

Further to a Direction from the Director of Services to seek Further Information, the following items of Further Information should be sought be sought:

1. Policy RE P12 of the Kildare County Development Plan 2023-2029 seeks to 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. Furthermore, Policy RE P11 and Policy EC P18 seeks to 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 proposed data centre development as proposed would result in the emission of 28.6 million tCO_2e (tonnes of carbon dioxide equivalent) during its lifetime which represents c. 49.35% of the Sectoral Emissions Ceiling for the entire Commercial Built Environment Sector to 2030. This level of emission is considered to be excessive for one development and would have wider implications for the sector to remain within its emission ceiling, with a consequent negative impact on climate change. The proposed development, as proposed, would run counter to the provisions of National Policy as set out in Ireland's Integrated National Energy and Climate Plan 2021-2030 and in the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy 2022, both of which require decarbonisation through emissions reduction/removal and design. The development would therefore be contrary to Policy RE P12, RE P11 and EC P18 of the Kildare County Development Plan 2023-2029, would set an undesirable precedent for similar developments of this nature and would be contrary to the proper planning and sustainable development of the area.

The applicant is requested to comment.

2. The proposed development relies heavily on the supply of gas from the national network to fuel the gas turbines to generate the electricity to power the development. There is currently no gas supply infrastructure available to serve the site. The development is thus wholly reliant on the separate provision of a Gas Networks Infrastructure upgrade including the construction of a high-pressure gas pipeline to the site, that must be undertaken under a separate process, by the relevant Statutory Undertaker. No such works have been undertaken or appear to be planned or approved. It is considered that there is a deficiency in the availability of the necessary infrastructure to serve the development and, in this regard, the development, as proposed, is considered to be premature and would therefore be contrary to the proper planning and sustainable development of the area.

The applicant is requested to comment.

3. Natural gas is a fossil fuel. The energy supply to serve the proposed development, as proposed, is largely fossil fuel driven. Notwithstanding the national target of decarbonising gas supply by 2050 and to produce 5.7TWh of biomethane by 2030, it is considered that the volume of biomethane required to serve the fully operational proposal would be c.50% of the national target which is considered to be unsustainable. The proposed gas fuelled electricity generation will allow the proposed data centre to be an independent operator, outside of the national grid and, to this end, it is an example of an “islanded” data centre, not connected to the grid and powered mainly by on site fossil fuel generation. Such developments as identified in the Government Statement on the Role of Data Centres in Irelands Enterprise Strategy 2022, run counter to emissions reduction objectives and would not serve the wider efficiency and decarbonisation of our energy system and could result in the security of supply risk being transferred from electricity to gas supply, which would be a significant challenge given Ireland’s reliance on gas importation.

In this regard, having regard to the lack of significant on site renewable energy to power the development, the reliance on gas powered turbines to provide energy to the development and the lack of detailed evidence for Corporate Power Purchase Agreements, the proposed “islanded” data centre would be contrary to the provisions of Policy RE P11 and EC P 18 of the Kildare County Development Plan 2023-2029 which support the accommodation of data centres in line with, *inter alia*, the Government Statement on the Role of Data Centres in Irelands Enterprise Strategy 2022, would set a precedent for similar proposals of this nature and would therefore be contrary to the proper planning and sustainable development of the area.

The applicant is requested to comment.

4. Policy RE P 11 and EC P 18 of the Kildare County Development Plan 2023-2029 requires that 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 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.

Planning

5. The applicant is requested to submit revised Visual Impact Assessment to include views of the development from the east and north east of the site, to include views from (1) the dwelling house immediately north east of the site, (2) the Osberstown Business Park, (3) the motorway bridge over the M7 at Caragh Road (4) the houses

located north of the R409 at Caragh Road Roundabout (5) the Southern Link Road from R445 to R409 and (6) the M7 motorway east of the site.

6. The proliferation of palisade fencing throughout the site is noted. Notwithstanding the security rationale for the proposed fencing, the applicant is advised, having regard to the scale of the proposal, that there is insufficient consideration given to the passage of wildlife through the site and this should be facilitated by appropriate fencing. The applicant is requested to revise the proposed fencing arrangement on site to allow for wildlife access and passage through the site. An addendum to the Ecological Impact Statement shall accompany the revised fencing proposals.

Roads

7. The Applicant is requested to submit details to confirm that the proposed works occurring over, under or adjacent to the motorway within the MMarC (Motorway Maintenance and Renewal Contract) area have been addressed appropriately and that the proposed works adjacent to the M7 such as landscaping and drainage and lines associated works such as earth moving and lighting have been designed and constructed in a manner that has regard to the extents and function of the motorway.

8. The Applicant is requested to confirm the extent of the works within the MMarC Area.

9. The Applicant is requested to submit details of the Works Specific Deeds of Indemnities, arrangements for third party access or consent from Transport Infrastructure Ireland (TII) in accordance with Section 53 of the Roads Act, 1993 which a third party seeking to undertake works within a motorway/dual carriageway will generally be required to carry out as advised by TII.

10. The Applicant is requested to submit details to highlight compliance with the Technical Acceptance Requirements for the assessment, alteration, modification, strengthening and repair of all road structures which must be prepared in accordance with the Technical Approval of Road Structures on Motorways and Other National Roads for structures' (TII, 2009, DN-STR03001). This is to ensure that the current application demonstrates protection of the safety, maintenance and operation of the heavily trafficked M7 at this location and to confirm the technical feasibility of the proposal having regard to TII Publications requirements as appropriate.

11. The Applicant is requested to submit details to resolve the following operational issues related to the proposed development as part of a Construction Traffic Management Plan (CTMP) to address concerns relating to national road network maintenance and road safety.

a. Consultation with all relevant PPP Companies, MMarC Contractors and the MDO over which the haul route traverses to ascertain any operational requirements such as delivery timetabling, etc. and to ensure that the strategic function of the national road network is maintained.

- b. Any proposed works to the national road network, including signage, to facilitate construction traffic to comply with TII Publications and to be subject to Road Safety Audit as appropriate. Works should ensure the ongoing safety for all road users and prior to any development necessary licenses, approvals or agreements with PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) Companies and the MDO, as necessary, to be in place.
- c. All proposals agreed between the MDO/ KCC, PPP Concessions and MMaRC Companies and the Applicant impacting on national roads with mitigation measures identified by the Applicant.
- d. Measures to rectify any damage caused to the pavement of the existing national road due to the turning movement of abnormal 'length' loads (e.g. tearing of the surface course) to be in accordance with TII Pavement Standards and details in this regard to be agreed with the MDO.

Fire Service

The applicant is advised that there are a number of concerns regarding the details contained within the Fire Hazard Analysis Report received with the application.

12. Page 10 – The reference to UL 2775 indicates that the BESS will be protected with an aerosol suppression system, consistent with later portions of the report. Aerosol systems can extinguish such a fire but will not stop thermal runaway or off-gassing if the cells are damaged. Gas detection and possibly venting should be provided.

13. Page 27 – While NFPA 855 (National Fire Protection Association (USA) recommends gas detection when aerosol suppression systems are used, the report indicates that gas detection is not necessary. This should be addressed.

14. Page 28 – The report indicates that testing was done to UL 9540A. Measurable gas concentrations for certain gases were identified but the concentrations were not provided. A copy of the UL9540A test report should be provided for review. The lack of gas concentration data also does not allow an evaluation on the need for explosion protection and a toxicology evaluation.

15. In accordance with NFPA 855, aerosol suppression systems are only permitted if based on reports issued as a result of large-scale fire and explosion testing. No such report has been provided to support this.

16. The test report referenced above shall be accompanied by a supplemental report by a fire protection engineer providing interpretation of the test data in relation to the installation requirements. No such report has been provided.

17. Page 30 – The aggregate capacity of the BESS is identified as greater than 72 MJ. However, additional details have not been provided such as: manufacturer's specifications, ratings, and listings of the ESS, quantities and types of ESS units.

18. ESSs shall be comprised of groups with a maximum stored energy of 50 kWh each with a minimum separation between groups of 0.9m, unless larger groups or smaller spacing is based on fire and explosion testing. Again, no such fire test report has been provided.

19. Page 35 – Detailed design criteria for the detection, alarm, and suppression systems is not provided. References are made to “agreed cause and effect matrix,” and sprinkler design “appropriate for the use in question.” Clarification required.

20. Page 38 – Maintenance of the fire protection systems for the BESS and the buildings is not addressed.

21. Index 1 – The HMA indicates that sprinklers are provided external to the cabinets but no sprinkler design criteria is provided other than “appropriate for the data centre use.” Clarification required.

22. The toxicology analysis provided in Appendix 9 is generic and incomplete. Although referring to water suppression, the data sheet indicates that hydrogen can form an explosive mixture. Section 11 (Toxicological Information) indicates that most information is “not available.”

23. The Local Effect and Effect on System are very generic. For example, the Local Effect often indicates a fast rise in temperature and the associated Effect on System is to disconnect the ESS. Many of these features are required because NFPA 855 assumes an uncontrolled event occurred. If the protection feature fails during an uncontrolled event, what is the consequence of such an occurrence? This is not considered a dual fault condition.

24. It is acknowledged that the aggregate capacity will exceed 72 MJ and therefore NFPA 855 applies. However, that does not provide the actual aggregate capacity information, as required by NFPA 855.

DAU

25. Given the scale and location of the development site, it is possible that previously unrecorded sub-surface archaeological remains could be disturbed during the course of groundworks required for the development. The extensive area of archaeological significance identified through geophysical survey within Field No. 8 is considered to represent a new archaeological monument and preservation in situ should be the first and preferred first option. In accordance with Section 3.4 of Framework and Principles for the Protection of the Archaeological Heritage (1999), the applicant is requested to conduct a comprehensive interrogation of design options to determine the feasibility of facilitating preservation in situ of this monument and submit a detailed report detailing the results of an assessment of all design options.

Water Services

26. There is a query in relation to the figures pertaining to the estimation of the greenfield runoff rate at 6 l/s/ha. The applicant is requested to reissue the design with a revised Qbar rate and confirm that the available attenuation storage for the site provided in the proposed ponds and basins on the site layout plan have sufficient capacity to store the increased water volumes associated with the reduced Qbar rates.

27. The applicant is requested to reissue the Proposed SuDS Detail drawings highlighting the correct Qbar rate at each of the outfalls.

28. In the flood risk assessment issued for the site, it is noted that the design of the Sustainable Urban Drainage Systems at the proposed site are introduced to deal with potential pluvial flooding that has the potential to occur based on increase in hard surfacing at the site. In line with Item 1 above, the applicant is to review the Flood Risk Assessment to ensure that any increase in water volumes that are generated by the reduction in Qbar rate, are adequately assessed to ensure that there is adequate capacity in the proposed network so that no additional residual risks are generated on the site and downstream of the site.

Parks

29. The Landscape Design Rationale & Landscape Proposal prepared by the qualified Landscape Architect (or qualified Landscape Designer) should be amended to include additional planting and screening and the retention of existing trees and hedge rows.

The following shall be included to support this;

- A scaled Landscape Masterplan with cross- sections (where appropriate) showing the general layout and hard and soft landscape treatment of all external areas/spaces boundaries, structures, and features. This shall be generally provided at a maximum scale of 1/200.
- Details of Hard Landscape Design (where applicable) for boundaries, (walls, fences, screens), lighting, seating, kerbing, edging, surfacing.
- Details of Soft Landscape Design: detailed Planting Plan(s) and Planting Schedule(s) [species/varieties, quantities, sizes, rootball presentation, spacings]. Proposed planting should have a wide variety of species/varieties, using both native planting and non-native planting. The overall objective of planting in areas is that they are easily manageable, visually appealing, enhances biodiversity and pollinator friendly.
- A clearly outlined Landscape Plan which demonstrates that the proposed location of underground/over ground services will not impinge on the proposed trees or planting.

30. A revised tree protection plan amended in line with the revised landscape plan showing retain trees and hedges along with the overall site plan.

- Tree Protection Plan: a scaled site plan (1:500@A1) of the proposed development, clearly showing and distinguishing (by colour coding) those trees and hedges to be retained and protected and those to be removed ; showing alignments of Tree Protection Fencing and areas to be excluded from construction activities and compound(s), site office(s), plant, equipment and

materials storage. Root Protection Areas (RPAs) of all trees and hedgerows to be clearly shown on this drawing.

- Arboricultural Method Statement: clear and practically achievable measures to be used during the construction period, for the protection and management of all trees and hedges that are to be retained, as shown in the Tree Protection Plan.
- Summary Table: Summary of all trees and hedgerow proposed for removal and retention to include numbers and percentages.
- Arboricultural Impact Assessment: a thorough, detailed and realistic analysis and assessment of the likely impacts of the proposed development on the surveyed trees and hedges; along with a summary table of the tree population and quantification of impacts/losses etc. (total number surveyed and total numbers/percentage to be retained and felled respectively).

Drafted by:

Fiona Breen
Executive Planner

Signed:



S. Willoughby

Senior Planner

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