

CUNNANE STRATTON REYNOLDS

LANDSCAPE AND VISUAL APPRAISAL

Mill Farm Substation,

Ricetown,

Co. Meath.

April 2024

CUNNANE STRATTON REYNOLDS
LAND PLANNING & DESIGN
www.csrlandplan

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

1.1 Introduction

The Landscape and Visual Appraisal was prepared by CSR and was informed by a desktop study and a survey of the site and receiving environment in October 2023. The appraisal is in accordance with the methodology prescribed in the Guidelines for Landscape and Visual Impact Assessment, 3rd edition, 2013 (GLVIA) published by the UK Landscape Institute and the Institute for Environmental Management and Assessment and the relevant updates and Clarifications as issued by the Landscape Institute. The report identifies and discusses the landscape and visual constraints as well as landscape and visual effects in relation to the proposed Mill Farm development at Ricetown, Co. Meath.

1.1.1. Study Area

According to Section 5.2 of the Guidelines for Landscape and Visual Impact Assessment (3rd Edition 2013):

“The study area should include the site itself and the full extent of the wider landscape around it, which the proposed development may influence in a significant manner.”

The extent of a study area for an LVIA mainly derives from the nature of the site and wider landscape, in tandem with the specifics of the proposed development. In this instance, owing to the nature of the proposed development, there is a low capacity for significant impacts to arise beyond c. 1km from the site. However, out of an abundance of caution, a 2km study area will be used in this instance. It should not be inferred that the proposed development is unlikely to be visible from any location beyond the study area, but, more importantly, that the proposed development is unlikely to influence such receptors in a significant manner. Figure 1.1, below, sets out the extent of the 2km study area.



Figure 1.1: LVIA 2km Study Area

1.2 Methodology

Ireland is a signatory to the European Landscape Convention (ELC). The ELC defines landscape as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. This definition is important in that it expands beyond the idea that landscape is only a matter of aesthetics and visual amenity. It encourages a focus on landscape as a resource in its own right - a shared resource providing a complex range of cultural, environmental, and economic benefits to individuals and society.

As a cultural resource, the landscape functions as the setting for our day-to-day lives, also providing opportunities for recreation and aesthetic enjoyment and inspiration. It contributes to the sense of place experienced by individuals and communities and provides a link to the past as a record of historic socio-economic and environmental conditions. As an environmental resource, the landscape provides habitat for fauna and flora. It receives, stores, conveys and cleans water, and vegetation in the landscape stores carbon and produces oxygen. As an economic resource, the landscape provides the raw

materials and space for the production of food, materials (e.g. timber, aggregates) and energy (e.g. carbon-based fuels, wind, solar), living space and for recreation and tourism activities.

Forces for Landscape Change:

The GLVIA notes that the landscape is change is ongoing. Many different pressures have progressively altered familiar landscapes over time and will continue to do so in the future, creating new landscapes. For example, within the receiving environment, the environs of the proposed development have altered over the last thousand years, primarily from wilderness to agriculture and settlement.

Many of the drivers for change arise from the requirement for development to meet the needs of a growing population and economy. The concept of sustainable development recognises that change must and will occur to meet the needs of the present, but that it should not compromise the ability of future generations to meet their needs. This involves finding an appropriate balance between economic, social and environmental forces and values.

The reversibility of change is an important consideration. If change must occur to meet a current need, can it be reversed to return the resource (in this case, the landscape) to its previous state to allow for development or management for future needs?

Climate change is one of the major factors likely to bring about future change in the landscape, and it is accepted to be the most serious long-term threat to the natural environment, as well as economic activity (particularly primary production) and society. The need for climate change mitigation and adaptation, which includes the management of water and more extreme weather and rainfall patterns, is part of this.

1.2.1 Guidance

Landscape and Visual Appraisal is a tool used to identify the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity. As this is a standalone Landscape and Visual Appraisal, the report does not include a statement of the significance of effects. However the process by which the landscape and visual effects are identified is similar to that of a Landscape and Visual Assessment carried out as part of an EIAR.

The methodology is informed by the following key guidance documents, namely:

- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition 2013, published by the UK Landscape Institute and the Institute of Environmental Management and Assessment (hereafter referred to as the GLVIA).
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (Draft August 2017, EPA).

References are also made to the '*Landscape and Landscape Assessment – Consultation Draft of Guidelines for Planning Authorities*' document, published in 2000 by the Department of Environment, Heritage and Local Government.

Use of the Term 'Effect' vs 'Impact'

The GLVIA advises that the terms 'impact' and 'effect' should be clearly distinguished and consistently used in the preparation of an LVIA.

'*Impact*' is defined as the action being taken. In the case of the proposed works, the impact would include the construction of the proposed development.

'Effect' is defined as the change or changes resulting from those actions, e.g. a change in landscape character, or changes to the composition, character and quality of views in the receiving environment. This report focusses on these effects.

1.2.2 Assessment of Both 'Landscape' and 'Visual' Effects

Another key distinction to make in a LVIA is that between landscape effects and the visual effects of development.

'Landscape' results from the interplay between the physical, natural and cultural components of our surroundings. Different combinations of these elements and their spatial distribution create distinctive character of landscape in different places. 'Landscape character assessment' is the method used in LVIA to describe landscape, and by which to understand the potential effects of a development on the landscape as 'a resource'. Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of landscape that make a place distinctive.

Views and 'visual amenity' refer to the interrelationship between people and the landscape. The GLVIA prescribes that effects on views and visual amenity should be assessed separately from landscape, although the two topics are inherently linked. Visual assessment is concerned with changes that arise in the composition of available views, the response of people to these changes and the overall effects on the area's visual amenity.

The appraisal of landscape and visual effects included a desktop study, review of the proposed development drawings and visualisations, and a site visit which was carried out in October 2023.

1.2.3 Methodology for Landscape Appraisal

Landscape appraisal considers the sensitivity of the receptor, and the likely nature and magnitude of the changes to the main landscape elements and characteristics. Existing trends of change in the landscape are taken into account.

Sensitivity of the Landscape Resource

Landscape Sensitivity: Landscape sensitivity is a function of its land use, landscape patterns and scale, visual enclosure and distribution of visual receptors, scope for mitigation, and the value placed on the landscape. It also relates to the nature and scale of development proposed. It includes consideration of landscape values as well as the susceptibility of the landscape to change.

Landscape values can be identified by the presence of landscape designations or policies which indicate particular values, either on a national or local level. In addition, a number of criteria are used to assess the value of a landscape. These are described further in Section 1.6 below.

Landscape susceptibility is defined in the GLVIA as "*the ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the baseline scenario and/or the achievement of landscape planning policies and strategies.*" Susceptibility also relates to the type of development – a landscape may be highly susceptible to certain types of development but have a low susceptibility to other types of development.

For the purpose of assessment, three categories are used to classify the landscape sensitivity of the receiving environment.

Sensitivity is therefore a combination of Landscape value and Susceptibility.

Sensitivity	Description
High	Areas where the landscape exhibits strong, positive character with valued elements, features and characteristics. The character of the landscape is such that it has limited/low capacity for accommodating change in the form of development. These attributes are recognised in landscape policy or designations as being of national, regional or county value and the principal management objective for the area is conservation of the existing character.
Medium	Areas where the landscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong. The character of the landscape is such that there is some capacity for change in the form of development. These areas may be recognised in landscape policy at local or county level and the principal management objective may be to consolidate landscape character or facilitate appropriate, necessary change.
Low	Areas where the landscape has few valued elements, features or characteristics and the character is weak. The character of the landscape is such that it has capacity for change; where development would result in a minor change or would make a positive change. Such landscapes are generally unrecognised in policy and where the principal management objective is to facilitate change through development, repair, restoration or enhancement.

Table 1.1 – Categories of Landscape Sensitivity

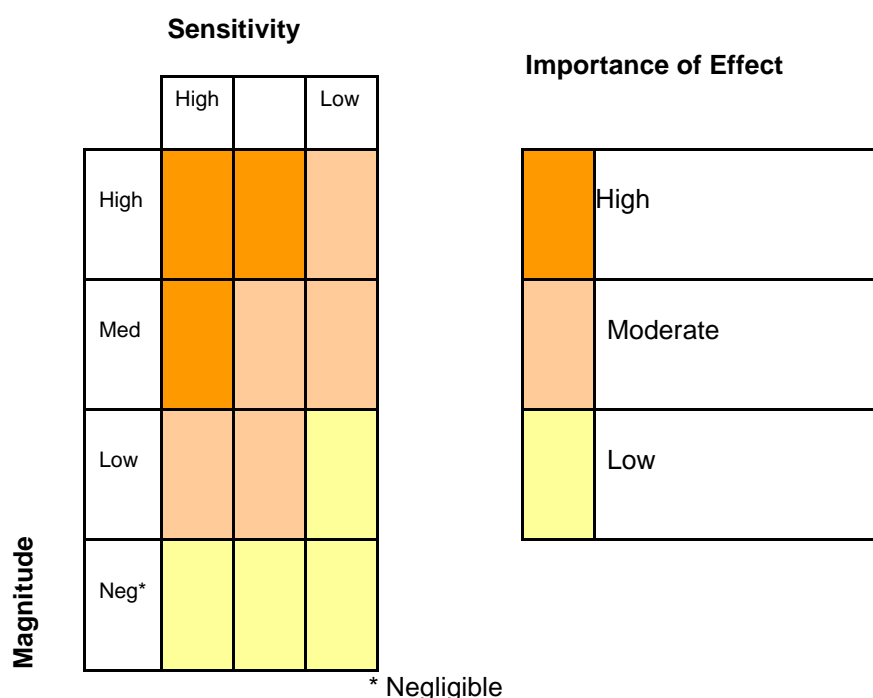
Magnitude of Landscape Change: The magnitude of change is a factor of the scale, extent and degree of change imposed on the landscape with reference to its key elements, features and characteristics (also known as 'landscape receptors'). Four categories are used to classify magnitude of landscape change.

Magnitude of Change	Description
High	Change that is moderate to large in extent, resulting in major alteration to key elements, features or characteristics of the landscape and/or introduction of large elements considered uncharacteristic in the context. Such development results in change to the character of the landscape.
Medium	Change that is moderate in extent, resulting in partial loss or alteration to key elements, features or characteristics of the landscape, and/or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development results in change to the character of the landscape.
Low	Change that is moderate or limited in scale, resulting in minor alteration to key elements, features or characteristics of the landscape, and/or introduction of elements that are not uncharacteristic in the context. Such development results in minor change to the character of the landscape.
Negligible	Change that is limited in scale, resulting in no alteration to key elements, features or characteristics of the landscape key elements features or characteristics of the landscape, and/or introduction of elements that are characteristic of the context. Such development results in no change to the landscape character.

Table 1.2 – Categories of Landscape Change**Landscape Effects**

A conclusion on the relative importance of landscape effects (either on physical landscape elements or on the landscape character) can be arrived at by combining the landscape sensitivity and the magnitude of change. This is illustrated in Figure 1.2 below.

As this is a standalone Landscape and Visual Appraisal, and not part of an EIAR, this report does not include a statement of the significance of effects.

**Figure 1.2: Guide to the classification of the level of effects**

Landscape effects are also classified as positive, neutral or negative/adverse. Development has the potential to improve the environment as well as damage it. In certain situations, there might be policy encouraging a type of change in the landscape, and if a development achieves the objective of the policy the resulting effect might be positive, even if the landscape character is profoundly changed.

1.2.4 Methodology for Visual Appraisal

Visual appraisal considers the changes to the composition of views, the character of the views, and the visual amenity experienced by visual receptors. Visual receptor sensitivity is a function of two main considerations:

- *Susceptibility of the visual receptor to change.* This depends on the occupation or activity of the people experiencing the view, and the extent to which their attention or interest is focussed on the views or visual amenity they experience at that location.

Visual receptors most susceptible to change include residents at home, people engaged in outdoor recreation focused on the landscape (e.g. trail users), and visitors to heritage or other attractions and places of community congregation where the setting contributes to the experience.

Visual receptors less susceptible to change include travellers on road, rail and other transport routes (unless on recognised scenic routes which would be more susceptible), people engaged in outdoor

recreation or sports where the surrounding landscape does not influence the experience, and people in their place of work or shopping where the setting does not influence their experience.

- *Value attached to the view.* This depends to a large extent on the subjective opinion of the visual receptor but also on factors such as policy and designations (e.g. scenic routes, protected views), or the view or setting being associated with a heritage asset, visitor attraction or having some other cultural status (e.g. by appearing in arts).

Three categories are used to classify a viewpoint's sensitivity:

Sensitivity	Description
High	Viewers at viewpoints that are recognised in policy or otherwise designated as being of value, or viewpoints that are highly valued by people that experience them regularly (such as views from houses or outdoor recreation features) and views which are valued by the local community. This would include tourist attractions, and heritage features of regional or county value, and viewers travelling on scenic routes.
Medium	Viewers at viewpoints representing people travelling at slow or moderate speed through or past the affected landscape in cars or on public transport, where they are partly but not entirely focused on the landscape, or where the landscape has some valued views. The views are generally not designated, but which include panoramic views or views judged to be of some scenic quality, which demonstrate some sense of naturalness, tranquillity, or some rare element in the view.
Low	Viewers at viewpoints reflecting people involved in activities not focused on the landscape e.g. people at their place of work or engaged in similar activities such as shopping, etc. The view may present an attractive backdrop to these activities but there is no evidence of that the view is valued, and not regarded as an important element of these activities. Viewers travelling at high speeds (e.g. motorways) may also be considered of low susceptibility.

Table 1.3 – Categories of Visual Receptor Sensitivity

Magnitude of Change to the View

Classification of the magnitude of change takes into account the size or scale of the intrusion of development into the view (relative to the other elements and features in the composition, i.e. its relative visual dominance), the degree to which it contrasts or integrates with the other elements and the general character of the view, and the way in which the change will be experienced (e.g. in full view, partial or peripheral, or glimpses). It also considers the geographical extent of the change, the duration and the reversibility of the visual effects.

Four categories are used to classify magnitude of change to a view.

Magnitude of Change	Description
High	Extensive intrusion of the development in the view, or partial intrusion that obstructs valued features, or introduction of elements that may be considered uncharacteristic in the context, to the extent that the development becomes co-dominant with other elements in the composition and affects the character of the view and the visual amenity.
Medium	Partial intrusion of the development in the view, or introduction of elements that may be prominent but not necessarily uncharacteristic in the context, resulting in change to the composition but not necessarily the character of the view or the visual amenity.
Low	Minor intrusion of the development into the view, or introduction of elements that are not uncharacteristic in the context, resulting in minor alteration to the composition and character of the view but no change to visual amenity.
Negligible	Barely discernible intrusion of the development into the view, or introduction of elements that are characteristic in the context, resulting in slight change to the composition of the view and no change in visual amenity.

Table 1.4 – Magnitude of Visual Change

Visual Effects

A conclusion on the relative importance of visual effects can be arrived at by combining the visual receptor sensitivity and the magnitude of change. This is included in Figure 1.2, above, as for Landscape Effects.

As this report is not part of an Environmental Impact Assessment Report, and is instead a standalone Landscape and Visual Appraisal, the report does not include a statement of the significance of effects.

Visual effects are also classified as positive, neutral or negative/adverse as set out below:

Quality and Timescale of Effects

The predicted effects are also classified as beneficial, neutral or adverse. This is not an absolute exercise; in particular, visual receptors' attitudes to development, and thus their response to the impact of a development, will vary. However, the methodology applied is designed to provide robust justification for the conclusions drawn. These qualitative impacts/effects are defined as:

- Adverse - Scheme at variance with landform, scale, pattern. Would degrade, diminish or destroy the integrity of valued features, elements or their setting or cause the quality of the landscape(townscape)/view to be diminished.
- Neutral - Scheme complements the scale, landform and pattern of the landscape(townscape)/view and maintains landscape quality.
- Beneficial - Improves landscape(townscape)/view quality and character, fits with the scale, landform and pattern and enables the restoration of valued characteristic features or repairs / removes damage caused by existing land uses.

Effects are also categorised according to their longevity or timescale:

- Temporary – Lasting for one year or less.

- Short Term – Lasting one to seven years.
- Medium Term – Lasting seven to fifteen years.
- Long Term – Lasting fifteen years to sixty years.
- Permanent – Lasting over sixty years.

1.3 The Proposed Development

It is proposed to construct a 110kV loop-in substation and associated works in the townland of Ricetown, County Meath to connect the permitted Mill Farm Solar Project to the National Grid.

The proposed project will comprise of:

- A 110 kilovolt (kV) Air Insulated Switchgear (AIS) loop-in substation with associated compound, including control and operational buildings, electrical plant, equipment, cabling, lighting, CCTV, lightening masts, drainage infrastructure, security palisade fencing, and all associated and ancillary works necessary to facilitate the development.
- Erection of 2 no. overhead line end masts (c. 20m high) and 2 no. lattice gantries (c. 16m high) and associated overhead cabling to enable a loop-in/loop-out grid connection to National grid via the existing the Meath Hill-Gorman 110kV overhead powerlines located above the site.

The works will include site drainage and permanent signage associated with the new construction. The road layout for the proposed project makes use of the existing onsite access road and tracks, associated with the adjacent permitted solar farm development, where possible. The proposed development is compatible with and does not in any way impede or alter the permitted Mill Farm Solar Farm.

1.3.1 Proposed 110kV Substation Compound

The development will comprise the construction of a 1 No. 110kV onsite Eirgrid substation with associated electrical plant, electrical equipment, security palisade fencing, an IPP building and a transformer.

The overall compound will have an area of c.11,572m², divided into two adjoining sections: an EirGrid section (c. 9,262m² in area) and an IPP (Independent Power Producer) section (c.2,310m² in area), each of which are enclosed within a 2.6m high palisade fence. An additional outer concrete post and rail fence (1.4m in height) will be installed around the perimeter of the EirGrid compound.

Each section will contain a control building and an outdoor electrical yard including electrical equipment such as electrical pylons, over and underground ducting & cables, busbars, disconnects, breakers, sealing ends, lightning, and lighting masts. The IPP section will also contain 1 No. banded transformer with a backup emergency diesel generator and associated diesel storage tank also located within the bund. Both buildings will be a block built single storey building approximately 6.5m in height, with pitched roof and an external blockwork and plastered finish.

The overall substation compound will consist of a 50mm compound stone finish. The max height of the substation is 8.55m. 10 No. Lightning masts of 18m high will be erected within the compound.

1.3.2 Overhead loop-in Grid Connection

The electrical connection required from the proposed substation development will be facilitated by Overhead 110kV Loop-in Interface Masts. The erection of 2 No. Over Head Line (OHL) End Mast structures (c. 20m high) are required under the existing Meath Hill-Gorman 110kV OHL. There is also a requirement for the installation of 2 No. lattice gantries (c. 16m high).

The existing Overhead line will be terminated, and 2 new towers will be erected to create 2 new OHL circuits. The new interface mast structure locations are to be selected based on ground surveys, ground profiles, allowable angles and ruling span checks. A foundation is excavated for each tower location and the placement of excavation material is temporarily stored in designated deposition areas. Any excess excavation material will be utilised as berms and for landscaping purposes on the adjacent permitted solar farm.

1.3.3 Permitted development

It is also worth noting that the proposed development is in the immediate vicinity of a permitted development that it is of considerable importance to it. This is a permitted solar farm (Planning Application Reference 221044, granted permission by Meath County Council on 28/03/23) that will, in effect, be in the same field as the site, and surround the site on three sides. This permitted development pertains to:

“The development will consist of permission for a period of 10 years to construct and complete a Solar PV development with a total site area of circa 97.05 hectares, to include solar panels mounted on steel support on steel support structures, associated cabling and ducting, 12 No. Transformers, 1 No. Temporary Construction Compound, 1 No. Storage Container, maintenance tracks, perimeter fencing and gates, 61 No. CCTV, 4 No. Weather Stations, 3 No. Bunds associated landscaping and ancillary works, with an operational life of 40 years. The application is accompanied by a Natura Impact Statement (NIS). Significant further information/revised plans submitted on this application.”

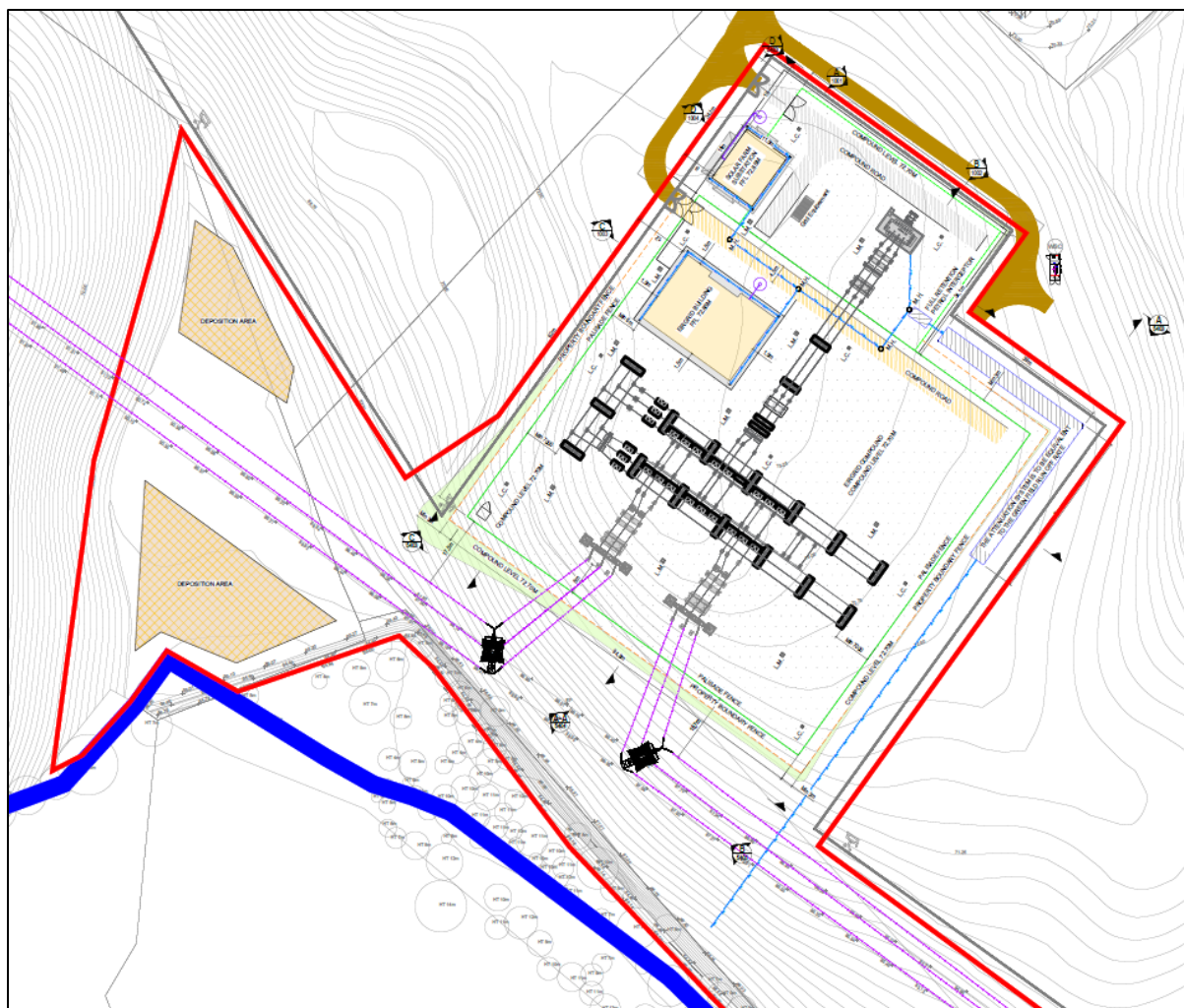


Figure 1.3a: Extract of Proposed Site Layout – Sheet 1 (Source: MWP Drawing No. 23991 MWP 00 00 DR C 5103)

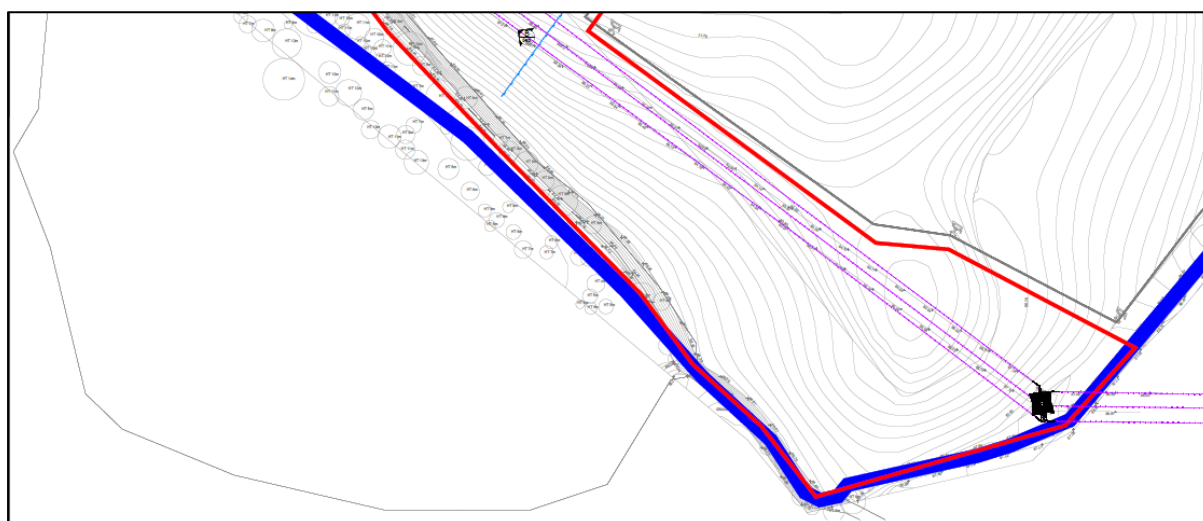


Figure 1.3b: Extract of Proposed Site Layout – Sheet 2 (i.e. southeastern end of site) (Source: MWP Drawing No. 23991 MWP 00 00 DR C 5103)

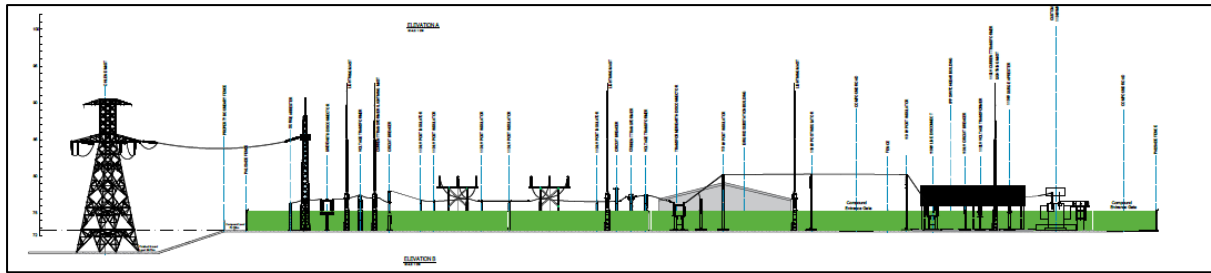


Figure 1.4: Extract of Compound Elevation B of the proposed development, looking in a north-western direction (Source MWP Drawing No. 23991-MW- 00-ZZ-DR-C-5403)

1.4 Receiving Environment – Policy Context

1.4.1 Meath County Development Plan 2021-2027

The following section includes policies and objectives from the Meath County Development Plan 2021-2027 (hereafter referred as the CDP). The CDP is a document that sets out the overall strategy and vision for the proper planning and sustainable development of the county over the six-year plan period.

1.4.2 Landscape Character Assessment

The Meath Landscape Character Assessment 2007 divides the county into 4 Landscape Character Types (LCTs). These are: 'Hills and Uplands Areas,' 'Lowland Areas,' 'River Corridors and Estuaries'; 'Coastal Areas.' The LCTs are sub-divided into 20 geographically specific Landscape Character Areas, as illustrated in Figure 1.5, below, which also indicates the location of the site for the proposed development.

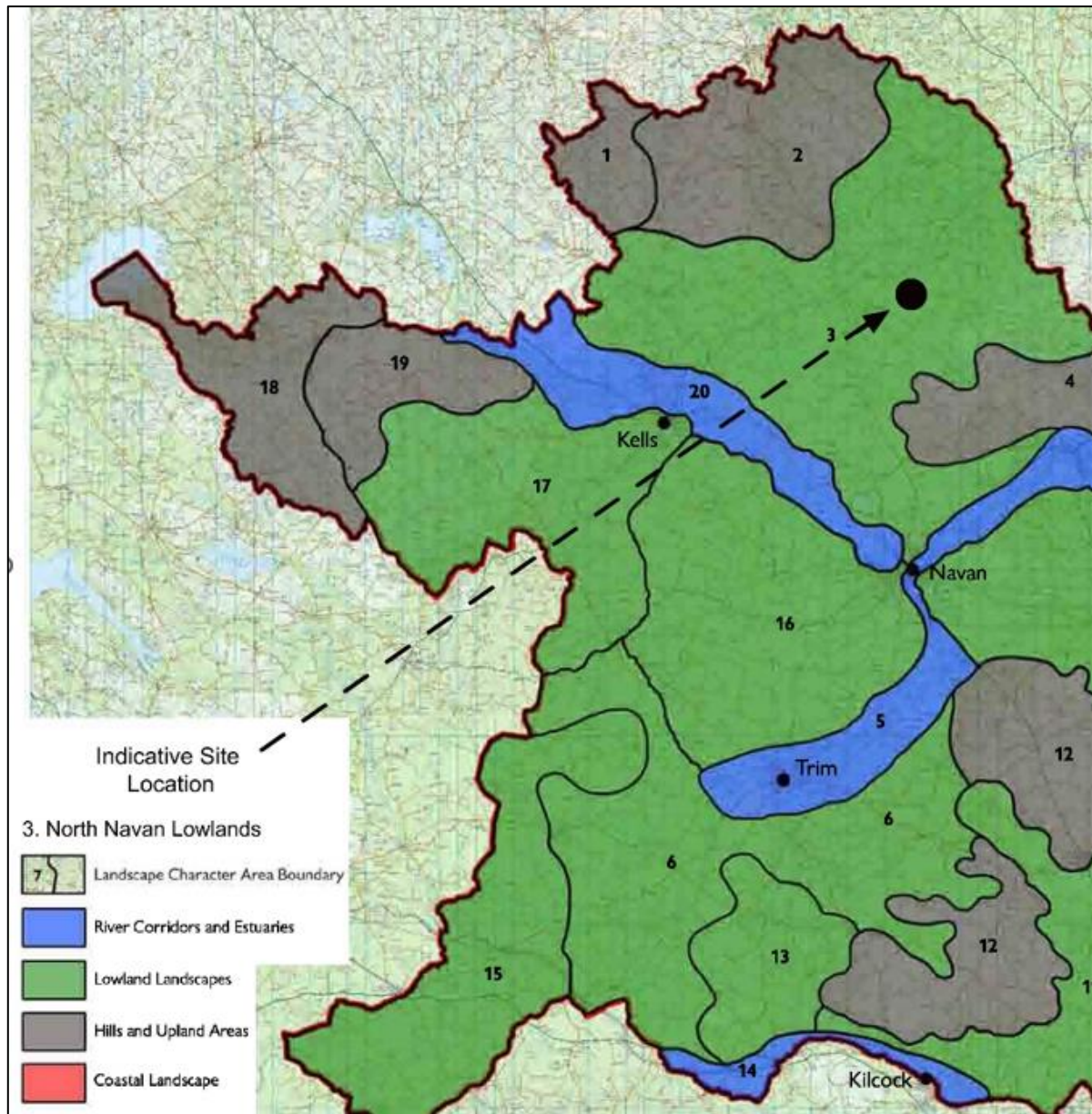


Figure 1.5: Extract of Landscape Character Assessment Map, County Meath (adapted)

The site is located within (Landscape Character Area) 'LCA 3 – North Navan Lowlands', which represents a large area of agricultural land to the north of Navan, contained in the east and west by the Rivers Blackwater and Boyne, respectively, and to the north by a more complex hilly landscape along the north Meath border.

"Overall this landscape character area is in a degraded condition. It comprises of a mixture of pasture and arable fields that have been enlarged by loss or removal of traditional boundaries, now often consist of post and wire or timber fences and drainage ditches along road corridors."

"This area is well served by transport routes and infrastructure because of its proximity to Navan and Kells: the N52 and several regional roads all traverse this character area. Road corridors often have quite an open character, but hedgerows are usually well maintained."

1.4.2.1 Summary of the North Navan Lowlands Land Use

- *"Predominantly large agricultural fields, mix of pasture and arable crops.*
- *Field boundaries in degraded condition.*
- *Significant 'sub-area' of coniferous plantation, wet birch woodland and heath in the centre of this LCA*
- *Small areas of mixed and broadleaf woodland in western section with more attractive character.*
- *Urban fringe landscape around Navan with mix of uses, degraded condition and visually detractive developments."*

1.4.2.2 Summary of 'Potential Capacity'

According to The Landscape Character Assessment 2007, 'LCA 3 – North Navan Lowlands' presents:

- *"High to medium potential capacity to accommodate overhead cables, masts and substations around urban fringe where built development is more common. Low potential capacity in rural areas and around smaller settlements, where landscape character is of higher value."*
- *"Low potential capacity to accommodate new underground service routes in parts of this LCA which are rich in historic features. However, in areas which are in a degraded condition potential capacity would be medium to high because of the potential associated opportunities to improve landscape condition."*

1.4.2.3 Landscape Value, Importance & Sensitivity

According to the Meath Landscape Character Assessment, 'LCA 3 – North Navan Lowlands' is deemed to have a:

- 'Moderate Value.'
- 'Regional Importance.'
- 'Medium Sensitivity.'

1.4.3 Relevant Policies and Objectives from the Meath County Development Plan

Biodiversity and Green Infrastructure

The County's natural heritage includes scenic river valleys, rolling farmland, a network of mature hedgerows and diverse coastal habitats.

HER POL 27

'To protect, conserve and enhance the County's biodiversity where appropriate.'

HER POL 28

'To integrate in the development management process the protection and enhancement of biodiversity and landscape features wherever possible, by minimising adverse impacts on

existing habitats (whether designated or not) and by including mitigation and/or compensation measures, as appropriate.'

HER OBJ 36

'To promote awareness, understanding and best practice in the management of the County's woodland, tree and hedgerow resource.'

HER POL 38

"To promote and encourage planting of native hedgerow species in new developments and as part of the Council's own landscaping works."

HER OBJ 48

"To support the aims and objectives of the European Landscape Convention by implementing the relevant objectives and actions of the National Landscape Strategy 2015-2025 and any revisions thereof."

HER POL 52

"To protect and enhance the quality, character and distinctiveness of the landscapes of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards of siting and design."

HER POL 53

"To discourage proposals necessitating the removal of extensive mounts of trees, hedgerows and historic walls or other distinctive boundary treatments."

HER OBJ 49

"To ensure the management of the development will have regard to the value of the landscape, its character, importance, sensitivity and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations."

HER OBJ 50

"To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity."

HER OBJ 60

"To encourage, pursuant to Article 10 of the Habitats Directive (92/43/EEC), the management of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species."

RUR DEV SO 1

"To support the continued vitality and viability of rural areas, environmentally, socially and commercially by promoting sustainable social and economic development."

RUR DEV SO 6

"To protect and enhance the visual qualities of rural areas through sensitive design."

RUR DEV SO 9

"To ensure that plans and projects associated with rural development will be subject to an Appropriate Assessment Screening and those plans or projects which could, either individually or in-combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) undergo a full Appropriate Assessment."

RUR DEV SO 10

"To promote rural economic development by recognising the need to advance the long term sustainable social and environmental development of rural areas and encouraging economic diversification and facilitating growth of rural enterprises."

1.4.4 Protected Views

There are no designated Scenic Views or Scenic Routes within the site or study area.

1.4.5 National Parks & Wildlife Service (NPWS)

There are no NPWS designations within the site or the study area.

1.4.6 Planning History of Site and/or immediate vicinity

Within the site, there is no known proposed or permitted developments. However, in February 2023, permission was granted by Meath County Council (Planning Application Reference 221044) for a 97 hectare solar farm located within the same large field. This permitted development will align the site's western, northern and eastern site boundaries. According to the National Planning Application Database:

'The development will consist of permission for a period of 10 years to construct and complete a Solar PV development with a total site area of circa 97.05 hectares, to include solar panels mounted on steel support on steel support structures, associated cabling and ducting, 12 No. Transformers, 1 No. Temporary Construction Compound, 1 No. Storage Container, maintenance tracks, perimeter fencing and gates, 61 No. CCTV, 4 No. Weather Stations, 3 No. Bunds associated landscaping and ancillary works, with an operational life of 40 years.'

In addition, on a site approx. 1-1.5km southeast of the site, planning permission is sought from Meath County Council (Planning Application Reference 231082) for a solar development:

'The development will consist of a 10-year permission for the construction of a solar PV energy development within a total site area of approximately 131.93ha, to include solar PV panels ground mounted on steel support structures, electrical transformer/inverter station modules, storage containers, CCTV cameras, access tracks, fencing and associated electrical cabling, ducting and ancillary infrastructure.'

1.4.7 Summary & Key Implications of Planning Policy Context Summary & Key Implications of Planning Policy Context

- The site is located within (Landscape Character Area) 'LCA 3 – North Navan Lowlands', which is deemed to have a 'Moderate Value,' 'Regional Importance' and 'Medium Sensitivity.'
- The 'potential capacity' of this LCA includes a *"High to medium potential capacity to accommodate overhead cables, masts and substations around urban fringe where built development is more common. Low potential capacity in rural areas and around smaller settlements, where landscape character is of higher value."*
- *"Support the continued vitality and viability of rural areas, environmentally, socially and commercially by promoting sustainable social and economic development."*
- *"To protect and enhance the visual qualities of rural areas through sensitive design."*
- *"To ensure the management of the development will have regard to the value of the landscape, its character, importance, sensitivity and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations."*
- *"To promote rural economic development by recognising the need to advance the long term sustainable social and environmental development of rural areas and encouraging economic diversification and facilitating growth of rural enterprises."*
- There are no NPWS designations or scenic designations within the site or the study area.
- The site is in the immediate vicinity of a permitted 97 hectare solar farm that will be located in the same large field as the proposed development. This permitted development will align the site's western, northern and eastern site boundaries.

1.5 Receiving Environment

1.5.1 Landscape Character

The landscape character is described below in terms of 'Topography & Drainage,' 'Landcover, Land Use & Vegetation,' 'Built & Cultural Heritage' and 'Amenity & Recreation'. Under each subheading, a differentiation is made between the 'site' and the 'wider study area.'

Topography & Drainage

The site is situated in the northern section of County Meath, and within the southern portion of Ricetown townland. Topography in the greater extent of the study area is gently undulating and below 100m AOD, with terrain within the site being gently sloping and less than 73m AOD.

In terms of watercourses and/or drainage patterns, as the site is set within a large existing field, there are no watercourses or waterbodies within or along the site. However, a vegetative land drain runs to the immediate south of the site, marking the original/larger field boundary. This stream feeds into the Killary Water (large stream) north of the site, which in turn flows into the Dee River north of the study area. In the southeast of the study area, there are small streams aligning field boundaries; streams that are also tributaries of the Killary Water (large stream). Please refer to Figure 1.6 & 1.7, below.



Figure 1.6 - Undulating terrain in the site



Figure 1.7 – a vegetative land drain runs to the immediate south of the site,

Landcover, land use & Vegetation

Reflective of the larger field in which the site is set, and of this area of County Meath, land use on the site is of an intensive agricultural nature, with barley and wheat grown in recent years. While no livestock have been grazed within the site or the larger field in recent years, there are large, unused cattle sheds approx. 50m north of the site. A well-worn agricultural track is located within 30m northwest of the site. South of the aforementioned land drain (i.e. outside the field) there is some low-lying broadleaf woodland within this low-lying area between intensively farmed fields. Please refer to Figure 1.8, below.

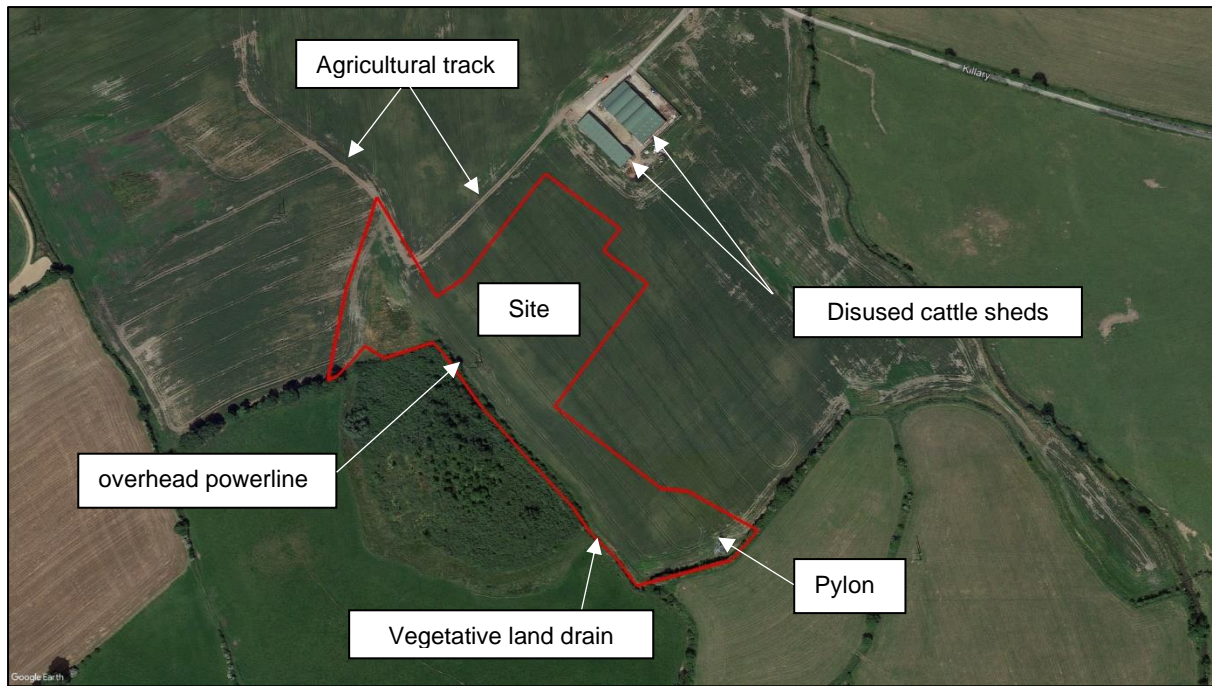


Figure 1.8 – Context of landcover and land use within the site and its immediate vicinity

The field in which the site is set, as well as the wider vicinity, has undergone considerable intensification in land use over the last two centuries. When cross-referenced with OSI historical 19th Century maps, it is apparent that the landscape value and sensitivity has been lowered, owing to the ongoing expansion of field sizes/removal of older field boundaries.



Figure 1.9 (left) pylon located in the southeast of the site. Figure 1.10 (right), twin set of utility poles located in the south of the site.

A 110kV overhead power line runs within the immediate southeast, south and southwest of the site. This is supported by twin sets of large timber utility poles (in the south and southwest of the site) as well as a large pylon in the southeast of the site). Please refer to Figure 1.8, 1.9 & 1.10, above. Within 250m north of the site, an extensive Corn Mill was located in the 19th Century; traces of which 'in the field' are no more. Approx. 700m north of the site, an extensive sand & gravel quarry has originated in the last century and expanded considerably in size. This quarry is now decommissioned.

Within 500m west of the site, are lands associated with horse gallops, training tracks and stables. However, the wider study area is characterized by intensive agricultural production, with mostly pastoral fields being of medium to large size. In several areas, vegetation in field boundaries is low or non-existent, although in most areas field boundaries take the form of mature treelines with undergrowth throughout.

Built & Cultural Heritage

Within the site, there are no built/constructed components or any known items/elements of any cultural, historic, or archaeological value. However, large, unused cattle sheds are located approx. 50m north of the site.

The study area is dotted with numerous detached rural residences. There is a cluster of housing at Killary (townland) approx. 900m east of the site, while there are numerous detached residences along a local road ('Knock road') approx. 1.4km southwest of the site. The only settlement within the study area is the small village of Lobinstown, c. 1.9km northeast of the site.



Figure 1.11 - Large, unused cattle sheds approx. 50m north of the shed

Amenity & Recreation

The Castletown GAA Club is located 1.5km to the southwest of the site, which functions as a recreational facility for the local community. Castletown GAA Club is rich in history, dating back to 1888, with the official founding of the club in 1896.

1.6.2 Views and Visual Amenity

Site

For the reasons set out in Section 1.6.1, above, there is a highly limited and/or low visual amenity associated with the site.

Wider Study Area

For the reasons set out in Section 1.6.1, above, there is a modest degree of visual amenity associated with the wider study area. Terrain is generally low-lying and slightly undulating, meaning that open views from the public sphere, in the direction of the site, are highly limited. Reflective of the fact that land use across the study area is of an undramatic topography and of an intensive agricultural nature, there are no designated scenic designations within the study area.

1.6.3 Summary of Landscape Characteristics and Values

- Topography in the study area is low lying and gently undulating, with the site's elevation lying below 73m AOD.
- The site is set within a large existing field of an intensive agricultural nature, and which has undergone considerable intensification in land use over the last two centuries.
- A 110kV overhead power line runs within the immediate southeast, south and southwest of the site.
- There is limited known amenity & recreation, as well as built & cultural heritage value, associated with the study area

1.6.4 Zone of Visual Influence and Potential Visual Receptors

A thorough assessment of potential views of the proposed development was carried out during the site visit, and the areas with likely views were identified within the study area.

Views from the southeast

While on a similar/comparable elevation, the nearest public realm to the site is from a local road less than 700m southeast of the site. However, potential views in the direction of the site from this road are mostly facilitated where field entrances and/or low/absent roadside vegetation occur.

Views from the southwest:

While on a similar/comparable elevation, a local road is located less within 1.5m southwest of the site. However, potential views in the direction of the site from this road are mostly facilitated where field entrances and/or low/absent roadside vegetation occur

Views from the northeast:

A modest lift in terrain in and around the small villages of Lobinstown, approx. 1.9km northeast of the site, presents potential open/ partially open views in the direction of the site.

Thus, 3 No. viewpoints were recorded from within the study area, from a range of different viewing contexts, distances and angles to the site. These are introduced in Table 1.5, below.

Viewpoint	Description
1	Yellowleas
2	Knock Road, Castletown
3	St. Oliver's Terrace, Lobinstown

Table 1.5: Viewpoints contained in Photomontage booklet.



Figure 1.12: Viewpoint Location Map

1.7 Landscape Appraisal

1.7.1 Landscape Sensitivity

For the multiple factors/reason set out in Section 1.4 and 1.5, above, the landscape sensitivity of the site and the study area is deemed to be 'Medium-low.'

1.7.2 Predicted Landscape Impacts

Construction Stage Impacts

The construction stage will result in ongoing infrastructure, building and related works, and will result in the loss of any existing agricultural vegetation cover and the removal of topsoil and subsoil across the site. The nature and extent of operations during construction stage can be determined from Section 1.3, above.

In the context of the landscape character of the site and environs, the magnitude of landscape change during Construction is confined to the site and deemed 'High-medium' in magnitude. Thus, in accordance with Figure 1.2, a 'Medium-low' landscape sensitivity combined with a 'High-medium' magnitude of landscape change will result in a 'Moderate' Importance of Effect for the site. In terms of qualitative effects, as with construction works generally, this would temporarily reduce the landscape quality and be considered 'Adverse' in quality. The timescale of construction-stage impacts will be Temporary (i.e., lasting one year or less).

Operational Stage Impacts

Following the completion of construction and its associated impacts, the main landscape effect associated with the proposed development will pertain to those on the landscape character of the receiving environment.

To begin with, the change to the landscape will not involve the demolition of any existing buildings or infrastructure, or the removal of any existing vegetation (other than potential agricultural vegetation). In addition, there is a palpable, well-established energy infrastructure already within the immediate vicinity

of the site. A 110kV overhead power line runs to the immediate southeast, south and southwest of the site. This is supported by twin sets of large timber utility poles (to the south and southwest of the site) as well as a large pylon to the southeast of the site. In addition, while this power line and large timber utility poles align one side of the site, a permitted extensive solar farm will be located adjacent to the three remaining sides of the site.

Thus, the proposal will not introduce a new or uncharacteristic land use (i.e. energy infrastructure) into the setting but it will represent a distinct escalation and intensification of that land use. The proposal will introduce numerous energy infrastructure elements within the site. This will include a 2 No. 6.5m-high buildings; 2 no. c.16m-high lattice gantries within the substation compound; the erection of 2 No. Over Head Line (OHL) End Mast structures (c. 20m high) required under the existing Meath Hill-Gorman 110kV OHL.

Overall, the magnitude of change will be 'Medium-low' for the operational stage impacts.

Thus, in accordance with Figure 1.2, a 'Medium-low' landscape sensitivity combined with a 'Medium-low' magnitude of landscape change will result in a 'Moderate' Importance of Effect, during the operational stage.

In terms of qualitative effects, the operational stage landscape impacts are deemed to be 'Adverse-neutral.' In terms of duration, these are expected to be 'Permanent' (i.e. lasting over 60 years).

1.7.3 Mitigation Proposals

Mitigation of the operational landscape effects is integral to the site planning of this proposal, to ensure the scheme is of planning merit, and conducive to the inherent landscape character.

The overall design of the Proposed Development has carefully considered its setting within a landscape where tangible energy infrastructure is already apparent in the immediate vicinity of the site. In addition, the proposed development will be located in the immediate vicinity of the aforementioned permitted extensive solar farm. Furthermore, large, unused cattle sheds are located approx. 50m north of the site, which imprint strong built and vertical elements within the vicinity of the site. Thus, in terms of operational stage landscape impacts, a range of mitigation proposals have been embedded into the sitting and design of the proposed development.

1.8 Visual Appraisal

1.8.1 Photography and presentation of viewpoints

Each Viewpoint is illustrated by a photograph showing the existing view and a verified photomontage showing the proposed development. The verified photomontages were produced by Innovision in March 2024 and are presented in a separate booklet with a map of their locations. These verified photomontages have been taken with a wide angle focal length (FL) and prime lens to allow representation of the development within its context. In all visualisations, the extent of the 50mm FL view has been indicated for reference, which is broadly equivalent to the c.40 degree Horizontal Field of View (HFOV). This is representative of what the human eye perceives and reflects the requirements of the Landscape Institute Technical Guidance Note on Visual Representation 2019.

To correctly view the photomontage at the correct scale, the extents of the 50mm lens/ 40 degree angle of view should be extended to A3 in size and viewed at arm's length. This can be done by printing a hard copy or, more easily, digitally on screen, allowing reference back to the wider angle to understand the context. Each viewpoint is described below in its existing condition, followed by the effects of the

proposed development. The descriptions focus primarily on the extent of the 50mm image, with reference to the wider view, where appropriate, to inform analysis.

Please also refer to Section 1.6.4 'Zone of Visual Influence and Potential Visual Receptors', above, in conjunction with the following appraisal.

1.8.2 Description and appraisal of viewpoints

Viewpoint (VP) 1 – Yellowleas

Existing View

By way of context, the nearest public realm to the site is from a local road less than 700m southeast of the site, which is the location of VP1. Owing to a similar/comparable elevation to that of the site, potential views in the direction of the site from this road are mostly facilitated where field entrances and/or low/absent roadside vegetation occur. In this instance, low roadside vegetation allows for the best opportunity for views in the direction of the site from the public realm, albeit at approx. 700m distance.

In this scene, beyond low roadside vegetation, a modest-sized pastoral field is home to a utility pole supporting an overhead electricity line; a field that terminates in a hedgerow and tall treeline. Beyond this field boundary, a further pastoral field and stacked treelines can be discerned, between and behind the intervening vegetation. A more distant pylon and two sets of twin utility poles (supporting an overhead 110kV power lines) can also be discerned between and behind the intervening vegetation, although these will be less likely to be discernible when the trees are in-leaf (i.e. April/May – October/November). Owing to the terrain and the stacked treelines, little land use/cover can be discerned beyond approx. 1km from this location.

Overall, this scene is of an agricultural domain that is tangibly influenced by well-established energy-infrastructure.

Viewpoint Sensitivity

The viewpoint sensitivity is deemed to be Medium-low.

Proposed Visual Changes

Approx. 700m away, two proposed OHL end masts, as well two sets of busbar steel supports, will be partially visible from this location. While these energy infrastructure elements may be relatively tall, they will not be solid/massed objects, and will appear in keeping with the character of inherent energy infrastructure visible at this setting. In addition, they will remain below the skyline set by the tall trees in the aforementioned treeline and will be less likely to be discernible when the trees are in-leaf (i.e. April/May – October/November). There will also be some very faintly discernible views of some elements within the substation visible through gaps in the bare leaf hedgerow, though these are not likely to occur at other times of the year. It is worth noting that this view is at an oblique angle to road users – the primary visual receptor at this location. Even if observed by the passerby, the proposed development is unlikely to noticeably detract from the inherent visual amenity of the view.

On balance, the magnitude of change is considered Low.

Proposed Visual Effects

In accordance with Figure 1.2, the visual effect of the proposed development will be of Low Importance. In terms of qualitative visual effects, the proposal would be Neutral in quality. In terms of duration of effect, the operational stage impacts will be permanent (i.e., lasting over 60 years).

Cumulative Visual Effects

The permitted solar application in the direct vicinity of the site (see Section 1.3) may be faintly discernible from this location, although quite unlikely to be so when the trees are in-leaf. Even if

discerned several hundred metres away, between intervening vegetation, these relatively low, land-hugging panels will have no potential to generate cumulative visual impacts from this location.

Thus, there is likely to be a Negligible cumulative visual effect from this location.

Viewpoint (VP) 2 – Knock Road, Castletown

Existing View

By way of context, Knock Road is the nearest road and/or public realm to the southwest or west of the site, and has numerous residences located along it. Generally, views off Knock Road are challenging to attain for road users, owing to the general height and density of roadside hedgerows/ treelines. However, in this winter scene, a recently cut roadside hedgerow allows for views in the broader direction of the site, although it is worth noting that during other times of the year (i.e. spring to autumn) regrowth on this roadside hedgerow is unlikely to present such views.

This scene is broadly representative of the agricultural domain across this section of Co. Meath; a scene of productive, slightly sloping agricultural fields, mature treelined field boundaries and distant low hills. In the foreground field, an 110kV powerline is discernible, as is the far-off small village of Lobinstown, as well as more distant wind turbines, which can be faintly discerned.

Viewpoint Sensitivity

The viewpoint sensitivity is deemed to be Medium-low.

Proposed Visual Changes

Approx. 1.7km away, the 2 No. proposed single storey building have the potential to be discerned from this location, though is highly unlikely to be noticed by even the stationary observer. However, all other elements of the proposed have no potential to be perceived from this location, primarily owing to intervening tall trees/ treelines. Even if faintly discerned, the proposed development will have no bearing upon the inherent visual amenity of the scene.

Thus, the magnitude of change is considered Negligible.

Proposed Visual Effects

In accordance with Figure 1.2, the visual effect of the proposed development will be of Low Importance. In terms of qualitative visual effects, the proposal would be Neutral in quality. In terms of duration of effect, the operational stage impacts will be permanent (i.e., lasting over 60 years).

Cumulative Visual Effects

The permitted solar application in the direct vicinity of the site (see Section 1.3) will be partially visible from this location, albeit at a location of over 1.4km. While this permitted development is likely to be partially more visible than the proposed development, the likely cumulative visual effect will be no higher than Low.

Thus, there is likely to be a Low cumulative visual effect from this location

Viewpoint (VP) 3 – St. Oliver's Terrace, Lobinstown

Existing View

By way of context, the only settlement within the study area is the small village of Lobinstown, almost 1.9km northeast of the site. It is located on marginally higher ground, in relation to the site. This location

is where the strongly residential St. Oliver's Terrace terminates, and a rural/country road begins at the edge of the village. This country road is lined with thick hedgerows that are cut each year. However, in this winter scene, a recently cut roadside hedgerow allows for views in the broader direction of the site, although it is worth noting that during other times of the year (i.e. spring to autumn), regrowth on this roadside hedgerow is unlikely to present such views.

The scene is one of a strong, albeit modified, pastoral kingdom, with lightly rolling fields and treelined field boundaries. The dark/olive green cattle sheds, which are located c. 50m north of the site, are also detectable. In the distance, far to either side of the site, clusters of large farmyards can also be discerned.

Viewpoint Sensitivity

As this location is representative of residential receptors, the viewpoint sensitivity is deemed to be 'High.'

Proposed Visual Changes

Approx. 1.8km away, the 2 No. proposed single-storey buildings will be discerned from this location, partially owing to their brightly toned exterior walls. While there is numerous other taller infrastructure within the proposed development, their relatively light, semi-transparent and/or lattice structures will make them considerably more difficult to locate from this distance. While, from this remove, the proposed development will not be immediately energy-related to the viewer, it will be one of several clustered developments in this scene, from a location (i.e. a village) that also has numerous developments that are considerably more immediate and more apparent than the proposed development will ever have the capacity to be.

On balance, the magnitude of change is considered Low.

Proposed Visual Effects

In accordance with Figure 1.2, the visual effect of the proposed development will be of Moderate Importance. In terms of qualitative visual effects, the proposal would be Neutral in quality. In terms of duration of effect, the operational stage impacts will be permanent (i.e., lasting over 60 years).

Cumulative Visual Effects

The permitted solar application in the direct vicinity of the site (see Section 1.3) will be partially visible from this location, albeit at a location of over 700m. While this permitted development will be more visible than the proposed development, the likely cumulative visual effect will be no higher than Moderate.

Thus, there is likely to be a Moderate cumulative visual effect from this location.

1.8.3 Cumulative Visual Effects

The potential cumulative visual effects have been assessed for each of the three viewpoints, as set out in Section 1.8.2. It found that there is likely to be no significant cumulative visual effects associated with this proposed development.

1.8.4 Mitigation and Enhancement

Mitigation of the residual visual effects has been embedded in the site planning of this proposal, to ensure the scheme is of planning merit, and conducive to the inherent landscape character.

The overall design of the Proposed Development has carefully considered its setting within a landscape where tangible energy infrastructure is present in the immediate vicinity of the site. In addition, the proposed development will be located in the immediate vicinity of the aforementioned permitted extensive solar farm. Furthermore, large, unused cattle sheds are located approx. 50m north of the site, which imprint strong built and vertical elements within the vicinity of the site. Thus, in terms of residual visual effects, a range of mitigation proposals have been embedded into the sitting and design of the proposed development.

1.9 Conclusion

This LVIA has assessed the impact and effects of the proposed development at the application site. This is summarised below.

1.9.1. Landscape Effects

Sensitivity: The landscape sensitivity of the site and the study area is deemed to be 'Medium-low.'

Construction stage impacts: In the context of the landscape character of the site and environs, the magnitude of landscape change during Construction is confined to the site and deemed 'High-medium' in magnitude. Thus, landscape change will result in a 'Moderate' importance for construction stage landscape impacts for the site and its immediate vicinity. In terms of qualitative effects, as with construction works generally, this would temporarily reduce the landscape quality and be considered 'Adverse' in quality. The timescale of construction-stage impacts will be Temporary (i.e., lasting one year or less).

Operational stage impacts: the proposal will not introduce a new or uncharacteristic land use (i.e. energy infrastructure) into the setting but it will represent a distinct escalation and intensification of that land use. Overall, the magnitude of change will be 'Medium-low' for the operational stage impacts. This will result in a 'Moderate' Importance of Effect, during the operational stage. In terms of qualitative effects, the operational stage landscape impacts are deemed to be 'Adverse-neutral.' In terms of duration, these are expected to be 'Permanent' (i.e. lasting over 60 years).

Thus, the proposed development is not likely to give rise to any potential significant landscape effects.

1.9.2. Visual Effects

In terms of visual sensitivity, the three viewpoints were deemed to have a 'Medium-low' visual sensitivity.

Viewpoint	Description	Importance of Visual Effect/ Quality/ Duration
1	Local road near Killary Bridge, Ricetown	Low/ neutral/ permanent
2	Knock Road, Castletown	Low/ neutral/ permanent
3	St. Oliver's Terrace, Lobinstown	Moderate/ neutral/ permanent

Table 1.6: Summary of Visual Effects at Viewpoints

The relatively low likely visual effects generated by the proposed development is an accurate reflection on how removed the site is from the public realm (i.e. approx. 700m, or more), combined with its astute site planning in a receiving environment where low-lying terrain combines with an abundance of thick and tall field boundaries and/or treelines to curtail open views of the proposed development.

Thus, the proposed development is not likely to give rise to any potential significant visual effects.