

Great Island, Kilmokea, Co. Wexford

Proposed 110 kV substation and underground grid connection



Landscape & Visual Appraisal

FINAL REPORT January 2024





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Cover photo: View from the north-west of existing site and adjacent Great Island Power Station and the Greenlink UK-Ireland Interconnector.

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1. Introduction

Purpose of report

- 1.1 This report sets out a Landscape and Visual Appraisal (LVA) in support of a Planning Application for a proposed electrical installation consisting of a 110 kV substation and associated 110 kV underground grid connection to the existing Eirgrid (herein called the 'Proposed Development'), on land at Great Island, Kilmokea, Co. Wexford.
- 1.2 The primary purpose of the LVA is to identify any significant adverse effects that are predicted during the operational phase of the Proposed Development on the landscape and visual resources of the site and surrounding landscape. Where any adverse effects are identified, appropriate mitigation measures have been proposed, and where practicable, embedded within the final design.
- 1.3 The LVA has been undertaken by Douglas Harman Landscape Planning (DHLP), on behalf of Entrust Professional Services Ltd. Douglas Harman is a sole practitioner and a Chartered Member of the Landscape Institute (CMLI).

Overview of approach

- 1.4 The methodology of the LVA (see Section 2 for further details) is primarily based on the Guidelines for Landscape and Visual Impact Assessment¹ and other current best practice guidance where relevant. As an overview, the objectives of this are to:
 - describe the methodology and criteria used to inform the assessment process;
 - identify the landscape related policy context and associated guidance;
 - identify and assess the key landscape and visual baseline conditions and associated sensitivities;
 - identify design principles and other mitigation measures embedded into the design of the project to help minimise any likely adverse significant effects; and
 - identify and evaluate any residual landscape and visual effects, including direct and indirect, based on the worst-case parameters as currently known.
- 1.5 This LVA has been informed by a desk-based analysis of existing data and other information gathered through a field survey undertaken during November 2023. Based on a 5 km radial study area, it identifies the baseline against which the effects of the Proposed Development are assessed and concentrates on predicting the likely adverse effects during the operational phase. As detailed in the Methodology, the degree of significance (in context of material considerations) is also identified.
- 1.6 Although inter-related, landscape effects are assessed separately to the effects on views and visual amenity.
- 1.7 Landscape effects consider the fabric, character and quality of the site and surrounding landscape/seascape and are concerned with:
 - landscape elements (e.g. hedgerows, trees and woodlands);

¹ Landscape Institute and the Institute of Environmental Management and Assessment (2013), The Guidelines for Landscape and Visual Impact Assessment, version 3.

- landscape character (local and regional distinctiveness); and
- special interests and values (e.g. landscape designations, conservation areas and cultural associations).
- 1.8 Visual effects are primarily concerned with the changes in people's views through intrusion or obstruction and whether important opportunities to enjoy views may be improved or reduced.

Proposed Development

- 1.9 As detailed in the Planning Statement and illustrated in the Overall Site Layout Plan (see Drawing 05951-DR-360), the Proposed Development comprises of the following components:
 - a 110 kV tail-fed substation and underground grid connection measuring approximately 838 m in overall length;
 - 110 kV substation with transformer, house transformer, disconnect, individual current and voltage transformers, combined current/voltage transformer, surge arrestors, circuit breakers and cable sealing end;
 - a blastwall measuring 8.00 m in overall height;
 - 4no. lightning masts measuring 18.00 m in overall height;
 - palisade fencing measuring 2.60 m in overall height with pole-mounted security cameras and lamp posts;
 - an Eirgrid substation building with an overall footprint of approximately 180.00 m² with an overall height of 4.20 m, to be located at the western end of the substation area;
 - An IPP substation with an overall footprint of 132 m² and height of overall 4.20 m would be located at the eastern end;
 - a typical UGC installation would consist of standard ESB ducting details of the following 1no. trench (0.82 m wide; 1.31 m deep) measuring approximately 838 m in overall length to carry 3no. 160 mm power ducts and 2no. communication ducts and an ECC duct, connecting the proposed substation to an existing 110kV Eirgrid substation at Great Island;
 - a typical trefoil trench would be adapted to a flat formation to accommodate for any service crossings encountered along the route;
 - a typical width of trench for a flat formation trench would be approx. 1.60 m with varying depths; and
 - a temporary construction compound would be constructed within the site boundary for construction phase of the development, after which it would be removed.

Report sections

- 1.10 Following this introductory section, the LVA is structured as follows:
 - Section 2: LVA Methodology a description of the method and associated guidance used to inform the assessment process;
 - Section 3: Policy Context a summary of landscape related planning policies and associated guidance relevant to the Proposed Development;
 - Section 4: Baseline Assessment a description and analysis of the landscape and visual resource of the study area conducted through desk study and site survey;
 - Section 5: Design and Mitigation Strategy a summary of the design aims and objectives in response to key landscape and visual issues;

- Section 6: Assessment of Effects an assessment of the landscape and visual effects predicted during the operational phase at nine viewpoint locations and on other landscape and visual receptors in the wider study area; and
- Section 7: Conclusion a summary of the landscape and visual effects of the Proposed Development and associated Statement of Significance.

Supporting information

- 1.11 The following figures support of this LVA:
 - Figure 1: Bare earth ZTV;
 - Figure 2: Screened ZTV;
 - Figure 3: Landscape character with SZTV;
 - Figure 4: Historic features with ZTV;
 - Figure 5: Scenic routes, Norman Way, scenic views and Eurovelo cycle route with SZTV;
 - Figure 6: Viewpoint locations with SZTV; and
 - Figure 7: Viewpoint montages.

2. Methodology

Approach and Guidance

- 2.1 This LVA follows the approach as set out in the *Guidelines for Landscape and Visual Impact*Assessment (GLVIA) and other current best practice guidance where relevant. It aims to identify, predict and evaluate the key effects of the Proposed Development on the landscape and visual resources of the study area. In line with best practice, landscape and visual effects are considered separately throughout.
- 2.2 As a brief overview, the assessment involved a combination of desk study, computer analysis, field work and interpretation using professional judgement. The site and surrounding area have been visited to gain a clear understanding of the landscape and the likely effects of the Proposed Development. Fieldwork was undertaken during a period of good visibility during November 2023, by a Chartered Member of the Landscape Institute.

The Study Area and Viewpoint Selection

- 2.3 To ensure the extent of any potential adverse effects are fully considered, the assessment is based on an initial indicative study area radius of 5 km. In selecting assessment viewpoints, a map showing the zone of theoretical visibility (ZTV), based on computer manipulation of a digital terrain model, was prepared out 3 km, as illustrated in **Figure 1**. This indicates areas from which the Proposed Development may theoretically be seen.
- 2.4 In considering the coverage of woodland partly surrounding the site and areas of built development and other land cover in the wider landscape, a further screened ZTV (SZTV) analysis was undertaken (out to 3 km) to ascertain the likely screening effect of all landcover above 2 m. The SZTV, as illustrated in **Figure 2**, enabled the assessment to be focused upon those locations that are most likely to be affected in practice.

- 2.5 The ZTVs are based solely on topography (1 m Lidar data) and identify the maximum theoretical and likely actual visibility of the Proposed Development. When interpreting the ZTVs, it is important to bear the following points in mind:
 - the bare-earth ZTV accounts for ground topography on the basis of a model made from 1 m Lidar data in the form of 3D points data on a 1 m grid;
 - the bare-earth ZTV does not account for any other features, including infrastructure, woodland, trees and hedgerows, and existing built forms;
 - the ZTVs are based on a maximum building/infrastructure height of 18 m (to represent the height of the lighting columns) above the site level and a receptor viewing height of 1.6 m above ground level;
 - in Figure 2, obstructions were calculated by subtracting the LIDAR DSM from the LIDAR DTM and removing everything <2m;
 - as Figure 2 assumes all obstructions provide total screening, in areas of woodland close to the site, there might be visibility from parts of that woodland (if it's not dense) that is not shown on the ZTV. Although this may underestimate visibility, it is only likely to be from some localised accessible areas in close proximity to the site;
 - the map does not take account of screening effects provided by minor landforms, which are not contained within the digital terrain model;
 - the map does not take the orientation of the viewer into account, for example when travelling in a vehicle; and
 - the map does not convey the likely nature or magnitude of visual effects of the proposed development, which can only be determined by further assessment, including fieldwork.
- 2.6 As a result, the visibility shown on the ZTV map is more extensive than would actually be visible on the ground, but where the ZTV indicates no visibility, the Proposed Development would not be seen.
- 2.7 The viewpoints used for this assessment were selected according to the criteria set out in the best practice guidance where relevant. Note that not all these criteria necessarily apply to all viewpoints:
 - publicly accessible;
 - reasonably high potential number of viewers or being of particular significance to the viewer(s) affected;
 - range of viewing distances (i.e. short, medium and long-distance views) and elevations;
 - range of viewing experiences (i.e. static views, for example from settlements, recognised viewpoints, car parks or points along sequential views, for example from roads, walking and cycling routes);
 - range of view types, (e.g. panoramas, glimpses);
 - views with different extents of the development visible; and
 - locations with potential cumulative views of the proposed development and other relevant development(s).
- 2.8 Informed by desk and field work, the viewpoints were selected to offer the clearest view within the vicinity of the chosen point where potentially significant effects are likely to occur. Viewpoints have been excluded where the ZTV indicates that the Proposed Development would not be visible, or where the viewpoint is too distant for any potentially significant effects to occur.

Landscape Resources

- 2.9 Landscape resources within the study area that could be affected by the Proposed Development include:
 - physical resources, such as landform, landcover, tracks, watercourses, etc.;
 - landscape character types/areas;
 - landscape designations e.g. Distinctive Landscapes; amd
 - other important recreational, natural or cultural heritage interests that contribute to landscape character.
- 2.10 The Landscape Baseline Appraisal (see Section 4) establishes the physical components of the landscape that may be directly affected by the Proposed Development (i.e. those within the site), as well as the landscape resources within the wider study area from which the Proposed Development could be visible. The ZTV analysis and field assessment studies have been used to check the potential visibility of the landscape resources within the study area.

Visual Resources

Visual receptors are defined as those individuals or groups of people within the study area who may have views towards the site and are likely to be affected by the Proposed Development. The Visual Baseline establishes the parts of the study area from which the Proposed Development may be visible; the viewpoints from which different groups of people may experience views of the proposed development, and the approximate number of people who will be affected by the changes in views or visual amenity.

Assessment of Predicted Effects

- 2.12 Having established the baseline conditions, the assessment of landscape and visual effects was then undertaken. Initially, the assessment focused on a Viewpoint Assessment to establish the potential effects on the landscape and visual resources experienced at specific locations. The field work was informed by a range of maps, photographs, the ZTV analysis and computer-generated photomontages.
- 2.13 Existing and predicted views from each of the viewpoints were assessed in order to identify, predict and evaluate the potential effects arising from the Proposed Development. Wherever possible, identified effects are quantified and the prediction of magnitude and assessment of significance of the landscape and visual effects is based on pre-defined criteria in order to provide greater consistency. Note that these criteria are not used as prescriptive tools, and the methodology and analysis of potential effects at any particular location allows for the exercise of professional judgement. In practice, all factors need to be considered in combination and applied using careful judgement, particularly in terms of the relative weight given to each. In some instances, one criterion may be considered to have a determining effect.
- 2.14 In addition to the Viewpoint Assessment field work was also undertaken to inform the general assessment of the landscape and visual receptors as identified in the Baseline Assessment. The findings of the detailed Viewpoint Assessment were also used to inform the general assessment of landscape and visual effects within the wider study area.
- 2.15 The criteria used in this assessment have been based upon paragraph 3.26 of the GLVIA, which recommends that factors affecting the sensitivity of the receptor (susceptibility and value), and those affecting the magnitude of the effect (size, extent, duration and reversibility) are each assessed separately. The description of effects takes account of changing seasonal conditions

and the effects of on-going changes to the landscape over time, such as the predicted growth of vegetation or woodland operations.

Duration and Reversibility of Effects

2.16 Effects due to construction therefore considered to be short-term, whilst effects arising during the operational phase would be long-term, albeit largely reversible.

Significance of Effects

2.17 Similar to an EIA report, the degree of significance (in context of material considerations) of effects on landscape resources and visual receptors is determined from a combined evaluation of the sensitivity of the receptor and the magnitude of the effect.

Determining Significance of Effects

2.18 The following table shows how the significance of the landscape/visual effect increases from negligible to substantial with increasing receptor sensitivity and with greater magnitude of effect. The most substantial effects would occur where a receptor of highest sensitivity is affected by an effect of very large magnitude. Conversely, negligible effects would result where a receptor of lowest sensitivity is affected by an effect of very small magnitude. Between these two extremes the significance of effect would vary continuously and the significance of any one effect is determined by professional judgement, taking into account all the relevant factors.

Table A: Significance of Effects

	Sensitivity of receptor		
Magnitude of effect	High	Medium	Low
Very large	substantial	major	moderate-major
Large	major	moderate-major	moderate
Medium	moderate-major	moderate	moderate-minor
Small	moderate	moderate-minor	minor
Very small	moderate-minor	minor	negligible

- 2.19 The assessment of significance of the landscape and visual effects is based on pre-defined criteria. The following assessment tables within this Section provide a framework that helps to ensure consistency and transparency in the decision-making process but are not used as prescriptive tools, allowing for the exercise of professional judgement in determining sensitivity, magnitude and significance.
- 2.20 The assessment of general effects and the detailed viewpoint assessments provide further details of how the significance of effects has been determined in each case where relevant. Where overall effects are predicted to be moderate-major, major or substantial, these are considered to be **significant** in the context of material considerations (shaded grey in Table A).

Positive and Negative Effects

2.21 Negative effects result in a direct loss of physical resources, weaken key characteristics, negatively affect the integrity of landscape designations or result in a reduction in visual amenity. Positive effects occur where a development replaces physical resources, strengthens the landscape characteristics or improves the visual amenity. Effects may also be neutral, where there is no net effect on the landscape or visual resources.

- 2.22 Changes to undeveloped rural landscapes, for example, that involve the construction of engineered man-made objects of a modest or large-scale generally have a negative effect on character, although this effect can be mitigated by the contribution to the landscape that a development may make in its own right, usually by virtue of good design, even if it is in contrast to the existing character.
- 2.23 Changes to views and visual amenity can be more subjective, in that people may like or dislike what they see, or may be used to seeing nearby development of similar nature and therefore more ambivalent about them. Whether the visual effect is perceived as positive or negative depends upon individual preferences, the context in which a person experiences the view, and upon their attitude towards this type of development in general. It should be recognised therefore that some people may be more neutral or ambivalent in their opinions about the proposed changes in views.

Direct and Indirect Effects

2.24 Direct effects result directly from the Proposed Development itself, such as the loss of woodland to development. Indirect effects are consequential changes resulting from a development, such as changes in rural character of a landscape character type/area that would result from the introduction of an industrial development located in its setting, for example.

Acceptability of Effects

- 2.25 In theory, a proposed development may be considered by some to be an unacceptable intrusion in the landscape. but could be seen as an essential contributor to the local economy. It is not the effects on the landscape that change but the judgements about the acceptability of those effects.
- 2.26 Acceptability is therefore a matter for the decision maker to determine, taking into account the overall balance of environmental benefits and effects of the proposed development, on the basis all of the available evidence. The GLVIA notes in paragraph 2.17 that "it is for the competent authority to judge the balance of weight between policy considerations and the effects that such proposals may have."
- 2.27 There are no specific accepted, legal requirements or published criteria to use as a basis on which to judge whether a change in the landscape, or in a view, is acceptable. Nor is there any published guidance on establishing a threshold, beyond which further changes should be prevented. This LVA sets out, in an impartial way, the nature and extent of landscape and visual effects that are likely to result from the proposed development and does not draw conclusions as to acceptability.

Landscape Effects

- 2.28 Landscape effects arise from changes to the physical components of the landscape, its character and how this is experienced. The GLVIA indicates that landscape receptors need to be assessed firstly in terms of their sensitivity, combining judgements of their susceptibility to the type of proposal and the value attached to the landscape.
- 2.29 Best practice guidance Topic paper 6 (Scottish Natural Heritage and Countryside Agency 2004, page 3) states that "Sensitivity is related...to landscape character and how vulnerable this is to change...Landscapes which are highly sensitive are at risk of having their key characteristics fundamentally altered by development, leading to a change to a different landscape character i.e. one with a different set of key characteristics. Sensitivity is assessed by considering the physical

- characteristics and the perceptual characteristics of landscapes in the light of particular forms of development."
- 2.30 These aspects of sensitivity distinguish one Landscape Character Type (LCT) from another, but it is important to recognise that sensitivity can also vary across a particular LCT. Some landscape assessments provide information concerning the sensitivity of LCTs to different types of development although in the case, no information is available.

Landscape Susceptibility

2.31 This LVA therefore includes an assessment of factors affecting the susceptibility of the landscape to the changes brought about by the Proposed Development. The following Table sets out attributes of landscape character that have been considered in assessing susceptibility, adapted from best practice guidance.

Table B: Landscape Susceptibility

Susceptibility	Lower	Higher
Scale	Large-scale or vast	Intimate or small-scale
Landform	Flat, smooth, regular, rolling, gently undulating, or flowing landform	Dramatic, steep, mountainous, rugged, or complex landform with prominent peaks or ridges
Diversity	Simple or uniform, e.g. Moorland or forestry plantations	Complex or diverse, variety of land cover
Landcover pattern and line	Sweeping lines, or indistinct or irregular patterns	Strong and regular linear features, geometric or rectilinear patterns, or planned landscapes
Settlement and infrastructure	Frequent masts, pylons, industrial elements, modern buildings, infrastructure, settlements or main roads	No obvious modern settlement, buildings, infrastructure or main roads
Perception of landscape change	Modern or clearly dynamic showing obvious land use changes	Little or no land use changes, or with obvious historical continuity
Tranquillity	Busy, with evidence of human activity, noise or regular movement	Remote or tranquil with strong sense of stillness or solitude
Settings and skylines	Low lying areas that do not tend to feature in views from populated areas or main transport routes	Areas with topographic features that define the setting, backdrop, outlook or skyline of populated areas or main transport routes

Landscape Value

2.32 The assessment takes as its starting point the recognised value of the landscape, for example, as identified by landscape designations. In addition, the assessment considers the following factors, in order to identify how the relative landscape value may vary at the local scale. The factors set out in the following Table are adapted from paragraphs 5.28-5.31 of the GLVIA and other guidance (Scottish Natural Heritage and Countryside Agency 2004 Figure 1b).

Table C: Landscape Value

Factors affecting Landscape Value		
Condition The degree to which the landscape is unified or intact. /intactness		
Scenic quality	The extent to which the landscape appeals, primarily to the visual senses.	

Factors affecting Landscape Value		
Perceptual aspects	The degree to which the landscape is recognised for perceptual qualities, such as its sense of remoteness.	
Rarity	The presence of unusual elements or features in the landscape or the presence of an unusual LCT.	
Representativeness	The degree to which the landscape contains important examples of elements or features, or is of a particular character that is considered important.	
Conservation interests	Cultural or natural heritage interests that add to the value of the landscape and/or are of value in themselves.	
Recreational value	Evidence of recreational activity where experience of the landscape is important, such as recognised scenic routes.	
Associations	Recognised cultural or historical associations that contribute to perceptions of the natural beauty of the landscape.	

Magnitude of Landscape Effects

2.33 Each effect on landscape receptors is also assessed in terms of its size or scale, the geographical extent of the area influenced and its duration and reversibility. This is judged using the factors set out in the following Table.

Table D: Size / Scale of Landscape Effect

Class	Criteria
Very large	Highly obvious change, affecting the majority of the key characteristics and defining the experience of the landscape.
Large	Obvious change, affecting many key characteristics and the experience of the landscape.
Medium	Noticeable but not obvious change, affecting some key characteristics and the experience of the landscape.
Small	Minor change, affecting some characteristics and the experience of the landscape slightly.
Very small	Little perceptible change.

2.34 The geographical area over which the landscape effects would be experienced (regional, local or restricted to the site) is also taken into account. This is distinct from the scale of the change. For example, a small change to the landscape over a large geographical area could be comparable to a very large change affecting a much more localised area.

Visual Effects

2.35 Visual effects result from the changes in the content or character of views and visual amenity, due to changes in the landscape. The assessment of visual effects takes account of both the sensitivity of the visual receptors (individuals or groups of people) and the magnitude of the change on their views and visual amenity.

Sensitivity of Visual Receptors

2.36 The sensitivity of each visual receptor is assessed in terms of susceptibility to change in views or visual amenity as well as the value attached to particular views. People generally have differing responses to views and visual amenity depending on the context (e.g. location, time of day, degree of exposure), and their purpose for being in a particular place (e.g. whether for

recreation, travelling through the area, residence or employment). Susceptibility to change is therefore a function of:

- the occupation or activity of people experiencing the view or visual amenity; and
- the extent to which their attention or interest may be focused on the landscape around them
- 2.37 The following table sets out some examples of the relative susceptibility of some of the key visual receptors within the Study Area. Note that different individuals or groups of people at one location may have different levels of susceptibility.

Table E: Examples of Susceptibility to Change in Views or Visual Amenity

High	Medium	Low
Residents within dwellings or curtilage.	People at their place of work, where views are an important part of the setting, such as a countryside ranger.	People at their place of work whose attention is likely to be focused on their work or activity, not on their surroundings.
Users of recognised footpaths paths, whose attention or interest is likely to be focused on the landscape or on particular views.	, 3	People engaged in active outdoor sports or recreation and less likely to focus on the view.
Road and ferry users where appreciation of the landscape is an important part of the experience, such as recognised scenic routes.	Road users likely to be travelling for other purposes than just the view, such as commuter routes.	
Visitors to heritage assets or to other attractions, such as recognised beauty spots, where views of the surroundings are an important part of the experience.		

- 2.38 Judgments are also be made about the value attached to views, based on the following considerations:
 - recognised value such as views from heritage assets or designated landscapes;
 - inclusion in guidebooks or on tourist maps, the facilities provided for visitors or references to the view in literature or art; and
 - the relative number of people who are likely to experience the view.
- 2.39 People that are more susceptible to change at viewpoints of recognised value are more likely to be significantly affected by any given change.

Magnitude of Visual Effect

- 2.40 The magnitude of the visual effect resulting from the Proposed Development is evaluated in terms of size or scale, geographical extent, duration and reversibility. This is based on the interpretation of a combination of a range of factors, described in the following Table. Some of these are largely quantifiable and include:
 - distance and direction of the viewpoint from the proposed development;
 - extent of the proposed development visible from the viewpoint;
 - scale of the change in the view, including the proportion of the field of view occupied by the proposed development;

- degree of contrast with the existing landscape elements and characteristics in terms of background, form, pattern, scale, movement, colour, texture, mass, line or height;
- the relative amount of time during which the effect would be experienced and whether views would be full, partial or glimpses; and
- orientation of receptors in relation to the proposed development, e.g. whether views are oblique or direct.

Table F: Size / Scale of Visual Effect

Class	Description	Appearance in field of vision
Very large	Dominant	 commanding, controlling the view creation/removal of a dominant visual focus highly uncharacteristic elements or pattern introduced most of the view affected
Large	Prominent	 major change to the view, striking, sharp, unmistakable, easily seen creation/removal of major visual focus uncharacteristic elements or pattern introduced large proportion of the view affected
Medium	Conspicuous	 noticeable change to the view, distinct, clearly visible, well defined creation or removal of a visual focus that may compete some elements of the Development fit the existing pattern some of the view affected
Small	Apparent	 minor change to the view but still evident little change to focus of the view fits intrinsic visual composition little of the view affected
Very small	Inconspicuous	no real change to perception of the viewweak, not legible, hardly discernible

3. Policy Context

Wexford County Development Plan 2022-2028

The local development plan relevant to this application consists of the Wexford County Development Plan 2022-2028, as adopted in 2022. Presented in 13 Volumes, Volumes 1 and 2 sets out the policies, objectives and development management standards which will guide development in the County during the plan period. Within this context, the material considerations relevant to the landscape and visual interests of the Proposed Development are as follows:

Power Transmission: Objective PTO4

3.1 In relation to power transmission proposals, it is the objective of the Council:

"To support the upgrade of existing and development of new electricity substations in locations that do not have a significant negative impact on nearby residents and are subject to landscaping screening."

Landscape and Green Infrastructure: Objective L01

3.2 As detailed in Chapter 11 of the Plan, L01 states that it is the objective of the Council:

"To have regard to the Landscape Character Units and their assigned Landscape Sensitivity, the Draft Landscape and Landscape Assessment-Guidelines for Planning Authorities (2000) and any updated versions of these guidelines published during the lifetime of the Plan, and any National Landscape Character Assessment prepared when assessing planning applications or when carrying out local authority own development."

Landscape and Green Infrastructure: Objective L04

3.3 With regard to landscape siting and design, LO4 states that it is the objective of the Council:

"To require all developments to be appropriately sited, designed and landscaped WCDP 2022 - 2028 Landscape and Green Infrastructure 479 having regard to their setting in the landscape, ensure that any potential adverse visual impacts are minimised and that natural features and characteristics of the site are retained."

Landscape and Green Infrastructure: Objective L06

3.4 Concerning visual considerations, L06 states that it is the objective of the Council:

"To ensure that developments are not unduly visually obtrusive in the landscape, in particular, in or adjacent to the Upland, River Valley, Coastal or Distinctive Landscape Character Units."

Landscape and Green Infrastructure: Objective L07

3.5 L07 states that it is the objective of the Council:

"To ensure that, where a development will have a negative impact in the Upland, River Valley, Coastal, or Distinctive Landscape Character Unit, an overriding need is demonstrated for that particular development and ensure that careful consideration is given to site selection. The development should be appropriate in scale and be sited, designed and landscaped in a manner which minimises potential adverse impacts on the subject landscape."

Landscape and Green Infrastructure: Objective L11

3.6 Further to visual considerations, L11 states that it is the objective of the Council:

"To protect views worthy of protection, including views to and from the sea, rivers, landscape features, mountains, tourism sites and landmark structures such as bridges and urban settlements from inappropriate development that by virtue of design, scale, character or cumulative impact would block or detract from such views".

Landscape and Green Infrastructure: Objective L12

3.7 Furthermore, Objective L12 states:

"To protect planned views and vistas, such as those that might be associated with planned settlements, heritage properties and monuments and ensure that new development does not detract from such views as may be identified within towns, formal settings and designated landscapes. In evaluating planning applications for development in the foreground of such views and vistas, consideration shall be given to the effect such development may have on the view or prospect."

Landscape and Green Infrastructure: Objective L13

3.8 In relation to landscape qualities, L13 states that it is the objective of the Council:

"To consider the special qualities of the landscapes listed in Section 4.0 Other Landscape Considerations in Volume 7 Landscape Character Assessment when assessing development proposals in these areas. In assessing impacts the Council will consider the specific landscape qualities for which they have been designated."

Landscape and Green Infrastructure: Objective L13

3.9 Objectives L13 then goes on to state:

"To adopt a presumption against developments which are located on elevated and exposed sites and where the landscape cannot accommodate such development with appropriate mitigation."

Landscape and Green Infrastructure: Objective L16

3.10 Finally in relation to Landscape and Green Infrastructure considerations, *L16* states that it is the objective of the Council:

"To require Landscape and Visual Impact Assessment Reports to be submitted for developments which may have a significant negative impact on the landscape."

Heritage and Conservation: Objective AH01

3.11 With regard to landscape-related heritage interests, AH01 states that it is the objective of the Council:

"To conserve and protect archaeological sites, monuments (including their settings), underwater archaeology and objects including those listed or scheduled for inclusion on the Record of Monuments and Places and/or the Register of Historic Monuments or newly discovered sub-surface archaeological remains."

Heritage and Conservation: Objective AH07

3.12 Objective AH07 then goes on to state:

"Protect historic and archaeological landscapes, including battlefields, and promote access to such sites provided that this does not threaten the feature."

Heritage and Conservation: Objective BH09

3.13 In relation to built heritage, BH09 states that it is the objective of the Council:

"To protect, maintain and enhance the established character and setting of vernacular buildings which are worthy of protection or have architectural heritage value, farmyards and settlements where they make a positive contribution to the built heritage and encourage the re-use and sensitive refurbishment of vernacular buildings using appropriate design and materials and having regard to best practice conservation guidelines."

Recreation and Open Space Strategy: Objective ROS50

3.14 In relation to Public Rights of Way, ROS50 states that it the objective to:

"To ensure that development does not impinge on public walking routes and public rights of way, particularly those at the seashore, mountain, lakeshore, riverbank or other places of natural beauty or recreational activity."

Summary of landscape policy context

- 3.15 The Wexford County Development Plan aims to ensure that the character, quality and diversity of the natural and cultural landscape of the County is protected and enhanced. Consequently, the landscape-related policy framework sets out a clear suite of criteria in which to assess the landscape and visual effects of the Proposed Development, in the context of wider social and economic material considerations. In summary therefore, the Proposed Development should:
 - be sensitively sited with a design and layout that positively integrates with its local landscape context:
 - conserve and enhance the character and special qualities of the landscape, particularly any Distinctive Landscapes;
 - protect the qualities and landscape setting of designated heritage assets;
 - Protect important trees, woodlands or hedgerows; and
 - not be visually intrusive, whilst protecting the important views and visual amenity of residents, and users of roads, Public Rights of Way and other important recreational routes.

4. Baseline Appraisal

4.1 The Baseline Appraisal establishes the existing landscape and visual resources against which the effects of the Proposed Development are predicted. It describes the site and its setting, including landscape character and any designated landscapes in the wider landscape, along with an assessment of sensitivity to change. Visual receptors such as residents, road users and those undertaking recreational activity, are also assessed. Following on from this, a selection of viewpoints are then identified to help inform the subsequent assessment of landscape and visual effects (see Section 6).

Overview of site and surrounding landscape

- 4.2 The Site of the Proposed Development, which measures 2.58 ha in area, is located to the east of Great Island Power Station and immediately to the north of the Greenlink Interconnector converter station building and associated development that is currently undergoing construction. The small liner settlement of Fishertown is located approximately 2.3 km to north and the village of Campile 2.9 km to the east.
- 4.3 The Site slopes south-north, where the existing highest level of 22 m ASL is in the south-west of the Site, dropping to 5 m ASL in the north-east. The Site is characterised as rough grassland with encroachment of brambles and scrub, bounded by hedgerows on the northern and eastern boundaries. Access to Site is gained from the L4033 (entrance road to Great Island Power Station) that is shared with Greenlink Interconnector, past the Siemens temporary construction compound.
- 4.4 Located approximately 700 m to the east of the Barrow River and associated bridge, the wider landscape setting is characterised by a river valley landscape that exhibits a low level of settlement dispersal, typified by a pattern of small villages, and dispersed farmsteads and dwellings nestled within rural farmland, connected by a relatively dense network of rural roads and access tracks. Low lying hills rising above the Barrow River to the west and more pronounced uplands to north-east of the study area provide a sense of wider containment to the river valley landscape.

4.5 The low-lying river valley landscape exhibits a distinctive historic and rural character and within the uplands, the landscape has an exposed character with a sense of remoteness and tranquillity. From within the lower-lying landscape, views tend to be focused along the river corridor and towards the backdrop of uplands. Located approximately 6.8 km to the north-east of the Site, the distinctive profile of Slieve Coillte also forms an important visual focus.

Landscape character

4.6 Landscape character within the study area has been mapped and described based on information contained within the Volume 7 of the Wexford County Development Plan and as illustrated in **Figure 3**, the site of the Proposed Development is located within the River Valley LCU (Landscape Character Unit).

Barrow River Valley LCU

- 4.7 As detailed within the Council's Landscape Character Assessment, the *Barrow River Valley* LCU shares similar characteristics to that of the *Lowlands* LCUs but exhibit a more scenic appearance due to the presence of the rivers and their associated topography, and riparian and woodland habitats. This unit is noted as being sensitive to development.
- 4.8 In relation to the Lowland LCU (which the study notes shares similar characteristics to the River Valley LCU, the study notes:

"The Lowlands LCU is generally made up of gently undulating lands and relates to extensive areas of the county. The slopes and topography in this unit are shallower. There are generally higher levels of population and more intensive agriculture. Agricultural lands tend to be characterised by views across larger fields as a result of the generally low well-trimmed hedges. This landscape unit hosts the principle towns (except where transacted by River Valleys) and major infrastructure such as the main roads and railways. There are a number of prominent hills within the Lowlands LCU which provide more enclosure and 'punctuation' within the overall landscape. The predominant agricultural use of most of the Lowlands LCU is expected to continue due, for the most part, to the high quality and fertility of the soils. Intensification of agricultural practices and expansion of urban settlements will be factors of change in this landscape. The Lowlands LCU generally has characteristics which have a higher capacity to absorb development without it causing significant visual intrusion although, care still needs to be taken on a site by site basis, particularly to minimise the risks of developments being visually intrusive. To the north and to the south-west of the lowlands there are transitional areas where this landscape unit meets the Uplands LCU and the higher elevations adjacent to the Barrow River Valley. To the north much of the mountain and hill peaks of the Blackstairs and Uplands LCU are inter-visible. To the south-west this land rises towards some notable peaks in the New Ross district. These parts of the lowlands have lower population densities and are more sensitive than the rest of the lowlands."

Barrow River Valley sensitivity

4.9 River Valley landscapes are classified as having a <u>moderate-high</u> sensitivity. In practice, this means that development has the potential to have significant individual or cumulative impacts. Applications for development in these areas must therefore demonstrate an awareness of these inherent limitations by having a very high standard of site selection, siting layout, selection of materials and finishes. Development in these areas which is likely to have an individual or cumulative visual impact on the landscape will only be permitted where the applicant has demonstrated an overriding need for the development, including transport and energy infrastructure, in the proposed location.

Uplands LCU

- 4.10 As illustrated in Figure 3, the wider study area within Wexford County to the east and north-east of the Site is characterised by the *Uplands* LCU. This landscape is mainly typified by areas of higher ground, with some variations within, and relates to the north and west of the county. The higher ground has more rainfall, wind and poor drainage with a limited range of vegetation and land use. At the higher reaches, agriculture is generally low intensity with stock rearing, forestry plantations and some areas of transitional vegetation. Afforestation may become a more dominant land use in these areas in the future.
- 4.11 On lower ground, fields are larger with low hedges and scattered smaller trees. The land is mostly used for stock rearing or mixed agricultural use. Some coniferous forestry, deciduous forestry and transitional woodland on steep slopes can be found within these areas. Recently constructed wind farms have become a feature in this landscape.
- 4.12 This landscape contains elevated and steeper land, ridges and skylines, which are prominent in the overall landscape, and which are generally more sensitive to development. As such, landscape sensitivity is assessed as <u>high</u>.

Kilkenny Landscape Character Assessment

- 4.13 Within Kilkenny County, landscape character is mapped and described based on information contained with the Kilkenny Landscape Character Assessment, 2003. This identifies Upland Areas, Lowland Areas, River Valleys and Transitional Areas. However, as this publication is not available on the Council's website, these areas have not been mapped in Figure 3. Nonetheless, it is assumed that the wider study area to the west of the site is either characterised by upland and/or river valley areas. Either way, it is of note that as illustrated in **Figure 4**, the east facing slopes and summits of the hills that contain the River Barrow are identified as Scenic Views.
- 4.14 In recognition of these Scenic Views, the Landscape Character Assessment highlights the special landscape value of several of the Landscape Character Areas, in particular Brandon Hill Uplands and the River Valley Areas of the Rivers Nore, Barrow and Sui. These areas have been identified as being highly scenic and visually pleasing, and as having significant visual amenity value and tourism potential within the county. As such, landscape sensitivity is assessed as <u>medium-high</u>.

Summary of LCU sensitivity

4.15 To be considered as part of the subsequent appraisal of effects, the following table sets out the sensitivity of all LCUs within the zone of theoretical visibility (see Figure 2).

Table 1: LCU sensitivity

LCU	Sensitivity	
Wexford County		
Barrow River Valley	Medium-high	
Uplands	High	
Kilkenny County		
Uplands/River Valley	Medium-high	

Landscape designations

4.16 There are no nationally important landscape designations within the study area and at a local level, there are no *Distinctive Landscapes* within the 5 km study area; the nearest *Distinctive Landscape*, namely Slieve Coillte, is located approximately 6 km to the north-east. Although this is beyond the study area, given its landscape and visual importance, a viewpoint assessment from the summit of this landscape has been undertaken (see section

- 4.17 n 6). The sensitivity of this landscape is assessed as <u>high</u>.
- 4.18 Although not specifically landscape designations, the landscape setting of nearby National Monuments, Recorded Archaeological Sites and Monuments, and Protected Structures, as mapped in **Figure 4**, are also considered. Given their national/regional importance, their landscape setting is assessed as <u>high</u>.
- 4.19 The following table evaluates the landscape designations within 6 km and the setting of cultural/historic features within approximately 2 km to be considered as part of the assessment of effects.

Table 2: Landscape designations

Designation	Summary of Qualities/Description	Sensitivity
Slieve Coillte Distinctive Landscape	Located approximately 6 km to the north-east of the Site, the Slieve Coillte Distinctive Landscape is located within the Uplands LCU. The hill is the highest point on the Hook peninsula, with an elevation of 268.5 metres. The summit is popular with hillwalkers, with thousands of people climbing the mountain every year. A 3 km road leads to a viewpoint on the summit. The road is accessible by car, so the view from Slieve Coillte can also be enjoyed without a walk to the top. Starting from the viewpoint is a 1.3 km circular track that is also suitable for inexperienced walkers. On the south side of the hill is the John F. Kennedy Arboretum with approximately 4,500 species of trees and shrubs on 620 acres. On a good day the whole of the Hook peninsula can be overseen, up to the 12th Century Hook lighthouse on Hook Head, one of the oldest operational lighthouses in the world. Villages around Slieve Coillte include New Ross, Slaught, Cassagh, Gusserane, and Campile,	High
Dunbrody Abbey National Monument	This National Monument is a Cistercian house located just over 1.6 km to the east of the Proposed Development. It sits on low-lying land, on a spur of land overlooking the River Campile. The monument is an impressive complex of stone buildings centred around a cloister with the church to the north, while the eastern range, houses the sacristy, chapter room, parlour, undercroft with dormitories above and the southern range the refectory, kitchen and lay brother's quarters. The buildings represent many different phases of building from the 12-17th centuries.	High
Recorded Archaeologic al Sites and Monuments	The two clusters of RMP / SMR Sites that are located approximately 650-750 m to the north-west of the Site (see Cultural Heritage Report for further details) are outside of theoretical visibility (see Figure 4) and therefore, the landscape setting of these monuments are not considered any further.	High
Kilmokea House Protected Structure	Located approximately 1.5 km to the north of the Site, Kilmokea House (see Cultural Heritage Report for further details) is outside of theoretical visibility (see Figure 4) and therefore, the landscape setting of this Protected Structure is not considered any further.	High
Barrow Bridge Protected Structure	The Barrow Bridge (see Cultural Heritage Report for further details) located to the west of the existing energy plant is considered to be of national importance although as it lies outwith the SZTV (see Figure 4), its landscape setting is not considered any further.	High
Kilmokea Graveyard	The Kilmokea Graveyard (see Cultural Heritage Report for further details) is located approximately 1.5 km to the north of the Site although as illustrated inf Figure 4, it lies outwith the SZTV and therefore, its landscape setting is not considered any further.	High

Designation	Summary of Qualities/Description	Sensitivity
Kilmannock House & Walled Garden	As illustrated in Figure 4, Kilmannock Walled Garden is just outside of the STV although the small parts of the House (see Cultural Heritage Report for further details) is just within visibility.	High

Settlements

4.20 As a general overview, the study area exhibits a relatively low level of settlement dispersal, typified by a pattern of small villages, and dispersed farmsteads and dwellings nestled within rural farmland. However, containing upland landscapes to the north and north-east east of the wider study area are largely unsettled. Table 3 sets out the main settlements that are considered in the assessment of visual effects. All residential receptors are assessed as having a high susceptibility to change and as the appreciation of their view is not subject to any landscape designations, a medium value. Overall sensitivity is therefore medium-high.

Table 3: Settlements

Settlement	Distance to site	Sensitivity
Great Island	600 m	Medium-high
Kilmannock	1.1 km	Medium-high
Kilmokea	1.3 km	Medium-high
Balleynamona	1.6 km	Medium-high
Horeswood	2.2 km	Medium-high
Fishertown	2.3 km	Medium-high
Priesthaggard	2.4 km	Medium-high
Drumdowney	2.4 km	Medium-high
Campile	2.9 km	Medium-high
Ballinlaw	3.6 km	Medium-high

Recreational routes

As illustrated in **Figure 5**, the study area includes a section of the Norman Way, a heritage route accommodating cyclists and walkers that runs along the south coast of County Wexford, where the Normans first set foot in Ireland in 1169. A number of medieval sites are located along it, including Kilmokea Cross and Dunbrody Abbey. In Kilkenny, parts of a Scenic Route lead south from Ballinlaw and across the hills to Gorteens. The Eurovelo cycle route also leads south from Ballyhack, approximately 4 km to the south of Site. Recreational users are assessed as having a a high susceptibility to change and with a medium value, overall sensitivity is medium-high.

Table 4: Recreational routes

Route	Distance to site	Sensitivity
Norman Way	1.9 km	Medium-high
Kilkenny Scenic Route	2.4 km	Medium-high
Eurovelo cycle route	4.0 km	Medium-high

Roads

4.22 The lower-lying parts of the landscape are traversed by a relatively dense network of rural roads and access tracks. With a *medium* susceptibility to change and *medium* value of view, the overall sensitivity of a relatively small number of local road is assessed as *medium*. The routes within approximately 3 km from the Site are listed in Table 4.

Table 5: Roads

Route	Distance to site	Sensitivity
Great Island to Fishertown	600 m	Medium
Fishertown to Dunbrody	1.8 km	Medium
Fishertown to Camplie	2.4 km	Medium

5. Design & Mitigation

- 5.1 The design of the Proposed Development has considered a range of technical, economic and environmental constraints and as part of this, objectives to minimise adverse landscape and visual effects are of fundamental importance. In working towards a high-quality designed development, a review of relevant policy, landscape character and the findings of a field survey have all been considered. The following measures have therefore been adopted in the sitting and design of the Proposed Development:
 - The selection of a site that lies in close proximity to the Great Island Power Station and adjacent to the Greenlink Interconnector converter station building and associated development. As such, the prevailing industrial appearance of the Proposed Development would be entirely characteristic to its sensitive landscape setting;
 - In providing a strong relationship with existing landscape features, the site has been located alongside an access track and nearby trees and woodland;
 - The location of a site with a good degree of separation from roads, dwellings and recreational routes:
 - To help avoid adverse comparisons in scale, the layout and infrastructure and has been designed to reflect the scale of the surrounding landscape pattern, and the height of the nearby trees and woodland; and
 - To help provide further integration into landscape and some long-term screening, particularly when the Proposed Development is viewed from the east (e.g. Dunbrody Abbey), native woodland is proposed along the eastern boundary, along with native hedgerow in front of the palisade fencing that runs along the engineered slope on the northern and eastern boundaries (see Landscape Planting Plan for further details).

Assessment of Effects

Overview

- 6.1 The remaining part of this LVA addresses the landscape and visual effects predicted during the operational phase of the Proposed Development, taking into account the embedded mitigation measures as described in the preceding section. This is structured as follows:
 - Assessment parameters and assumptions;

- Zone of theoretical visibility;
- Viewpoint Assessment static landscape and visual effects predicted during the operational phase; and
- Wider Assessment assessment of wider landscape and visual effects predicted during the construction operational phases.

Assessment parameters and assumptions

- 6.2 The assessment aims to predict the worst-case effects based on parameters as currently known and in assessing all landscape and visual effects, the magnitude of effect is evaluated against a baseline of existing conditions. As detailed in the Methodology (see Section 2), effects can be positive or adverse and although this application is not subject to an Environmental Impact Assessment, effects predicted to be moderate-major, major or substantial are considered to be significant, in the context of the material considerations (see Section 3).
- 6.3 In undertaking the assessment, the following assumptions are made:
 - the production of ZTV mapping and associated prediction of effects are based on a maximum development height of 18 m (to represent the height of lighting columns) above existing site levels;
 - although the ZTV is calculated at a height of 18 m, it should be noted that the more noticeable elements of the Proposed Development, such as the control building and transformer, are much lower in elevation (see Drawing 05951-DR-702 for further details) than the lighting columns;
 - the viewpoint assessment focuses in on the likely effects during the operational phase;
 - as the proposed woodland and hedge planting (as detailed in the Landscape Planting Plan) would take approximately 5-10 years to reach maturity, all viewpoint effects are assessed in the worst case scenario, i.e. without the benefit of any landscape screening; and
 - in predicting effects, it is also assumed that surrounding trees and woodland would remain largely in situ and/or continue to grow.

Zone of theoretical visibility

- As illustrated in **Figure 1**, approximately half of the study area is within bare-earth theoretical visibility of the Proposed Development. Within the site's locality, areas of ZTV are concentrated on the prevailing rural landscape to the north and east of the site although the river corridor to the south and west and outside of the ZTV. Within the wider landscape, theoretical visibility is concentrated on relatively large parts of the lower-lying river valley to the north-east, east and south-east of the Site, and some east facing hill slopes to the west of the Barrow River.
- 6.5 In considering the extent of bare-earth theoretical visibility however, it is important to recognise that as the ZTV takes no account of woodland, development and other landcover, the pattern of mature hedgerows, trees and dense woodlands that are characteristic to the river valley landscape would notably reduce the extent of actual visibility. As such, a screened ZTV (SZTV) has been produced to provide a more accurate representation of the likely extent of visibility in practice.
- 6.6 As illustrated in **Figure 2**, the SZTV is relatively limited, most of which, is focused on areas of unsettled and largely inaccessible river valley landscape to the north-east and east of the Site,

- and some low-lying slopes to the south-east. To the west of the Barrow River, some small parts of the east facing slopes around Drumdowney are also within the SZTV.
- 6.7 Consequently, it is very apparent that although the extent of theoretical visibility is quite extensive, in practice, there are relatively few accessible locations where the Proposed Development would be visible.

Assessment viewpoints

- 6.8 Based on the SZTV analysis (Figure 2) and the preceding identification of landscape and visual receptors (see section 4), the following nine viewpoints (see Table 6) have been selected to undertake an assessment of landscape and visual effects. These represent the typical views experienced by a variety of visual receptors, at varying distances across the study area.
- 6.9 The viewpoints have been identified as those which are sensitive to change and where open views towards the site are generally experienced. The viewpoint locations, as illustrated in **Figure** 6, have been carefully selected to demonstrate the worst-case scenario and in identifying these, a detailed analysis of the surrounding landscape was undertaken to establish the likely visibility of the Proposed Development.

Table 6: Viewpoint selection

Table 6: Viewpoint selection					
VP Location	randscal		APE VISUAL		AL
VI Location	Disto to si	LCU	Sensitivity	Receptor	Sensitivity
Local road north of Site	410 m	River Valley	Medium- high	Residential	Medium- high
2. Local road north-west of Site	780 m	River Valley	Medium- high	Local road users	Medium
3. Ballyedock	2380 m	River Valley	Medium- high	Recreational & residential	Medium- high
Local road, south-east of Ballyedock	2020 m	River Valley	Medium- high	Recreational & residential	Medium- high
5. Access track, Kilmannock	1010 m	River Valley	Medium- high	Residential	Medium- high
6. Dunbrody Abbey	1575 m	River Valley	Medium- high	Visitors	High
7. Horeswood Church	2290 m	River Valley	Medium- high	Visitors	Medium- high
8. Slieve Coillte	6785 m	Uplands	High	Recreational	High
9. Drumdowney	2425 m	Uplands/River Valley	Medium- high	Recreational & residential	Medium- high

Viewpoint assessment

6.10 The following viewpoint assessment provides an appraisal of the static visual effects and the magnitude of landscape effect/change predicted during the operational phase, at each viewpoint location. The accompanying baseline photos and associated wirelines and photomontages, as illustrated in **Figure 7**, have been prepared at A3 size (with a focal length of 50mm) and these indicate the extent of the Proposed Development that is likely to be visible from each viewpoint. In addition to illustrating the various components of the Proposed

- Development, the proposed Battery Storage Area (subject to a separate Planning Application), has also been identified for cumulative context.
- 6.11 As well as providing an assessment from specific locations, the viewpoint findings are also used to inform a wider assessment of landscape and visual effects that follows the viewpoint assessment. It should be noted that where landscape effects are identified at each viewpoint, no conclusion on the overall significance of effect are provided, as this requires an analysis of the overall extent of any changes experienced across each landscape receptor; this is undertaken as part of the wider assessment on landscape character (see Table 7).

VIEWPOINT 1: Local road north of Site (see page 3 in Photoset)

Grid reference: SL 59827 77150

View direction: 155° Distance to site: 410 m

Landscape Character Unit: River Valley

Landscape designations: None

Context

At an elevation of 18 m AOD, the viewpoint is located alongside an unsurfaced local road (designated as a residential route) to north-west of the site, in close proximity to the south of several nearby residential dwellings. When travelling south towards the site, approximately 300 m of the road are within visibility of the Proposed Development. The viewpoint represents the views of residents from two or three nearby dwellings although as there no windows facing towards the site, residents would only experience views from parts of their curtilage. Due to the screening effect of intervening vegetation, it is unlikely that open views towards the site from three or four dwellings further north would be experienced. Residents are assessed as having a high susceptibility to change and as the appreciation of their view is not subject to any landscape designations, a medium value. Overall sensitivity is therefore medium-high.

Parts of proposed development potentially visible

As illustrated on **page 3** of **Figure 7**, all of the Proposed Development would be visible in quite close proximity immediately to left of the large Greenlink Interconnector converter station building and associated development in the immediate backdrop that is currently undergoing construction.

Landscape effects		
LCU & sensitivity	Magnitude of landscape effect	
River Valley: Medium- high	Given the presence of the existing power station and the ongoing construction of the Greenlink Interconnector, the Proposed Development would be entirely characteristic to this part of the River Valley LCU. Although the various parts of the proposed infrastructure would appear quite noticeable against a backdrop of rising ground, given the heavily industrialised character of the local landscape, any changes to the wider undeveloped rural character of the valley would be relatively minimal. The more scenic parts of the valley to the east would remain unaffected, as would the rivers and their associated topography, and riparian and woodland habitats. The Proposed Development would also relate to the scale of the landscape and the distinctive containing backdrop of Slieve Coillte would also remain unaffected. Overall, there would be a minor change, affecting some characteristics and the experience of the landscape slightly. As such, the magnitude of effect is assessed as small (adverse).	

Visual effect	S	
Receptor & sensitivity	Magnitude of visual effect	Effect
Residential: Medium- high	When looking south, the visual amenity of residents (and any local road users) are already affected by views of the large Greenlink Interconnector building and the clutter of nearby infrastructure associated with the power station. Although the Proposed Development would result in a relatively small increase in the horizontal extent of visible industrial development, it would not however appear prominent. It would be much less noticeable the power station building, steel towers and pylons, and there would little change to the focus of the view. The views across the valley would remain interrupted, as would views to Slieve Coillte. The proposals also fit the existing visual composition, with very little of the 180° view affected. Consequently, the magnitude of visual effect is predicted to be small-medium .	Moderate (adverse) Not significant

VIEWPOINT 2: Local road north-west of Site (see page 4 in Photoset)

Grid reference: SL 59795 77518

View direction: 160° Distance to site: 780 m

Landscape Character Unit: River Valley

Landscape designations: None

Context

At an elevation of 27 m AOD, the viewpoint is located at a field entrance alongside a local road (designated as a residential route) to north of the site. From all other parts of this east-west aligned section of the road, dense roadside hedgerows would screen (or heavily filter) the Proposed Development from view. A farmhouse is also located in close proximity to the west of the viewpoint although given the presence of large barns immediately to the south of the house, it is very likely that the views of residents would remain unaffected. The viewpoint therefore represents the oblique views of a very small number of road users along a 5 m section of the route. Local road users are assessed as having a medium susceptibility to change and as the appreciation of their view is not subject to any landscape designations, a medium value. Overall sensitivity is therefore medium.

Parts of proposed development potentially visible

As illustrated on **page 4** of **Figure 7**, all of the Proposed Development would be visible immediately to left of the large Greenlink Interconnector converter station building and associated development in the immediate backdrop that is currently undergoing construction.

Landscape	Landscape effects		
LCU & sensitivity	Magnitude of landscape effect		
River Valley: Medium- high	As with viewpoint 1, the presence of the adjacent Greenlink Interconnector would result in the Proposed Development appearing entirely characteristic to this part of the River Valley LCU. Although the introduction of additional infrastructure would appear quite noticeable against a backdrop of rising ground, given the heavily industrialised nature of the local landscape surrounding the site, any changes to the wider undeveloped rural character of the valley would be very minimal. The more scenic parts of the rural valley to the north and east would remain unaffected, as would the river valley topography and the semi-natural character of riverine habitats. The Proposed Development would also relate to the scale of the landscape and the distinctive containing backdrop of Slieve Coillte would also remain unaffected. Overall therefore, there would be little change to the key characteristics and the experience of the river valley landscape and consequently, the magnitude of effect is assessed as small (adverse).		

Visual effect	Visual effects		
Receptor & sensitivity	Magnitude of visual effect	Effect	
Residential: Medium- high	When heading east, a very small number of road users would experience oblique and fleeting views of the Proposed Development, in context of the adjacent large Greenlink Interconnector building and the cluttered appearance of nearby infrastructure associated with the power station. The Proposed Development would only result in a small increase in the horizontal extent of visible industrial development, appearing much less noticeable than the power station, steel towers and nearby pylons. There would no change to the visual focus along the hedge lined road corridor towards a backdrop of the valley sides and where the Proposed Development would be evident, it fits the existing visual composition, with very little of the view affected. Consequently, the magnitude of visual effect is predicted to be small .	Minor- moderate (adverse) Not significant	

VIEWPOINT 3: Ballyedock (see page 5 in Photoset)

Grid reference: SL 60452 79138

View direction: 185° Distance to site: 2380 m

Landscape Character Unit: River Valley

Landscape designations: None

Context

At an elevation of 14 m AOD, the viewpoint is located alongside a local road to the south-east of the small linear settlement of Fishertown. As the road is designated part of the Norman Way, the viewpoint represents the views of recreational users (in addition to local road users) and the views of residents from several nearby dwellings. Although several hundred meters of this part of the Norman Way are with the SZTV, roadside hedgerows would tend to screen most views of the Proposed Development during summer months. The viewpoint therefore represents the oblique views of a relatively small number of recreational (and road) users and the direct views of residents from some nearby dwellings. As the appreciation of their view is not subject to any landscape designations, both recreational and residential receptors are assessed as having a medium-high sensitivity.

Parts of proposed development potentially visible

As illustrated on **page 5** of **Figure 7**, most of the parts of the Proposed Development would be visible above intervening coniferous woodland.

above intervening coniferous woodland.		
Landscape ef	iects	
LCU & sensitivity	Magnitude of landscape effect	
River Valley: Medium- high	The Proposed Development would be experienced within context of the Greenlink Interconnector, power station and associated pylons. As such, the Development would appear entirely characteristic to the River Valley LCU to relatively distant backdrop to the local landscape of this viewpoint local distance, any changes to the rural character of the intervening landscape quite difficult to discern and the more scenic parts of would remain underwould the river valley topography and the semi-natural character of rivering Overall, the Proposed Development would relate very well to backdrop of industrial infrastructure, with little perceptible change to the key character the experience of the river valley landscape. Consequently, the magnitude is assessed as very small (adverse).	e Proposed that forms a tion. At this e would be affected, as ne habitats. large scale eristics and
Visual effects		
Receptor & sensitivity	Magnitude of visual effect	Effect
Residential & recreational: Medium- high	A small number of residents and recreational users would experience relatively distant views of the Proposed Development, in context of the cluttered and prominent appearance of the power station and nearby interconnector. Only very small parts of the Proposed Development would be visible and this distance, any changes in visual amenity would be quite difficult to discern. With only a very small increase in the extent of visible infrastructure, it would appear much less noticeable than the proliferation of existing large scale industrial development. There would no change to the visual focus along the hedge lined road corridor and nearly all of the view would remain unaffected. As such, the Proposed Development fits the existing visual composition, would appear hardly discernible and	Minor to minor- moderate (adverse) Not significant

VIEWPOINT 4: Local road, south-east of Ballyedock (see page 6 in Photoset)

Grid reference: SL 60944 78672

View direction: 195° Distance to site: 2020 m

Landscape Character Unit: River Valley

Landscape designations: None

Context

At an elevation of 20 m AOD, the viewpoint is located alongside a local road to the south-east of Ballyedock. As the road is designated part of the Norman Way, the viewpoint represents the views of recreational users (in addition to local road users) and the views of residents from several nearby dwellings. Although several hundred meters of this part of the Norman Way are with the SZTV, roadside hedgerows would provide some screening during summer months. The viewpoint therefore represents the oblique views of a relatively small number of recreational (and road) users and the direct views of residents from some nearby dwellings. As the appreciation of their view is not subject to any landscape designations, both recreational and residential receptors are assessed as having a medium-high sensitivity.

Parts of proposed development potentially visible

As illustrated on **page 6** of **Figure 7**, most parts of the Proposed Development would be visible against a backdrop of the Greenlink Interconnector converter station building and associated ongoing construction activity.

Construent dentity.		
Landscape effects		
LCU & sensitivity	Magnitude of landscape effect	
River Valley: Medium- high	Similar to viewpoint 3, the Proposed Development would be experient context of the prominent Greenlink Interconnector, power station and pylons. As such, the Proposed Development would appear entirely character the River Valley LCU that forms a relatively distant backdrop to the local later this viewpoint location. At this distance, any changes to the rural character intervening landscape would be difficult to discern and the more scenic parameter unaffected, as would the river valley topography and the scharacter of riverine habitats. The Proposed Development would relate to backdrop of large scale industrial infrastructure, with little perceptible chakey characteristics and the experience of the river valley landscape. Cothe magnitude of effect is assessed as very small (adverse).	associated acteristic to ndscape of acter of the acts of would emi-natural very well to ange to the
Visual effects		
Receptor & sensitivity	Magnitude of visual effect	Effect
Residential & recreational: Medium- high	Residents and recreational users would experience relatively distant views of the Proposed Development, in context of the cluttered and prominent appearance of the power station and nearby interconnector. With only a very small increase in the extent of visible infrastructure, any changes in visual amenity would be quite difficult to discern at this distance, especially when travelling along the road. The addition of the Proposed Development would appear much less noticeable than the proliferation of existing large scale industrial development and there would no change to the visual focus along the hedge/tree lined road corridor. Nearly all of the view would remain unaffected and the Proposed Development would fit the existing visual composition. Overall, any changes to the visual composition would be very minimal and therefore, the magnitude of visual effect is assessed as very small .	Minor to minor- moderate (adverse) Not significant

VIEWPOINT 5: Access track, Kilmannock (see page 7 in Photoset)

Grid reference: SL 61189 77183

View direction: 240° Distance to site: 1010 m

Landscape Character Unit: River Valley

Landscape designations: Kilmannock House & Walled Garden (NIAH)

Context

At an elevation of 11 m AOD, the viewpoint is located alongside an access track at Kilmannock. A residential dwelling is located in close proximity to the north, and to the south-east, a cluster of farm buildings and Kilmannock House & Walled Garden (both listed features on the National Inventory of Architectural Heritage) are largely set within surrounding tress. The viewpoint therefore represents the direct views of residents from one nearby dwelling and as the appreciation of their view is not subject to any landscape designations, their visual sensitivity is assessed as *medium-high*.

Parts of proposed development potentially visible

As illustrated on **page 7** of **Figure 7**, all of the Proposed Development would be visible against a backdrop of the Greenlink Interconnector converter station and the Great Island Power Station immediately beyond.

Landscape effects		
LCU & sensitivity	Magnitude of landscape effect	
River Valley: Medium- high	The prominent presence of the power station and interconnector in the backdrop to the local landscape would result in the Proposed Development appearing entirely characteristic to this part of the River Valley LCU. Although the introduction of additional infrastructure would appear quite noticeable against a backdrop of the interconnector building and power station chimneys, given the heavily industrialised nature of the local landscape surrounding the site, any changes to the wider undeveloped rural character of the river valley would be very minimal. The appreciation of the more scenic parts of the landscape would remain unaffected, as would the river valley topography and the semi-natural character of riverine habitats. The Proposed Development would also relate to the scale of the landscape and overall there would be little change to the key characteristics and the experience of the River Valley LCU. Considering these factors, the magnitude of effect is assessed as very small (adverse).	

\(C \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Visual effect	S	
Receptor & sensitivity	Magnitude of visual effect	Effect
Residential: Medium- high	From one nearby dwelling, residents would experience views of the Proposed Development in direct association with the large Greenlink Interconnector building and the cluttered appearance of nearby infrastructure associated with the power station. The Proposed Development would only result in a small increase in visible industrial development, appearing much less noticeable than the interconnector building, power station and nearby pylons. Views towards the rising backdrop of <i>Pointe na Sige</i> would remain uninterrupted, as would the view of the Barrow River corridor further to the left. As with other viewpoints, the Proposed Development fits the existing visual composition, with very little of the view affected. Consequently, the magnitude of visual effect is predicted to be small .	Minor- moderate to moderate (adverse) Not significant

VIEWPOINT 6: Dunbrody Abbey (see page 8 in Photoset)

Grid reference: SL 61850 76683

View direction: 270° Distance to site: 1575 m

Landscape Character Unit: River Valley

Landscape designations: Dunbrody Abbey National Monument

Context

At an elevation of 6 m AOD, the viewpoint is located at the north-eastern edge of the grounds of Dunbrody Abbey (Natioal Monument). From most parts of the monument's grounds, the Proposed Development would be screened from view by intervening built structures and dense hedgerow along the eastern edge. The viewpoint therefore represents the views of visitors to the monument and in considering the national importance of the designation, their visual sensitivity is assessed as high.

Parts of proposed development potentially visible

As illustrated on **page 8** of **Figure 7**, all of the Proposed Development would be visible adjacent to the Greenlink Interconnector converter station and associated ongoing construction activity.

Landscape effects		
LCU & sensitivity	Magnitude of landscape effect	
River Valley: Medium- high	Viewed against a prominent backdrop of the large interconnector building and in close association with the nearby power station and associated infrastructure, the Proposed Development would appear entirely characteristic to this part of the River Valley LCU that forms a backdrop setting to the monument. Although the introduction of additional infrastructure would appear quite noticeable, given the heavily industrialised nature of the local landscape surrounding the site, any changes to the rural character of the intervening river valley corridor would be relatively minimal. The appreciation of the more scenic parts of the valley, particularly the river and associated habitats to the left of view, would remain unaffected. From here, the Proposed Development would also relate to the scale of the landscape and overall there would be little change to the key characteristics and the experience of the River Valley LCU. Considering these factors, the magnitude of effect is assessed as very small (adverse).	

Visual effects			
Receptor & sensitivity	Magnitude of visual effect	Effect	
Visitors: High	From this location, visitors would experience views of the Proposed Development in direct association with the large Greenlink Interconnector building and the cluttered appearance of nearby infrastructure associated with the power station. The Proposed Development would only result in a small increase in visible industrial development, appearing much less noticeable than the interconnector building, power station and nearby pylons. Of particular note, views towards the rising backdrop of <i>Pointe na Sige</i> and the highly scenic composition of the Barrow River corridor (to left of view) would remain uninterrupted. Overall therefore, the Proposed Development fits the existing visual composition, with very little of the view affected. Consequently, the magnitude of visual effect is predicted to be <i>small</i> .	Moderate (adverse) Not significant	

VIEWPOINT 7: Horeswood Church (see page 9 in Photoset)

Grid reference: SL 62169 78025

View direction: 231° Distance to site: 2290 m

Landscape Character Unit: River Valley

Landscape designations: None

Context

At an elevation of 24 m AOD, the viewpoint is located to the south of a car park that serves the nearby Horeswood Church. From the Church and all parts of the car park, intervening hedgerow and nearby trees would screen the Proposed Development from view. The sensitivity of visitors to the church and a small number of any nearby residents that might share similar views is assessed as *medium-high*.

Parts of proposed development potentially visible

As illustrated on **page 9** of **Figure 7**, the upper parts of the control building, scada pole and lighting columns would be visible above intervening coniferous woodland, set against a backdrop of the Greenlink Interconnector converter station and the Great Island Power Station. All other lower-lying parts of the Proposed Development would be screened from view by the dense coverage of the woodland.

Landscape effects			
LCU & sensitivity	Magnitude of landscape effect		
River Valley:	As only the upper parts of the control building, scada pole and lighting columns would be visible above intervening coniferous woodland and given the heavily industrialised appearance of the prominent Greenlink Interconnector, power station and associated pylons, any changes to character and quality of the intervening river landscape would		
Medium- high	be very difficult to discern. With very little perceptible change, the Proposed Development would relate very well to backdrop of large scale industrial infrastructure and consequently, the magnitude of effect is assessed as <i>none to very small</i> (adverse).		

Visual effects			
Receptor & sensitivity	Magnitude of visual effect	Effect	
Residential:	As nearly all of the Proposed Development would be screened from view, any apparent upper parts would appear highly inconspicuous in context of the cluttered composition of backdrop infrastructure. As such, there would	Negligible (adverse)	
Medium- high	no real change to the perception of the view and therefore, effects are hardly discernible. Consequently, the magnitude of effect is assessed as none to very small.	Not significant	

VIEWPOINT 8: Slieve Coillte (see page 10 in Photoset)

Grid reference: SL 63924 82335

View direction: 102° Distance to site: 6785 m

Landscape Character Unit: Upland

Landscape designations: Slieve Coillte Distinctive Landscape

Context

At an elevation of 256 m AOD, the viewpoint is located at the southern outcrop of Slieve Coillte. The hill is the highest point on the Hook peninsula, with an elevation of 268.5 metres. The summit is popular with hillwalkers, with thousands of people climbing the mountain every year. A 3 km road leads to a viewpoint on the summit. The road is accessible by car, so the view from Slieve Coillte can also be enjoyed without a walk to the top. Starting from the viewpoint is a 1.3 km circular track that is also suitable for inexperienced walkers. The sensitivity of a large number of visitors and recreational users is assessed as high.

Parts of proposed development potentially visible

As illustrated on **page 10** of **Figure 7**, the upper parts of the control building, scada pole and lighting columns would be visible above intervening coniferous woodland, set against a backdrop of the Greenlink Interconnector converter station. All other lower-lying parts of the Proposed Development would be screened from view by the dense coverage of the woodland.

would be screened from view by the dense coverage of the woodland.				
Landscape effects				
LCU & sensitivity	Magnitude of landscape effect			
Upland: High	As only very small upper parts of the control building, scada pole and lighting columns would be visible above intervening coniferous woodland. Considering the heavily industrialised appearance of the prominent Greenlink Interconnector, power station and associated pylons, any changes to character and quality of the remote, tranquil and semi-natural character of this upland landscape would be very difficult to perceive. With very little perceptible change at this long distance, the Proposed Development would relate very well to backdrop of large scale industrial infrastructure and consequently, the magnitude of effect is assessed as <i>none to very small</i> (adverse).			
Visual effects				
Receptor & sensitivity	Magnitude of visual effect	Effect		
	As nearly all of the Proposed Development would be screened from view, any apparent upper parts at this distance would appear highly inconspicuous in context of the cluttered composition of backdrop infrastructure. As such, there would no change to the perception of the view and therefore, effects are hardly discernible. As such, the magnitude of visual effect is assessed as none to very small .			

VIEWPOINT 9: Drumdowney (see page 11 in Photoset)

Grid reference: SL 57629 77449

View direction: 185° Distance to site: 2425 m

Landscape Character Unit: River Valley/Upland

Landscape designations: None

Context

At an elevation of 106 m AOD, the viewpoint is within a curtilage of a residential dwelling on an east facing hillside at Drumdowney. Due to screening effect of intervening woodland, there are no views from the house and no nearby publicly accessible views were identified. Outwith any landscape designations, the visual sensitivity of residents and any recreational users in the wider landscape is assessed as medium-high.

Parts of proposed development potentially visible

As illustrated on **page 11** of **Figure 7**, most parts of Proposed Development would be visible above intervening coniferous woodland, adjacent to the Greenlink Interconnector converter station building.

interversing considered we calcula, adjacon to the crost similar more of the control of station bostom ing.				
Landscape effects				
LCU & sensitivity	Magnitude of landscape effect			
The Proposed Development would be experienced within context of the prominent Greenlink Interconnector, power station and associated pylons. As such, the Proposed Development would appear entirely characteristic to the River Valley LCU that forms a lower-lying setting to these hills. At this distance, any changes to the rural character of the intervening landscape would be quite difficult to discern. The Proposed Development would also relate very well to backdrop of large scale industrial infrastructure, with little perceptible change to the key characteristics and the experience of this landscape. Consequently, the magnitude of effect is assessed as very small (adverse).				
Visual effects				
Receptor & sensitivity	Magnitude of visual effect	Effect		
From parts of their garden, residents would experience relatively distant views of the upper prats of the Proposed Development, in context of the cluttered and prominent appearance of the interconnector and nearby power station. With only a very small increase in the extent of visible infrastructure, any changes in visual amenity would be quite difficult to discern at this distance. The addition of the Proposed Development would appear much less noticeable than the proliferation of existing large scale industrial development and there would no change to the visual focus over the river corridor to the right of view. Nearly all of the view would remain unaffected and the Proposed Development would fit the existing visual composition. Overall, any changes would be very minimal and therefore, the magnitude of visual effect is assessed as very small.		Minor to minor- moderate (adverse) Not significant		

Summary of Viewpoint Assessment

6.12 The following table sets out a summary of the Viewpoint Assessment findings and associated significance where relevant.

Table 7: Summary of Viewpoint Assessment findings

Idble	able 7: Summary of Viewpoint Assessment findings					
\/B	LANDSCAPE		VISUAL			
VP	LCU	Magnitude of effect	Receptor	Magnitude of effect	Effect & significance	
1.	River Valley	Small	Residential	Small-medium	Moderate (adverse): Not significant	
2.	River Valley	Small	Local road users	Small	Minor-moderate (adverse): Not significant	
3.	River Valley	Very small	Recreational & residential	Very small	Minor to minor-moderate (adverse): Not significant	
4.	River Valley	Very small	Recreational & residential	Very small	Minor to minor-moderate (adverse): Not significant	
5.	River Valley	Very small	Residential	Small	Minor-moderate to moderate (adverse): Not significant	
6.	River Valley	Very small	Visitors	Small	Moderate (adverse): Not significant	
7.	River Valley	None to very small	Visitors	None to very small	Negligible (adverse): Not significant	
8.	Uplands	None to very small	Recreational	None to very small	Negligible (adverse): Not significant	
9.	Uplands/ River Valley	Very small	Recreational & residential	Very small	Minor to minor-moderate (adverse): Not significant	

Construction effects

- 6.13 The construction phase would not result in the loss of any notable landscape features and the site's landform would remain largely unaltered. Any nearby trees and vegetation would also remain unaffected. As such, direct landscape effects are judged to be negligible and not significant.
- 6.14 In relation to indirect landscape and visual effects, any construction activity would be experienced in context of the prefiltration of prominent industrial infrastructure and activity. In considering the findings of the preceding Viewpoint assessment, indirect construction effects are judged to be minor-moderate from locations within approximately 1 km from the site, reducing to minor or negligible with greater distance. Either way, construction effects would be not significant.

Wider Landscape, Visual and Cumulative effects (operational)

6.15 The remaining part of this section sets out an assessment of the long-term landscape and visual effects that are precited during the operational phase of the Proposed Development. In addition to desk and field work, this has been informed by the findings of the preceding Viewpoint Assessment. As the Viewpoint Assessment aims to consider the worst-case scenario, it is unlikely that the magnitude of effect in any locality would be any greater than those predicted in the Viewpoint Assessment. The following table therefore sets out an overview of the operational effects predicted on the key landscape and visual receptors, as identified in the Baseline Assessment (Section 4).

Table 8: Appraisal of wider Landscape and Visual effects

	LANDSCAPE CHARACTER UNITS	
LCU (sensitivity)	Magnitude of effect	Effect & significance
Barrow River Valley (Medium- high)	The Site is located within this low-lying LCU and as illustrated in Figure 2, only relatively small parts of the valley landscape are within the SZTV (see paragraphs 6.4-8 for further details). As evidenced by the preceding viewpoint assessments, the predicted magnitude of landscape effect from viewpoints 1-7 ranges from very small to small. Given the presence of the adjacent Greenlink Interconnector and nearby power station, the Proposed Development would be entirely characteristic to this part of the River Valley LCU. Although the introduction of additional infrastructure would sometimes appear quite noticeable from some nearby locations, in considering the heavily industrialised nature of the local landscape surrounding the site, any changes to the wider undeveloped rural character of the valley would be very minimal. The more scenic parts of the rural valley to the north and east would be unaffected, as would the river valley topography and the semi-natural character of riverine habitats. The Proposed Development would also relate to the scale of the landscape and the distinctive containing backdrop of Slieve Coillte and other containing hills would also remain unaffected. Overall therefore, there would be little change to the key characteristics and the experience of the river valley landscape and consequently, the magnitude of effect is assessed as very small (adverse).	Minor (adverse) Not significant
Uplands (High)	As demonstrated by the assessment at viewpoint 8 (Slieve Coillte), any distant visibility of the Proposed Development would be experienced in context of the heavily industrialised appearance of the prominent Greenlink Interconnector, power station and associated pylons. As such, any changes to character and quality of the remote, tranquil and semi-natural character of this upland landscape would be very difficult to perceive. With very little perceptible change at this long distance, the Proposed Development would relate very well to backdrop of large scale industrial infrastructure and consequently, the magnitude of effect is assessed as <i>none to very small</i> (adverse).	Negligible (adverse) Not significant

LANDSCAPE DESIGNATIONS						
Designation (sensitivity)	Magnitude of effect	Effect & significance				
Slieve Coillte Distinctive Landscape (High)	As with the preceding assessment of the <i>Upland</i> LCU, any changes to the remote, tranquil and semi-natural qualities of this upland Distinctive Landscape would be very difficult to perceive at this distance. As such, the magnitude of effect is assessed as <i>none to very small</i> (adverse).					
Dunbrody Abbey National Monument (High)	The local landscape setting of Dunbrody Abbey National Monument is typified by open rural farmland and to the north and west, the highly scenic composition of the Campile River. As demonstrated by the assessment at viewpoint 6, although the introduction of additional infrastructure would appear quite noticeable in wider backdrop to the monument, given the heavily industrialised nature of the landscape surrounding the site, any changes to the rural character of the intervening river valley corridor would be relatively minimal. The appreciation of the more scenic parts of the valley, particularly the river and associated habitats to the left of view, would also remain unaffected. As such, the magnitude of effect on its setting is assessed as very small (adverse). Furthermore, once the woodland mitigation planting on the eastern slopes of the Site begin to mature, the Proposed Development would be partly screened from view.	Minor (adverse): Not significant				
Kilmannock House & Walled Garden	Walled the Proposed Development would adversely affect their local landscape setting in any case the nearby assessment at viewpoint 5					
Recorded Archaeological Sites and Monuments (High)	Archaeological Sites and Monuments located approximately 650-750 m to the north-west of the Site are outside of theoretical visibility (see) and therefore, the landscape setting of these monuments would remain unaffected.					
Kilmokea House Protected Structure (High)	None - As illustrated in Figure 4 , Kilmokea House is outside of theoretical visibility (see) and therefore, its landscape setting would remain unaffected.	None				
Barrow Bridge Protected Structure (High)	Protected theoretical visibility and no effects on setting would result. Structure					
Kilmokea Graveyard (High)	None - As illustrated in Figure 4 , Kilmokea Graveyard is outside of theoretical visibility (see) and therefore, its landscape setting would remain unaffected.	None				

VISUAL						
Receptor & sensitivity	Magnitude of effect	Effect & significance				
Great Island (Medium-high)	None - The settlement is outside of theoretical visibility.	None				
Kilmannock (Medium-high)	As demonstrated by the assessment at Viewpoint 5, one dwelling is predicted to experience a <i>small</i> magnitude effect although as most dwellings are outside theoretical visibility, the overall magnitude is assessed <i>very small</i> .	Minor (adverse): Not significant				
Kilmokea (Medium-high)	None - The settlement is outside of theoretical visibility.	None				
Balleynamona (Medium-high)	As demonstrated by the assessment at Viewpoint 7 (Horeswood Church), only a very small magnitude of effect is predicted at this distance.	Minor (adverse): Not significant				
Horeswood (Medium-high)	As demonstrated by the assessment at Viewpoint 7 (Horeswood Church), only a very small magnitude of effect is predicted at this distance.	Minor (adverse): Not significant				
Fishertown (Medium-high)	magnitude of effect is predicted at this distance.					
Priesthaggard (Medium-high)	As demonstrated by the assessment at Viewpoint 3, only a very small magnitude of effect is predicted at this distance.	Minor (adverse): Not significant				
Drumdowney (Medium-high)	As demonstrated by the assessment at Viewpoint 9, only a very small magnitude of effect is predicted at this distance.	Minor (adverse): Not significant				
Campile (Medium-high)	None - The settlement is outside of theoretical visibility.	None				
Norman Way (Medium-high)	As illustrated in Figure 5 , approximately 2 km of the route is within theoretical visibility and the assessments at viewpoints 3 and 4 that are located on the Norman Way, both predict a very small magnitude of effect. All of the route to east of the site outside of visibility.	Minor (adverse): Not significant				
Kilkenny Scenic Route (Medium-high)	None - As illustrated in Figure 5 , all of the route is outside of theoretical visibility.	None				
Eurovelo cycle route (Medium-high)	None - As illustrated in Figure 5 , all of the route is outside of theoretical visibility.	None				

Cumulative effects

- 6.16 Although no cumulative ZTV analysis has been undertaken, it is very apparent that given the much larger scale and height of the Greenlink Interconnector building and associated infrastructure, the Proposed Development would not result in any additional visibility of industrial development than is already experienced.
- 6.17 In relation to the proposed 38 kV Substation and associated Battery Energy Storage Site (subject to a separate Planning Application), this would be located immediately to the north of the Proposed Development. If the 38kV Substation is consented therefore, the Proposed Development would be viewed in direct association with this and as such, the magnitude of cumulative landscape and visual effect would be very limited.
- 6.18 Considering all of these factors, and that no significant effects are predicted from the introduction of the Proposed Development in isolation, the magnitude of cumulative landscape and visual effect is assessed as *minor* and **not significant**.

7. Conclusion

Summary of effects

7.1 Located within the Barrow River Valley, the landscape of the wider study area is generally highly scenic and therefore, very sensitive to most changes. However, as evidenced throughout this LVA, **no significant** effects are predicted on any landscape or visual receptors within the study area and as a summary, the following table sets out the findings of the detailed Viewpoint Assessment:

Table 9: Summary of Viewpoint Assessment findings

VP	LANDSCAPE		VISUAL		
	LCU	Magnitude of effect	Receptor	Magnitude of effect	Effect & significance
1.	River Valley	Small	Residential	Small-medium	Moderate (adverse): Not significant
2.	River Valley	Small	Local road users	Small	Minor-moderate (adverse): Not significant
3.	River Valley	Very small	Recreational & residential	Very small	Minor to minor-moderate (adverse): Not significant
4.	River Valley	Very small	Recreational & residential	Very small	Minor to minor-moderate (adverse): Not significant
5.	River Valley	Very small	Residential	Small	Minor-moderate to moderate (adverse): Not significant
6.	River Valley	Very small	Visitors	Small	Moderate (adverse): Not significant

VP	LANDSCAPE		VISUAL		
	LCU	Magnitude of effect	Receptor	Magnitude of effect	Effect & significance
7.	River Valley	None to very small	Visitors	None to very small	Negligible (adverse): Not significant
8.	Uplands	None to very small	Recreational	None to very small	Negligible (adverse): Not significant
9.	Uplands/ River Valley	Very small	Recreational & residential	Very small	Minor to minor-moderate (adverse): Not significant

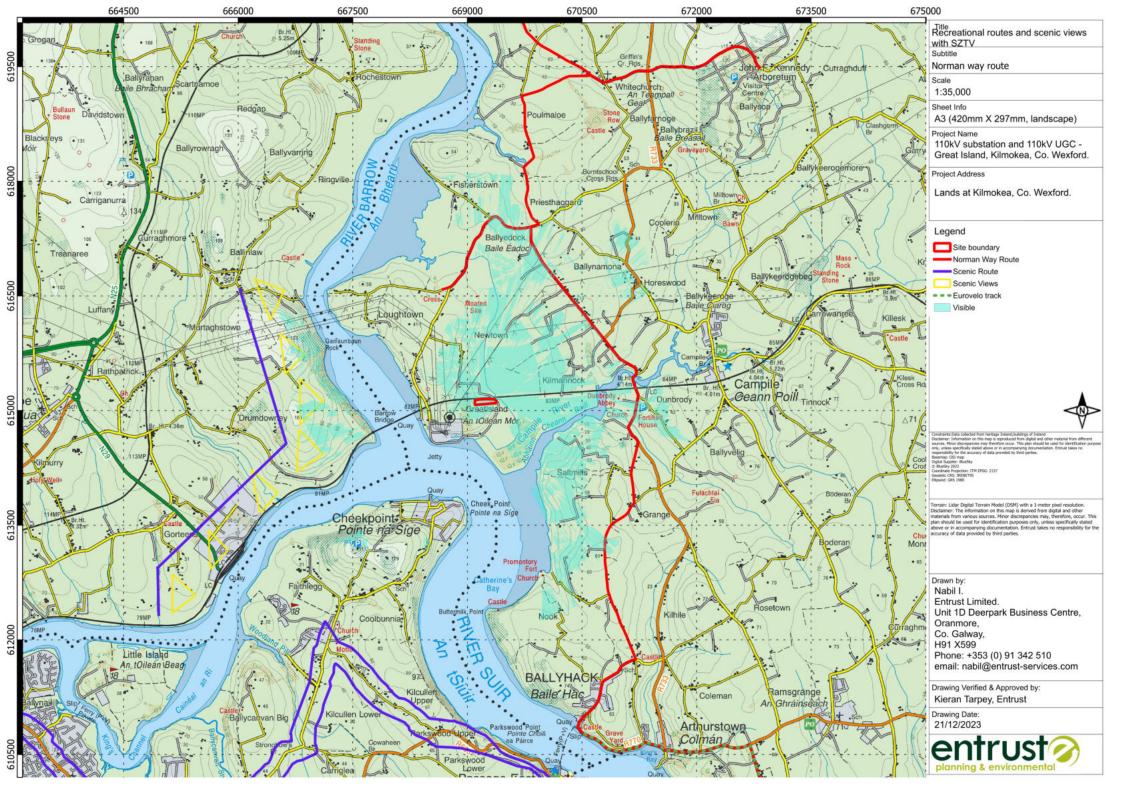
- 7.2 In conclusion, the absence of any significant effects is largely due to the following factors:
 - The Site lies in very close proximity to the Great Island Power Station and adjacent to the Greenlink Interconnector converter station building and associated infrastructure. As such, the prevailing industrial appearance of the Proposed Development would be entirely characteristic to its local context;
 - In providing a strong relationship with existing landscape features, the site has been located alongside an access track and nearby trees and woodland;
 - The site benefits from a good degree of separation from roads, dwellings and recreational routes;
 - As illustrated in Figure 2, the visibility of the Proposed Development is relatively minimal;
 - Although the introduction of additional infrastructure would sometimes appear quite noticeable from some nearby locations, in considering the heavily industrialised nature of the local landscape surrounding the site, any changes to the wider rural character of the valley would be very minimal;
 - The more scenic parts of the rural valley to the north and east would remain unaffected, as would the river valley topography and the semi-natural character of riverine habitats;
 - The Proposed Development relates to the scale of the landscape pattern and is much less obvious than large Greenlink Interconnector building and nearby power station chimney and associated pylons and other infrastructure;
 - the distinctive containing backdrop of Slieve Coillte and other surrounding hills would remain unaffected; and
 - To help provide further integration into landscape and some long-term screening, particularly when the Proposed Development is viewed from the east (e.g. Dunbrody Abbey), native woodland is proposed along the eastern boundary, as well as native hedgerow in front of the palisade fencing that runs along the engineered slope on the northern and eastern boundaries (see Landscape Planting Plan for further details).

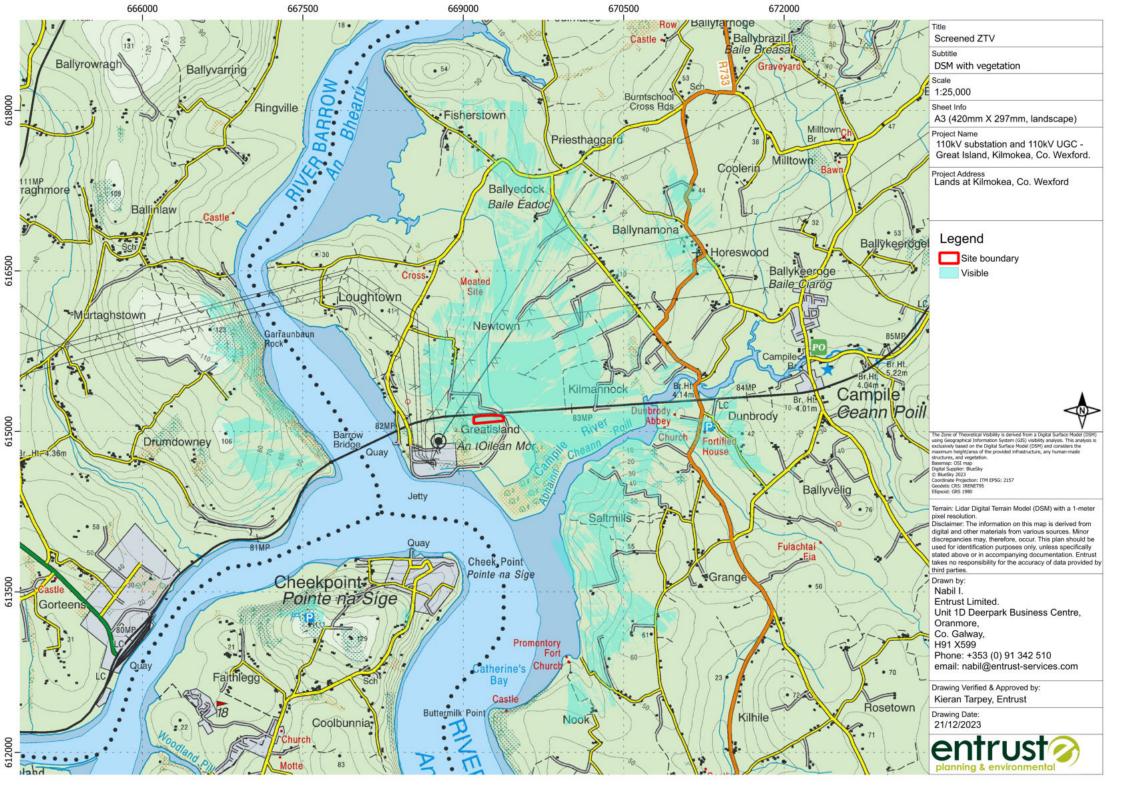
Policy compliance

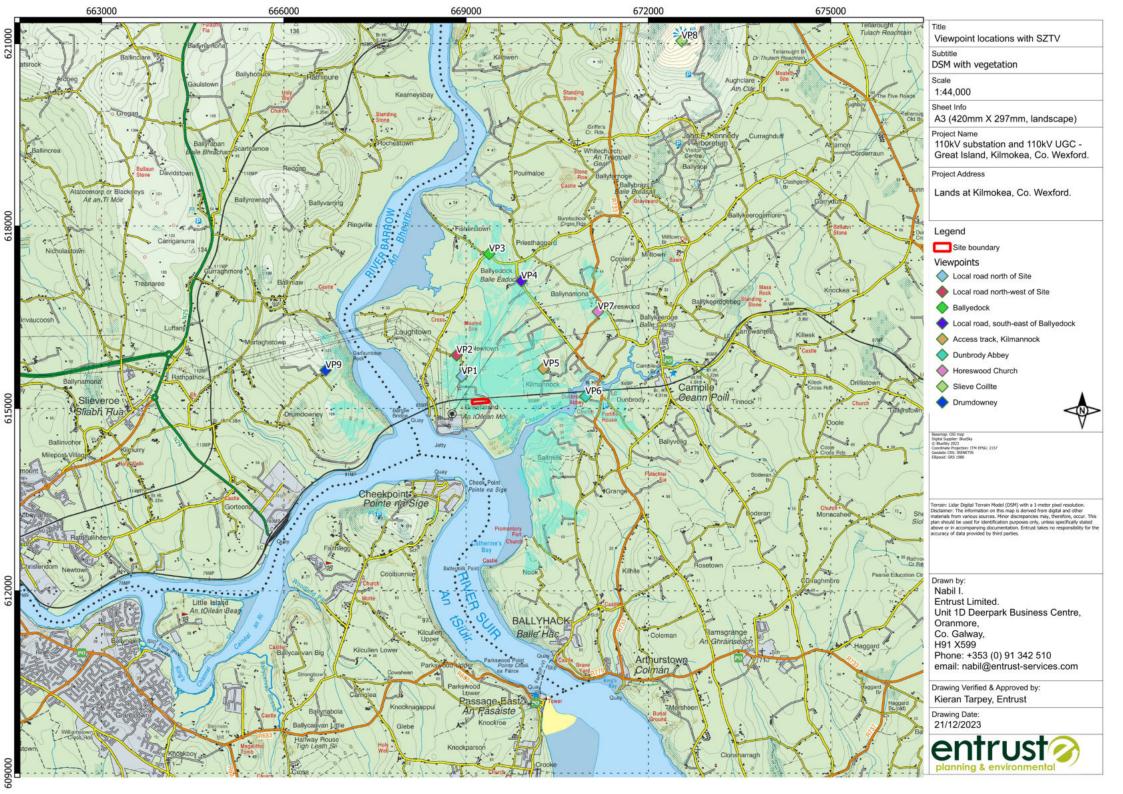
- 7.3 In relation to the landscape policy context, (see Section 3), the findings of this LVA demonstrate that the Proposed Development:
 - is sensitively sited with a design and layout that positively integrates with its local landscape context:

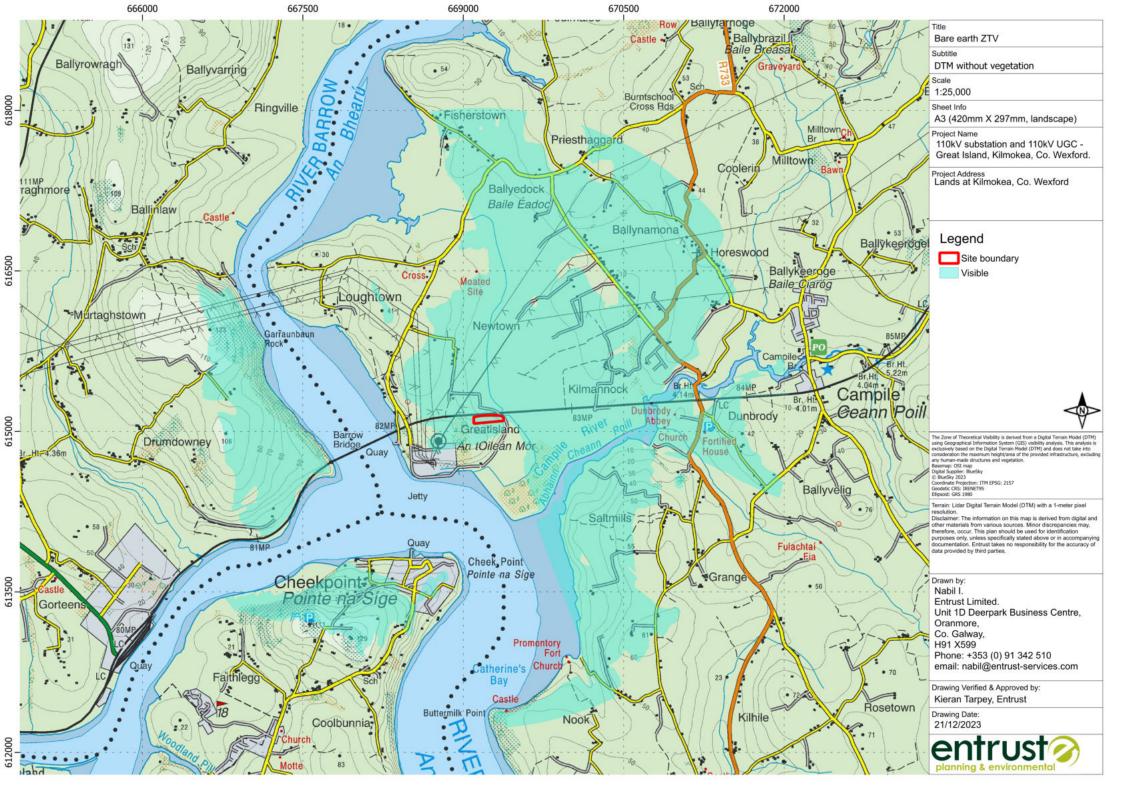
- conserves the landscape character and quality of the sensitive Barrow River Valley landscape;
- protects the qualities of the Slieve Coillte Distinctive Landscape and the landscape setting of designated heritage assets;
- protects important trees, woodlands and hedgerows; and
- is not visually intrusive, whilst protecting the important views and visual amenity of residents, and users of roads, Public Rights of Way and other important recreational routes.

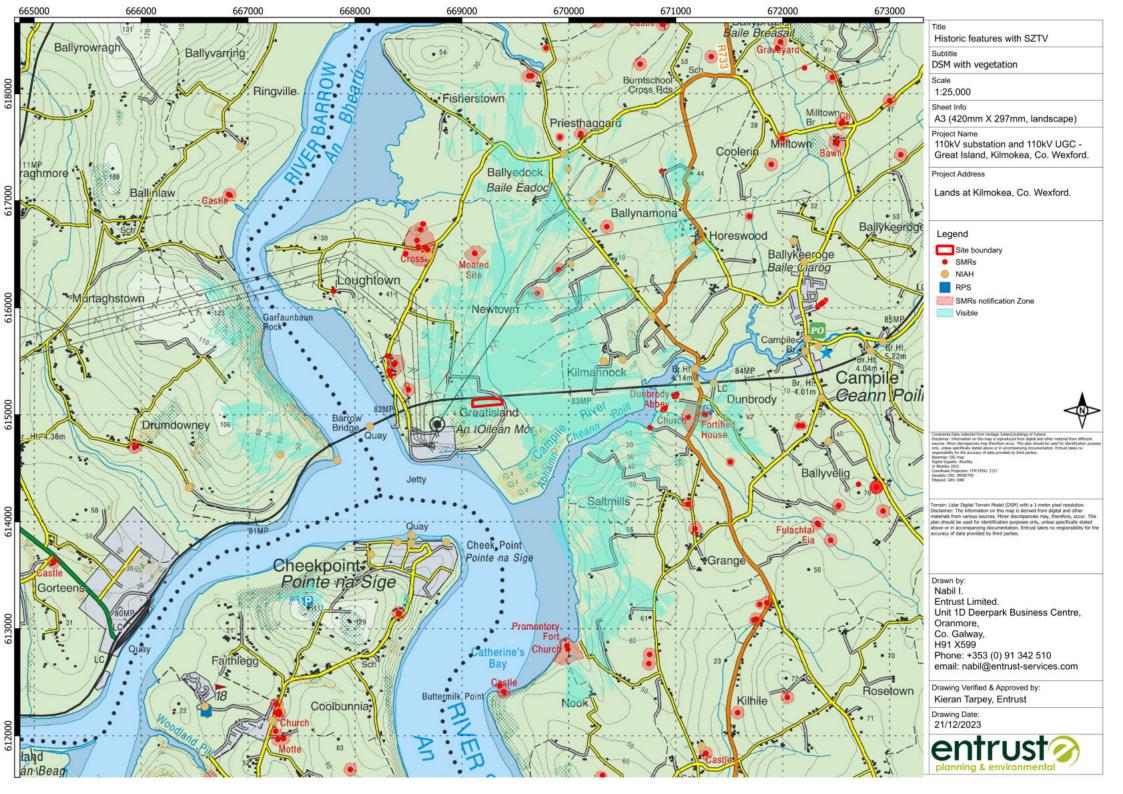
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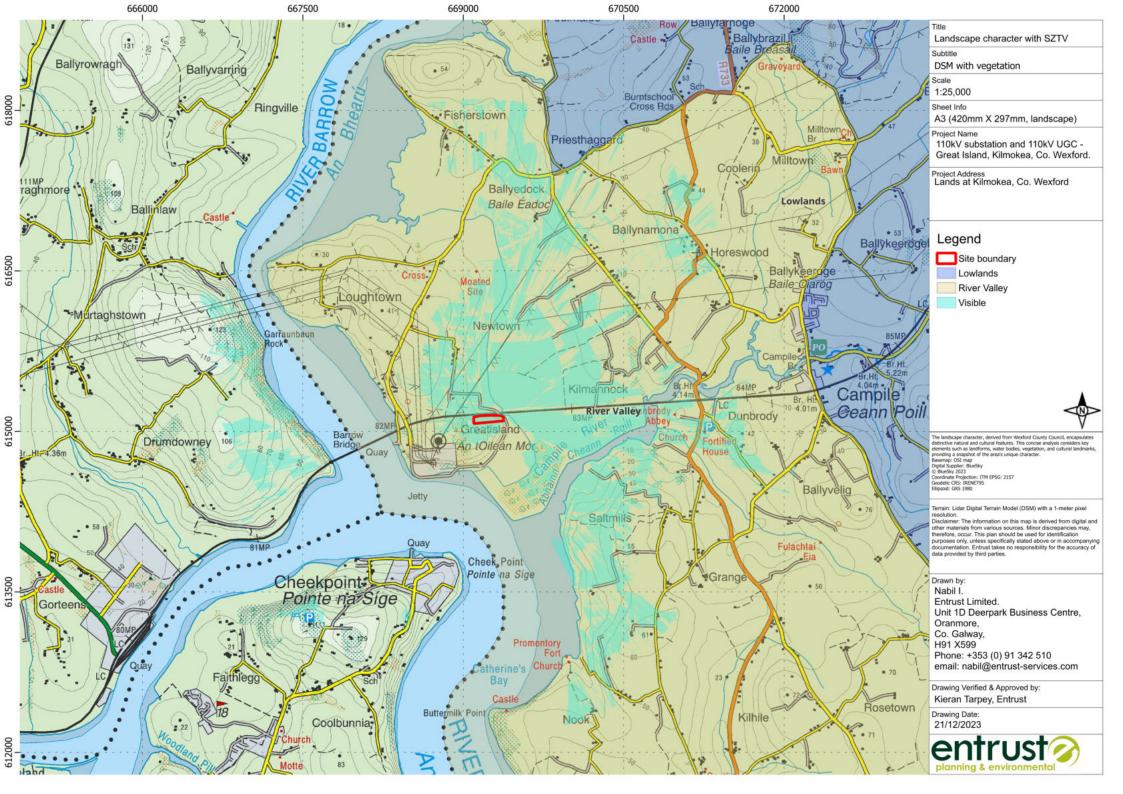














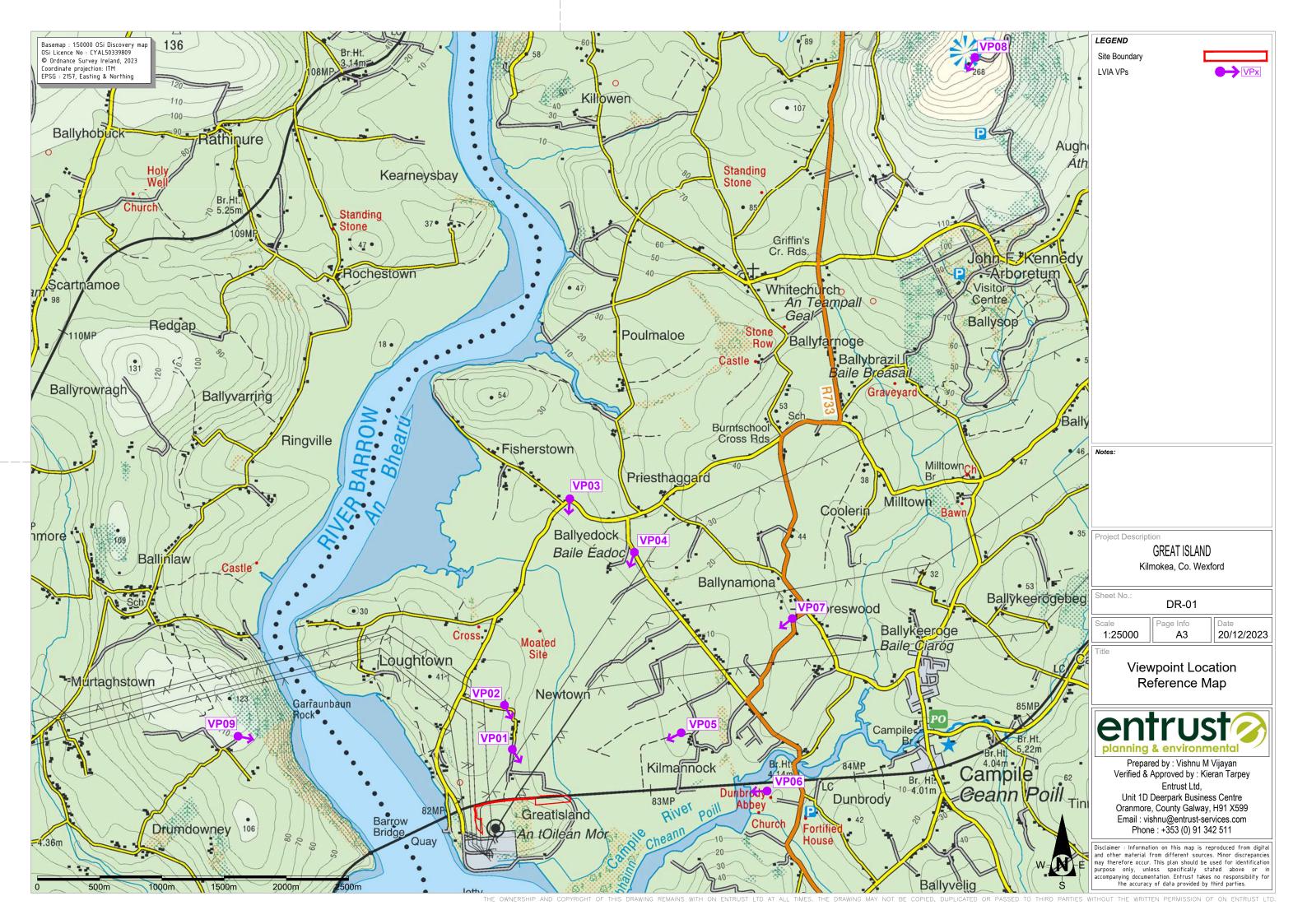
110kV Substation Photomontage Report 20/12/2023

Client: Kilmannock 110kV Substation & 110kV Grid Connection

Project: Great Island, Kilmokea, Co. Wexford

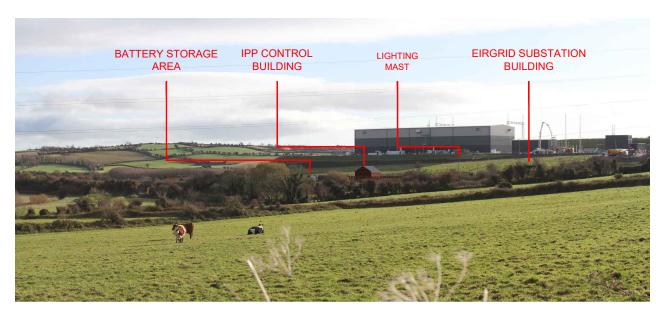
Created by: Vishnu M Vijayan

Approved by: Kieran Tarpey

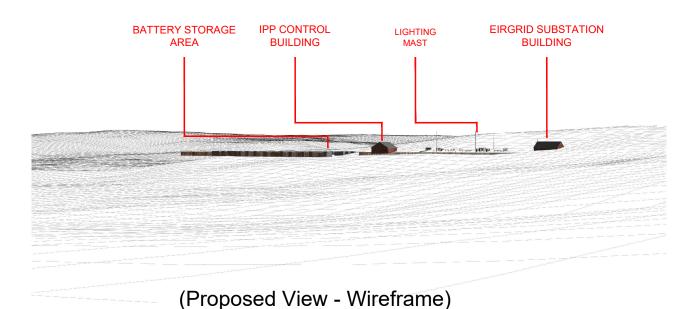




(Current View)



(Proposed View)



Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 1: Local road north of Site

Created by: VV 20/12/2023 20/12/2023 Checked by: PS Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 668911 E, 615519 N

Elevation AOD : 18m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

: Canon EOS 7D, Camera & Lens

35mm Focal equiv.

: 80.7° Horizontal View Angle Viewing Distance : 330mm

Distance to Proposed development : 410m Direction of View (degrees) : 155°

: A3 Page Size

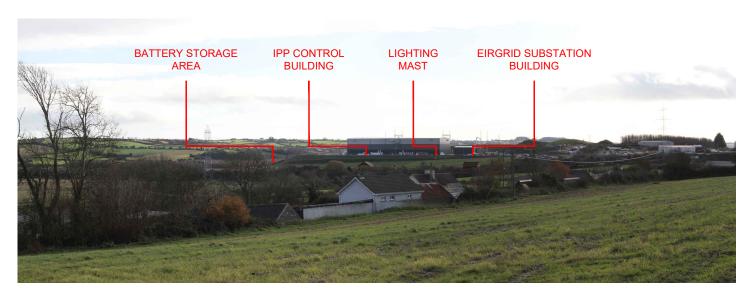


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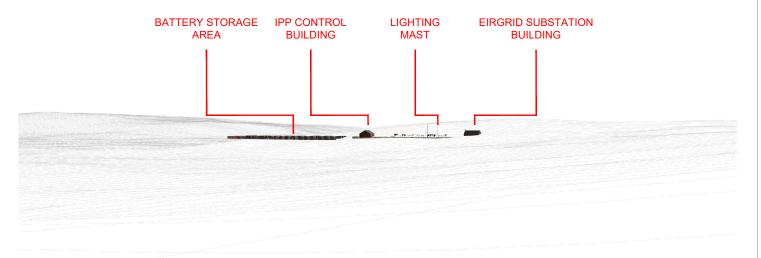
Email: contact@entrust-services.com Phone: +353 (0) 91 342 511



(Current View)



(Proposed View)



(Proposed View - Wireframe)

Title

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 2: Local road north-west of Site

Created by: VV 20/12/2023 Checked by: PS 20/12/2023 Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 668848 E, 615875 N

Elevation AOD : 27m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

Camera & Lens : Canon EOS 7D,

35mm Focal equiv.

Horizontal View Angle : 69.1° Viewing Distance : 330mm

Distance to Proposed development : 780m Direction of View (degrees) : 160°

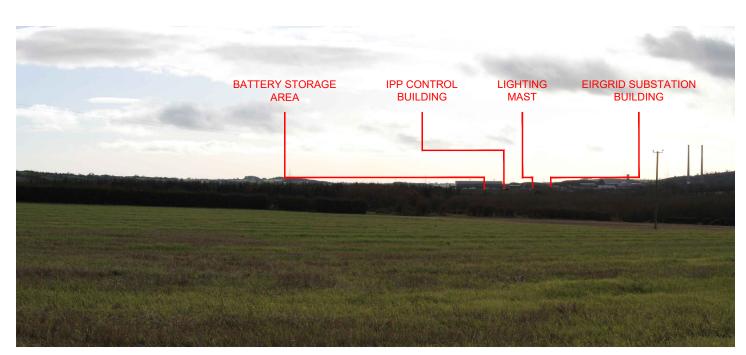
Page Size : A3



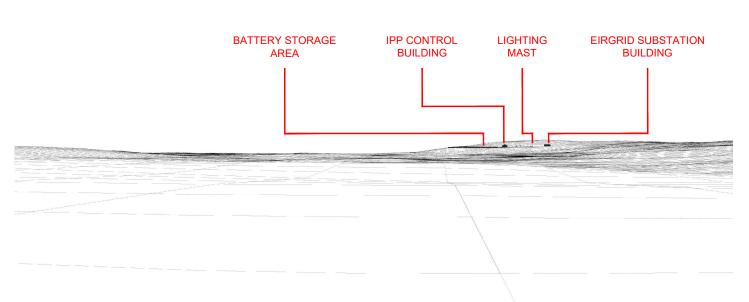
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Unit 1D Deerpark Business Centre
Oranmore, County Galway, H91 X599
Email: contact@entrust-services.com
Phone: +353 (0) 91 342 511



(Current View)







(Proposed View - Wireframe)

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 3 : Ballyedock

Created by: VV 20/12/2023 20/12/2023 Checked by: PS Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 669373 E, 617534 N

Elevation AOD : 14m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Horizontal View Angle

Height above ground : 1.6m

: Canon EOS 7D, Camera & Lens

35mm Focal equiv.

: 34.6°

Viewing Distance : 330mm Distance to Proposed development : 2380m

Direction of View (degrees) : 185°

: A3 Page Size

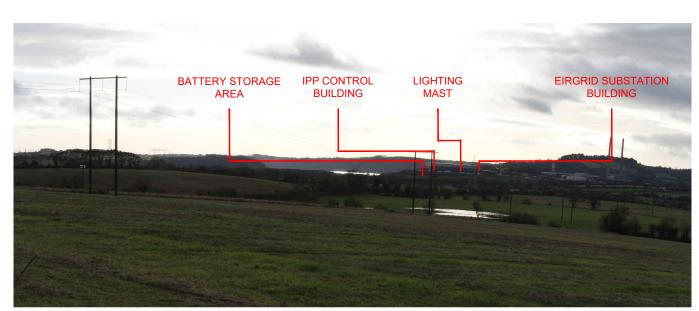


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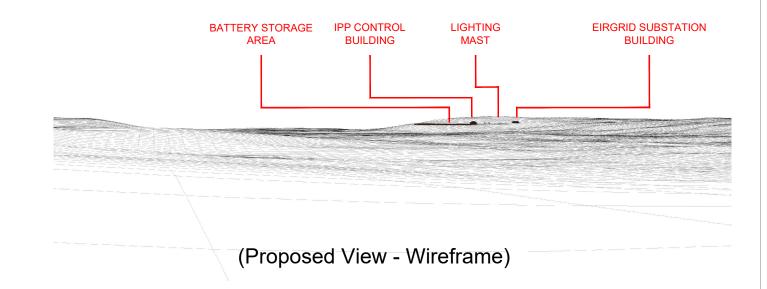
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(Current View)



(Proposed View)



Γitle

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 4 : Local road, south-east of Ballyedock

Created by: VV 20/12/2023 Checked by: PS 20/12/2023 Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 669892 E, 617104 N

Elevation AOD : 20m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

Camera & Lens : Canon EOS 7D,

35mm Focal equiv.

Horizontal View Angle : 38.3°
Viewing Distance : 330mm

Distance to Proposed development : 2020m Direction of View (degrees) : 195°

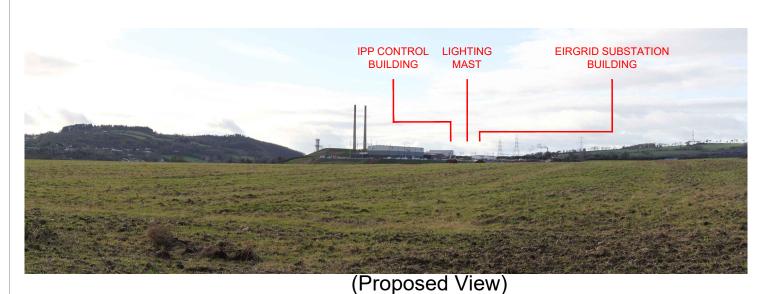
Page Size : A3

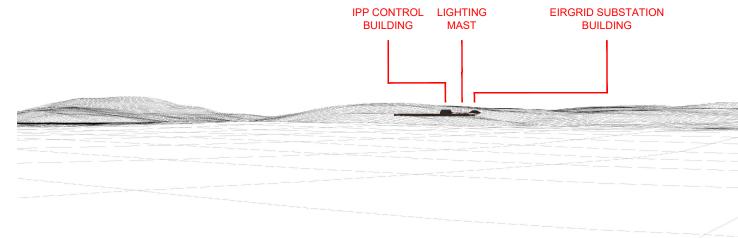


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(Current View)





Titlo

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 5 : Access track, Kilmannock

Created by: VV 20/12/2023 Checked by: PS 20/12/2023 Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 670269 E, 615653 N

Elevation AOD : 11m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

Camera & Lens : Canon EOS 7D,

35mm Focal equiv.

Horizontal View Angle : 59.8° Viewing Distance : 330mm

Distance to Proposed development : 1010m Direction of View (degrees) : 240°

Page Size : A3



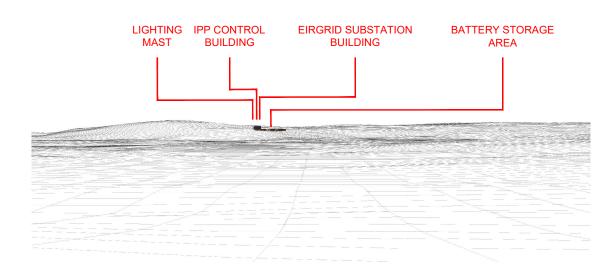
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(Current View)



(Proposed View)



(Proposed View - Wireframe)

itle

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 6 : Dunbrody Abbey

Created by: VV 20/12/2023 Checked by: PS 20/12/2023 Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 670959 E, 615185 N

Elevation AOD : 06m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

Camera & Lens : Canon EOS 7D,

35mm Focal equiv.

Horizontal View Angle : 28.1° Viewing Distance : 330mm

Distance to Proposed development : 1575m

Direction of View (degrees) : 270°

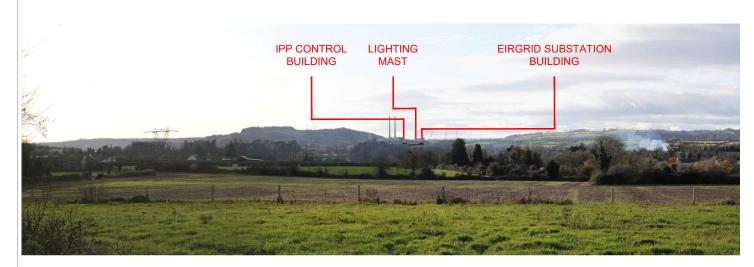
Page Size : A3



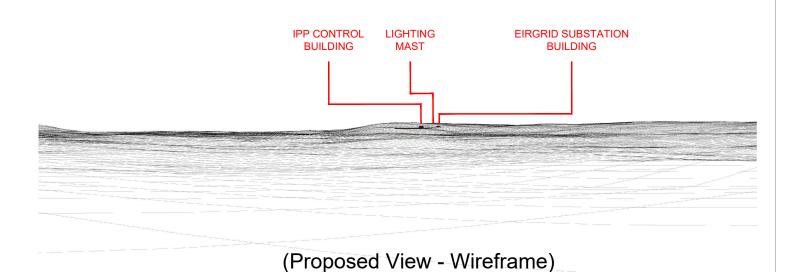
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(Current View)



(Proposed View)



Γitle

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 7: Horeswood Church

Created by: VV 20/12/2023 Checked by: PS 20/12/2023 Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 671162 E, 616571 N

Elevation AOD : 256m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

Camera & Lens : Canon EOS 7D,

35mm Focal equiv.

Horizontal View Angle : 37°
Viewing Distance : 330mm

Distance to Proposed development : 2290m Direction of View (degrees) : 231°

Page Size : A3

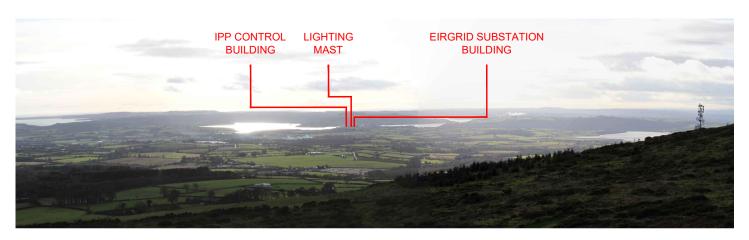


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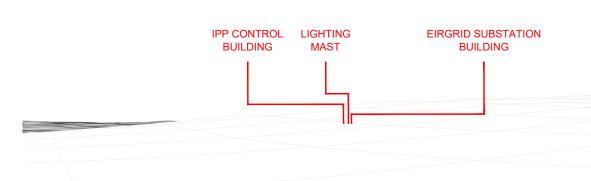
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(Current View)



(Proposed View)



(Proposed View - Wireframe)

Γitle

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 8 : Slieve Coillte

Created by: VV 20/12/2023 Checked by: PS 20/12/2023 Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 672629 E, 621081 N

Elevation AOD : 30m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

Camera & Lens : Canon EOS 7D,

35mm Focal equiv.

Horizontal View Angle : 32.1° Viewing Distance : 330mm

Distance to Proposed development : 6785m

Direction of View (degrees) : 210°

Page Size : A3



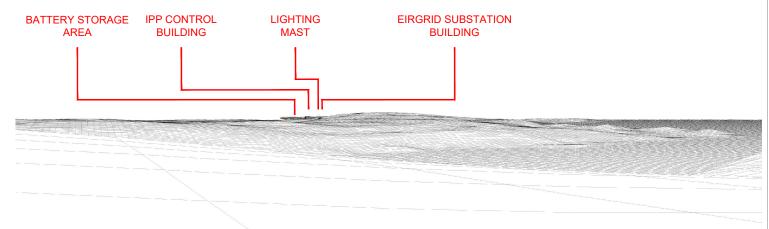
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(Current View)



(Proposed View)



(Proposed View - Wireframe)

Γitle

Kilmannock 110kV Substation & 110kV Grid Connection at Great Island, Kilmokea, Co. Wexford

Viewpoint 9 : Drumdowney

Created by: VV 20/12/2023 Checked by: PS 20/12/2023 Approved by: KT 20/12/2023 Viewpoint Details

Grid Reference : 666707 E, 615625 N

Elevation AOD : 106m

Proposed Development Info.

Kilmannock 110kV Substation & 110kV Grid Connection

Photograph

Height above ground : 1.6m

Camera & Lens : Canon EOS 7D,

35mm Focal equiv.

Horizontal View Angle : 35.3° Viewing Distance : 330mm

Distance to Proposed development : 2425m

Direction of View (degrees) : 102°

Page Size : A3



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