

Planning Report for a Strategic Infrastructure Development

In respect of

**The Provision of a Proposed Grid Substation and Associated
Electricity Transmission Line Connections**

Prepared by

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On behalf of

Art Data Centres Ltd.

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CONTENTS

1.0.....	INTRODUCTION AND CONTEXT	3
2.0.....	SITE LOCATION AND CONTEXT	5
3.0.....	PRE – APPLICATION CONSULTATIONS	7
4.0.....	RELEVANT PLANNING HISTORY	8
5.0.....	DEVELOPMENT DESCRIPTION	12
6.0.....	RELEVANT NATIONAL AND REGIONAL PLANNING POLICY.....	17
7.0.....	LOCAL PLANNING POLICY	21
8.0.....	E I A R AND N I S	24
9.0.....	CONCLUSION.....	25

1.0 INTRODUCTION AND CONTEXT

- 1.1 On behalf the applicant, Art Data Centres Ltd, and further to a determination received from An Bord Pleanála dated the 26th January 2022 confirming the proposed development constitutes Strategic Infrastructure Development (SID) pursuant to Section 182A of the Planning and Development Act 2000, as amended (hereinafter referred to as ‘the Act’), we hereby submit this planning application in respect of a proposed development of an electricity grid 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 associated underground transmission line connections linking the proposal to the existing Ennis sub-station to the south-west of the proposed substation development site.
- 1.2 The proposed development is located within the townlands of Tooreen, Cahernalough, Knockanean, Ballymacahill, Muckinish and Rosslevan, just outside to the north east of Ennis town, Co. Clare. The application site has a total area of c. 9 hectares.
- 1.3 The development is described as follows within the public notices:

“The proposed development primarily comprises the provision of a new 110 kV Gas Insulated Switchgear (GIS) grid substation, two 110 kV underground transmission cables connecting to existing 110 kV overhead lines to the north of the proposed substation, and two 110kV underground transmission cables connecting to the existing Ennis 110kV grid substation (located to the east of the M18 and to the north of the Tulla Road (R352)), along with associated and ancillary works.

The proposed development is located within the townlands of Tooreen, Cahernalough, Knockanean, Ballymacahill, Muckinish, and Rosslevan to the north east of Ennis, on the Tulla Road (R352), Co. Clare. The application site has a total area of c. 9.0 hectares.

The proposed development is described as follows:

The proposed new 110 kV GIS grid substation is to be located on lands at Cahernalough, to the north east of Ennis, and to the north of the Tulla Road (R352). The proposed 110kV GIS grid substation is located to the north east of a proposed data centre development subject to a separate concurrent application to Clare County Council under Reg. Ref.: P21-757. An EPA-Industrial Emissions Directive (IED) licence will be applied for to facilitate the operation of the development proposed under Reg. Ref.: P21-757.

The proposed substation consists of two storey 110kV GIS grid substation building (with a gross floor area of 1,431 sq.m.) enclosed within a 2.6 metre high security fence; a single storey client control building (with a gross floor area of 467 sq.m), 2 No. 110kV hybrid GIS circuit breakers; 2 no. 110/10kV dual output step down transformers (separated by isolators and metering equipment), and 4 No. medium voltage output switch rooms for distribution to the site and connection to the onsite energy center generators (proposed under concurrent application Reg. Ref.: P21-757), all within a 2.6m high fenced compound.

Two existing overhead 110 kV transmission cables circuits traversing the site from south-west to north-east will be undergrounded via 2 no. dropdown. masts with two proposed 110kV underground transmission cables (within ducts) to connect the proposed dropdown masts with the proposed 110kV GIS grid substation. Each of the two new circuits will terminate in a cable – overhead line/cable (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 110 kV overhead lines. Each proposed dropdown mast will be c. 17 metres in height, set on concrete foundations. The obsolete sections of the two existing overhead 110kV lines from the proposed dropdown towers to the existing Ennis 110kV substation, including the supporting poles /masts will be removed / demolished.

Two proposed 110kV underground transmission cables (within ducts) will run from the proposed 110 kV GIS grid substation, connecting to the existing Ennis 110 kV Grid Substation via a route southwards along the proposed main campus internal road (proposed under concurrent application Reg. Ref.: P21-757), then turning west along the Tulla Road (R352) until they reach the existing Ennis 110kV grid substation.

The development includes enabling works and services diversions; adjacent access paths to serve the proposed transmission cables; joint bays; connections to the proposed and existing substations; landscaping; security fencing; lightning masts; provision of internal access arrangements within the substation compound; services, and all associated construction and ancillary works.”

- 1.4 An Environmental Impact Assessment Report (EIAR) has been prepared by AWN Consulting Limited and other EIA contributors and accompanies this application submitted to An Bord Pleanála.
- 1.5 A Natura Impact Statement has also been prepared by Scott Cawley, Consulting Ecologists, and is submitted with this application.
- 1.6 The main stakeholders for the development are as follows;
 - EirGrid, is responsible for operating and developing the national high voltage electricity grid in Ireland;
 - ESB Networks (Asset Owner), is responsible for carrying out maintenance, repairs and where works are not contestable, the construction of the national high voltage electricity grid in Ireland;
 - Art Data Centres Limited’s role for this project is to act as the Developer/Applicant.

Development Method

- 1.7 The development of the proposed 110kV grid substation and transmission lines connecting to the existing overhead 110kV transmission line to the north east and to the Ennis 110kV Grid Substation will be a contestable development. The meaning of this, is that the Developer will be responsible for the design, construction, fit-out and pre-commissioning of both the proposed 110kV grid substation and the underground 110kV transmission line circuits and bringing these to both the existing Ennis 110kV Grid Substation site and to the overhead 110kV transmission lines.
- 1.8 Upon completion of the works by the Developer, the proposed 110kV GIS Grid Substation and transmission line circuits will be handed over to EirGrid, whom in conjunction with ESB Networks (ESBN) will carry out the final connections and commissioning and energisation of the proposed grid substation and transmission line connections.

- 1.9 Once energised, the proposed development will form part of the ESBN infrastructure, which EirGrid will be responsible for operating.

Applicant

- 1.10 The Applicant (Developer) for the proposed contestable development is Art Data Centres Limited, with a registered address at Avonlea, Demesne, Lucan, Co. Dublin K78 Y3Y5.
- 1.11 The main agent acting on behalf of the Applicant is John Spain Associates, with an address at 39 Fitzwilliam Place, Dublin 2.

2.0 SITE LOCATION AND CONTEXT

- 2.1 The proposed development comprises the provision of a 110 kV GIS grid substation to be sited on lands located c.4 km to the north-east of Ennis, County Clare, in the townlands of The development also includes the provision of two 110 kV underground transmission cables, connecting to the two existing 110 kV overhead lines to the north east of the proposed grid substation via two dropdown towers, and an underground transmission cable connection (comprising two circuits) between the proposed 110kV grid substation and the site of the existing ESB Ennis 110kV grid substation (including connections within the substation), to the south west of the proposed grid substation site.
- 2.2 The proposed development is located within the townlands Tooreen, Cahernalough, Knockanean, Ballymacahill, Muckinish and Rosslevan, Tulla Road, Ennis. The application site has a total area of c. 9 hectares, and sits within the wider data centre campus site of c. 60 hectares. See Figures 2.1 and 2.2 below.

Proposed 110kV GIS Grid Substation

- 2.3 The proposed new 110 kV GIS grid substation is to be located on lands at Cahernalough, to the north east of Ennis, and to the north of the Tulla Road (R352). The proposed 110kV GIS grid substation is located to the north east of a proposed data centre development subject to a separate concurrent application to Clare County Council under Reg. Ref.: P21-757.
- 2.4 The site for the proposed 110kV GIS grid substation is greenfield / agricultural in nature, and is well set back from the public road and adjoining residential properties. The site is highly accessible having regard to its location off the R352 Regional Road (Tulla Road), and close to Junction 13 on the M18.
- 2.5 The lands surrounding the application site are currently undeveloped, but are subject to a current planning application as noted above and described in further detail within the Planning History section of this report.

Transmission Cable Routes and Dropdown Connection Points

- 2.6 As part of the proposed development, two existing overhead 110 kV transmission cables circuits entering the site from the north east will be taken down via dropdown towers and undergrounded and brought to the proposed Art Data Centre Grid Substation.
- 2.7 The obsolete sections of the two existing overhead 110kV lines from the proposed dropdown towers to the existing Ennis 110kV substation, including the supporting poles /masts will be removed / demolished. The routes of these existing cables to be

removed, including the supporting poles / masts, are included within the red line boundary, and run southwest from the proposed dropdown mast locations before turning the south and entering the existing Ennis Grid Substation.

- 2.8 Two underground 110kV cable circuits will run from the proposed 110 kV GIS grid substation, connecting to the existing Ennis 110 kV Grid Substation routing along the proposed main campus internal road and then along the Tulla Road (R352) until it reaches the site of the existing Ennis Grid Substation, including connections within the Ennis Grid Substation compound.

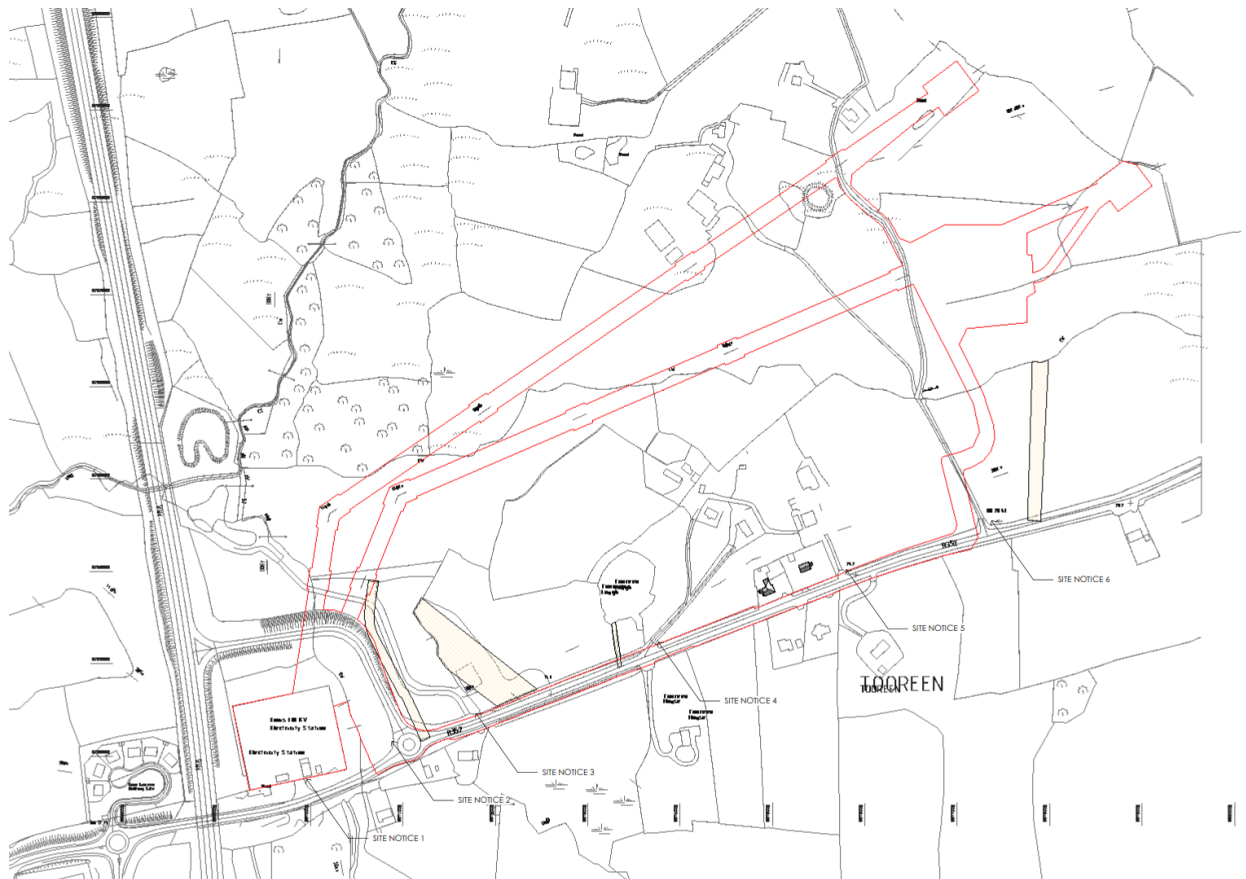


Figure 2.1: Extract from ARC MC Site Location Map

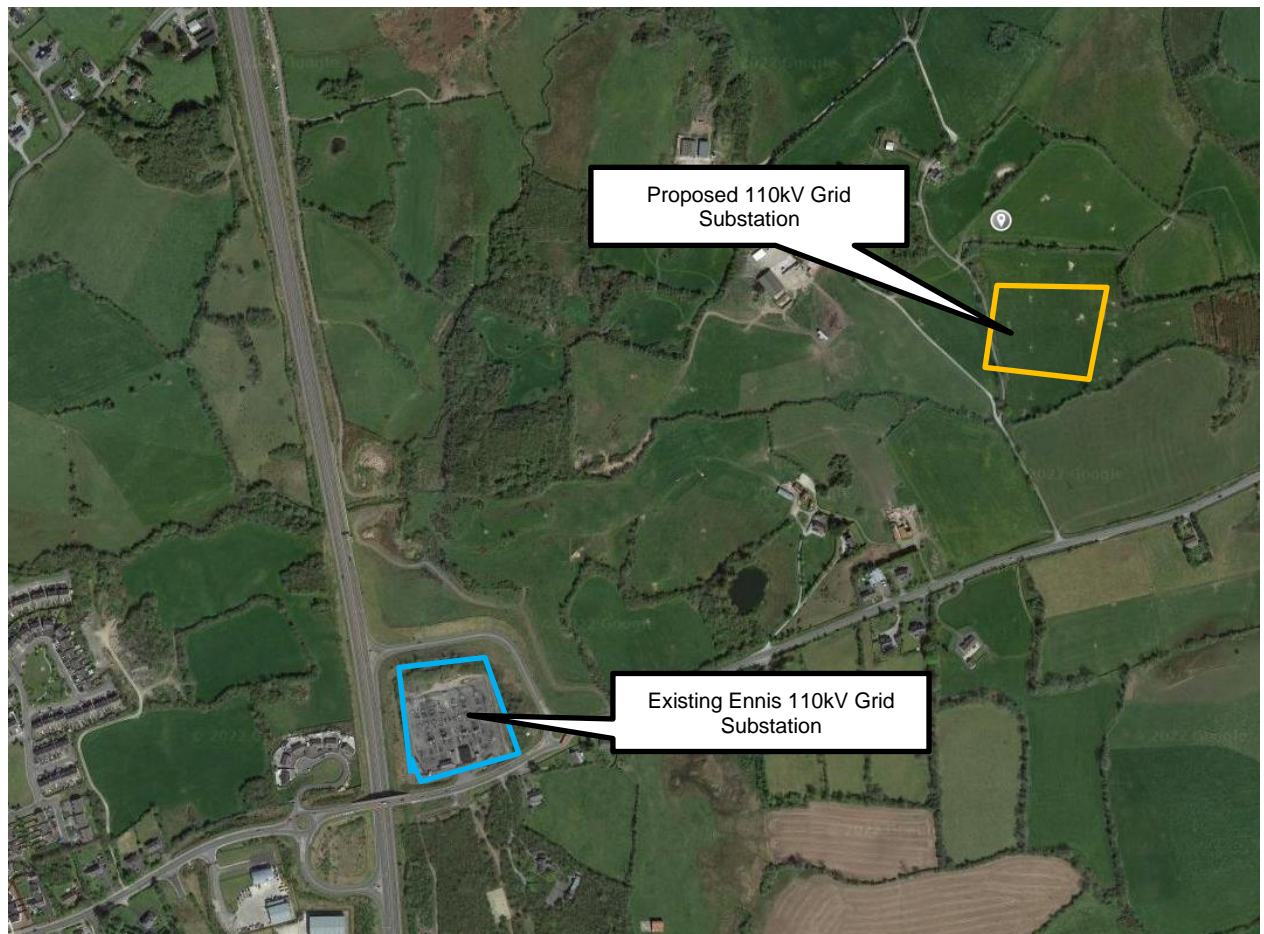


Figure 2.2: Aerial image with the location of the existing Ennis substation and the approximate location of the proposed 110kV Grid Substation indicated

3.0 PRE – APPLICATION CONSULTATIONS

- 3.1 The applicant has undertaken 1 no. pre-application consultation meeting with An Bord Pleanála on the 16th of September 2021, in response to a pre-application consultation request to the An Bord Pleanála dated the 15th of June 2021.
- 3.2 The purpose of the consultation meeting was to provide further information to An Bord Pleanála to inform their determination as to whether or not the proposed development might constitute strategic infrastructure under section 182 of the Act.
- 3.3 A request to conclude the pre-application process was submitted to An Bord Pleanála on the 29th of September 2021.
- 3.4 The Board Inspector’s report on the pre-application request, which informed the determination by the Board that the development constitutes Strategic Infrastructure Development, stated the following:

“I consider that the proposed development as described in the submissions and drawings constitutes strategic infrastructure coming within the scope of section 182A of the Planning and Development Act 2000, as amended, necessitating an application to be made directly to the Board.”

- 3.5 An Bord Pleanála have confirmed in a letter dated the 26th January 2022 that the proposed development constitutes Strategic Infrastructure within the meaning of section 182A of the Act. The determination was made following the conclusion of the

above-referenced pre-application process under Ref.: ABP-310507-21. A copy of the Board's confirmation that the proposed development falls under the provisions of section 182 of the Act is appended to the planning cover letter accompanying this application.

3.6 Therefore, the current application is required to be submitted directly to An Bord Pleanála under section 182A(1) of the Act.

3.7 The determination from the Board that the development constitutes a SID was accompanied by an Inspector's Report, which recommended that the applicant be informed that the proposed development constitutes Strategic Infrastructure.

3.8 The determination by the Board that the proposal constitutes Strategic Infrastructure Development was accompanied by a list of Prescribed Bodies, to whom a copy of the application has been issued. The following bodies were listed:

- Minister of Housing, Local Government and Heritage
- Minister for Environment, Climate and Communications
- Clare County Council (the Planning Authority)
- Transport Infrastructure Ireland
- Irish Water
- An Chomhairle Ealaíon
- Fáilte Ireland
- An Taisce
- Heritage Council
- Commission for Regulation of Utilities, Water and Energy
- Health Service Executive
- Irish Aviation Authority
- Health & Safety Authority

Consultation with Clare County Council

3.9 Pre-application consultations have also been undertaken with Clare County Council. A number of pre-application meetings were held with the Planning Authority as part of pre-application consultations on the overall data centre campus development, including the sub-station and grid connections, the subject of this SID application.

3.10 The applicant and design team have taken cognisance of the matters discussed during the course of this consultation.

4.0 RELEVANT PLANNING HISTORY

4.1 This section provides details of relevant planning history in the vicinity, of relevance to the overall development.

Proposed Substation Site

4.2 ***Clare County Council Reg. Ref.: P21-757 Current Data Storage Facility Application***

On the 15th of July 2021 a planning application was submitted to Clare County Council for a data centre campus development which the proposed substation and transmission line will ultimately serve. The site of the proposed substation and the proposed underground cable circuits are located within the site of this current data storage facility application, which is presently being considered by Clare County Council.

The application has been subject to Further Information and Clarification of Further Information requests. A response to the request for Clarification of Further Information was submitted on the 9th of June 2022. The Clarification of Further Information was deemed significant by the Planning Authority, and the public consultation in respect of the CFI is currently ongoing.

The development the subject of this current application is described within the public notices as follows:

“A permission of 10 years in duration is sought. The application site has total area of c. 60 hectares with a nett area for development of c.45 hectares, and is bound to the south by R352 (Tulla Road), to the east and the north by agricultural land, to the west by the M18.

The development will consist of:

- *The demolition of an existing single storey with pitched roof farm dwelling house together with 8 No. farm outbuildings on the overall site.*
- *The construction of 6 No. two storey data centre buildings with three storey plant/office levels and associated ancillary development that will have a combined gross floor area of 118,740 sqm. These data halls are maximum 19m high and will consist of the data halls and air handling units and offices and ancillary plant and support.*
- *Each of the six data centre buildings will include data halls, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, pump rooms, water storage tanks, and plant, as well as backup (standby) generators (11 No. per building) for emergency use only situated along one elevation of each building. The standby diesel generators will have associated 8 m high flues. Each generator will also include local diesel storage tanks with a single refueling area to serve the proposed emergency generators.*
- *A gas powered energy centre and Above Ground Installation (AGI) 4,674 sqm in size . The energy centre will primarily comprise 18 no. lean-burn natural gas engines, 2 No. pump rooms, and fuel storage compound. Each generator will have its own flue of 25m height. The energy centre and buildings within the compound will be 12 m high, single storey with mezzanine level. The buildings will house ancillary office, welfare facilities and associated parking.*
- *A two storey Vertical Farm Building. The vertical farm will be c. 2,430 sqm and 12m high. It will comprise c. service area of 1,444 sqm, handling area of 844 sqm and ancillary areas .*
- *Solar Panels located on each of the data centres and Rainwater harvesting included in the development.*
- *Undergrounding of two existing overhead 110kV electricity transmission lines.*
- *Ancillary site development works, that will include attenuation ponds and the installation of pipes and connections to the public water supply, foul and storm water drainage network, and installation of utility ducts and cables. Other ancillary site development works will include hard and soft landscaping throughout the site, lighting, fencing, signage, central services road and internal access roads, security gate, 299 No. car parking spaces, and 126 no. bicycle parking spaces. The development will be enclosed with landscaping to all frontages including the retention of an ecological buffer area to the west.*
- *The development will be accessed from the Tulla Road (R352) with the provision of a new vehicular access road, together with an emergency access/egress road*

to the south west of the site. A shared surface cycle/footpath is to be provided along both sides of the Tulla Road across the campus site's full road frontage.

- All associated and ancillary works.

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

The development is to be constructed in three phases and an Environmental Impact Assessment Report and Natura Impact Statement were submitted along with the application to the Planning Authority. Updates to the EIAR were made at Further Information stage, and further updates to the EIAR and NIS were made at Clarification of Further Information stage.

The current data storage facility application under Reg. Ref.: P21-757 makes passive provision for the development of a substation and the provision of associated underground cable circuits to serve the development, subject to a separate planning application (i.e. this application which is now being submitted to the Board following a determination that the substation and associated transmission cables constitute Strategic Infrastructure Development under section 182 of the 2000 Act). The layout of the current data centre development application is illustrated in the figure below.

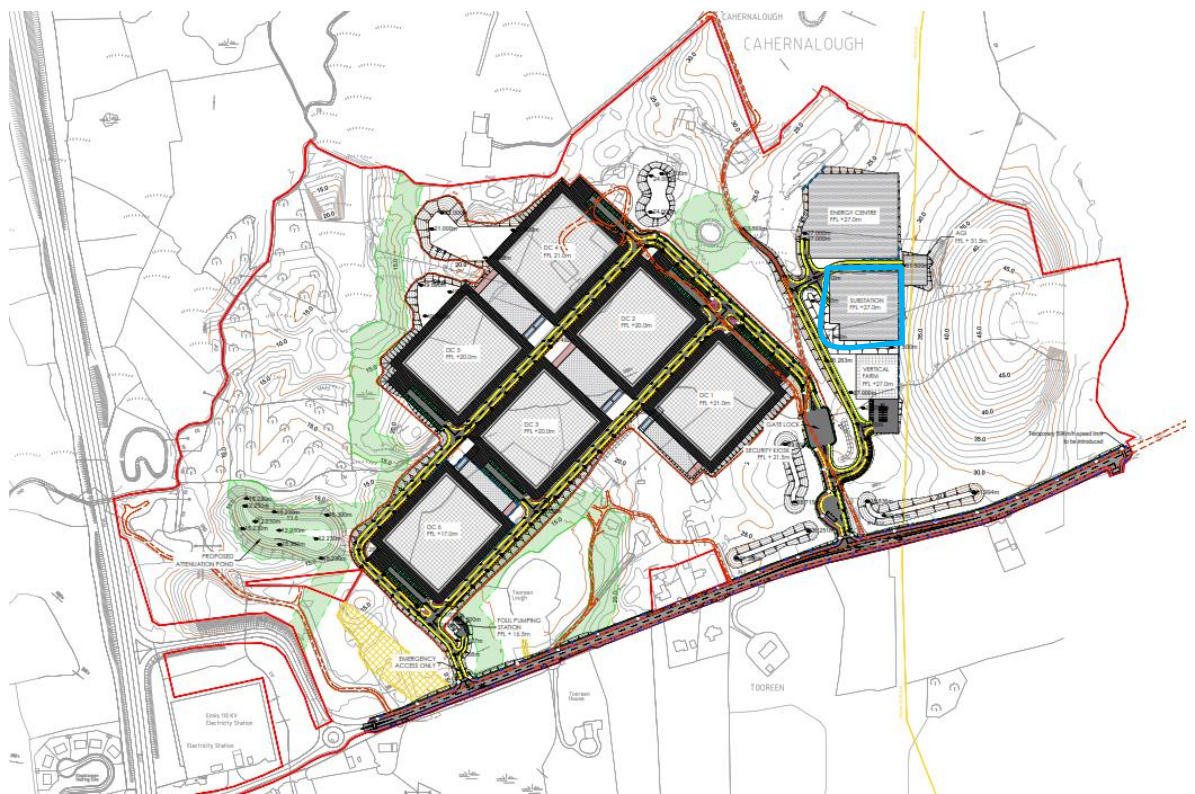


Figure 4.1: Extract from site masterplan for Reg. Ref.: P21-757, with substation location annotated in blue.

Other Relevant Planning History

4.3 **Reg. Ref 02261**

A final grant of permission was issued by Clare County Council on 18/04/2002 to alter and divert the existing Drumline-Ennis 110kV Transmission Line.

4.4 **Reg. Ref.: 16141**

This application was subject to a final grant of permission by Clare County Council on 13/10/2005. The development applied for consisted of alterations to the existing 110kv Ennis electrical transformer station, consisting of 2 No. 110 to medium voltage transformers and associated bunding, 1 No. oil/water interceptor and percolation area, 2 No. 110kv transformer bays to include disconnects, circuit breaker, current transformers and surge arrestors, new medium voltage building and extension to existing control building, new 4.90 metre wide gate at the existing inner compound fence, upgrading the existing splayed entrance to removable fence for the purpose of maintenance and transformer delivery.

4.4 We also note a series of planning applications related to the normal maintenance and alteration of this substation under Clare County Council Reg. Refs.: 051000, 15751, 09556, and 05842.

5.0 DEVELOPMENT DESCRIPTION

110kV Gas Insulated Switchgear (GIS) Substation

- 5.1 The proposed new 110 kV GIS grid substation is to be located on lands at Cahernalough, to the north east of Ennis, and to the north of the Tulla Road (R352). The proposed 110kV GIS grid substation is located to the north east of a proposed data centre development subject to a separate concurrent application to Clare County Council under Reg. Ref.: P21-757.
- 5.2 An EPA-Industrial Emissions Directive (IED) licence will be applied for to facilitate the operation of the development proposed under Reg. Ref.: P21-757. However such a licence is not required in respect of the proposed electricity transmission development subject to the current application.
- 5.3 The proposed substation consists of two storey 110kV GIS grid substation building (with a gross floor area of 1,431 sq.m.) enclosed within a 2.6 metre high security fence; a single storey client control building (with a gross floor area of 467 sq.m), 2 No. 110kV hybrid GIS circuit breakers; 2 no. 110/10kV dual output step down transformers (separated by isolators and metering equipment), and 4 No. medium voltage output switch rooms for distribution to the site and connection to the onsite energy centre generators (proposed under concurrent application Reg. Ref.: P21-757), all within a 2.6m high fenced compound.
- 5.4 The substation development is to be made of two elements, the first being a new node on the Irish electricity grid at Ennis which will be handed over and be operated by EirGrid ESO as the transmission system operator (TSO) (i.e. the EirGrid side of the substation compound, including the GIS building), the second element will be comprise the transformation to a lower voltage to enable distribution to the Art Data Centre Development (i.e. the Client side of the compound, including the Client Control Building).
- 5.5 The proposed new Grid Substation has been designed in accordance with Eirgrid's standard arrangements for 110kV based switchgear. Eirgrid also have standard arrangements for GIS (gas insulated switchgear) 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, 5-1, 5-2 and 5-3 show these standards have been adopted in the design of the proposed 8-bay GIS Grid Station, which consists of a two storey building with a total floor area of 1,431sq.m.

Figure 5.1: Ground floor plan of the GIS Building

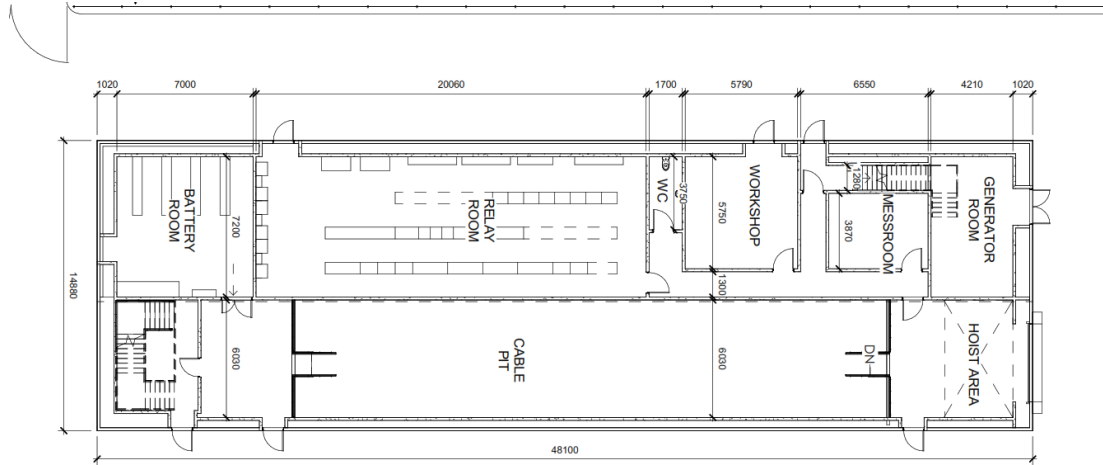


Figure 5.2: First Floor Plan of the GIS building

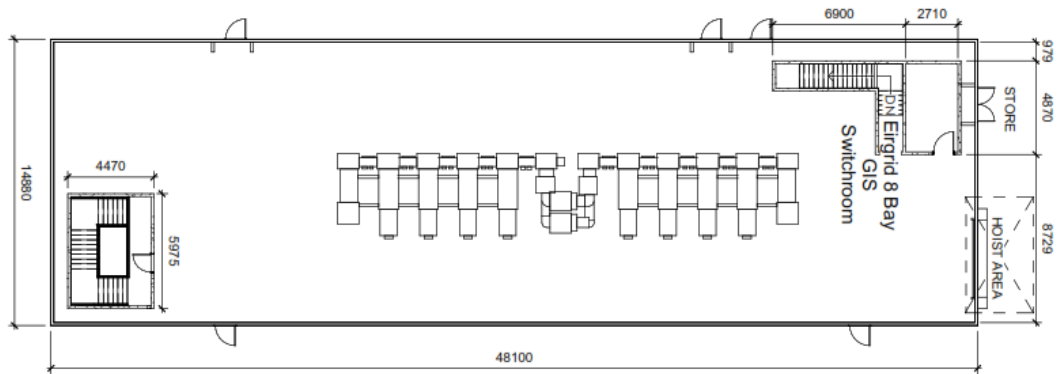
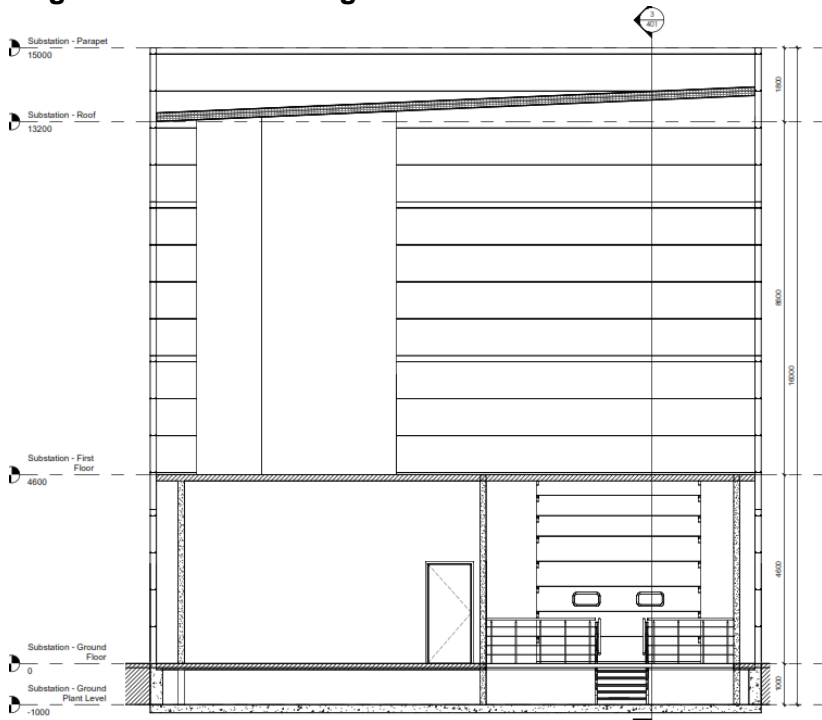


Figure 5.3: GIS Building Section



5.6 In accordance with the Eirgrid standard arrangement for a 110kV GIS grid substation compound, the substation forming part of the Art Data Centre development has been

arranged to have two sections, the first to fully incorporate the arrangement of the Eirgrid 8-bay GIS grid substation building and the second section to incorporate the local distribution and step-down transformers for the data centre development itself. This proposed arrangement is shown in Figure 5.4 below.

- 5.7 The western side (client side) of the overall substation compound will accommodate the single storey client control building, transformers and associated electrical equipment including 110kV hybrid GIS circuit breakers, isolators and metering equipment. The proposed transformers will provide for a step-down from 110kV to 10kV. The client control building will accommodate 4 no. 10kV medium voltage output switch rooms for distribution to the site and connection to the onsite energy centre generators. The building will also accommodate 2 no. control / battery rooms.
- 5.8 The eastern side (EirGrid side) of the overall compound will accommodate the proposed GIS substation building, and associated access arrangements. The GIS building will accommodate a relay room, battery room, cable pit, workshop, generator room, mess room, and hoist area at ground floor level, with an EirGrid 8 bay GIS switchroom provided at first floor level.
- 5.9 The design and layout of the proposed substation compound is in keeping with the design of the wider data centre campus proposed under current application Reg. Ref.: P21-757, with the cladding of the GIS building graduating from dark to lighter panel colours, from dark blue to sky blue, in order to reduce perceived massing and visual impact. The single storey client control building will be clad in dark blue architectural panelling.
- 5.10 The development includes access arrangements for both the client and EirGrid sides of the overall substation, which tie into the road network associated with the current data centre application.

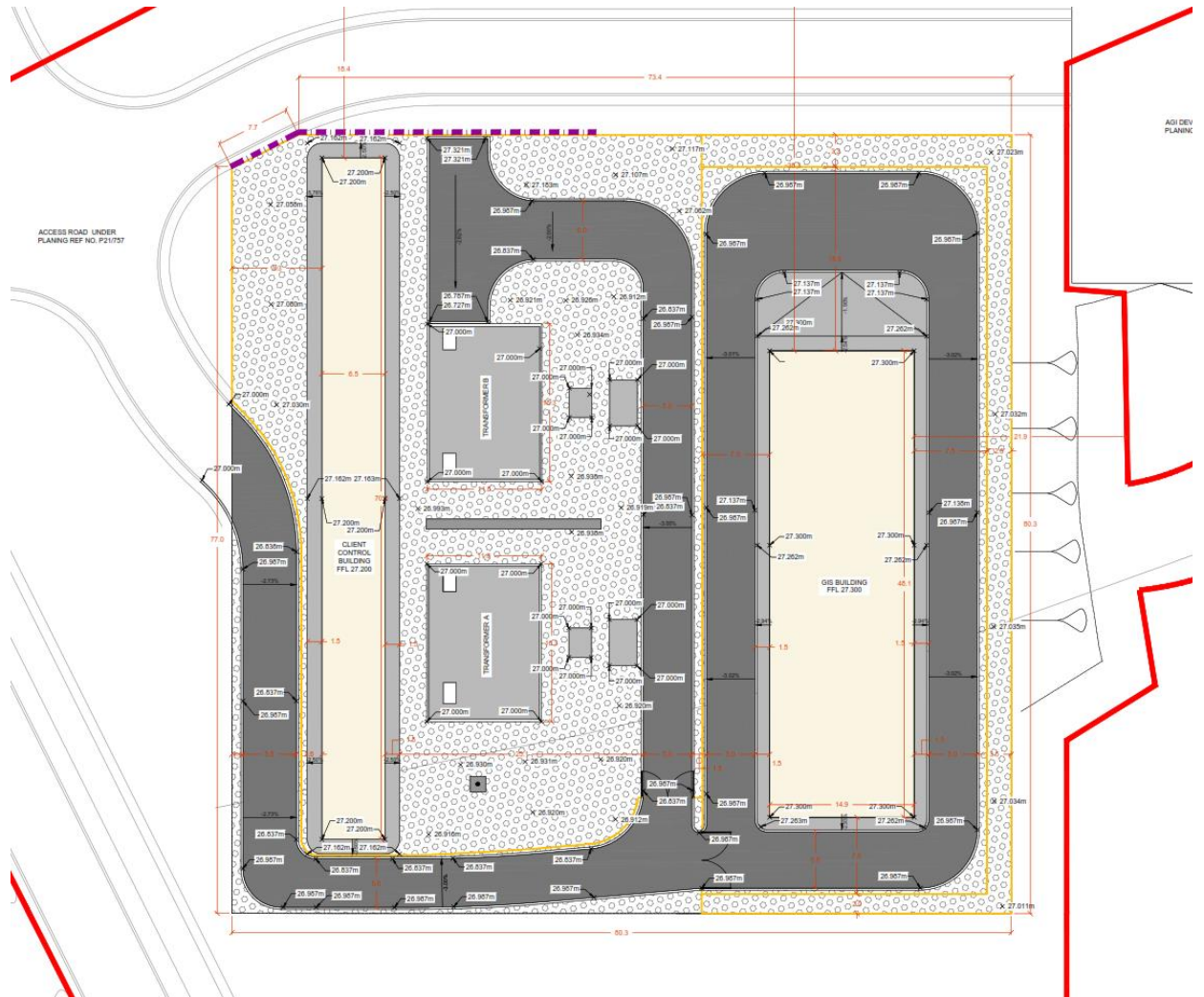


Figure 5.4: Proposed New Substation Arrangement (Source CSEA Consulting Engineers)

5.11 Further details on the proposed substation design and specifications can be found in the Engineering Report prepared by CSEA and the Electrical Report prepared by HDR.

110kV Underground Transmission Cables and Undergrounding of Existing Cables

5.12 As shown on Figure 5-5 are two positions where the existing overhead 110kV cables are proposed to be terminated and then diverted underground. Termination of the overhead lines will have to be by new single circuit L/C interface tower, similar to that shown in Figure 5-6 below.

5.13 As part of the proposed development, two existing overhead 110 kV transmission cables circuits traversing the site from south-west to north-east will be undergrounded via 2 no. dropdown. masts with two proposed 110kV underground transmission cables (within ducts) to connect the proposed dropdown masts with the proposed 110kV GIS grid substation.

5.14 Each of the two new circuits will terminate in a cable – overhead line/cable (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 110 kV overhead lines.

- 5.15 Each proposed dropdown mast will be c. 17 metres in height, set on concrete foundations (as illustrated in Figure 5.6 below).
- 5.16 The obsolete sections of the two existing overhead 110kV lines from the proposed dropdown towers to the existing Ennis 110kV substation, including the supporting poles /masts will be removed / demolished.
- 5.17 Two proposed new 110kV underground transmission cables (within ducts) will run from the proposed 110 kV GIS grid substation, connecting to the existing Ennis 110 kV Grid Substation via a route southwards along the proposed main campus internal road (proposed under concurrent application Reg. Ref.: P21-757), then turning west along the Tulla Road (R352) until they reach the existing Ennis 110kV grid substation.

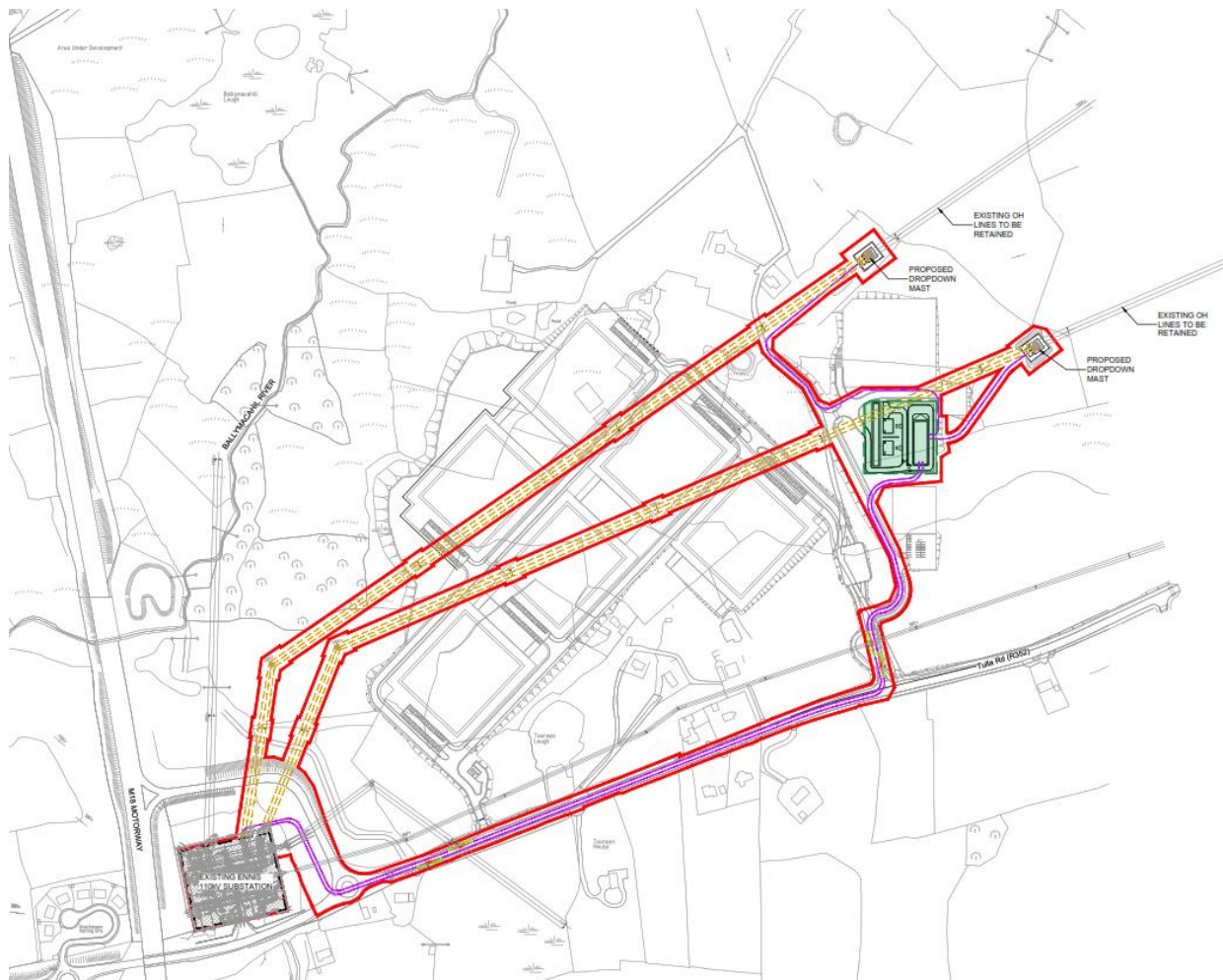


Figure 5.5 Proposed Substation & Undergrounding of 110kV Overhead Lines

- 5.18 The proposed underground cables between the proposed 110kV Grid Substation and the existing Ennis Grid Substation are to be run in ducts, conforming with Eirgrid’s standards, running south to the edge of the site and then along the Tulla Road to the roundabout adjacent to the existing Ennis Grid Substation.

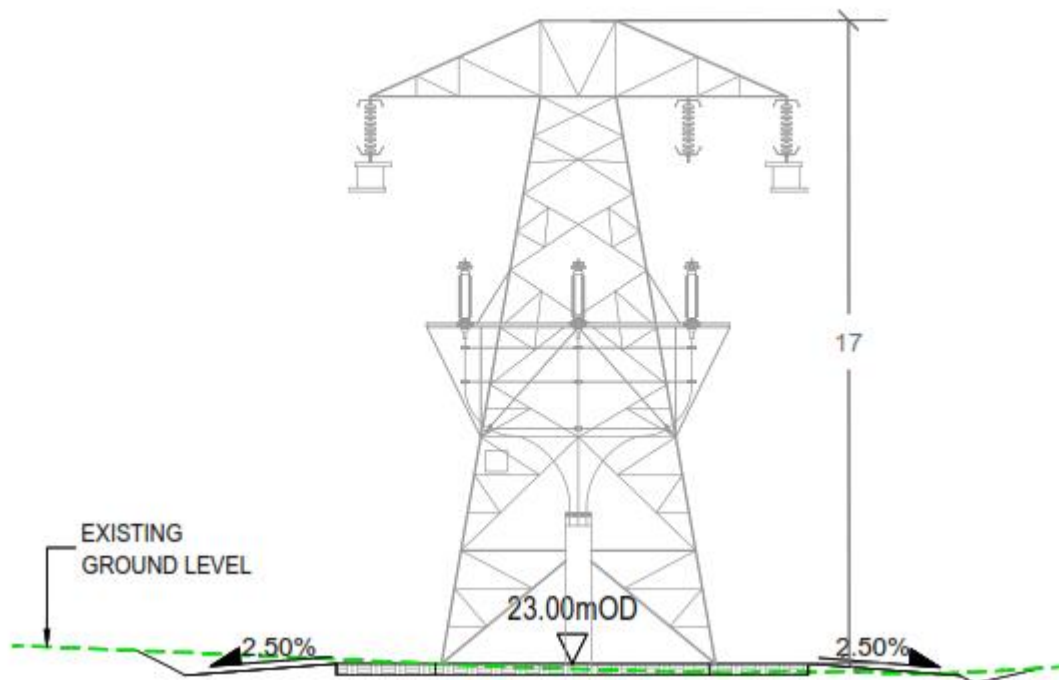


Figure 5.6: Dropdown mast elevation

- 5.19 The proposed underground transmission cables will be punctuated by Joint Bays and Pull Pits at various points along their routes as illustrated in the accompanying drawings prepared by CSEA Consulting Engineers.

Associated / Ancillary Works

- 5.20 As set out within the public notices, the development includes enabling works and services diversions; adjacent access paths to serve the proposed transmission cables; joint bays; connections to the proposed and existing substations; landscaping; security fencing; lightning masts; provision of internal access arrangements within the substation compound; services, and all associated construction and ancillary works.

6.0 RELEVANT NATIONAL AND REGIONAL POLICY CONTEXT

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

- 6.1 The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy was published by the Department of Business, Enterprise and Innovation in June 2018. The Statement notes the role which data centres play in Ireland's ambition to be a digital economy hot-spot in Europe.
- 6.2 The Statement includes a section dealing with electricity infrastructure (page 8 onward refers). The Statement includes 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.

- 6.3 The current Strategic Infrastructure Development proposal constitutes the provision of transmission infrastructure required to provide electricity for the development of the area, including the adjoining data centre buildings which are subject to a current planning application under consideration by the Planning Authority as outlined above.

National Planning Framework – Ireland 2040

- 6.4 The National Planning Framework was published in February 2018 and contains policies which are supportive of the development of Information and Communications Technology (ICT) infrastructure, with particular reference made to “*datacentres*”.
- 6.5 National Strategic Outcome 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.
- 6.6 The following objective, relating to ICT infrastructure (including datacentres) is included under National Strategic Outcome 6:

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

- 6.7 The current application proposes the provision of electricity infrastructure which will serve a proposed data centre development, and is therefore considered to be in accordance with the foregoing policies.
- 6.8 The NPF further states under National Strategic Outcome 6:

“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.”

- 6.9 As noted above, the proposed development constitutes the development of the grid to serve a proposed data centre development and is therefore considered to fully accord with the foregoing strategic outcome.

Regional Spatial and Economic Strategy for the Southern Region

- 6.10 The Southern Regional Assembly (SRA) has adopted the Regional Spatial and Economic Strategy (RSES) for the Southern Region.
- 6.11 ICT is widely referenced in the RSES as a key strength in the region and sector of future potential. Digital connectivity is considered an essential aspect in developing a smart region.

- 6.12 The subject site is located along the Atlantic Economic Corridor, consider a key growth enabler for the region. The Atlantic Economic Corridor (AEC) is described as ‘a linear network along the western seaboard supported by the Department of Rural and Community Development.’ It is a connected network of businesses and organisations seeking global market opportunities and investment to grow and prosper.

Economic Strategy

- 6.13 Chapter 4 sets out the economic Strategy for the Region, the vision is as follows: “*The economic vision for the Region is to enable sustainable, competitive, inclusive and resilient growth. This requires the development of a strong and diverse economic base. With immediate challenges such as Brexit, global issues and potential vulnerabilities within Ireland’s enterprise base, it is important that the Region sustains what we have in the immediate term, transforms our enterprise base for longer term resilience while managing potential vulnerabilities.*”
- 6.14 The RSES requires that employment development should be suitably located in accordance with the settlement hierarchy set out in Chapter 3. The proposed location is suitable for employment development as it is adjacent to Ennis which is a ‘Key Town’. It is contiguous to the town’s footprints where it can be served by public transport, walking and cycling. The current proposal, consisting of electricity transmission infrastructure, will support employment development in the area, including the currently proposed data centre development.
- 6.15 RPO 46 relates to Digital and Physical Infrastructure in Rural Areas and states:

“It is an objective to expedite the completion of infrastructure servicing diverse settlements to support innovation, enterprise start-ups and competitiveness. This includes high quality broadband and mobile communication services to all rural locations, water and wastewater facilities for the growth of settlements. Sustainable energy supply, enhanced transport connectivity including rural public transport services and greenway walking and pedestrian corridors between settlements.”

Data Centres

- 6.16 The RSES sets out Guiding principles for investment prioritisation in placemaking for enterprise development. Including: “*Align to national strategy and approach for data centres – right location for use and energy demand.*”
- 6.17 Section 8.2 sets out detail in relation to Data Centres and states that “*The Government statement on the role of Data Centres in Ireland’s Enterprise Strategy published June 2018, advises that a plan-led and strategic approach should ensure suitable locations throughout Ireland are promoted for investment in data centres to minimise the need for deep reinforcements on the energy grid. This policy is reflected for the Region in the objectives set out on the next page.*”
- 6.18 Regional Policy Objective 219 is as follows:
- “It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.”*

6.19 Regional Policy Objective 222 is as follows:

“It is an objective to support the development of a safe, secure and reliable supply of electricity and to support and facilitate the development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid’s (2017) Grid Development Strategy (subject to appropriate environmental assessment and the planning process) to serve the existing and future needs of the Region and strengthen all-island energy infrastructure and interconnection capacity”.

6.20 The current proposals represent electricity transmission infrastructure, which will expand the capacity of the national grid in this location in order to deliver economic development in the area. The proposed development is in accordance with the foregoing Regional Policy Objectives.

Ennis

6.21 Ennis is characterised as a ‘key town’ and the accompanying text states:

*“The triangle of Limerick-Shannon-Ennis is recognised as the economic engine of the Mid-West. The M18 has created a greater synergy and connection between Ennis and Galway **and there is potential to attract economic drivers/ infrastructure such as data centres.** In this context, Ennis should build on its current talent and skills offer and attract a higher level education campus. The preparation of the ‘Ennis 2040 Economic and Spatial Strategy’ offers an opportunity to create a long-term strategy for the sustainable development of the town.”*

6.22 RPO 13 relates specifically to Ennis, which states:

“a. To support Ennis as a self-sustaining, regional economic driver and as a key location for investment choice in the Region, to support its enhanced development based on its strategic location relative to Limerick and Galway Cities and Shannon International Airport, as well as its role as a centre of employment and economic activity within the Region. The RSES recognises that this should be supported and enhanced through initiatives such as the Atlantic Economic Corridor;”

6.23 The subject development comprises a unique proposition in the region, it will strengthen the area’s employment base while contributing to the economic strategy for the region and directly align with the recognised potential of Ennis as an appropriate location for data centre development under the RSES. The construction and operation of the facility will require a broad range of skills and professions, providing an attractive employment opportunity for highly skilled workers in the area. The current electricity transmission infrastructure application will support the delivery of this new employment generating development in line with the objectives of the RSES for the area.

6.24 The proximity of Ennis and the national road and electricity networks mean the proposed location is highly suitable for the currently proposed data centre use and in proportion to the area. The proposed transmission infrastructure will support this intended use.

6.25 Having regard to the above, the RSES clearly supports the development of data centres and associated energy infrastructure in the Southern Region which can further strengthen and diversify the local economy and larger scale economic networks such as the AEC. The proposed development is therefore considered to be wholly in accordance with this key regional planning policy document.

- 6.26 In response to the above it is considered that the proposed transmission infrastructure is required to facilitate significant economic infrastructure in the area. It is also considered that the route for the proposed transmission line has been identified with due consideration for social, environmental and cultural impacts (as set out in detail within the EIAR). The design selected has been predicated on the need to minimise environmental impact and includes mitigation measures as set out within the EIAR submitted herewith. The design of the project has been undertaken in accordance with best practice by the project engineers.

7.0 LOCAL PLANNING POLICY

Clare County Development Plan 2017-2023

- 7.1 This proposed development comprises of development within the functional area of Clare County Council. The proposed development is subject to the Clare County Development Plan 2017-2023. The following sections outline how the proposed development is in compliance with the relevant policies and objectives contained within the Development Plan.

Variation No. 1

- 7.2 The Members of Clare County Council adopted Variation No.1 to the Clare County Development Plan 2017-2023 on 11th March 2019. The reason for the Variation is to give effect to the Government Policy on the Development of Data Centres in Ireland by identifying in a plan led manner the preferred location of a Data Centre in County Clare.

- 7.3 The Variation provided for the following changes:

In regard to Volume 1 - Written Statement of the Clare County Development Plan 2017-2023 aims:

“To incorporate the use and development of data centres and power generating infrastructure into the enterprise zoning definition, the following additional text has been added into the zoning objective for enterprise as set out in Chapter 19.

Lands zoned for ‘enterprise’ shall be taken to include the use and development of land for high end research and development, business science and technology-based industry, financial services, call centres/telemarketing, software development, data centres, enterprise and incubator units, small/medium manufacturing or corporate office in high quality campus/park type development.

It is intended that such developments will have high quality architectural design and landscaping. This zoning allows for ‘walk to’ support facilities such as canteen, restaurant or crèche services which are integrated into employment units and are of a nature and scale to serve the needs of employees on the campus.

This zoning also allows for associated power generating infrastructure as well as transportation infrastructure such as car and bicycle parking and bus stop shelters.”

- 7.4 Overall, the proposed development will achieve the goal of the Variation by supporting the delivery of a data centre campus (by serving the location with the required transmission connections) thus supporting both the Government Policy Statement on the Development of Data Centres and also the Clare County

Development Plan and national policy in relation to the economic development of the county.

Volume 3 (a) - Ennis Municipal District

- 7.5 Within Volume 3 (a) in regard to “Ennis Municipal District – Written Statement and Settlement Plans”, the Variation amended the zoning objective for the lands previously identified in the Ennis Settlement Plan as ‘Industrial IND1’ to ‘Enterprise ENT3’ at Toureen and extended the ‘Enterprise ENT3’ zoning objective to 45 ha, onto lands previously identified as being in the open countryside.
- 7.6 The Variation has also zoned an area of approximately 10 hectares as Buffer Space at Toureen and this amended zoning map is set out in Figure 7.1 below.

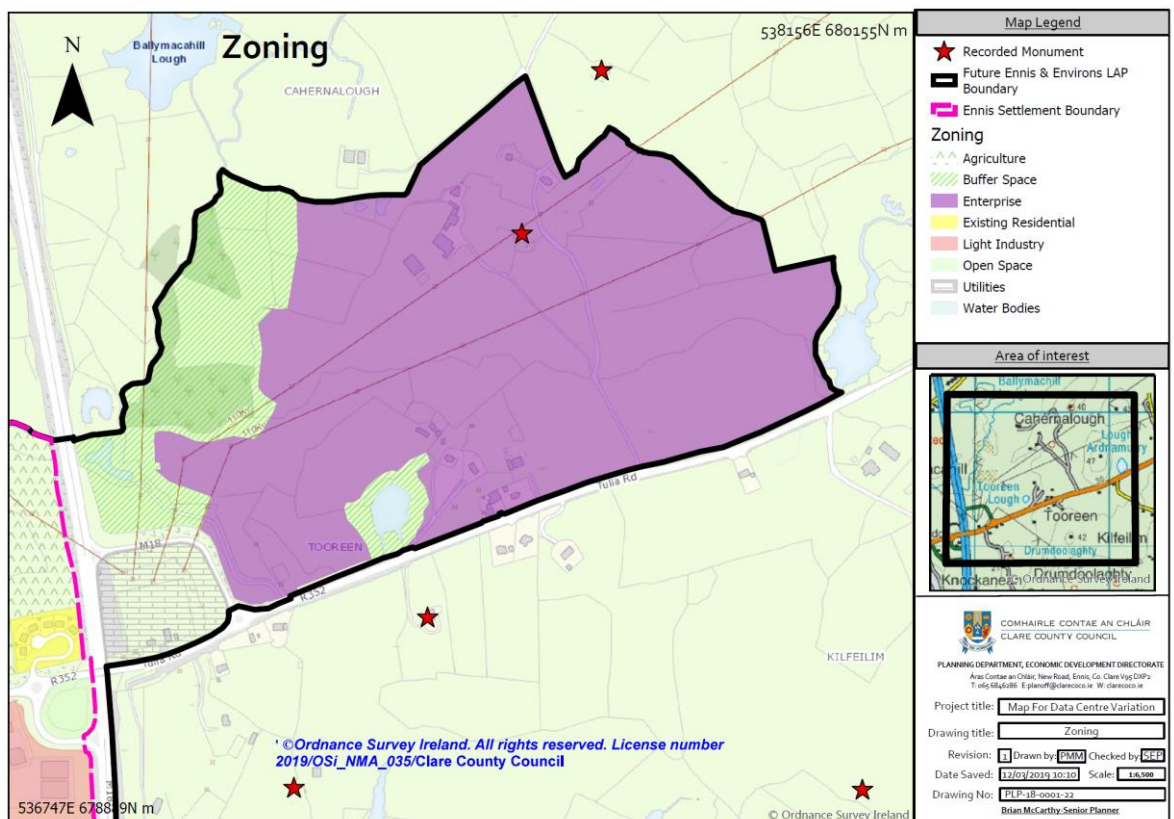


Figure 7.1: Data Centre Variation Zoning Map (Source: CCC, 2021).

- 7.7 Section 1.5.2 associated with the subject lands set out text associated with the extended site identified as Enterprise (ENT3) which reads as follows:

“A site located in the Toureen area on the eastern side of Ennis has been zoned for enterprise use (ENT3). Project Ireland 2040 - National Planning Framework sets out the strategic importance of data centres in Irelands’ Enterprise Strategy. Having regard to the Government Statement on The Role of Data Centres in Ireland, which in particular recommends having a plan-led approach to data centres, this 55ha site has been identified and zoned as Enterprise (45ha) and for Buffer Space (10ha) with a specific use for a Data Centre Campus due to its proximity to the electricity sub-station, its proximity to the M18 motorway and adjoining regional road network, the location of the site relative to the Gas Pipeline, the availability of Dark Fibre and the proximity of the site to Shannon International Airport and Ennis Town.”

7.8 Section 2.13.5, in relation to Toureen, states:

“Site ENT3 Toureen:

Project Ireland 2040 -National Planning Framework sets out the strategic importance of data centres in Irelands’ Enterprise Strategy. Having regard to the Government Statement on The Role of Data Centres in Ireland, which in particular recommends having a plan-led approach to data centres, this 55ha site has been identified and zoned as Enterprise (45ha) and Buffer (10ha) with a specific use for a Data Centre Campus due to; its proximity to the electricity sub-station; its proximity to the M18 motorway and adjoining regional road network; the location of the site relative to the Gas Pipeline; the availability of Dark Fibre and the proximity of the site to Shannon International Airport and Ennis Town.

This site is zoned to accommodate a Data Centre campus which consists of one or more than one structure, used primarily for the storage, management and dissemination of data and the provision of associated power electricity connections and energy generating infrastructure.”

7.9 As evident from above extract, the subject lands are zoned for enterprise use and have been identified to accommodate a Data Centre campus. This provides for one or more structures to be used primarily for the storage, management and dissemination of data and the provision of associated power electricity connections and energy generating infrastructure. The proposed development represents electricity infrastructure in accordance with the objectives for the lands.

7.10 Based on the contents of the above-referenced variation, the proposed electricity transmission development is primarily located on lands zoned for enterprise use. A short portion of the existing overhead lines to be removed traverses lands zoned as buffer space and lands zoned for utilities (within the existing Ennis Grid Substation). The proposed transmission line connections to the existing Ennis Substation will also be accommodated on public roads (not subject to a specific zoning objective) and zoned for utilities (within the existing Ennis Grid Substation).

7.11 While the development of ‘Utilities’ such as the electricity transmission infrastructure proposed is not listed as a use class under the zoning matrices of the Plan in Appendix 2, it is noted that the proposed development, which relates to the development of utilities infrastructure will accord with the main Enterprise zoning of the lands, which are identified for the delivery of a data centre development, which the current proposals will support. The works within the existing Ennis Substation will be located on lands zoned for Utilities, and will accord with that zoning, while the works on lands zoned as buffer space will relate solely to the removal of existing overhead lines and associated masts and therefore will accord with and enhance the nature of these lands as a buffer. The proposed development is fully in accordance with the zoning and planning policy context for the lands.

Development Management Standards

7.12 Chapter 17 sets out the Development Plan’s strategy in relation to ‘Design and Built Environment’. In accordance with the overall vision for the Plan, this chapter is based on the following strategic aims:

- *“To ensure that each structure or group of structures, whether in an urban or rural*
- *setting, will enhance the environment;*

- *To ensure that structures or groups of structures in urban areas are designed to create spaces between buildings which are attractive places for people to occupy;*
- *To ensure that structures or groups of structures in rural areas are designed to protect and enhance the quality of the landscape particularly in the case of extensions to, or reuse of, vernacular buildings;*
- *To ensure that each structure or group of structures is designed and sited to maximise conservation of energy, water and resources and to facilitate flexible and sustainable use.”*

7.13 The Development Plan notes that a high standard of design and finish is required for developments of this nature and that landscape plans will be required as part of applications. The current proposal demonstrates a good-quality architectural design executed by ARC MC Architects, which also tie-in to the data storage facility development on the adjoining lands and the landscape layout developed by Nicholas de Jong Associates landscape architects for the overall campus as part of the current application to Clare County Council.

7.14 We further note the provision of Appendix 1 of the Development Plan which sets out development Management Guidelines which note criteria, against which development proposals will be assessed. The proposed development accords with these criteria on the basis of the following:

- The subject site is appropriately zoned for the proposed development, with the substation to be delivered on lands zoned ENT3 under the Clare County Development Plan.
- The proposal allows for a campus style design, which will tie-in with the data storage facility development that is subject to a concurrent planning application.
- The proposed height of the development is no more than is necessary for the operation of the development and will not have any significant impact on adjoining land uses, or the amenity of the area, particularly having regard to the landscape screening and berms to be provided to the site boundaries. The proposed substation compound and buildings are also significantly set back from any adjoining properties, allowing for a significant landscaped buffer.
- The subject site is serviced to allow for the proposal, whilst the development in its own right will provide for the enhanced servicing of the area by providing for a new substation and associated electrical connections.
- The proposal provides for an adequate standard of accessibility.
- The current application is accompanied by a full Environmental Impact Assessment Report, which includes detailed assessments pertaining to noise and air quality.

8.0 ENVIRONMENTAL IMPACT ASSESSMENT AND APPROPRIATE ASSESSMENT


8.1 An Environmental Impact Assessment Report (EIAR) including a Non-Technical Summary has been prepared / coordinated by AWN Environmental Consultants and is submitted along with this application.

8.2 A Natura Impact Statement has been prepared by Scot Cawley, Consultant Ecologists, and is also submitted with this application.

9.0 CONCLUSION

- 9.1 This planning application relates to the provision of a 110kV GIS grid substation and underground transmission cable connections between the proposed 110kV grid substation and the existing ESB Ennis 110kV grid substation to the south west of the proposed grid substation site, and underground 110kV transmission lines from two dropdown towers connecting to the two existing overhead 110kV transmission lines traversing the north eastern part of the site.
- 9.2 This project 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 under Reg. Ref.: P21-757.
- 9.3 The proposal is in accordance with the policies and objectives of national and regional planning policy, and the Clare County Development Plan 2017-2023, including Variation no. 1 thereto.
- 9.4 It has been demonstrated within this report, as well as within the accompanying drawings, documents, and Environmental Impact Assessment Report and Natura Impact Statement that the proposal provides a suitable use of the subject lands.
- 9.5 If you require any further information, or clarification on the above, please do not hesitate to contact us.


Yours faithfully,



John Spain Associates

APPENDIX 1: EXTRACT OF BOARD CONFIRMATION THAT THE PROPOSED DEVELOPMENT CONSTITUTES STRATEGIC INFRASTRUCTURE DEVELOPMENT

Our Case Number: ABP-310507-21
 Your Reference: Art Data Centres Limited



RECEIVED

27 JAN 2022

John Spain Associates
 39 Fitzwilliam Place
 Dublin 2
 D02 ND61

Date: 26 January 2022

Re: Substation and associated grid connection
 Site at Tulla Road, Ennis, Co. Clare

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.

Attached is a list of prescribed bodies to be notified of the application for the proposed development.

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.

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.

If you have any queries in relation to the matter please contact the undersigned officer of the Board.

Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Teil Glao Áitiúil Facs Láithreán Gréasáin Ríomhphost	Tel LoCall Fax Website Email	(01) 858 8100 1890 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
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