
- The front building line shall be as determined in consultation with the planning authority and, where required, the existing roadside boundary shall be set back;
- A landscaping plan shall be included with any planning application which details landscaped areas to the front of the building line and the provision of a buffer zone (minimum 5-10 metres) where the development adjoins another zoning or where it would impact on the amenities of adjoining land uses;

With specific reference to building lines there are quantitative standards for **rural areas**, as set out below:

"Where developments are permitted in rural areas along National, Regional and County Roads it is the policy of the Council to require compliance with the minimum setbacks as set out in Table 15.7. All measurements are taken from the nearest edge of the road surface. In situations where there is an established building line, new houses, where appropriate, shall conform to the established building line.

Motorways	91m
National Primary	91m
National Secondary	91m
Regional Road	31m
County Road	18.5m

Table 15.7 - Building Lines from Public Roads in Rural Areas

It is not considered that these standards apply to the subject site given:

- The subject site is located in Naas, a designated "key town" within the Greater Dublin Area.
- Its location within the Naas Local Area Plan boundary;
- The subject lands being zoned P "Data Centre";
- Existing commercial development to the north and south of the subject site; and
- Lands immediately to the east being zoned H "Industry and Warehousing".

There is not a specific quantitative standard for lands in an urban location. Guidance is more nuanced, stating:

"Building lines in developed areas will be determined having regard to the historic urban grain of the area and the need to provide pedestrian friendly streets with a sense of enclosure. Proposed developments should have regard to Chapter 14 Urban Design Guidelines on this matter.

Proposals for residential developments near busy roads in urban areas and adjacent to transportation corridors will be required to demonstrate how the impacts of noise are avoided, prevented or mitigated and shall have regard to planning guidance issued by the Local Authority or nationally. A key element is a Noise Impact Assessment / Acoustic Design Statement report to demonstrate the application of good acoustic design to ensure:

Units or blocks have been spatially located within the site to minimise noise impact from in-borne transportation noise

ii) Noise sensitive rooms within each unit or block have been designed so as to minimise in-borne noise impact

iii) adequate building ventilation and thermal comfort, in all living areas (e.g., living rooms, bedrooms) with openable windows in accordance with the internal noise level guidelines, as outlined in BS 8233:2014, 'Guidance on sound insulation and noise reduction for buildings;

iv) private external amenity areas can be enjoyed as intended taking cognisance of environmental noise levels."

The proposed development is located in an urban area and the considered design accords with existing proximate development and the site shall operate well within the constraints of the best practice guidance noise limits.

5.3 Naas Local Area Plan 2021-2027

The *Naas Local Area Plan 2021-2027* (Naas LAP) sets out an overall local strategy for the proper planning and sustainable development of Naas.

As illustrated in **Figure 5-1**, the subject site is zoned 'P(1) – Data Centre' in the Naas LAP. Naas LAP seeks "*To provide for Data Centre development and their associated infrastructure only*" for Land Use Zoning Objective 'P'. The subject site is one of only two sites to have been zoned for Data Centres in Naas. The only use considered by the Naas LAP to be '*Permitted in Principle*' in lands zoned 'P' is Data Centres.

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The development of the subject site as proposed, fully accords with the land use zoning objectives for this area as set out in the Naas LAP.

"Objective EDO 1.12

- (a) Facilitate the location of Data Centre development on land designated P: Data Centre at Caragh Road South and Jigginstown for the identified land use only subject to appropriate environmental assessments, heat mapping, transport impact assessments and consideration of the cumulative impact on the electricity network supply capacity and targeted reductions in greenhouse gas emissions.
- (b) Any data centre project will be required to include measures to generate energy (sustainable, then renewable in the first instance) on site as part of the overall development proposal."

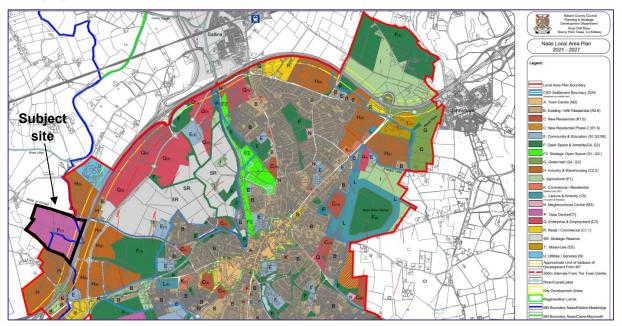


Figure 5-1: Land Use Zone Map (Source: Naas Local Area Plan, RPS Annotation).

5.3.1 Building Line Set Back

As can be seen in **Figure 5-1** there is an "approximate line of setback of development from the M7" set out in the Naas LAP. Further to this MTO 3.8 states:

"To ensure a 91-metre building line setback from the motorway and associated junctions from the nearest roadside edge to protect against transportation noise and to ensure the future protection of the motorway network. Under certain circumstances ancillary development may be considered within the setback zone in recognition of local conditions and the nature of the proposed activity."

The proposed development provides for a setback of the building line at a minimum of 56m from the motorway. This is consistent with existing development in the area and fully protects the motorway network. Buildings in the adjacent Osberstown Business Park and the Osberstown wastewater treatment plant are within c. 50m of the motorway. In the wider Naas area there are many buildings within 91m of the motorway, including the Monread shopping centre and the M7 Business Park. The proposed development is considered to be consistent with local building lines.

Given the nature of the proposed development there are no noise implications arising from the proposed data centre location given the proposed setback from the motorway.

As described in **Section 4**, the proposed landscaping measures include a 30 - 40m wide landscape buffer to minimise views of the proposed data centre from passing traffic on the motorway.

It is therefore considered that the proposed development meets the stated rationale for the setback, as it protects against transportation noise and provides for the future protection of the motorway network.

Local conditions and the nature of the proposed activity determine that it may appropriately be located within the 91m boundary.

5.4 Comparator Local Area Plans

It should be noted that the inclusion of the setback as in the Naas LAP is not consistently included in other local area plans within and outside County Kildare. The *Leixlip Local Area Plan 2020 – 2026*, within which the M4 routes, does not include a setback boundary on LAP mapping or a general requirement for same in the written statement.

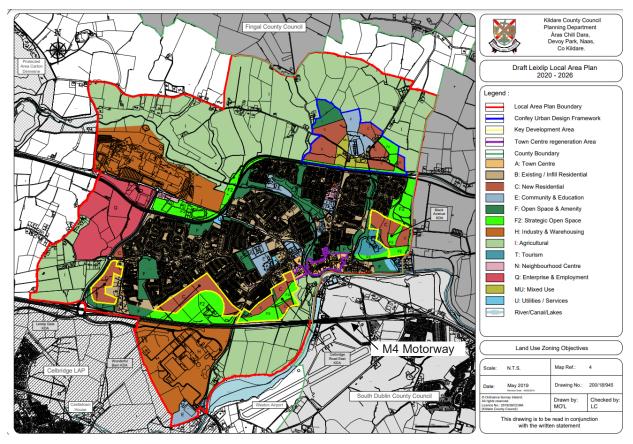


Figure 5-2: Land Use Zoning Map Leixlip (Source: Leixlip Local Area Plan)

The *Kilcullen Local Area Plan 2014 – 2020* adjacent to the M9 does not include any requirement for a setback from the M9.

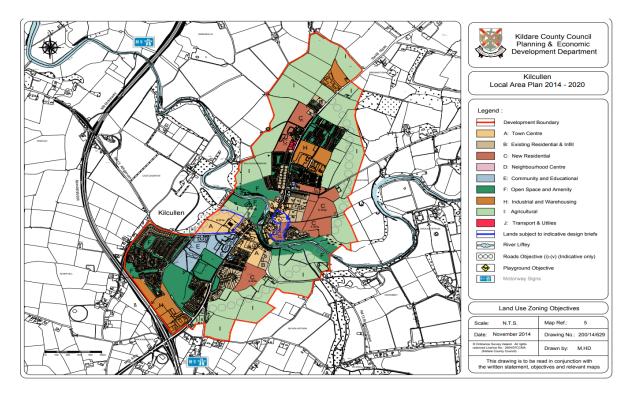


Figure 5-3: Land Use Zoning Map Kilcullen (Source: Kilcullen Local Area Plan)

The *Meath County Development Plan 2021 - 2027* does not include a setback boundary along the M3 at Dunboyne / Clonee / Pace.

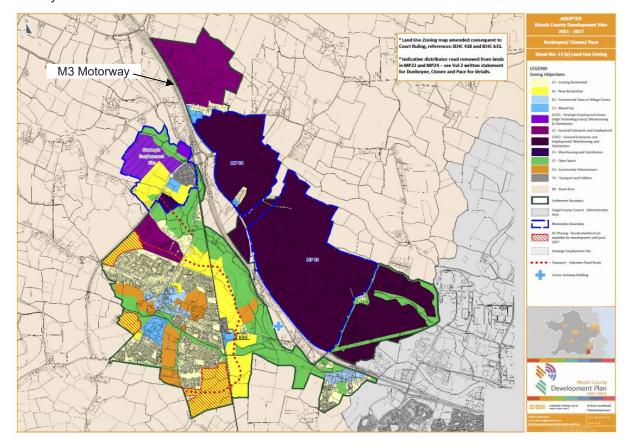


Figure 5-4: Land Use Zoning Map Dunboyne / Clonee / Pace (Source: Meath County Development Plan 2021 - 2027)

The *Ballinasloe Local Area Plan 2022 – 2028* within which the M4 routes, does not include any requirement for a setback from the M4.

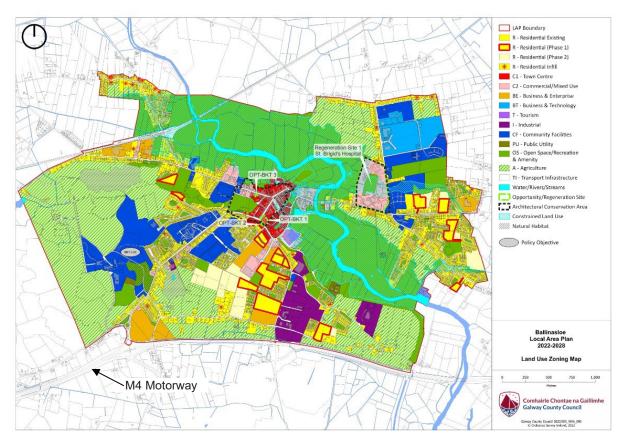


Figure 5-5: Land Use Zoning Map Ballinasloe(Source: Ballinasloe Local Area Plan 2022 - 2028)

6 PLANNING PRECEDENT

6.1 KCC Reg. Ref. 17574 / ABP Ref. PL09.249304

On the 13th March 2018 permission was granted for 16 no. Light Industrial Warehouse Units including all associated site works, roads and services at the Monread Road, Naas, Co. Kildare. A setback from the motorway of 35m was proposed.

With regard to the proposed setback the KCC's Report states:

"One of the central issues relates to the set back from the Motorway. Table 17.8 of the CDP 2017 – 2023 requires a building line of 91m. It is noted however, that the applicant has submitted numerous examples of recent developments within Naas, where the set back has been permitted to be less than the 91m specified in the Plan. A question arises therefore as to whether the Planning Authority is satisfied with the applicant's proposed 35m set back. In this regard, it is noted that the submission form TII raises no issue with regard to set back and similarly, the Roads Section. The set back is mentioned in the report of the NRO, however, the issue is not raised as a request for Further Information."

The KCC's Report concludes:

"it is considered, having regard to the location of the site in close proximity to the M7 motorway, the previous zoning of the site for industrial uses in the Naas Environs Plan, and the character of the immediate area, that the principle of the proposed development is acceptable"

With regard to the proposed setback the ABP Inspector's Report states:

"The National Roads Office (NRO) referred to the fact that the setback distance from the motorway was 35m, rather than 91m required in Table 17.8 of the Plan, which provides information on the setback distances for different classes of roads.

The planned upgrade to the M7 motorway in this general area is due to get underway in Q1 this year. I note that the Roads and Transportation Section had no objections to the proposal, and Transport Infrastructure Ireland commented that they had no objection.

I note that the Plan states the setback distances must be conformed with 'where developments are permitted in rural areas'. If this was a rural area, then the 91m should apply. The Plan also states that 'Building lines in developed areas will be determined having regard to the historic urban grain of the area'. I note that the developments along the Monread Road are substantially below the 91m setback and have therefore set a precedent for the area. Having regard to the fact that the M7 works are permitted by the Board and about to start, I do not consider the reduced setback to be an issue."

6.2 Reg. Ref. 18/454

On the 20th July 2018 permission was granted for 20 no. Light Industrial Warehouse Units including all associated site works, roads and services at the Monread Road, Naas, Co. Kildare. (phase 2 of a 3 phase development – phase 1 granted under **Reg. Ref. 17574**) A setback from the motorway of 35m was proposed.

The KCC Planner's report states:

"One of the central issues relates to the set back from the Motorway. Table 17.8 of the CDP 2017 – 2023 requires a building line of 91m. It is noted however, that the applicant has submitted examples of precedent development where the set back has been permitted to be less than the 91m specified in the Plan. A question arises therefore as to whether the Planning Authority is satisfied with the applicant's proposed 35m set back. In this regard, it is noted that the submission from TII raises no issue with regard to set back and similarly, the Roads Section. The report of the NRO indicates given that the proposed development is within the Naas Urban Area and will be served by a new access off the local road network, in Naas, the application has no impact on the national road network."

6.3 Reg Ref. 18/1132

On the 28th March 2019 permission was granted for 20 no. Light Industrial Warehouse Units including all associated site works, roads and services at the Monread Road, Naas, Co. Kildare. (phase 3 of a 3 phase development – phase 1 granted under **Reg. Ref. 17/574** and phase 2 granted under **Reg. Ref. 18/454**) A setback from the motorway of 35m was proposed.

The KCC Planner's report states:

"Table 17.8 of the CDP 2017 – 2023 requires a building line of 91m. The proposed set back is 35 metres in this instance. It is noted however, that the applicant has submitted examples of precedent development where the set back has been permitted to be less than the 91m specified in the Plan. In this regard, it is noted that the submission from TII raises no issue with regard to set back and similarly, the Roads Section and NRO report do not cite concerns regarding the set back."

6.4 Reg Ref. 12/796

In 2013 planning permission was granted for a single storey petrol service station comprising of a retail shop, toilets and stores, delicatessen with seating, forecourt area, canopy, pump islands, signage, service area, car wash area, ATM, underground storage tanks, refuse storage and all associated site development works at Monread, Monread Road, Naas, Co. Kildare within the 91m motorway setback.

The KCC Planning Report stated:

"Given the non-compliance with the motorway building line existing on adjoining and nearby development it is not considered appropriate to implement it on this site."

6.5 Planning Precedent Summary

There are a large number of buildings and developments existing within 91m of the M7 motorway. Planning permission has been granted in recent years for a number of further buildings proximate to the M7 as shown in **Figure 6.1**. Many of these are located much closer (35m) to the M7 than the subject proposal.

Both KCC and ABP have confirmed that the location of development within 90m of the M7 in Naas is acceptable.

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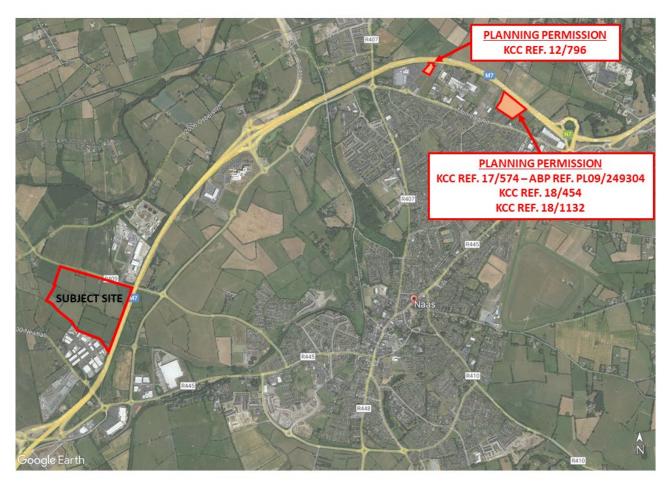


Figure 6-1: Location of Sample Recent Planning Permissions within 91m of M7

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7 SUMMARY

The proposed development aligns with national, regional and local policy supporting the ICT sector and data centres as a key component of this sector.

The proposed Data Centre use at this site accords with the local land use zoning objective set out in the Naas LAP which has explicitly identified this location as being for a data centre only.

The subject proposals follow a considered design process and include a generous setback from the motorway and a high quality landscaping arrangement.

There is local planning policy pertaining to a 91m setback from the motorway in the Naas LAP. It is not considered that the rigid application of the 91m setback is appropriated in this instance because:

- There are numerous examples of buildings within 91m of the motorway in the immediate vicinity of the subject site;
- There has been no requirement to set back development 91m from the motorway in the general vicinity
 of the subject site in a large number of planning decisions made by KCC and ABP in recent years;
- A setback of at least 57.5m and 40m landscaping is proposed in the subject development, this
 addresses visual and noise impacts and is considered to allow for any potential future upgrade that may
 be required; and
- The requirement for a 91m setback from motorway is not applied consistently in LAPs within Kildare and other counties and there does not appear to be any overarching planning or technical requirement for such a setback.

It is considered that the proposed development accords with sustainable development objectives and adopts an exemplary approach to data centre development within the State.

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Appendix E

KCC Roads Correspondence

Planning Report

From: George Willoughby < gwilloughby @kildarecoco.ie >

Date: Mon, 17 Apr 2023 at 12:02

Subject: FW: Herbata Data Centre, Halverstown.

To: Aisling Tormey < ATormey@kildarenrdo.com >, Aidan Farrell NRDO < afarrell@kildarenrdo.com >

Cc: Marie Whelan mwhelan@kildarenrdo.com, Stephen Deegan SDeegan@kildarenrdo.com, Colm Lynch

< Clynch@kildarecoco.ie>, David Reel < Dreel@kildarecoco.ie>, Yasir Khan < YKhan@kildarecoco.ie>,

Donnachadh O'Brien < d.obrien@doba.ie >

Aisling, Aidan,

I wish to confirm that the KCC Roads Planning Section has examined the additional information submitted by Donnachadh O'Brien Consulting Engineers and Our Section has **no objection** to the proposed VRU Improvement Works on the Caragh Bridge R409 to service the development and the proposed set back proposals from the M7 Motorway.

I would appreciate confirmation that the Kildare NRO are also in agreement with this by this Wednesday 19th April (COB) if possible.

Regards,

George

George Willoughby

BA/BAI CEng MIEI

Chartered Engineer

Senior Executive Engineer

Kildare County Council

Roads, Transportation & Public Safety Department

Appendix F

KCC Correspondence Regarding Scales

Planning Report

From: Elaine Donohoe < eldonohoe@kildarecoco.ie >

Sent: 03 August 2023 13:07

To: Anne Mooney <Anne.Mooney@rpsgroup.com>

Cc: Michael Higgins < michael.higgins@rpsgroup.com >; Kehinde Oluwatosin < KOluwatosin@kildarecoco.ie >

Subject: RE: Herbata Data Centre Naas Co Kildare - Planning Application

CAUTION: This email originated from outside of RPS.

Hi Anne,

I've briefly reviewed the information submitted. I think the position of the site notices would be acceptable.

Having regard to the scale of the development, I consider that the scales as proposed are acceptable.

To confirm, no hard copy of the application is required when you apply online.

Regards, Elaine

From: Anne Mooney < Anne. Mooney@rpsgroup.com >

Sent: Wednesday, August 2, 2023 4:32 PM

To: Elaine Donohoe <<u>eldonohoe@kildarecoco.ie</u>> **Cc:** Michael Higgins <<u>michael.higgins@rpsgroup.com</u>>

Subject: FW: Herbata Data Centre Naas Co Kildare - Planning Application

Warning

This email originated from outside Kildare County Council. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Elaine.

RPS are currently finalising the planning application for the Herbata Ltd Data Centre proposal to the west of Naas, which has been the subject of several pre-planning consultations with Kildare County Council, with the most recent on the 24th of May.

We would greatly appreciate some guidance on the following matters prior to submission of the planning application;

1. Site Notices

We are currently proposing 6 no. site notices as shown on the attached site location map along with a 7th site notice to be located at the proposed footpath/cycleway on the R409 (as shown by the comment on the site location map attached). Are you satisfied with the location and quantum of these site notices?

2. Scales of Drawings

In general, the drawings comply with the statutory regulations in terms of scale. However, the drawings we hope to submit for the Proposed Site Sections (DWGS 1017 & 1018 attached) & Proposed Site Elevations (DWGS 1021 & 1022 attached) are at scales of 1:500 & 1:1000 due to the large size of the proposal (as opposed to a scale of 1:200 as stipulated by the Regs). Can you confirm that the use of these scales is satisfactory?

3. Engineering Drawings

Please see attached 3 no. engineering drawings prepared by HDR that show Campus Road Surfacing Layout (DWG 112255), Campus Road Layout (DWG –112250) and Site Contour Plan (DWG 112210), all at 1:1000. Can you confirm that the scales chosen for these drawings are satisfactory or would you also like them at 1:500?

Planning Report

4. Submission of Planning Application

We hope to submit the planning application online. Can you confirm that there is no requirement to submit a hard copy of the planning application to KCC?

Michael Higgins or myself can be reached at the phone number below if you wish to discuss any of the above items further.

Kind regards, Anne

Anne Mooney

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Appendix G

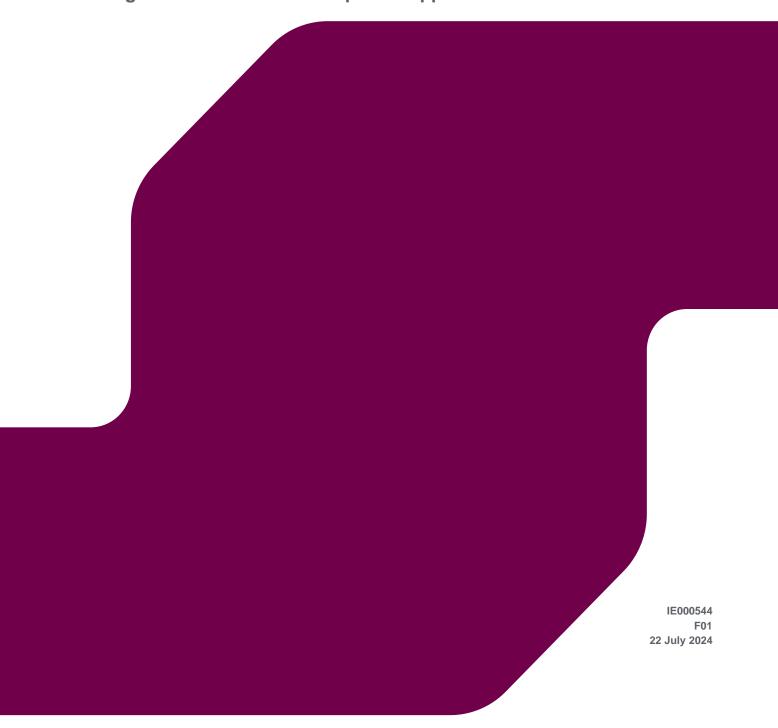
Draft Substation Planning Report



PLANNING REPORT

PROPOSED GRID SUBSTATION AND ASSOCIATED ELECTRICITY TRANSMISSION LINE CONNECTIONS - NAAS, CO. KILDARE

Strategic Infrastructure Development Application



Planning Report

Document status					
Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
F01	Planning	CG	MH	KK	22/07/2024

Approval for issue	
KK	22 July 2024

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Appendix A

ABP SID Determination Letter

1 INTRODUCTION

RPS Group Ltd (RPS), West Pier Business Campus, Dún Laoghaire, County Dublin, A96 N6T7, in association with a multidisciplinary team, has been instructed by the Applicant, Herbata Limited (Herbata), to prepare this Planning Report to accompany a Strategic Infrastructure Development (SID) application to An Bord Pleanála (ABP) for a proposed development in the townland of Halverstown, at Naas, County Kildare.

This application is made in accordance with the provisions of section 182A (1) of the Planning and Development Act, 2000 (as amended) (the Planning Act).

The proposed development includes the provision of:

- 110kV GIS Building/Grid Substation c. 1253sqm and 15m in height;
- 4 no. medium voltage (MV) output switch rooms (each MV will be c. 5.5m in height and c. 93.5 sqm in area)
- 4 no. 110/10kV dual output step down transformers (5.7 m in height) separated by isolators;
- Undergrounding of a 110kV transmission line;
- 2 no. Dropdown towers (16m in height);
- Removal of two existing overhead 110kV lines from the proposed dropdown towers, including the supporting poles / tower; and
- All associated ancillary works.

The subject site currently comprises c. 3.15 ha of agricultural lands to the west of the M7 and Naas town.

The development of the substation and associated electrical infrastructure is necessary to provide for the development of an associated data centre. The overall development includes two main elements, namely:

- (a) The substation, comprising a grid substation and 110kV transmission connection. These elements are subject of the SID application to ABP, and that application is referred to hereafter as "the Substation Application"
- (b) The data centre, comprising 6 no. two storey data centre buildings, an administration/management building, car parking, landscaping, energy infrastructure and other associated works. These elements are the subject of the planning application submitted to Kildare County Council (KCC), and that application is referred to hereafter as "the Data Centre Application".

There is a separate statutory development consent process for each of these elements, with which Herbata must comply. The data centre element requires planning permission pursuant to section 34 of the Planning Act, while the substation element is "Strategic Infrastructure Development" within the meaning of the Planning Act and requires approval from ABP under section 182A of the Planning Act (instead of a regular planning permission under section 34 of the Planning Act).

It is therefore necessary for Herbata to make two distinct applications, one to KCC in respect of the data centre (i.e. the Data Centre Application) and one to ABP in respect of the substation (i.e. the Substation Application). This is not at all unusual and is in compliance with legislation.

The Data Centre Application and the Substation Application together constitute the "Project" for the purposes of Environmental Impact Assessment Report (EIAR) and Appropriate Assessment (AA), and references to the Project in this EIAR should be read as references to those two applications taken together as one project.

The extent of the two applications is shown in **Figure 1-1**.

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Figure 1-1: KCC and SID Applications

Source: RKD

The proposed development shall enhance the local electricity transmission network and is designed to support current power demand and future growth within the area inclusive but not limited to the power requirements for the proposed data storage facility development.

A full description of the proposed development is set out in **Section 6** of this report.

The documentation provided has been prepared within inputs from the following team members:

- RPS (Planning & Environmental);
 - AA Screening Report, prepared by James McCrory, CEcol CEnv MCIEEM CBiol MRSB.
 - EIAR, Project Lead Raymond Holbeach, BSc Environmental Science, MSc Landscape Architecture
- RKD (Architecture);
- HDR (Engineering);
- DOBA (Engineering); and
- BSM (Landscape).

This Planning Report presents the proposed development and associated works in the context of relevant planning legislation, policies, objectives and development management standards. This report is set out under the following sections:

- Section 1: Introduction;
- Section 2: Background;
- Section 3: Site Location and Context;
- Section 4: Planning History;

Planning Report

- Section 5: Pre-Application Consultation;
- Section 6: Proposed Development;
- Section 7: Planning Policy Context and Appraisal;
- Section 8: Environmental Assessments; and
- Section 9: Conclusion.

This Planning Report should be read in conjunction with all plans and particulars submitted as part of the application and listed in the *List of Enclosures* submitted under separate cover, including the EIAR and *AA Screening Report*.

2 BACKGROUND

The proposed development shall support current power demand and future growth within the area having spare 110kV circuits if required. The proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.

This Substation Application is also designed to enable suitable electricity network connectivity to a proposed data storage facility, which is subject to a separate planning application with KCC. The Data Centre Application comprises c. 37.5 ha of agricultural lands to the north, east and south of the SID subject site. This proposed data storage facility planning application to be submitted to KCC includes the provision of:

- 6 no. data centre buildings;
- Administration / management and water treatment building;
- Incoming gas supply compounds;
- District heating facilities; and
- Car parking, security building, landscaping, and all associated site works.

2.1 The Need for the Proposed Development

The substation development is to be made of two elements, the first being a new node on the Irish electricity grid at Naas, which will be handed over and be operated by EirGrid as the Transmission System Operator (TSO); the second element will comprise the transformation to a lower voltage to enable distribution to the proposed data centre development, subject to a separate planning application to KCC. Further detail on the Data Centre Application is provided in **Sections 1 and 6** of this report.

The purpose of the proposed electricity grid substation is therefore:

- To allow EirGrid in the future to use the spare circuit breakers provided within the new grid substation to feed further capacity in the Naas/Kildare area. The proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.
- To allow the generation provided for the data centre development to export power to the Irish Electricity Grid as and when required.
- To allow the battery storage provided for the data centre site to provide frequency stability to the Irish Electricity Grid as and when required.
- To allow the data centre site to draw new renewable power from the grid.

2.2 Statutory Consents / Approvals required for Data Centre and Substation

The Data Centre Application is subject of a planning application to KCC. It does not comprise SID; either under section 37A (Seventh Schedule) or section 182A of the Planning Act.

The on-site 110kV substation and loop-in infrastructure which will facilitate export of the generated electricity to the National Grid, comprises of electricity transmission development, is SID and accordingly falls under the provisions of section 182A of the Planning Act. This has been confirmed by ABP (ABP Ref. 315659-23) in the enclosed correspondence in **Appendix A**.

Accordingly, the substation, comprising a grid substation and 110kV transmission connection are subject to an SID application to ABP, and this application is referred as the Substation Application.

Due to the integrated nature of the overall project, the Data Centre Application, subject to a KCC planning application and the Substation Application have been assessed within the enclosed EIAR, AA Screening Report and other reports, as appropriate. The two applications are defined together as constituting "the Project" for Environmental Impact Assessment and AA purposes.

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3 SITE LOCATION AND CONTEXT

The site is located on the western side of the M7 motorway, between Junctions 9a and 10, and will be accessed to the north by the R409 which provides a direct link to the centre of Naas, c.2.5km to the east (see **Figure 3-1**). The red line boundary has an area of c. 3.15 ha. These lands are currently in agricultural use and are largely flat.

The subject SID application is bound to the north, east and south by the Data Centre Application, with the R409 (Caragh Road) and the Osberstown Business Park and Osberstown Wastewater Treatment Plant further north. The subject site includes a small area of the R409 and lands immediately to the north of the R409. The M7 Business Park is located further south of the site, adjacent to the Data Centre Application boundary. The M7 motorway is located to the east of the site, and the west of the site is bound by agricultural lands. The Newhall Retail Park is located to the south of the site, on the east side of the M7 motorway. There has been significant development in the locality in recent years, particularly light industry, logistics and services. Lands to the east, on the other side of the motorway, form part of the Naas Northwest Quadrant.



Figure 3-1: Local Site Location Context Map

Source: Google Maps, RPS annotation.

4 PLANNING HISTORY

A desktop search was undertaken of KCC's online planning enquiry system to review planning permissions on the subject site. There is no record of any recent planning applications having been made on the subject site.

4.1 Planning History at the Site

No recent planning history at the site has been identified on KCC's online planning enquiry system.

4.2 Planning History at Adjacent Sites

There is an extensive planning history in the vicinity of the site along the M7, on lands south of the subject site at the M7 Business Park and east of the site at Osberstown Business Park. These applications have been in relation to developments within the business parks.

rpsgroup.com

5 PRE-APPLICATION CONSULTATION

Pre-application consultations with ABP have been completed under ABP Ref. 315659-23.

ABP have confirmed in correspondence dated 5th July 2023 that the new substation compound, a medium voltage switchgear and control equipment building, a building housing indoor high voltage (HV) gas insulated switchgear (GIS) equipment, high voltage busbar connections, and step-down power transformers and underground cables connecting the proposal to the existing 110kV overhead lines in Halverstown, Naas, Co. Kildare is SID within the meaning of section 182A of the Planning Act. This confirmation is enclosed in **Appendix A**.

Extensive consultation has been undertaken in the preparation of the EIAR for the project. These are described in Chapter 3 of the EIAR.

6 PROPOSED DEVELOPMENT

The proposed development comprises a new electricity grid substation development made of two elements, the first being a new node on the Irish electricity grid at the subject site, which will be handed over and be operated by EirGrid as the TSO; the second element will comprise the transformation to a lower voltage to enable distribution to the new proposed data centre These two elements together comprise the Substation Application, the subject of the application for approval to ABP. The Data Centre Application, as explained above, is subject to a separate planning application to KCC.

The Substation Application consists of the following:

- 110kV GIS Building/Grid Substation c. 1255sqm and 15m in height;
- 4 no. medium voltage (MV) output switch rooms (each MV will be c. 5.5m in height and c. 93.5sqm in area);
- 4 no. 110/10kV dual output step down transformers (5.7m in height) separated by isolators;
- Undergrounding of a 110kV transmission line, including section under R409;
- 2 no. Dropdown towers (16m in height);
- Internal Road Layout;
- Boundary Fences and landscaping on the western boundary;
- Underground Services (Watermain, Surface Water, Foul, Power); and
- All associated ancillary works.

The site area for the proposed works is 3.15ha. The site layout is shown in Figure 6-1 below.

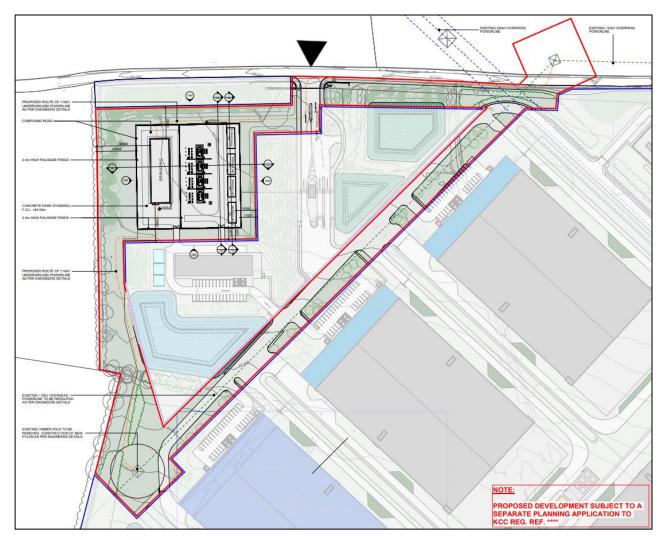


Figure 6-1: Proposed Site Layout

Source: RKD

An existing overhead 110kV transmission circuit currently enters the site from the north and west sides of the development site and will be taken down by line/cable (L/C) dropdown towers, undergrounded and brought to the proposed new Grid Substation. Between the L/C dropdown towers, a new underground 110kV cable circuit will run from the proposed 110kV GIS grid substation, connecting to each of the L/C dropdown towers. The obsolete section of the overhead 110kV line from the proposed dropdown towers, including the supporting poles, will then be taken down and removed from the site.

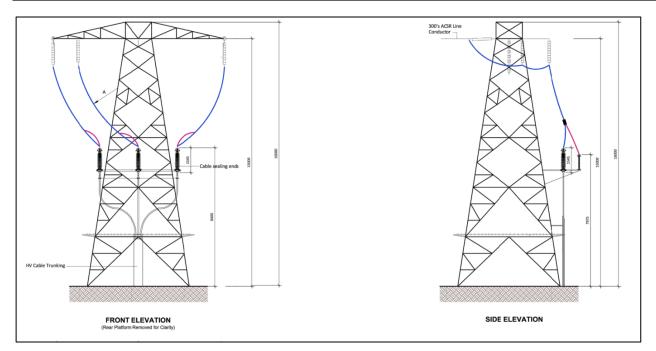


Figure 6-2: Dropdown Mast Elevation

Source: HDR

The new circuit will terminate in an overhead L/C interface compound containing air-insulated electrical equipment mounted on concrete plinths. Adjacent to each L/C interface compound, an overhead line tower will be erected to facilitate connection of the new underground cables to the two existing 110kV overhead lines. Each new overhead line tower will be c. 16m in height, set on top of concrete foundations.

The development includes enabling works, services diversions, connections to the proposed grid substation, landscaping, security fencing and berms, provision of internal access arrangements within the grid substation compound.

The proposed new Grid Substation is based on EirGrid's standard arrangements for 110kV based switchgear. EirGrid also have standard arrangements for GIS that they use on their network, these require the switchgear to be housed in a 2-storey building to enable safe operation and cable entry. **Figures 6-3** and **6-4** show these standard arrangements have been adopted for an 8-bay GIS Grid Station.

Using this standard arrangement for a GIS Grid Station, the substation on the data centre development has been arranged to have two sections, the first to fully incorporate the arrangement of the EirGrid 8-bay GIS Grid Station and the second section to incorporate the local distribution and step-down transformers for the distribution to the Data Centre Application (subject to a separate planning application to KCC). The design of the substation is in keeping with the main data centre buildings, using flat composite panels in light grey colour. Much of the site will be partially hidden through proposed landscaping including berming and planting. To the west of the site, existing hedgerows are to be maintained and augmented to further hide the views from neighbouring site. The quality of the design is considered further in the enclosed under separate cover *Architectural Design Statement* prepared by RKD.

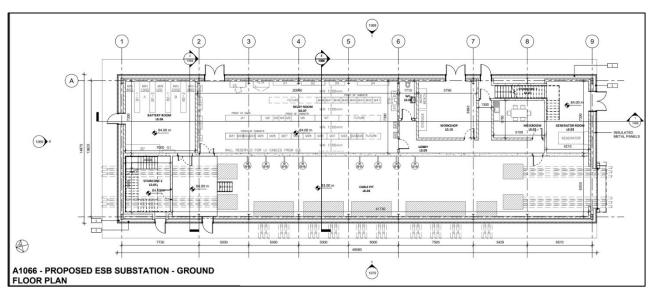


Figure 6-3: Ground Floor 8-bay GIS Station

Source: RKD

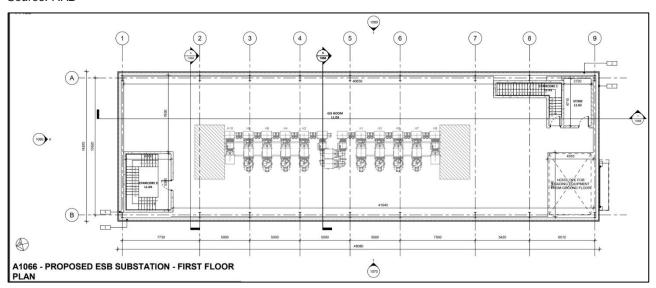


Figure 6-4: First Floor 8-bay GIS Station

Source: RKD

A palisade boundary fence of 2.4m in height around the entire compound and landscaping on the western boundary as shown in the enclosed drawings prepared by BSM are proposed. The proposed landscaping forms a coherent integrated design with that proposed under the Data Centre planning application with KCC as shown in **Figure 6.5** and **6.6**.

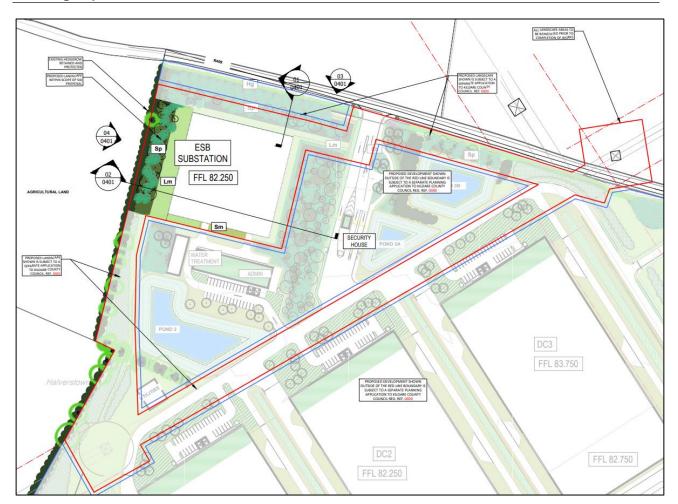


Figure 6-5: Substation Application Landscaping

Source: BSM



Figure 6-6: Landscaping Masterplan

Source: BSM

6.1 Data Centre Energy Sources

The proposed data centre (subject to KCC planning application) will have its primary source of power generation on-site. Generation of electricity is proposed on site using highly efficient gas turbines for the majority of the generation, with top up from gas engines. These facilities shall be provided in the plant area of DCB. GNI have in their *Vision 2050 document set out how* they could achieve a zero dependency on gas from fossil fuels.

The Data Centre Application will use Corporate Power Purchase Agreements (CPPAs) to procure sustainable energy from new wind / solar farms. From the outset of operations it is proposed that 30% of the energy requirements will be met from new renewable wind / solar generation procured by CPPA.

Each DCB will have solar PV panels with a total area of 3,600m² on the roof, contributing to the overall energy requirements.

The electricity production and storage capacity proposed as part of the Data Centre Application provides a backup energy source and in addition adds resilience to the wider network, having the capacity to provide immediate export of energy to the national grid.

7 PLANNING POLICY CONTEXT AND APPRAISAL

This section of the Planning Report sets out a summary of the relevant national, regional, and local planning policies, objectives, development management standards and guidance documents against which the Substation Application will be assessed and demonstrates how the Substation Application development is consistent with these policy and guidance documents.

This SID proposal comprises of an electricity substation which will power the grid and also the proposed neighbouring data centre campus that comprises a planning application to KCC. Therefore, key policy with regard to data centres is also reported.

7.1 National Planning Policy Context

7.1.1 Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy

The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy¹ sets out the national policy for the development of data centres. The statement recognises the fundamental importance of data centres and that they comprise: "Core digital infrastructure and play an indispensable role in our economy and society".

The statement identifies the many advantages arising from the location of data centres within Ireland, including:

- Assist people and businesses to fully realise the benefits of digitalisation;
- Data can drive research and innovation;
- The direct generation of employment; and
- Secures the presence of the global technology sector in Ireland.

The importance of Ireland's technology sector to the economy and society is set out in the Government Statement, accounting for €52 billion (16%) of gross value added and employing 140,000 people, which is equivalent to 6% of total national employment with 40% growth over the last five years.

The Statement states the following statement in relation to the electricity infrastructure requirements of planned and projected data centre development:

"Currently, a large portion of existing and planned data centres that are due to connect to the electricity system are expected to be in the Dublin area. Based on existing data centres, committed expansion and expected growth, total demand could treble within the next ten years. A consistent and supportive whole of government approach will be brought to the realisation of the transmission and distribution assets required to support the level of data centre ambition that we adopt."

The Substation Application seeks to provide the transmission infrastructure required to provide electricity for the development of the area, including the adjoining data centre buildings which are subject to a Data Centre Application under consideration by KCC. The proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.

7.1.2 Climate Action Plan 2024

The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland's Climate Action Plan 2019. CAP24 was approved by the government on 21st May 2024.

CAP24 implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. CAP24 sets out how Ireland can accelerate the actions that are required to

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¹ https://enterprise.gov.ie/en/publications/government-statement-on-role-of-data-centres-in-enterprise-strategy.html

respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

With reference to 'manage electricity demand growth', Section 12.4.1.3 of CAP24 states that "The overarching objective of managing electricity demand growth is to ensure, through a combination of energy efficiency and flexible electricity demand, that economic growth can be supported by low-carbon or nocarbon energy demand growth".

Demand growth from Large Energy Users (LEU), such as data centres is discussed in CAP24. CAP24 Section 12.4.1.3 states: "The demand side strategy should accelerate the rollout of local flexibility markets by the Distribution System Operator, as required to meet renewable electricity and carbon abatement targets, and contain measures to incentivise Large Energy Users to increase the flexibility in their electricity demand." Additionally, CAP24 has a 2024 Action to: "incentivise and enable large energy users to participate in flexible demand initiatives designed to enable low/zero carbon demand growth".

Further, 'Managing energy demand in the commercial sector, with a potential focus on data centre power demand' is mentioned as an example of additional actions in energy efficiency and demand management, mentioned in 5.6.1 of CAP24.

The proposed Substation Application supports the development of the neighbouring data centre campus (a LEU), which makes provision for on-site renewable energy production and on-site energy storage. CPPAs will also enable sustainable sources of energy generation to serve the development. The remaining energy requirement shall be met by gas, a transitionary fuel, from the national gas grid. In addition, the proposed Substation Application will have the flexibility to export energy to the national grid if and when required.

7.1.3 Project Ireland 2040: National Planning Framework and National Development Plan 2021-2030

The National Development Plan 2021-2030 (NDP)² and the National Planning Framework (NPF)³ combine to form Project Ireland 2040. The NPF sets the vision and strategy for the development of Ireland until 2040 and the NDP provides the enabling investment to implement that strategy.

The NPF sets out the overall national planning policy objectives and targets for the country over the next 20 years. It provides a framework to guide public and private investment "to create and promote opportunities for our people, and to protect and enhance our environment". Ten National Strategic Outcomes (NSOs) articulate the primary objectives of the NPF, while National Policy Objectives (NPOs) outline more precise ambitions and targets.

NSO 5 supports the development of the ICT sector and recognises the development of data centres as a key part of this:

"NSO 5 - A Strong Economy Supported by Enterprise, Innovation and Skills:

"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."

NSO 8 supports for the enhancement of the national electricity transmission grid:

"NSO 8 - Transition to a Low Carbon and Climate Resilient Society:

Reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres."

The Substation Application contributes to the fulfilment of these objectives through the delivery of enhanced transmission infrastructure supporting the development of the surrounding area and the increased usage of renewable sources in electricity generation and the adjoining data centre buildings which are subject to the Data Centre Application under consideration by KCC.

² https://www.gov.ie/pdf/?file=https://assets.gov.ie/200358/a36dd274-736c-4d04-8879-b158e8b95029.pdf#page=null

³ https://www.gov.ie/en/publication/774346-project-ireland-2040-national-planning-framework/

NSO 6 of the NPF relates to the creation of "A Strong Economy Supported by Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation, including the following:

"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."

The Data Centre Application as supported by the subject Substation Application proposes the provision of a new data centre facility at an appropriate location which is specifically zoned for this use.

The NPF identifies district heating as part of a key future growth enabler for Irish cities:

"Improving sustainability in terms of energy, waste and water, to include district heating and water conservation"

The Data Centre Application includes proposals specifically to facilitate the delivery of district heating in Naas.

7.1.4 Policy Statement on Security of Electricity Supply

The *Policy Statement on Security of Electricity Supply* was published by the Government in 2021. Ensuring continued security of electricity supply in the context of up to 80% of electricity consumption coming from renewable sources by 2030 is considered a priority at national level.

The Policy Statement recognises:

"there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply"

The Policy Statement goes on to note that the Government has approved:

"the development of new conventional generation (including gas-fired and gasoil/distillate-fired generation) is a national priority and should be permitted and supported in order to ensure security of electricity supply and support the growth of renewable electricity generation

the connection of large energy users to the electricity grid should take into account the potential impact on security of electricity supply and on the need to decarbonise the electricity grid;

it is appropriate for additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply;

it is appropriate for additional natural gas transmission and distribution grid infrastructure to be permitted and developed in order to support security of electricity supply."

The Substation Application shall upgrade electricity grid infrastructure and the proposed 8-bay substation format provides 4 bays as spare for future development in and around the Naas area.

The associated Data Centre Application will directly delivery gas powered turbines and energy storage infrastructure which accords with the policy statement.

7.2 Regional Planning Policy Context

7.2.1 Eastern and Midland Regional Spatial and Economic Strategy

The Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES)⁴ outlines the spatial and economic policies and targets for the region. The RSES is a strategic plan and investment framework to shape the future development of the region to 2031 and beyond.

The RSES, prepared in accordance with the NPF, sets the context for each local authority within the Eastern and Midland Region to develop county and city development plans in a manner that will ensure that national,

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⁴ https://emra.ie/final-rses/

regional and local plans align. Regional Strategic Outcomes (RSOs) provide a framework for city and county development plans and align with international, EU and national policy.

The RSES provides support for the enhancement of the national electricity transmission grid, as follows:

- "RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.
- **RPO 10.22:** Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people."

Naas is designated as a key town with the RSES and there is clear support for the growth and development of the town. The upgrade of electricity infrastructure underpins this growth:

- "RPO 4.51: Strengthen the local employment base including through the development of MERITS, Millennium Park in the North West Quadrant and the regeneration of underutilised lands including industrial lands in the northeast of the town.
- "RPO 4.53: Support an enhanced role and function of Naas as the County town of Kildare, particularly as a hub for high quality employment, residential and amenities".

The RSES also supports the development of the ICT sector and recognises the development of data centres as a key part of this:

 "RPO 8.25 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."

The Substation Application contributes to the fulfilment of these objectives through the delivery of enhanced transmission infrastructure supporting the resilience of the network, and the increased usage of renewable sources in electricity generation.

The delivery of enhanced transmission infrastructure supports the development of Naas and the North West Quadrant in addition to supporting the adjoining data centre buildings which are subject to the Data Centre Application under consideration by KCC.

7.3 Local Planning Policy Context

7.3.1 Kildare County Development Plan 2023-2039

The *Kildare County Development Plan 2023-2029* (the Development Plan)⁵ serves as the key planning policy document for the County and includes policy objectives and development standards. The Development Plan supports economic development, enhancement of electrical infrastructure and the provision of data centres within the county. This section will identify the relevant policies and objectives from the Development Plan and illustrate how the how the proposal will be consistent with the same.

7.3.1.1 Employment and Economic Development

Chapter 4 of the Development Plan relates to Resilient Economy and Job Creation with the aim: "To provide for the future well-being of the residents of the county by creating a strong and resilient economic base, providing expanded opportunities for employment and facilitating a good quality of life within vibrant and attractive places to live, work, visit and invest." Further to this are objectives for the development of Naas. The following objectives are relevant to the proposal:

-

⁵ https://kildarecoco.ie/AllServices/Planning/DevelopmentPlans/

- "RE 01: Facilitate and support the growth of the economy in Kildare and the Greater Dublin Area in a sustainable manner, and in accordance with the Regional Spatial and Economic Strategy.
- **RE O22:** Promote the Key Town of Naas as a primary centre of high-quality employment in the County so that its significant residential population will have employment opportunities within easy distance of their homes, thereby reducing outbound commuting."

The Substation Application shall deliver enhanced transmission infrastructure supporting the economic development of Naas and the North West Quadrant.

7.3.1.2 Electricity Infrastructure

Chapter 7 of the Development Plan relates to Energy & Communications with the aim: "To encourage and support energy and communications efficiency and to achieve a reasonable balance between responding to EU and National Policies on climate change, renewable energy and communications and enabling resources to be harnessed in a manner consistent with the proper planning and sustainable development of the county". Of particular relevance, we note the following policy and objectives:

- "EC P19: Support the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid to provide for the future physical and economic development of Kildare. Such projects shall be subject to AA screening and where applicable, Stage 2 AA. The developments will have regard for protected species and provide mitigation and monitoring where applicable."
- **RE 014:** Work with EirGrid and ESB Networks to support the provision of a resilient electricity supply and distribution system to accommodate the future economic growth of the county and to facilitate the transition of heat and transport from fossil fuels to electricity.
- **EC 064:** Support and safeguard the efficient and reliable supply of electricity to all homes and businesses in County Kildare.
- **EC 065:** Support the reinforcement and strengthening of the electricity transmission and distribution network, including the installation of Battery Energy Storage System plants2, Synchronous Condenser plants, and associated dispatchable power plants associated with high energy users, to facilitate planned growth and transmission/distribution of a renewable energy focused generation, at appropriate locations and in consultation with relevant stakeholders, where they are adjacent and/or proximate to the grid network.
- **EC 070:** Facilitate the development of grid reinforcements including grid connections and a transboundary network into and through the county and between all adjacent counties. Such projects shall be subject to AA screening and where applicable, Stage 2 AA. The developments will have regard for protected species and provide mitigation and monitoring where applicable."

The Substation Application shall deliver enhanced transmission infrastructure. The proposed 8-bay substation format provides 4 no. bays as spare for future development in and around the Naas area.

7.3.1.3 Data Centre Development

The Development Plan supports acknowledges that data centres contribute to job creation during construction, maintenance and from associated areas such as research and development, data analytics, customer service, technical support, marketing and sales. The following policies and objectives are relevant to the Substation Application:

• "Policy EC P18: Support the accommodation of Data Centres at appropriate locations in line with the objectives of the National Planning Framework and the principles for Sustainable Data Centre Development of the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy (July 2022) subject to appropriate Transport, Energy and Environmental Assessments and all relevant planning conditions. The location of data centres shall be situated where they will not have a potential likely significant effect on a European Site. Such developments shall be subject to an AA Screening Report, and where applicable, Stage 2 AA. They shall have regard for any hydrological connection shared with a European Site and shall account for any potential likely significant effects and provide mitigation and monitoring where appropriate.

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One of the functions of the Substation Application is to provide for the energy requirements of the Data Centre Application in adjacent land zoned for data centre development, as discussed under **Section 7.3.2** of this Planning Report.

7.3.1.4 Applications Proximate to Overhead Lines

Section 15.11.23 of the Development Plan states that;

"In relation to development proposals proximate (within 23 metres) to overhead electrical infrastructure, developers / applicants should contact ESB in advance of completing or finalising designs etc. (i.e. prior to pre-planning stage), so as to ensure that the relevant clearances are maintained from any overhead electricity infrastructure."

The applicant has liaised with ESB and the relevant clearances are maintained from overhead electricity infrastructure (existing 220kV line).

7.3.2 Naas Local Area Plan 2021-2027

The *Naas Local Area Plan 2021-2027* (Naas LAP)⁶ sets out an overall strategy for the proper planning and sustainable development of Naas, with regard to the other relevant plans and policies.

7.3.2.1 Data Centre

The Naas LAP supports the development of data centres within Naas:

"This Plan promotes Naas as a sustainable international destination for ICT infrastructures such as data centres, in line with Regional Policy Objective 8.25. Two locations have been zoned for Data Centre/Warehouse locations within this Plan. Land has been designated between Junction 10 and Junction 9a, located centrally between two of the motorway junctions. The site will be served by the local road network which would disperse traffic between motorway interchanges to reduce any impacts on the motorway network..... Naas has been chosen as a suitable location for data centre development in recognition of its status as a Key Town. The sites identified in this LAP have the ability to cater for space extensive enterprises contiguous to the existing urban form, proximate to electricity and telecommunication infrastructure. These lands are identified exclusively for Data Centres, to ensure the location of these types of proposals are controlled proximate to serviced areas of the county. The Council will not consider any alternative use on these lands, other than those associated with Data Centres."

• Objective EDO 1.12 states:

- "(a) Facilitate the location of Data Centre development on land designated P: Data Centre at Caragh Road South and Jigginstown for the identified land use only subject to appropriate environmental assessments, heat mapping, transport impact assessments and consideration of the cumulative impact on the electricity network supply capacity and targeted reductions in greenhouse gas emissions.
- (b) Any data centre project will be required to include measures to generate energy (sustainable, then renewable in the first instance) on site as part of the overall development proposal."

The development of a substation at the subject site, as proposed, supports the proposed Data Centre Application, as submitted to KCC, and therefore, fully accords with the development of data centres within Naas as provided for in the Naas LAP.

7.3.2.2 Land Use Zoning

Chapter 11 of the Naas LAP sets out the Land Use Zoning, with the aim: "to manage and deliver new development to ensure that it occurs in an orderly and efficient manner in accordance with proper planning and sustainable development."

 $^{^{6}\ \}underline{\text{https://kildarecoco.ie/AllServices/Planning/LocalAreaPlans/LocalAreaPlans/NaasLocalAreaPlan2021-2027/2016} \\$

As shown in **Figure 7-1**, the subject site is zoned 'P(1) – Data Centre' in the Naas LAP. The objective of Land Use Zoning Objective 'P' is "To provide for Data Centre development and their associated infrastructure only". The only use considered by the Naas LAP to be 'Permitted in Principle' in lands zoned 'P' is Data Centres and associated infrastructure. Utility Structures are the only land use 'Open for Consideration'. The Substation Application will deliver infrastructure associated with the development of a data centre.

The subject site is one of only two sites to have been zoned for Data Centres in Naas. The Naas LAP notes that, "These lands are identified exclusively for Data Centres, to ensure the location of these types of proposals are controlled proximate to serviced areas of the county. The Council will not consider any alternative use on these lands, other than those associated with Data Centres."

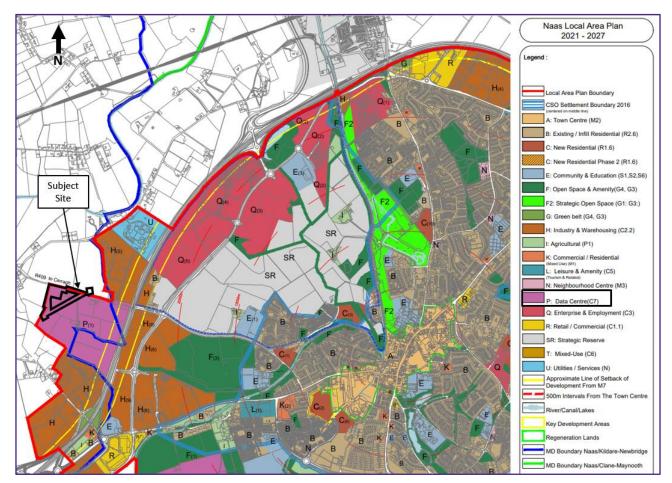


Figure 7-1: Land Use Zone Map

Source: Naas Local Area Plan, RPS Annotation.

7.3.2.3 Employment

The Naas LAP recognises that Naas is designated a "Key Town" and an important employment centre within the County and more widely. The need to generate new employment within the town and in particular in sectors such as IT is identified through objectives, as follows:

- **"EDO 1.1**: Encourage economic development and employment growth in Naas in accordance with its designation as a Key Town, while adhering to the overall Economic Development Strategy of the Plan.
- EDO 1.2: Promote enterprise and employment development in the Northwest Quadrant, focusing on high-tech manufacturing, research and development, ICT, food science and production, large scale offices, public administration, banking, tourism and bloodstock, within a high quality campus/park type development."

The project will directly support the generation of c. 225 no. jobs in the ICT sector at the proposed data centre campus and the Substation Application will also support employment more widely through the provision of an enhanced local electricity transmission network.

7.3.2.4 Electricity Infrastructure

Policy I4 of the Naas LAP is to "promote and facilitate the development and renewal of energy and communications networks in Naas, while protecting the amenities of the town." An 'Action' of Policy I4, includes: "To liaise with EirGrid in relation to the rationalisation of transmission infrastructure and/or underground routing of overhead powerlines in Naas."

The Substation Application shall enhance the energy network in accordance with Policy I4 and will deliver the undergrounding of a section of the existing 110kV line, which fully accords with the action above.

7.3.2.5 Heat Waste Utilisation

Waste heat is identified in Naas LAP as the single largest low-carbon source of energy available in the Region that is not being used. Data centres generate significant levels of excess heat which can be used in district heating systems. There are a number of objectives in the Naas LAP pertaining to data centres and the production of heat waste:

- **"WH 1.1**: Support developments which deliver energy efficiency and the recovery of energy that would otherwise be wasted through the use of district heating systems, particularly in the Northwest Quadrant and sites designated specifically for Data Centres, ensuring such developments will not negatively impact upon the surrounding landscape, environment, biodiversity or local amenities.
- WH 1.2: Ensure that all significant development proposals on the sites, designated for Data Centres carry out an Energy Analysis and explore the potential for the development of low carbon district heating networks."

The Data Centre Application includes proposals specifically to facilitate the delivery of district heating in Naas.

8 ENVIRONMENTAL ASSESSMENTS

As set out in **Section 1** above, the Substation and the Data Centre together constitute the Project for EIAR and Appropriate Assessment purposes.

An EIAR in respect of the Project has been prepared by RPS with input from a multidisciplinary team of competent experts and is submitted along with this Substation Application and has also been submitted to KCC as part of the Data Centre Application.

The EIAR considers and assesses the likely significant effects of the Project on the environment and contains the information required by Annex IV to the EIA Directive and Schedule 6 to the Planning and Development Regulations, 2001 (as amended), to assist the competent authority in carrying out an Environmental Impact Assessment in respect of the Project.

An AA Screening Report has been prepared by RPS and is included in the application documentation. This assessment was completed in compliance with EU and Irish law and relevant European Commission and national guidelines to determine whether or not Likely Significant Effects on any European site could be excluded as a result of the Data Centre Application.

The AA Screening Report concludes, for the reasons set out in that report, that the Project is not directly connected with or necessary to the management of any European site, and that following an examination, analysis and evaluation of all relevant information, on the basis of objective information and in light of best scientific knowledge and applying the precautionary principle, it can be concluded that the Project, either individually or in combination with other plans and projects, and in the absence of mitigation, is not likely to have a significant effect on any European Site(s), in view of the sites conservation objectives, and that there is no reasonable scientific doubt in relation to this conclusion.

9 CONCLUSION

The proposed development comprises a new electricity grid substation development made of two elements, the first being a new node on the Irish electricity grid at the subject site, which will be handed over and be operated by EirGrid as the TSO; the second element will comprise the transformation to a lower voltage to enable distribution to the new proposed data centre These two elements together comprise the Substation the subject of this Substation Application for approval to ABP. The proposed data centre, as outlined above, is subject to a separate planning application to KCC, namely the data centre application.

This substation development is designed to support current power demand and future growth within the area, inclusive, but not limited to the power requirements for the Data Centre Application. Indeed, the substation shall provide 4 bays as spare for future development in and around the Naas area.

The proposal is in accordance with the policies and objectives of national, regional and local planning policy. It has been demonstrated within this report, as well as within the accompanying drawings, documents, and EIAR and AA Screening Report that the proposal provides a suitable use of the subject lands and accords with good planning and sustainable development.

Appendix A

ABP SID Determination Letter

Our Case Number: ABP-315659-23

Your Reference: Herbata Limited



RPS Group Ltd c/o Michael Higgins West Pier Business Campus Dun Laoghaire Co. Dublin A96 N6T7

Date: 05 July 2023

Re: Proposed development of a new electricity grid substation compound, a medium voltage switchgear and control equipment building, a building housing indoor high voltage (HV) gas insulated switchgear (GIS) quipment, high voltage busbar connections, and step-down power transformers, and underground cables connecting the proposal to the existing 110kV overhead lines in Halverstown, Naas, Co. Kildare.

In Halverstown, Naas, Co. Kildare.

Dear Sir / Madam.

Please be advised that following consultations under section 182E of the Planning and Development Act 2000, as amended, the Board hereby serves notice that it is of the opinion that the proposed development falls within the scope of section 182A of the Planning and Development Act 2000, as amended. Accordingly, the Board has decided that the proposed development would be strategic infrastructure within the meaning of section 182A of the Planning and Development Act 2000, as amended. Any application for approval for the proposed development must therefore be made directly to An Bord Pleanála under section 182A(1) of the Act.

Please also be informed that the Board considers that the pre-application consultation process in respect of this proposed development is now closed.

In accordance with section 146(5) of the Planning and Development Act 2000, as amended, the Board will make available for inspection and purchase at its offices the documents relating to the decision within 3 working days following its decision. This information is normally made available on the list of decided cases on the website on the Wednesday following the week in which the decision is made.

In accordance with the fees payable to the Board and where not more than one pre-application meeting is held in the determination of a case, a refund of €3,500 is payable to the person who submitted the pre-application consultation fee. As a meeting was not required / only one meeting was required in this case, a refund of 3,500 will be sent to you in due course.

The attachment contains information in relation to challenges to the validity of a decision of An Bord Pleanála under the provisions of the Planning and Development Act 2000, as amended.

Teil Glao Áitiúil Facs Láithreán Gréasáin Ríomhphost Tel LoCall Fax Website Email (01) 858 8100 1800 275 175 (01) 872 2684 www.pleanala.ie bord@pleanala.ie

64 Sráid Maoilbhríde Baile Átha Cliath 1 D01 V902 64 Marlborough Street Dublin 1 D01 V902 The application documentation should be forwarded to the following:

- 1. Minister of Housing, Local Government and Heritage
- 2. Minister for Environment, Climate and Communications
- 3. Minister for Agriculture, Food and the Marine
- 4. Kildare County Council
- 5. EirGrid
- 6. ESB
- 7. Commission for Regulation of Utilities
- 8. Irish Water
- 9. An Chomhairle Ealaíon
- 10. Fáilte Ireland
- 11. An Taisce
- 12. Heritage Council
- 13. Health & Safety Authority

Additional notifications should also be made where considered appropriate.

Teil Glao Áitiúil Facs Láithreán Gréasáin Ríomhphost Tel (01) 858 8100 LoCall 1800 275 175 Fax (01) 872 2684 Website www.pleanala.ie Email bord@pleanala.ie

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Appendix C

RPS Planning Report submitted as Further Information under Reg. Ref. 2460787



HERBATA DATA CENTRE CAMPUS, NAAS

Planning Report Addendum



Document status										
Status	Revision	Purpose of document	Authored by	Reviewed by	Approved by	Review date				
Final	F01	Planning	TH & OB	МН	VB	16/06/2025				

Approval for issue	
VB	18 June 2025

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1 INTRODUCTION

RPS, West Pier Business Campus, Dun Laoghaire, County Dublin, on behalf of our client, Herbata Limited, (the Applicant) has prepared this Planning Report Addendum in response to the Request for Further Information (RFI) issued by Kildare County Council (KCC) on 4th October 2024 in respect of the planning application under **Reg. Ref. 24/60787**.

This Planning Report Addendum provides an update on planning matters relevant to KCC's consideration of the proposed development and should be read in conjunction with the Planning Report submitted as part of the planning application. This Planning Report Addendum is set out in the following sections:

- Section 1: Introduction;
- **Section 2**: A description of the design and energy enhancements of the proposed development arising from the RFI response;
- Section 3: Planning Policy Updates Policy updates since the lodgement of planning application;
- **Section 4**: Planning Policy Appraisal Consideration of policy accordance of design and energy enhancements now proposed;
- Section 5: Update on Additional Assessments and Consenting Processes; and
- Section 6: Conclusion.

2 DESCRIPTION OF PROPOSED DEVELOPMENT ENHANCEMENTS

The proposed Data Centre comprises 6 no. two storey Data Centre (DC) Buildings, an administration/management building, car parking, landscaping, energy infrastructure and other associated works.

In responding to the KCC, RFI it is proposed to enhance the energy efficiency of the proposed development while maintaining the key elements described in the submitted planning application documentation. In responding to the RFI the applicant has refined and further enhanced the proposals to *inter alia*:

- Increase the utilisation of renewable energy sources from the outset of operations from a minimum of 30% of the operational energy demand as per the planning application proposals to at least 50% of the operational energy demand as set out in the enclosed RFI response documents;
- Utilisation of Combined Cycle Gas Turbines (CCGT) rather than Open Cycle Gas Turbines (OCGT) to
 provide for up to 50% of the energy required. The use of CCGTs will improve the efficiency of the
 electricity generated on site from c. 30.8% to near 45% thereby reducing required gas consumption by
 978 GWh per annum at full operating condition and a consequent reduction of 552,000 tonnes in
 greenhouse gas emissions; and
- Modify the design of proposed Data Centre Building no. 4 (DC 4) and associated infrastructure to avoid all direct impacts on the previously unrecorded sub-surface archaeological remains.

The proposed site layout as per the previously submitted planning application is shown in **Figure 2-1**. The proposed site layout as per the RFI response is shown in **Figure 2-2**. It can be seen that the RFI response has a limited impact on the overall scale, appearance and extent of proposals.

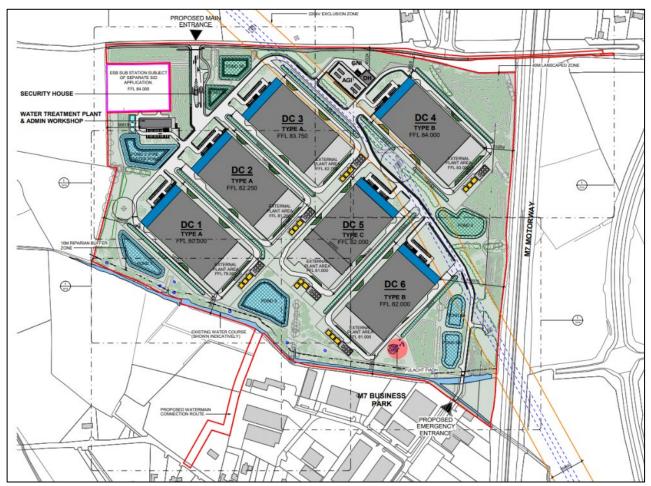


Figure 2-1: Extract from Proposed Site Plan (Planning Application)

Source: RKD (DWG no. 22217-RKD-ZZ-ZZ-DR-A-1010, Overall Proposed Site Plan)

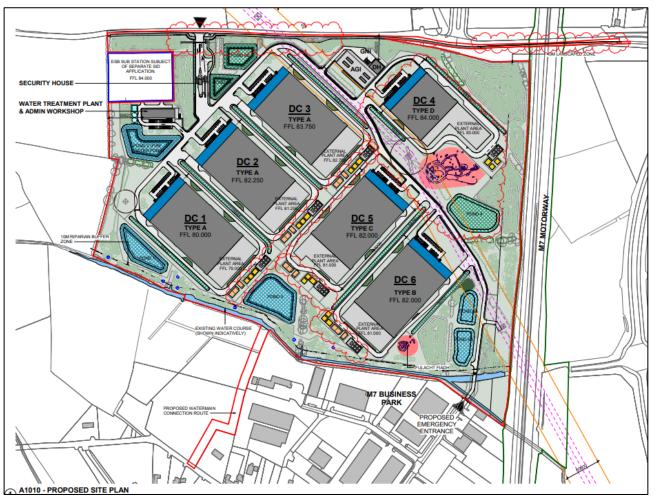


Figure 2-2: Extract from Proposed Site Layout including CCGT Compounds and Changes to DC 4 (Further Information Response)

Source: RKD Drawing No. 22217-RKD-ZZ-ZZ-DR-A-1010 - Overall Proposed Site Plan

2.1 Increased Utilisation of Renewable Energy

Following receipt of the RFI, the utilisation of renewable energy, particularly that secured through Corporate Power Purchase Agreements (CPPAs) has been re-examined. The planning application as submitted proposed that a minimum of 30% of energy required would be met, from the outset of operations, from renewable energy sources. The *Energy Policy Compliance Report* as previously submitted and prepared by HDR set out the pathway to net zero carbon providing that by 2039 the proposed data centre could operate at net zero.

It is now proposed that from the outset of operations the proposed development will have a minimum of 50% of the energy required provided from renewable sources. This additional renewable energy is to be procured via CPPAs. The CPPA process, the steps the applicant has already taken to secure CPPAs and assurance that the necessary renewable energy supply will be available as required is set out in the enclosed *Energy Strategy Report* prepared by BOS Energy Ltd. which includes letters of intent from renewable energy providers and a draft CPPA legal agreement, Detail with regard to CPPAs is also provided in the response to RFI item 3 in the enclosed *Response to Request for Further Information* report prepared by RPS. Furthermore, in this regard, Herbata Limited are proposing that a condition be attached to any grant of planning permission requiring that the necessary CPPA(s) be secured in advance of the proposed development becoming operational. Wording for such a condition is included in the response to RFI item 3 in the enclosed *Response to Request for Further Information* report prepared by RPS and is also set out below:

Page 6

"Prior to the commencement of the operation of the development, the applicant shall submit for the written agreement of the Planning Authority details of one or more Corporate Purchase Power Agreements that the developer has entered into which demonstrates that at least 50% of the energy consumed by the development on site is matched by new renewable energy generation in line with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy.

REASON: In the interests of sustainable development."

With the imposition of this planning condition, the proposed development cannot lawfully operate in the absence of a CPPA / CPPAs providing that at least 50% of the energy consumed by the development is matched by new renewable energy generation. This is greater than the requirement that a minimum of 30% of energy required to operate the facility be sourced form renewables as set out in Objective RE O72 of the *Kildare County Development Plan 2023-2029*.

The positive impacts of the increased use of renewable energy is further detailed in the enclosed *Energy Policy Compliance Report – Updated* prepared by HDR and is considered and assessed in the enclosed *EIAR Addendum to Chapter 16 Climate Change*, which concludes that the Greenhouse Gas (GHG) emissions generated by the Project's on site energy demand have been assessed as a minor adverse to climate which is not significant in EIA terms.

2.2 Reduction in GHG Production via Use of Combined Cycle Gas Turbines

Changes to the proposed gas turbines are now proposed which will limit GHG emissions by employing higher efficiency turbines. It is proposed to change some of the turbine types from OCGT to CCGT types. This improves the efficiency of the electricity generated on site from c. 30.8% to near 45%. Effectively this means that c. 31.6% less gas will be required for the operation of the facility. An additional compound of c. 625 m² is now proposed to be provided to accommodate the supporting elements for the CCGTs at each DC Building. The use of CCGT necessitates additional water storage on site. 6 no. new tanks of 650 m³ are now proposed under the external plant compound area of each data centre building. These are shown on enclosed drawing no. 2232-DOB-ZZ-ZZ-DR-C-0260 – Proposed SuDS Details - Masterplan. The locations of the fuel compounds and sprinkler tank compounds as proposed in the original planning application are subject to a minor amendment.

The proposed layout for the Combined Cycle Gas System Compound at DC1-DC 3, DC5 and DC6 is shown in the Section drawing prepared by HDR and shown below. The arrangements for DC 4 are described in **Section 2.3**.

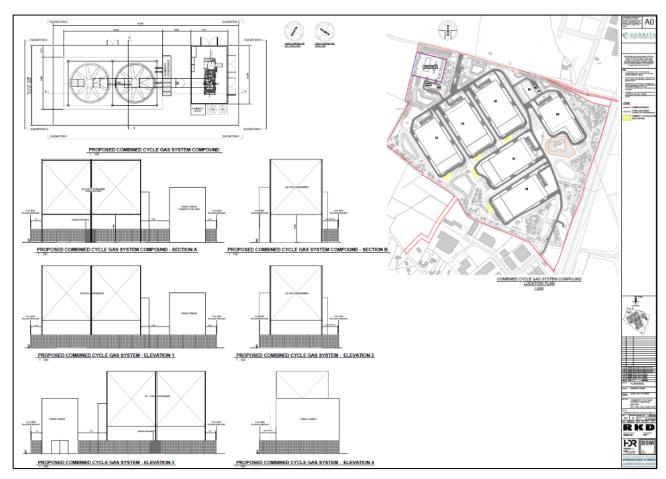


Figure 2-3: Proposed CCGT Compounds

Source: HDR Drawing no. 10360452-HDR-XX-XX-DR-C-082111 - Combined Cycle Gas System Compound Section DC1, DC2, DC3, DC5 & DC6

2.3 Modification of layout of Data Centre Building no. 4

The design team has undertaken a comprehensive interrogation of the design to determine the feasibility of facilitating preservation in situ of the previously unrecorded sub-surface archaeological remains in 'Field 8'.

The process concluded that amendments to the design of the proposed DC 4 which enable the preservation in situ of these previously unrecorded sub-surface archaeological remains was possible. The amended layout of DC 4 as is now proposed will allow for the preservation of the sub-surface remains which comprises of a circular ditched feature (c. 31 m in diam.) with multiple internal features and two sub-rectilinear annexes, extending c. 25m to the east of the main enclosure *in situ*. Additionally, the redesign includes a buffer from the outer edge of the enclosure.

The modified layout of DC 4 is shown in *drawing no. 22217-RKD-ZZ-ZZ-DR-A-1012 - Proposed Site Plan B* prepared by RKD and shown below. The proposed design modifications include changes to the internal road network and services infrastructure and landscaping as shown in enclosed Engineering and Landscaping drawings.



Figure 2-4: Extract from Proposed Site Layout showing amended DC 4

Source: RKD Drawing no. 22217-RKD-ZZ-ZZ-DR-A-1012 - Proposed Site Plan B

Data Centre Building no. 4 retains the *templated design*, common to Data Centres 1-3, 5 and 6 with the exception of the gross internal area (GIA) as noted below:

- DC Total GIA 16,188 m² (Data hall and administration area);
- Height to parapet 18m unchanged;
- Height to flue 19m unchanged;
- Building height c. 19m unchanged;
- 30 car parking spaces unchanged;
- Smoking shelters of 9 m² unchanged; and
- Total number of 16 bicycle spaces unchanged.

2.4 Minor Modifications

2.4.1 Public Path and Bus Stop

Minor upgrades to the proposed public paths along the R409 and the proposed bus stop are now proposed following meetings with KCC Roads and TII. The cycle and pedestrian lane along the R409 have been revised to pass behind the proposed bus stop and the alignment of the cycle and pedestrian lanes have been set back from the main entrance/egress of the site to allow for enhanced visibility for vehicles. The enclosed *Structure Assessment Report* prepared by Clandillon Civil Consulting arising from RFI item 10 outlines that changes proposed for the KE-M07-031.00 overbridge as part of the Herbata Data Centre project will not adversely impact its structural integrity, maintenance, durability, safety or operation of the M7 motorway.

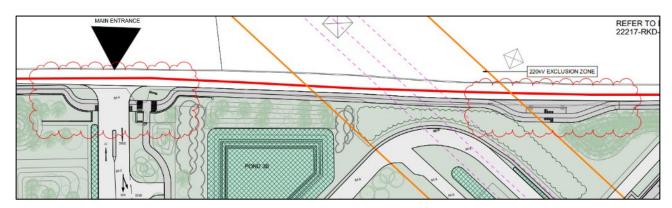


Figure 2-5: Proposed Site Layout showing revised pedestrian and cycle paths at entrance and bus stop

Source: RKD Drawing no. 22217-RKD-ZZ-ZZ-DR-A-1011 - Proposed Site Plan A

2.4.2 Fencing

In consideration of the request for inclusion of a fencing arrangement to allow for wildlife access and passage through the site, a revision has been made to the proposed Landscape Masterplan to include mammal passes in fences throughout the full extent of the site.

The number, location and dimensions of the mammal passes was established following engagement between the project ecology and landscape team. Details are included on the enclosed drawing no. 22217-RKD-ZZ-ZZ-DR-A-1400 - Proposed Boundary and Fence Details, prepared by RKD (see **Figure 2-6** below) and enclosed in this response. The location of the proposed mammal passes are shown in the enclosed drawing no. BSM-ZZ-ZZ-DR-L-0311 - Landscape Boundary Treatments Plan, prepared by BSM.

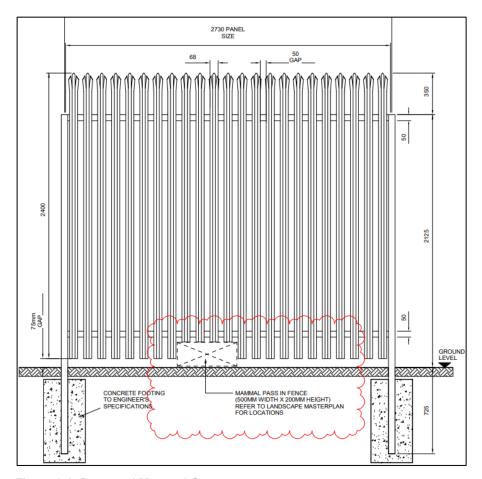


Figure 2-6: Proposed Mammal Gates

Source: RKD (DWG no. 22217-RKD-ZZ-ZZ-DR-A-1400, Proposed Boundary And Fence Details)

Further detail is provided in the response to RFI item 6 in in the enclosed Response to Request for Further Information report prepared by RPS.

2.4.3 Landscape Planting

Due to the amended design of DC Building no. 4, it has been necessary to amend landscape proposals within the environs of the building and its ancillary built elements and this can be seen in drawing no. *BSM-ZZ-ZZ-DR-L-0301 - Landscape Masterplan* prepared by BSM. Having regard to the archaeological exclusion zone, which influenced the amended design of Data Centre 4, the existing grassland over the archaeological feature is to be retained, protected and managed as a meadow.

The revised landscaping proposals also have regard to the alterations proposed as a response to the RFI received from KCC and as detailed above includes the introduction of the compounds at each data centre building and the revisions to the pedestrian and cycle track along the northern site boundary. The updated landscape drawings, together with the other landscape drawings submitted with the planning application, illustrate the general layout and hard and soft landscape treatment of all external areas/spaces boundaries, structures, and features of the site.

2.5 Summary Description of Data Centre Application

The description of the proposed Data Centre development as set out in the statutory notice issued as part of the planning application is set out below:

The proposed development will consist of a Data Centre comprising:

- The demolition of 3 no. dwelling houses, associated garages and farm outbuildings / agricultural buildings (total floor area 1,591 m²);
- The construction of 6 no. two storey data centre buildings, each with loading bays, external plant area including electrical and mechanical plant rooms, fuel compound, sprinkler tanks and associated ancillary development;
- Data centre building Nos. 1, 2, 3, 4 and 6 will consist of: a data hall (24,756 m², overall height 19m), an administration block (2,505 m² overall height 15m) and include an external screened plant area of 18m in height and 6,164 m²; Gas turbines, gas engine and battery energy storage systems will be provided within each plant area;
- Data centre building no. 5 will consist of: a data hall (24,756 m², overall height 19m), an administration block (2,505 m² overall height 15m) and include an external screened plant area of 18m in height and 6,375 m² in area and includes infrastructure for district heating; Gas turbines, gas engine and battery energy storage systems will be provided within the plant area;
- Adjacent to each data centre building will be a screened sprinkler tank compound (408 m² to 528 m² in area) comprising of 3 no. above ground sprinkler pump containers, (1 no. 240 m³ and 2 no. 268.8 m³ containers) and a screened fuel compound (331 m² in area) comprising 1 no. 38 m³ fuel pump container and 6 no. 64 m³ tanks; and
- Solar panels with a total area of 3,600 m² will be provided on the roof of each data centre building and rainwater harvesting is included in the development.

The proposed development of the Data Centre also comprised:

- A screened Gas Networks Ireland (GNI) compound (61 m² in area) with 1 no. kiosk (3m in height and 19.5 m² in area) with a biomethane gas injection point;
- A screened above Ground Installation (AGI) compound (1,753 m² in area) with 4 no. kiosks each of 3m in height and 51.5 m² in area;
- A district heating building (5m in height and 341 m² in area) district heating plant and in ground piping for district heating system;
- Security hub building (4.1m in height and 42 m² in area) at main entrance to proposed development;
- A single storey admin workshop / office (504 m² in area) and water treatment plant (315 m² in area) building (4.8m in height) and associated hydrant pump compound (352 m² in area) comprising of a

hydrant pump room (5m in height and 80 m² in area) and 2 no. hydrant pump room storage tanks (5m in height and c. 251 m³ in area);

- A new access / egress from the R409 and a new emergency access / egress from the L2030 via the M7 Business Park and including a bridge over Bluebell stream;
- A cycle path and footpath along the south side of the R409 along the length of the campus site's road frontage and extending east to existing cycle and pedestrian facilities;
- A bus stop on the R409;
- Construction of a temporary construction access off R409 and temporary construction compound within the boundary of the site; and
- Ancillary site development works that will include swales, detention & attenuation ponds and the installation of pipes and connections to the public water supply, foul and storm water drainage networks, and the installation of utilities; Other ancillary site development works will include hard and soft landscaping, including removal of existing hedgerows, planted mounding, lighting, fencing (max 2.4m) / integrated boundary treatments, bat houses, smoking shelters, signage, central services road and internal access roads, loading bays, gates, 210 no. car parking spaces and 104 no. bicycle parking spaces; The development will be integrated into the surrounding landscape with native woodland planting to all frontages, including a 30 40m landscaped buffer along the M7.

The RFI response includes the following changes:

- Data Centre Building no. 4 will now consist of: a data hall (13,683 m², overall height 18m), an administration block (2,505 m² overall height 15m) and include an external screened plant area of 19m in height and 6,065 m²; gas turbines, gas engine and battery energy storage systems will be provided within the plant area;
- Provision of 17 no. combined cycle gas turbines (including those proposed at Data Centre Building no.
 4) to replace 26 no. open cycle gas turbines;
- A screened compound (ranging between 490 m² 630 m²) adjacent to each data centre building except DC 4, comprising of an air cooled condenser (ACC, 200 m²) and a steam turbine (90 m²);
- 6 no. new tanks of 650 m³ under the external plant compound area of each data centre building;
- Data Centre Building no. 4 will now have 1,800 m² of solar panels on the roof;
- Minor alteration to the proposed new bus stop on the R409:
- Minor alteration to the site entrance off the R409;
- A number of mammal passes are to be provided in the proposed fencing;
- Minor modification of locations of the proposed fuel compound and sprinkler tank compounds; and
- All associated works.

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3 PLANNING POLICY UPDATES

3.1 Introduction

Set out below is a consideration of national, regional and local planning policy pertinent to the Data Centre Application. The accordance of the Data Centre Application with these policies is also set out.

3.1.1 National Planning Framework First Revision, April 2025

The *National Planning Framework* (NPF) sets out the overall national planning policy objectives and targets for the country up to 2040. In April 2025 the *National Planning Framework First Revisions* (NPF First Revision) was approved by the Government and both Houses of the Oireachtas.

The revisions to the NPF do not materially alter the nature of the policy framework pertinent to the proposed development.

Ten National Strategic Outcomes (NSOs) articulate the primary objectives of the NPF, while National Policy Objectives (NPOs) outline more precise ambitions and targets.

National Strategic Outcome (NSO) 6 of the NPF First Revision relates to the creation of "A Strong Economy Supported by Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation, and includes the following objective:

"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities...

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. These factors help to underpin Ireland's international position as a leading location for ICT, which contributes to wider synergies in the economy as indigenous and multinational enterprises develop linkages and benefit from the potential of regional clustering."

The proposed development is wholly consistent with this objective and directly delivers information and communication technology (ICT) infrastructure.

NSO 8 of the NPF First Revision relates to the "Transition to a Carbon Neutral and Climate Resilient Society". This strategic outcome is underpinned by a range of objectives relating to green energy, and includes the following objective:

"Deliver 80% of our electricity needs from renewable sources by 2030 with a strategic aim to increase renewable deployment in line with EU targets and National policy objectives out to 2030 and beyond. It is expected that this increase in renewable deployment will lead to a greater diversity of renewable technologies in the mix."

As set out above, at least 50% of the energy demands of the proposed development will be from renewable energy sourced through CPPAs. The use of CPPAs will directly cause an increase in renewable deployment by providing a route to market for a renewable generator, and the proposed development is therefore wholly consistent with this objective. Herbata Limited are proposing that a condition be attached to any grant of planning permission requiring that the necessary CPPAs be secured in advance of the proposed development becoming operational, the wording of which is set out in response to RFI item no. 3.

NSO 8 also includes the following objective:

"Reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres."

The proposed overall development includes a grid substation and 110kV transmission connection, which constitutes 'Strategic Infrastructure Development' within the meaning of the Planning and Development Act 2000, as amended (hereafter the Planning Act) and will therefore be the subject of a separate approval from An Bord Pleanála under Section 182A of the Planning Act. This proposed substation will enhance the electricity grid and will allow for development outside of the site to be enabled by including spare 110kV circuits which can be made available for other development if required.

There are a number of policy objectives in the NPF First Revision pertaining to the use of renewable energy and limiting GHG emissions, and the proposed development is consistent with these objectives for the reasons outlined below:

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

National Policy Objective 70 Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050.

National Policy Objective 71 Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development"

In this regard, as outlined above, the proposed development will utilise a minimum of 50% of energy provided from renewable sources from the outset of operations. This renewable energy will be provided in part from onsite solar PV and a greater part from new additional renewable energy generators procured via CPPAs. This renewable energy will be funded and delivered through CPPAs and is illustrative of the crucial role of large energy users (LEU) in the delivery of additional renewable energy generation, as further discussed in detail in the *Energy Strategy Report* prepared by BOS Energy Ltd. and in Section 4.3 of the *Response to Request for Further Information* document prepared by RPS. The proposed development therefore fully supports National Policy Objectives 69, 70, and 71 as set out above.

In addition, the proposed development, as detailed in the enclosed *Updated Energy Policy Compliance Report* prepared by HDR, is on a pathway to achieve net carbon zero by 2039. This accords with the aim of *National Policy Objective 69* to reduce GHG emissions.

Furthermore, as set out in Section 1.1 of the EIAR and set out above the overall data centre development also includes a grid substation and 110kV transmission connection, which constitutes 'Strategic Infrastructure Development' within the meaning of the Planning Act and will therefore be the subject of a separate approval from An Bord Pleanála under Section 182A of the Planning Act. This proposed substation will enhance the electricity grid and will allow for development outside of the site to be enabled by including spare 110kV circuits which can be made available for other development if required.

NSO 8 of the draft NPF also supports district heating, stating:

"District heating networks will be developed, where technically feasible and cost effective, to assist in meeting renewable heat targets and reduce Ireland's GHG emissions."

Further to this National Policy Objective 68 is

"Support the growth and development of efficient district heating, electrification of heating, and utilisation of geothermal energy."

The proposed development includes provision of infrastructure (Each of the data centre buildings will have either two or three CCGTs all with waste heat thermal boilers installed within their exhaust flues) to enable district heating. The recovered heat will be pumped, via underground pipework, to an onsite district heating building at the perimeter of the data centre campus. From this location, a district heating network operator would provide pumps and heat exchangers to service offsite heat demand that are likely to require good quantities of heat. A number of existing facilities and sites for future development have been identified as having the potential to generate heat demand, including the K Leisure Complex, Osprey Hotel Complex, the Kildare Country Council offices and the Millennium Park. We refer to the Updated Feasibility Assessment Herbata Data Centre Campus - District Heating Network report prepared by HDR and submitted as part of the RFI response, for further details.

Having regard to the above, the NPF clearly supports the location of ICT infrastructure in Ireland, and the Data Centre Application is therefore considered to be in accordance with national planning policy.

3.1.2 Climate Action Plan 2025, April 2025

In April 2025 *Climate Action Plan 2025* (CAP25) was published, which is the third Climate Action Plan to be prepared under the Climate Action and Low Carbon Development Act 2015, as amended by the Climate Action and Low Carbon Development (Amendment) Act 2021.

As is clear from page 20 and page 33 of CAP25, CAP25 is to be read in conjunction with CAP24 and takes account of key developments in the policy and evidence base in the previous year while setting out a range of new actions in response to the latest data. This is intended to facilitate a focus on the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23.

CAP25 presents the national carbon budgets and the sectoral emissions ceilings established by the government in July 2022 and commits the Climate Change Advisory Council (CCAC) to the following action:

"GV/25/2 Update sectoral emissions ceilings for the second carbon budget period (2026-2030)"

CAP25 reports that there has been a reduction in electricity generation emissions in 2023 of 22% (based on the 2021 emissions) (against a 3% increase in electricity demand). This is due, in part, to an increase in the share of renewable electricity generation to, from 38.6% in 2022 to 40.7% in 2023 with targets to achieve 50% (in 2025) and 80% (in 2030) renewables. A renewables-led system is at the core of Ireland's plan to radically reduce emissions in the electricity sector, protect energy security, and ensure economic competitiveness.

There are no specific actions in CAP25 relating specifically to the development of data centres but regarding the demand management of Large Energy Users (LEU) CAP25 states that:

"A review of the Large Energy Users Connection Policy is ongoing and will ensure that new Large Energy User grid connections do not contribute to energy security challenges and that the power system decarbonises new demand in line with climate targets. A final decision is expected in 2025.

Recommendations for an Enhanced Electricity Emissions Reporting Framework for Large Energy Users is due to be published in late 2024, while actions under Powering Prosperity and the NEDS will contribute to developing a plan-led, spatial approach to facilitate the co-location of future renewable electricity supply and large-scale energy demand".

Further details on this connection policy for LEU are provided in **Section 3.1.3**. This policy aims to minimise potential impacts on national renewable energy targets and carbon emissions from these LEU and by complying in full with the policy, the Project is in effect reducing, in so far as practicable, the potential emissions and complying with the requirement of CAP25. CAP25 also identifies the following CAP24 Legacy Action which is relevant to Large Energy Users (LEU) such as the proposed development:

"EL/24/22 Implementation of enhanced emissions reporting framework for electricity emissions for large energy users and the system operators dispatch actions".

The climate action plans recognise LEUs as having a critical role in delivering high levels of flexibility across time and geographical locations and matching energy consumption with renewable energy generation. By employing the very flexible and agile technology used in the Project, the Project is designed to align with the new enhanced reporting framework and also to fully comply with this CAP action.

The proposed Data Centre, (an LEU), makes provision for on-site renewable energy production (through onsite solar PV) and on-site energy storage. CPPAs will also enable sustainable sources of energy generation to serve the development. The remaining energy requirement shall be met by gas, a transitionary fuel moving to net zero, from the national gas grid. In addition, the proposed data centre will have the flexibility to export energy to the national grid if and when required.

The provisions of CAP24 and CAP25 are considered in more detail in Chapter 16 Climate Change of the EIAR and in the enclosed *EIAR Addendum to Chapter 16 Climate Change* respectively, which also set out how the Competent Authority, in granting planning permission for the proposed development, will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved Climate Action Plan (being CAP25, which must be read in conjunction with CAP24) and the other matters specified in Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended).

The proposed development is considered to accord with CAP25.

3.1.3 Large Energy Users Connection Policy, February 2025

On 18th February 2025, the Commission for Regulation of Utilities (CRU) published a proposed decision paper on the LEU Connection Policy. The purpose of this proposed decision paper is to set out a potential pathway for connection applications for new data centre customers to the electricity grid with due regard to security of supply and network constraints while minimising, where possible, potential impacts on national renewable energy targets and carbon emissions.

It should be noted that the proposed development will not be reliant upon existing electricity generation to power the proposed data centre. The proposed data centre will be powered by on-site renewable electricity generation (solar PV), renewable electricity procured through CPPAs from new renewable energy generators, and highly efficient onsite gas turbines. The connection to the electricity grid will enable (1) the delivery of the electricity procured through the CPPAs to the proposed development and (2) the on-site generation to be exported to the grid.

The manner in which the proposed development complies with the proposed decisions in the LEU Connection Policy is set out below.

"Data centres connecting to the electricity network will be required to provide dispatchable onsite or proximate generation and/or storage capacity which matches their MIC (subject to derating requirements), with this generation required to participate in the wholesale electricity market."

It should be noted that the proposed development will normally be powered by using highly efficient on-site electricity generation (up to 50% of total energy) in conjunction with off-site renewable generators procured using CPPAs (minimum 50% of total energy). There will be a small proportion powered by on-site renewable electricity generation (solar PV). The MIC for the connection to the grid will be more than matched by the on-site electricity generation. The grid connection will be an Autoproducer connection, meaning it will enable the on-site electricity generation to be delivered to and participate in the wholesale electricity market.

"The ramping up of a new data centre demand connection towards full MIC is linked to achieving delivery of dispatchable onsite or proximate generation and/or storage in the wholesale market."

Installation of the on-site generation will be aligned to the development of each data centre hall. Furthermore, the proposed development shall, from the outset of operations, utilise a minimum of 50% of energy provided from the renewable sources, as set out in detail in the *Energy Policy Compliance Report - Updated*. This electricity will be from onsite generation and new, additional renewable sources procured via CPPAs. As the data centre progresses towards full operation of all of the data centre halls, the demand for energy and the energy procured through CPPAs will increase but at all times the on-site generation will be capable of matching 100% of the energy needs of the data centre.

"The [System Operators] should take into account the location of the requested data centre connection and associated generation in respect of whether it is in a constrained or unconstrained region of the electricity network."

For the reasons set out at Section 3 of the enclosed *Energy Strategy Report* prepared by BOS Energy Ltd., including the Kildare-Meath grid upgrade discussed therein, the proposed development will be in a region with available capacity.

"Data centres will be required to self-report to the System Operator annually in relation to their use of renewable energy and their sites' emissions. A summary of these reports will be published."

Herbata Limited will fulfil all requirements in relation to self-reporting to the system operator annually in relation to its use of renewable energy and the sites' emissions.

Further detail on the manner in which the proposed development is compliant with the *Large Energy Users Connection Policy* is provided in Section 3 of the enclosed *Energy Strategy Report* prepared by BOS Energy Ltd. and the *Energy Policy Compliance Report - Updated* prepared by HDR.

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4 PLANNING POLICY APPRAISAL – POLICY UPDATE

4.1.1 Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy

The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy, published in July 2022, sets out national policy for the development of data centres. The statement recognises the fundamental importance of data centres and that they comprise:

• "Core digital infrastructure and play an indispensable role in our economy and society".

The statement identifies the many advantages arising from the location of data centres within Ireland, including:

- Assist people and businesses to fully realise the benefits of digitalisation;
- Data can drive research and innovation;
- The direct generation of employment; and
- Secures the presence of the global technology sector in Ireland.

The importance of Ireland's technology sector to the economy and society is set out, accounting for €52 billion (16%) of gross value added and employing 140,000 people – equivalent to 6% of total national employment with 40% growth over the last five years.

The Data Centre Application is therefore wholly consistent with the Government Statement providing support for data centres. This is considered further below including how the Data Centre Application aligns with each of the Government Policy's six core principles, which are as follows:

- i. Economic benefit
- ii. Grid capacity and efficiency
- iii. Renewable additionality
- iv. Co-location or proximity with future-proof electricity supply
- v. Decarbonised data centres by design
- vi. SME access and community benefits

The design and energy enhancements as proposed in this RFI response are considered to impact only on the following principles, (ii) Grid Capacity and efficiency, (iii) Renewable additionality and (v) Decarbonised data centres by design, which are considered further below. Principles (i), (iv) and (vi) were considered in the *Planning Report* submitted as part of the planning application and this consideration remains applicable to the enhanced proposals as set out in the RFI response.

4.1.1.1 Grid Capacity and Efficiency

"Grid Capacity and Efficiency: The Government has a preference for data centre developments that make efficient use of our electricity grid, using available capacity and alleviating constraints. Data centres should engage collaboratively with the respective system operators to understand capacity availability and required grid services across geographic locations, and where connection can be facilitated, provide grid services such as to best utilise available infrastructure to the benefit all electricity customers."

The proposed data centre will not be reliant upon the existing electricity generation and will be powered by on-site renewable electricity generation (solar PV), renewable electricity procured through CPPAs from new renewable energy generators, and highly efficient onsite gas turbines. The improved efficiency in the conversion of gas to electrical generation, from c. 30.8% to near 45%. The reduction in gas consumption for the overall site meaning that c. 31.6% less gas will be required for the operation of the facility.

The proposed onsite battery storage provides a back-up energy source for onsite activity and in addition adds resilience to the wider network, having the capacity to provide immediate export of energy to the national grid, or store energy from the national grid if required.

This is a highly effective and efficient format linked also to the ability of the electrical systems to provide capacity back to the grid and/or provide fast acting short term grid frequency response services. This ability has come about from a key electrical design format change, by moving the battery elements out of traditional UPS systems and locating them alongside the generating turbines at a higher voltage; this gives much better access to allow grid support.

A new 110kV grid substation is proposed as part of the project, which is the subject of a separate Strategic Infrastructure Development (SID) application to An Bord Pleanála for approval under Section 182A of the Planning Act, and which will allow the site to export to the Irish grid and to allow import from renewable energy sources covered by CPPAs. This proposed substation will enhance the electricity grid and will allow for development outside of the site to be enabled by including spare 110kV circuits which can be made available for other development if required.

The subject site will benefit from the recent grant of planning permission has been granted by An Bord Pleanála (ABP Ref. 316372) in March 2025 for grid upgrades work that will add a high-capacity 400 kV underground electricity connection between Dunstown substation in Kildare and Woodland substation in Meath, further enhancing the grid infrastructure in the Kildare and surrounding area.

These combined measures will allow the proposed development to operate efficiently without significant reliance on the electricity grid network.

4.1.1.2 Renewable Additionality

"Renewable Additionality: The Government has a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland. Developments should provide clear additionality in renewable energy delivery in Ireland, whether through new generation, repowering or otherwise increasing in-country renewable energy capacity—proportionate to the impact of their energy demand."

The powering of the Data Centre Application is described in **Section 3** of this report. The proposed data centre will fund the delivery of additional renewable energy generation.

Renewable energy purchased through CPPAs with new solar and/or wind providers mean the Data Centre Application is effectively funding the delivery of additional renewable energy. It is now proposed that from the outset of operations the proposed development will have a minimum of 50% of the energy required provided from renewable sources. The applicant will secure CPPAs and has engaged BOS Energy Ltd. to procure and negotiate same on their behalf. A draft CPPA legal agreement and letters of intent from CPPA counterparties are included in the appendix to the enclosed *Energy Strategy Report* prepared by BOS Energy Ltd. A letter from a biomethane supplier is included as an appendix to the enclosed *Response to Request for Further Information* report prepared by RPS.

If KCC are so minded a condition may be attached to a grant of permission requiring the CPPAs to be secured in advance of the proposed development becoming operational. Wording for such a condition is provided below:

"Prior to the commencement of the operation of the development, the applicant shall submit for the written agreement of the Planning Authority details of one or more Corporate Purchase Power Agreements that the developer has entered into which demonstrates that at least 50% of the energy consumed by the development on site is matched by new renewable energy generation in line with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy.

REASON: In the interests of sustainable development."

Through generating solar energy onsite, facilitating the injection of biomethane gas / hydrogen into the network and the funding via CPPAs new solar and wind generation off-site, the proposed data centre is delivering additional renewable energy.

4.1.1.3 Decarbonised Data Centres by Design

"Decarbonised Data Centres by Design: The Government has a preference for data centres developments that can demonstrate a clear pathway to decarbonise and ultimately provide net zero data services. It is expected that data centres will align with the EU Climate Neutral Data Centre Pact energy efficiency and water use targets and set themselves targets to achieve

zero-carbon electricity use at all hours. System operators will work with large energy users to facilitate accurate hourly emissions reporting, grid carbon-intensity transparency, and allow data centre to optimise computing loads to maximise use of renewables and minimise carbon emissions (as per Action 99 of Climate Action Plan 2021)."

The Data Centre Application has a clear pathway to decarbonise and ultimately provide net zero data services. This is further detailed in the enclosed *Energy Policy Compliance Report - Updated* prepared by HDR. As now proposed in the RFI response over 50% of energy requirements will be met through onsite solar PV and CPPAs with new solar and/or wind providers.

In addition, higher efficiency turbines are now proposed. It is proposed to change some of the turbine types from open cycle (OCGT) to combined cycle (CCGT) types. 22 no. OCGTs are proposed along with 17 no. CCGTs which improves the efficiency of the electricity generated on site from c. 30.8% to near 45%. Effectively this means that c. 31.6% less gas will be required for the operation of the facility.

The remaining energy requirements will be met through an innovative energy production process. The proposed battery storage and efficient gas turbines provides for cleaner, more resilient electricity production in the immediate term. Going forward, GNI are committed to the decarbonising of the gas network through the use of biomethane and abated natural gas. The Data Centre Application includes a gas injection point to further expedite this process. Further details in relation to the correspondence with GNI and the proposed development's future connection to the gas network is outlined in **Section 5.4** of this document.

This considered strategy means the Data Centre Application is on a clear pathway to decarbonisation and from the outset will use only sustainable or transitionary energy sources.

4.1.2 Other National Policy Relevant to the Proposed Development

There are a number of other National Policy documents relevant to the proposed development, including:

- Statement on Security of Electricity Supply (2021);
- National Hydrogen Strategy (2023); and
- Ireland's National Biomethane Strategy (2024).

Each of these have been considered in the *Planning Report* submitted with the planning application. As set out in the submitted *Planning Report* the proposed development accords with these policy documents. It is not considered that the RFI response impacts materially on the accordance of the proposed development with these policy documents.

It should be noted that RFI item 3 queried the volume of biomethane to be used by the proposed development. As set out in the response to this item in the enclosed *Response to Request for Further Information Report* prepared by RPS it is confirmed that Herbata Limited propose to use only 0.17TWh of this total, i.e. less than 3% of the overall quantity of biomethane to be produced.

4.2 Regional Planning Policy Context

The accordance of the proposed development with the *Regional Spatial and Economic Strategy for Eastern and Midlands Regional Assembly* (RSES) has been outlined in the *Planning Report* submitted with the planning application. As noted in that report the proposed development directly accords with the Regional Policy Objective (RPO) 8.25 which states,

"Local Authorities shall:

...Support the national objective to promote Ireland as a sustainable international destination for ICT infrastructure such as data centres* and associated economic activities at appropriate locations."

The proposed increase in CPPAs to be procured from renewable energy producers further strengthens compliance of the proposed development with overarching RSES policy supporting sustainable development and specifically RPO10.20:

"Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This includes the

delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process."

The proposed substation which will enhance the electricity grid and allow for development outside of the site to be enabled by including spare 110kV circuits which can be made available for other development if required and the provision of a gas injection point both directly address RPO 10.20.

4.3 Local Planning Policy Context

4.3.1 Kildare County Development Plan 2023-2029

The RFI response impacts on the compliance of the proposed development with only a small number of the policies and objectives relevant to the proposed development set out in the *Kildare County Development Plan 2023-2029* (CDP).

Therefore, only those policies and objectives the RFI response may impact upon and those policies and objectives specifically referenced in the RFI are considered herein. All other policies and objectives are considered in the *Planning Report* submitted with the original planning application

4.3.1.1 Data Centres

"RE O72 Require data centres to consider the use of sustainable renewable sources of energy to fuel their operations in whole in the first instance or in part (minimum of 30%) where this is not possible and where it has been satisfactorily demonstrated not to be possible, subject to all relevant and cumulative environmental assessments and planning conditions."

In accordance with RE O72 consideration of the use of sustainable renewable sources of energy has guided the subject development. As detailed in the previously submitted planning application documentation onsite solar PV panels and CPPAs with new solar / wind farms / biomethane gas producers were to ensure over 30% of energy requirements would be met by new sustainable renewable sources of energy from the commencement of operations.

However, in responding to the RFI the applicant has refined and further enhanced the proposals to inter alia:

- Increase the utilisation of renewable energy sources from the outset of operations from a minimum of 30% as per the planning application proposals to at least 50% as set out in the enclosed FI response documents;
- Utilisation of CCGT to provide for up to 50% of the energy required. The use of CCGT will improve the
 efficiency of the electricity generated on site from c. 30.8% to near 45% thereby reducing required gas
 consumption by 978 GWh per annum at full operating condition and a consequent reduction of 552,000
 tonnes in GHG emissions.

There is a clear pathway for the project to operate with net zero carbon by 2039. This is further detailed in the enclosed *Energy Policy Compliance Report - Updated* prepared by HDR. The proposed development therefore accords fully with RE O72.

"RE O71 Require that any application for a data centre will be subject to all relevant and cumulative environmental assessments and planning conditions and shall take account of the cumulative visual impact of the proposed connections of the data centre with electricity transmission, renewable energy and broadband infra- structure in the area".

The RFI responses includes an *Addendum to EIAR* and *Natura Impact Statement* (NIS) which consider both the proposed data centre and the associated Substation Application including the undergrounding which is subject to a separate consenting process. The *EIAR Addendum to Chapter 11 Landscape and Visual* assesses the landscape and visual impacts identified arising from the additional and updated views at the construction and operation stage. No significant impacts are identified.

"EC O61 Require data centres to include strong energy efficiency measures to reduce their carbon footprint in support of national targets towards a net zero carbon economy, through the use of sustainable sources of energy generation in the first instance and then the use of renewable sources of energy to power their operations, where on site demand cannot be met in this way, to provide evidence of engagement with power purchase agreements (PPA) In

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Ireland. All data centre developments shall provide evidence of sign up to the Climate Neutral Data Centre Pact."

The proposed development as per the planning application documentation previously submitted set out a path to net zero. However, as noted above, in responding to the RFI the applicant has refined and further enhanced the proposals to *inter alia*:

- Increase the utilisation of renewable energy sources from the outset of operations from a minimum of 30% as per the planning application proposals to at least 50% as set out in the enclosed FI response documents; and,
- Utilisation of CCGT to provide for up to 50% of the energy required. The use of CCGT will improve the
 efficiency of the electricity generated on site from c. 30.8% to near 45% thereby reducing required gas
 consumption by 978 GWh per annum at full operating condition and a consequent reduction of 552,000
 tonnes in GHG emissions.

Additional certainty with regard to the procurement of CPPAs is enclosed in the RFI response including:

- Draft Power Purchase Agreement (Included as Appendix 1 to Energy Strategy Report);
- Letters from CPPA counterparties (Included as Appendix 2 to Energy Strategy Report);
- Letter from biomethane supplier (Included as Appendix D to Response to Request for Further Information Report);

If KCC are so minded a condition may be attached to a grant of permission requiring the CPPAs to be secured in advance of the proposed development becoming operational. Wording for such a condition is provided below:

"Prior to the commencement of the operation of the development, the applicant shall submit for the written agreement of the Planning Authority details of one or more Corporate Purchase Power Agreements that the developer has entered into which demonstrates that at least 50% of the energy consumed by the development on site is matched by new renewable energy generation in line with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy.

REASON: In the interests of sustainable development."

It is considered that the proposed development further strengthens the accordance of the proposed development with EC 061.

The consistency of the proposed development with the CDP policies referenced in the RFI items 1 and 3 (*REP12, RE P11 and EC P18*) are set out below. It should be noted that RE P12 was not referenced in the *Planning Report* submitted with the planning application and the opportunity to address it here is welcomed.

CDP Policy RE P12 states:

"Ensure that economic and enterprise related development is provided in a manner which facilitates a reduction in greenhouse gas emissions and accelerates the transition towards a sustainable, low carbon and circular economy. The following measures shall be supported:

- An increase in employment densities within walkable distances of communities and on public transport routes.
- Promotion of walking and cycling and use of public transport through increased permeability and mobility management measures within and outside employment areas.
- The sourcing of power from district heating and renewables including wind and solar.

Additional native tree planting and landscaping on existing and proposed enterprise zones and development sites to aid with carbon sequestration, contributing to the green infrastructure network of the County and promoting quality placemaking."

The proposed development fully complies with Policy RE P12 of the CDP as set out below.

Reduction in greenhouse gas emissions and accelerates the transition towards a sustainable, low carbon and circular economy

In accordance with RE P12, the proposed development will, from the commencement of operations, use a minimum of 50% renewable energy. This is to be achieved through onsite solar PV and CPPAs with new wind / solar farms. Full detail on this is provided in the enclosed *Energy Strategy Report* prepared by BOS

Energy Ltd. and the response to RFI item 3 in the enclosed *Response to Request for Further Information Report*, which includes the proposed wording for a condition to be attached to a grant of permission requiring that agreement on CPPAs be submitted to KCC prior to the commencement of operations.

There is a clear pathway for the project to operate with net zero carbon by 2039. This is further detailed in the enclosed *Energy Policy Compliance Report – Updated* prepared by HDR.

District Heating

Data centres generate significant levels of excess heat, which can be used in district heating systems. In this regard, the proposed development includes provision of infrastructure to enable district heating.

The proposed development includes the installation of waste heat thermal boilers within the exhaust flues of up to 3 no. of the CCGT gas turbines in each building in order to recover the medium to high grade heat from the turbines. The recovered heat will then be pumped, via underground pipework, to an onsite district heating building at the perimeter of the data centre campus. The underground pipework and heat exchangers in the district heating building will be sized to be the equivalent to that of 2 no. CCGT turbines from any of the data centre buildings. From this location, a district heating network operator would then provide pumps and heat exchangers to service offsite heat demand, for example existing facilities and buildings that are likely to require good quantities of heat, such as hotels, leisure facilities and swimming pools or industrial and warehousing. The use of this heat is for district heating is an exemplar of the circular economy.

We refer to the *Feasibility Assessment – Updated Herbata Data Centre Campus - District Heating Network* report prepared by HDR and submitted as part of the RFI response, for further detail. This study concludes that a waste heat load of 20MW (or smaller) provides a number of significant opportunities to decarbonise the heating of public buildings, businesses, new homes in the local area close to the site and identifies the next steps required to deliver district heating.

Digital Economy

The digital economy offers huge carbon savings. We refer to the following publication, prepared by the Commission in 2021, *Declaration on A Green and Digital Transformation of the EU*¹ which notes the benefits of digital technology in relation to carbon emissions, stating the following:

"Smart use of clean digital technologies can serve as a key enabler for climate action and environmental sustainability. The digital transition and a smarter and greener use of technologies will help make Europe the first climate-neutral continent by 2050, a key goal of the European Green Deal. Technology can improve energy and resource efficiency, facilitate the circular economy, lead to a better allocation of resources; reduce emissions, pollution, biodiversity loss and environmental degradation. At the same time, the ICT sector must ensure the environmentally sound design and deployment of digital technologies."

We refer to the following report, prepared by Deloitte, *Digital as a Key Enabler for Climate Action - The European Union and United Kingdom Perspective*² which explores how digital technologies can be leveraged to meet the challenge across the three pillars of climate action (Mitigation, Adaptation & Resilience, Setting Foundations). This report states:

"While the opportunity for technological development is already at the heart of the Green Deal, the potential for digital technologies to act as a key enabler of climate action is highlighted separately in the declaration on the "green and digital transformation of the EU" signed by 26 member states plus Norway and Iceland. While both the green and digital transformations have independently already been given high priority within EU policy, the EU recognizes the high synergistic potential of both transformations and is calling for a twin green and digital transition."

In this regard, it is clear that digital technology will play a role in reducing the carbon emissions across the EU and contribute to net-zero emissions. The proposed data centre will contribute to reducing the carbon emissions across the EU and contribute to net-zero emissions. Therefore, the proposed development is in compliance with the following aspects of Policy RE P12; "development which facilitates a reduction in

https://digital-strategy.ec.europa.eu/en/news/eu-countries-commit-leading-green-digital-transformation#:~:text=Smart%20use%20of%20clean%20digital%20technologies%20can%20serve,a%20key%20goal%20of%20the%20European%20Green%20Deal

² https://www2.deloitte.com/content/dam/Deloitte/il/Documents/digital-sprinters-2024/MonitorDeloitte DigitalSprinters EU.pdf

greenhouse gas emissions and accelerates the transition towards a sustainable, low carbon and circular economy" and "the sourcing of power from district heating and renewables including wind and solar".

Mobility Management

The proposed development will provide employment and is expected to generate c. 225 no. jobs. Many of these will be highly skilled and well-paid employment. This development will provide employment opportunities for Naas residents and the site is within comfortable walking / cycling distance of Naas.

The subject site is bound to the north by the R409 which provides a direct link to the centre of Naas, c. 2.5km to the east. The proposed development includes the provisions of footpaths on both sides of the R409 approximately 100m east of the M7 boundary of the site, which connect to a network of pedestrian and cycle ways travelling along the R409 and Millennium Park Road (R445) towards the town of Naas and surrounding commercial and residential areas.

The proposed development includes enhanced pedestrian / cycle facilities including a cycle path and footpath along the south side of the R409 along the length of the campus site's road frontage and extending east to existing cycle and pedestrian facilities, connecting the site to the community. Additionally, a new bus stop is proposed on the R409.

A *Mobility Management Plan* was prepared by Systra (contained in Appendix L of the previously submitted *Planning Engineering Report*) with an overall aim to:

"Minimise the proportion of single occupancy vehicle trips generated, in favour of sustainable transport trips."

Please refer to the *Mobility Management* and the *Transport Assessment* prepared by Systra (submitted with the planning application) for full details on the mobility management measures. In regard to the above, and to the details set out in the *Mobility Management* and the *Transport Assessment*, we consider the proposed development to comply with the following aspects of Policy RE P12: "An increase in employment densities within walkable distances of communities and on public transport routes" and "Promotion of walking and cycling and use of public transport through increased permeability and mobility management measures within and outside employment areas."

Landscaping

In accordance with RE P12 native tree species are proposed throughout the development. This is in addition to the proposed native long and short meadow grassland of wildflowers, integrated aquatic and SuDs planting and seeding and green roof proposals providing over 8,000sq.m of vegetation. In summary, the proposed development includes:

- 5.4 ha Native Woodland/Structural Screen Planting (36,150 no. trees);
- 0.56 ha Native Scrub Planting (Hazel, Holly, Hawthorn, Blackthorn etc.) (6,210 no. trees);
- 2,529 no. Advanced Trees (506 no. Pine, 2,023 no. Advanced Native Deciduous Trees);
- 4.45 ha Short Meadow to be managed in accordance with All-Ireland Pollinator Plan (AIPP);
- 3.4 ha Long Meadow to be managed in accordance with AIPP; and
- 1.38 ha of SuDS biofiltration planting.

As outlined in the *Landscape Design Report* prepared by BSM (submitted with original planning application), objectives of the proposed planting include to increase and enhance biodiversity through pollinator friendly native planting, wildflower meadows, native wetlands, and habitat enhancement measures for flora and fauna and to integrate sustainable water management to ensure a clean and diverse environment. The landscaping proposals will aid with carbon sequestration, contribute to the green infrastructure network of Kildare and promoting quality placemaking. We refer to the previously submitted *Landscape Design Report* and associated landscape drawings for further landscape details.

In regard to the above, and to the previously submitted *Landscape Design Report* and associated landscape drawings, we consider the proposed development to comply with the with the following aspect of Policy RE P12: *Additional native tree planting and landscaping on existing and proposed enterprise zones and development sites to aid with carbon sequestration, contributing to the green infrastructure network of the County and promoting quality placemaking".*

Therefore, for the reasons set out above, the proposed development fully complies with all aspects of Policy RE P12.

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Policies RE P11 and EC P18 are identical and both read as follows:

"Support the accommodation of Data Centres at appropriate locations in line with the objectives of the National Planning Framework and the principles for Sustainable Data Centre Development of the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy (July 2022) subject to appropriate Transport, Energy and Environmental Assessments and all relevant planning conditions.

The location of data centres shall be situated where they will not have a potential likely significant effect on a European Site. Such developments shall be subject to an AA Screening Report, and where applicable, Stage 2 AA. They shall have regard for any hydrological connection shared with a European Site and shall account for any potential likely significant effects and provide mitigation and monitoring where appropriate."

The proposed development fully complies with Policy RE P11 and Policy EC P18 as set out below.

National Planning Framework Objectives

The manner in which the proposed development complies with the NPF First Revision has been outlined in **Section 3** of this report. In accordance with the NPF First Revision the proposed development delivers ICT infrastructure, supports the development of new renewable energy and provides for district heating.

Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy

The manner in which the proposed development complies with the Government Statement is outlined in **Section 4.1.1.2** of this report and Section 4.2.4 of the Planning Report submitted as part of the planning application. In accordance with the Government Statement the proposed data centre shall deliver core digital infrastructure which plays an indispensable role in our economy and society.

Environmental Assessments

The submitted application included an EIAR and an Appropriate Assessment (AA) Screening Report. Additionally, in response to RFI item no. 4, a NIS has also been prepared and is submission as part of this RFI response.

That Appropriate Assessment Screening Report, submitted with the original application, concluded that following an examination, analysis and evaluation of all relevant information, on the basis of objective information and in light of the best scientific knowledge and applying the precautionary principle, it could be concluded that the project, either individually or in combination with other plans or projects, and in the absence of mitigation, was not likely to have a significant effect on any European site(s) in view of their site-specific conservation objectives. It was considered that there was no reasonable scientific doubt as to the absence of such effects.

It has been objectively concluded by the authors of the NIS, specialist ecologists in RPS, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Project and the effective implementation of the mitigation measures proposed, that the Project will not adversely affect (either directly or indirectly) the integrity of any European site in view of sites' conservation objectives, either alone or in combination with other plans or projects and there is no reasonable scientific doubt in relation to this conclusion.

Land Zoning

Further to the above and as described in Section 4.4.2.2 of the submitted *Planning Report*, the proposed data centre development is located on lands zoned 'P(1) – Data Centre' in the *Naas Local Area Plan 2021-2027* (Naas LAP), with the objective: "*To provide for Data Centre development and their associated infrastructure only*". In this regard, the proposed development of the subject site fully accords with the land use zoning objectives for this area as set out in the Naas LAP and is the only land use provided for at this location. This use has been subject to a Strategic Environmental Assessment by KCC as part of the LAP preparation process.

Therefore, it is considered that the proposed developments in compliance with the following aspects of Policies RE P11 and EC P18: "Support the accommodation of Data Centres at appropriate locations... subject to appropriate... Environmental Assessments" and "the location of data centres shall be situated where they will not have a potential likely significant effect on a European Site".

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Energy Assessment

The energy proposals have been carefully assessed at both the application stage and current RFI stage. In response to RFI item no. 1, it is now proposed to further reduce the development's projected emissions through a series of measures including:

- CCGTs; using higher efficiency turbines will produce 50% of on-site generated energy resulting in a reduction of 978 GWh per annum at full operating condition in the total amount of gas required to power the data centres, and a consequential reduction of 552,000 tonnes in greenhouse gas emissions; and
- Solar PV and CPPAs; The proportion of energy sources from new renewable sources sourced via CPPAs has been increased to at least 50% of the total energy demands of the data centres, with on-site Solar PV providing additional renewable energy.

In this regard, the proposed development will only generate **1.26**% of the Sectoral Emissions Ceiling for the Electricity Sector to 2030.

The energy proposals have been fully assessed in the enclosed *EIAR Addendum to Chapter 16 Climate Change* prepared by RPS and the enclosed *Energy Policy Compliance Report - Updated* prepared by HDR. We refer to both documents for full details. Therefore, it is considered that the proposed development's energy proposals are fully assessed and therefore is in compliance with this aspect of Policies RE P11 and EC P18.

Transport Assessment

The transport proposals have been assessed through a *Mobility Management Plan* prepared by Systra (contained in Appendix L of the previously submitted *Planning Engineering Report*), a *Transport Assessment* (previously submitted) prepared by Systra and Chapter 12 'Transport' of the EIAR.

The Transport Assessment concludes:

"The proposed development is considered to be well placed to take advantage of the surrounding transport network. Dedicated pedestrian and cycle infrastructure as part of the application will encourage sustainable transport trips where possible. The site aligns with sustainable transport best practices and the wider policy set out by the Naas Local Area Plan 2021 – 2027".

Chapter 12 'Transport' of the EIAR notes:

"The Project is served by existing motorways and regional roads which can accommodate the predicted levels of traffic during the construction and operational phases... the overall impact of the Project upon the surrounding highway network is considered to be negligible."

Please refer to the previously submitted *Mobility Management* and the *Transport Assessment* prepared by Systra, and Chapter 12 of the EIAR for full details on the transport proposals. Please also find enclosed *EIAR Addendum to Chapter 12 Traffic and Transportation* which assesses minor design modifications in response to the RFI. Therefore, it is considered that the proposed development's transport proposals are fully assessed and therefore is in compliance with this aspect of Policies RE P11 and EC P18.

4.3.2 Naas Local Area Plan 2021-2027

The Naas LAP sets out an overall local strategy for the proper planning and sustainable development for the town of Naas.

The RFI response does not impacts materially on the accordance of the proposed development with the policies and objectives relevant to the proposed development set out in the *Naas LAP*.

As noted in the Planning Report submitted as part of the planning application the Naas LAP supports the development of data centres within Naas and the subject site is one of two sites exclusively zoned for data centre use within the town. The designation is specific, stating that no other land use will be considered at these sites.

The subject site is zoned 'P(1) – Data Centre' in the Naas LAP. Naas LAP seeks "To provide for Data Centre development and their associated infrastructure only" for Land Use Zoning Objective 'P'. The only use considered by the Naas LAP to be 'Permitted in Principle' in lands zoned 'P' is Data Centres.

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The development of the subject site as proposed, fully accords with the land use zoning objectives for this area as set out in the Naas LAP.

"Objective EDO 1.12:

- (a) Facilitate the location of Data Centre development on land designated P: Data Centre at Caragh Road South and Jigginstown for the identified land use only subject to appropriate environmental assessments, heat mapping, transport impact assessments and consideration of the cumulative impact on the electricity network supply capacity and targeted reductions in greenhouse gas emissions.
- (b) Any data centre project will be required to include measures to generate energy (sustainable, then renewable in the first instance) on site as part of the overall development proposal."

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5 UPDATE ON ADDITIONAL ASSESSMENTS AND CONSENTING PROCESSES

5.1 Addendum to Environmental Impact Assessment Report

Data Centres are not in themselves a class of development for the purposes of EIA. However, the Data Centre Application comprises an infrastructure project that would exceed the area thresholds set out in Class 10 of Part 2 of the Fifth Schedule of the Planning and Development as which relates to 'Urban development which would involve an area greater than 2 hectares in the case of business district, 10 hectares in the case of other parts of a built up urban area and 20 hectares elsewhere.'

In the case of the Data Centre Application, the site has a stated area of 37.51ha and therefore is above the threshold set out in Class 10(b)(iv).

In this regard, an EIAR in respect of the Project was prepared by RPS with input from a multidisciplinary team of competent experts and is submitted along with this Data Centre Application to KCC and will also be submitted to ABP as part of the Substation Application.

The EIAR considered and assessed the likely significant effects of the Project on the environment and contains the information required by Annex IV to the EIA Directive and Schedule 6 to the Planning and Development Regulations, 2001 (as amended), to assist the competent authority in carrying out an Environmental Impact Assessment in respect of the Project.

Having regard to the RFI from KCC, an *Addendum to the EIAR* has been provided. This *Addendum to the EIAR* should be read in conjunction with the EIAR (dated June 2024), as submitted to Kildare County Council as part of the application for planning permission for the Project (submitted 13th August 2024) and in conjunction with the information and documentation contained in the *Response to the Request for Further Information* Report, prepared by RPS, including all documentation, supporting materials and drawing pack.

5.2 Appropriate Assessment (Stage 1)

An AA Screening Report was prepared by RPS in respect of the Project and was submitted with the application on 13th August 2024. The AA Screening Report submitted with the original application, concluded that following an examination, analysis and evaluation of all relevant information, on the basis of objective information and in light of the best scientific knowledge and applying the precautionary principle, it could be concluded that the project, either individually or in combination with other plans or projects, and in the absence of mitigation, was not likely to have a significant effect on any European site(s) in view of their site-specific conservation objectives. It was considered that there was no reasonable scientific doubt as to the absence of such effects.

5.3 Natura Impact Statement (Stage 2 Appropriate Assessment)

Kildare County Council noted at Item 4 of their Request for Further Information that;

"The proposed Data Centre has hydrological connections to European Sites including South Dublin Bay, North Dublin Bay, River Tolka Estuary, North Bull Island and North West Irish Sea via the Bluebell Stream. Based on the information received with the application, the Planning Authority is not satisfied, having regard to the scale of the proposed development, that the impact on the integrity of the European Sites can be screened out.

The Applicant is requested to conduct a Stage 2 Appropriate Assessment of the proposed development and submit a Natura Impact Statement accordingly."

In response to Item 4 of the KCC RFI as set out above, in circumstances where KCC is not satisfied that impacts on the integrity of European Sites can be screened out, a NIS has been prepared and provides an in depth examination, analysis and evaluation of the potential impacts of the Project on European sites and presents findings and conclusions with respect to the Project in light of the best scientific knowledge in the field. A NIS has been prepared out of an abundance of caution and provides an examination, analysis and evaluation of the potential impacts of the Project on European sites and presents findings and conclusions with respect to the Project in light of the best scientific knowledge in the field. This NIS will inform and assist the competent authority in carrying out an Appropriate Assessment as to whether or not the Project will

adversely affect the integrity of any European sites, either alone or in combination with other plans and projects, in view of their conservation objectives.

It has been objectively concluded by the authors of the NIS, specialist ecologists in RPS, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Project and the effective implementation of the mitigation measures proposed, that the Project will not adversely affect (either directly or indirectly) the integrity of any European site in view of sites' conservation objectives, either alone or in combination with other plans or projects and there is no reasonable scientific doubt in relation to this conclusion.

5.4 Strategic Infrastructure Development

As noted in the *Planning Report* submitted as part of the planning application a request was made on 30th January 2023 to ABP under Section 182E of the Planning Act to enter into a pre-application consultation with ABP in relation to the Substation Application, the undergrounding of an existing 110kV transmission cable along with associated and ancillary works.

On 5th July 2023 ABP issued a determination (ABP Ref. 315659-23) confirming that the proposed grid development meets the relevant criteria and constitutes SID under Section 182A of the 2000 Planning Act as amended.

An application shall be submitted for permission under Section 182A of the Planning Act for the substation, the undergrounding of an existing 110kV transmission cable along with associated and ancillary works.

5.5 Data Centre Grid Connection Processing

As noted in the *Planning Report* submitted as part of the planning application, the applicant will be seeking consent to connect to the grid. This connection will facilitate procurement of new renewable energy via CPPAs. The grid connection will be an Autoproducer connection, meaning it will enable the on-site electricity generation to be delivered to and participate in the wholesale electricity market.

On 18th February 2025, the CRU published a proposed decision paper on the *LEU Connection Policy*. The purpose of this proposed decision paper is to set out a potential pathway for connection applications for new data centre customers to the electricity grid with due regard to security of supply and network constraints while minimising, where possible, potential impacts on national renewable energy targets and carbon emissions.

As set in **Section 3.1.3** above, the proposed development accords with this policy document. Further detail on the manner in which the proposed development is compliant with the *Large Energy Users Connection Policy* is provided in Section 3 of the enclosed *Energy Strategy Report* prepared by BOS Energy Ltd. and the *Energy Policy Compliance Report - Updated* prepared by HDR.

5.6 Gas Connection

As detailed in **Section 3.1.1** and the *Energy Strategy Report* prepared by BOS Energy Ltd., up to 50% of the energy requirement will be met by highly efficient gas turbines.

Herbata Limited have engaged with GNI throughout the design process in relation to the proposed development's connection to the gas network. GNI has confirmed in a letter dated 14th March 2025 (see Appendix B of the *Response to FI Report*) that it is in receipt of a formal natural gas connection application dated 21st December 2021 from Herbata Limited in respect of the proposed development, which application remains live.

Key items set out in the enclosed GNI letter dated 14th March 2025 include:

- Confirmation that dialogue has been ongoing, that an application for gas connection to the site has been
 received and furthermore, that there is sufficient capacity within the GNI transmission network to
 accommodate the Herbata Data Centre project;
- GNI commentary on the role of the Commission for Regulation of Utilities (CRU) and the ongoing consultations that have been taking place in relation to LEUs. This has prevented GNI from being able

to provide a formal offer, but this is expected to be clarified by the Government shortly, so allowing GNI to provide a Letter of Offer in due course.

As set out in a letter of 28th May 2025 from Herbata Limited's legal advisors McCann FitzGerald LLP (see Appendix C of the *Response to FI Report*), the position in relation to the gas connection does not provide a lawful reason to suggest that the pending application is in any way premature.

6 CONCLUSION

This *Planning Report Addendum* has been prepared as part of the response documentation to an RFI issued by Kildare County Council on 4th October 2024 (**Reg. Ref. 24/60787**).

In addressing the specific RFI, three key items have arisen;

- The design and energy arrangements have been enhanced:
 - A significant increase in the utilisation of renewable energy sources from the outset of operations from a minimum of 30% of the annual energy consumption as per the planning application proposals to at least 50% of the annual energy consumption as set out in the enclosed RFI response documents;
 - Utilisation of Combined Cycle Gas Turbines (CCGT) to provide for up to 50% of the energy required. The used of CCGT will improve the efficiency of the electricity generated on site from c. 30.8% to near 45%; and
 - Modify the design of proposed Data Centre Building no. 4 and associated infrastructure to avoid all direct impacts on the previously unrecorded sub-surface archaeological remains.
- There is greater clarity and certainty with regard to energy sources:
 - A minimum 50% of the energy will be supplied from renewables though CPPAs and onsite generation (letters from renewable energy suppliers and a draft legal agreement are appended to the enclosed *Energy Strategy Report*); and
 - GNI have confirmed in a letter dated 14th March 2025 that dialogue has been ongoing with Herbata Limited, that an application for a gas connection to the site has been received and furthermore, that there is sufficient capacity within the GNI transmission network to accommodate the Herbata Data Centre project.

The overall impact of these enhanced energy arrangements is to significantly reduce the emissions arising from the proposed development. This is considered further in the enclosed *Response to FI Report* (see Section 4.1) prepared by RPS.

The proposed Data Centre accords with the NPF First Revision, CAP25, Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy and the LEU Connection Policy.

The Data Centre Application aligns with national, regional and local policy supporting the ICT sector and data centres as a key component of this sector.

The proposed Data Centre use at this site accords with the local land use zoning objective set out in the Naas LAP which has explicitly identified this location as being appropriate for a data centre.

It is considered that the Herbata Data Centre Application accords with sustainable development objectives and adopts an exemplary approach to data centre development within the State.