

Table 13-7 Magnitude of Visual Change Assessment Criteria

Magnitude of Change	Description
Substantial	Substantial change, where the proposals would result in large-scale, prominent or very prominent change, leading to substantial obstruction of existing view or complete change in character and composition of the baseline though removal of key elements or addition of uncharacteristic elements which may or may not be visually discordant. This includes viewpoints where the Proposed Development is fully or almost fully visible over a wide extent, at close proximity to the viewer. This change could be long term or of a long duration.
Moderate	The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Slight	The proposals would be partially visible or visible at sufficient distance to be perceptible and result in a low level of change in the view and its composition and a low degree of contrast. The character of the view may be altered but will remain similar to the baseline existing situation. This change could be short term or of a short duration.
Negligible	Any change would only be barely distinguishable from the status quo "do-nothing scenario" in the surroundings. The composition and character of the view would be substantially unaltered, approximating to little or no change.

Visual Effects Assessment Matrix in Table 13-8 below shows the significance of visual effects, arrived at by combining the visual receptor sensitivity and the magnitude of change classifications. Visual receptor sensitivity is shown in the left-hand first column and magnitude of visual change is shown in the first row at the top of the table. This table is used as an indicative tool to assist in determining the significance of visual effects. In different circumstances differing levels of mitigating factors may ultimately result in a different determination of the level of significance (see below). The significance of a visual effect is based on a balance between the sensitivity of the receptor and the magnitude of effect. The significance of visual effect is arrived at using a combination of the matrix shown in Table 13-8 and Table 13-9 below.

Table 13-8 Visual Effects Significance Assessment Matrix

	Substantial	Moderate	Slight	Negligible
Very High	Major	Major/Moderate	Moderate	Moderate/Minor
High	Major/Moderate	Moderate	Moderate/Minor	Minor
Medium	Moderate	Moderate/Minor	Minor	Minor/Negligible
Low	Moderate/Minor	Minor	Minor/Negligible	Negligible

The determination of significance uses a seven-point scale, ranging from Major to Negligible. This seven-point scale is translated to the EPA impact assessment classifications of significance, as outlined in Table 13-9 below.



Table 13-9 EPA Impact Assessment Significance Classification for Visual Effects

Matrix Classification Significance	EPA Significance Classification	EPA (2017) Definition of Significance
Major	Profound	An effect which obliterates sensitive characteristics
Major/Moderate	Very significant An effect, which by its character, or intensity alters most of a sensit environment	
Moderate	Significant	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
Moderate/Minor	Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends
Minor	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
Minor/Negligible	Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Negligible	Imperceptible	An effect capable of measurement but without significant consequences

13.2.7.3.3 Residual Visual Effect

After determining the significance of the visual effect using the above visual effects assessment matrix and significance graph, mitigating factors are taken into consideration to arrive at the final residual effect. In some cases, mitigating factors merit a reduction in classification.

13.2.7.4 Determination of Residual Landscape and Visual Effects

The matrices and tables above are excellent tools to aid professional judgement in the determination of the significance of an effect. They are useful in that they provide a transparent, objective, structure to the process of balancing sensitivity and magnitude of change. In the context of the determination of visual effects, the formulaic process created by the use of the matrix above provides an indicative initial assessment, which is clearly demonstrated in the viewpoint assessment tables in Section 13.7.3.2.

However, over-reliance on the formulaic process, which is heavily influenced by the definitions of sensitivity and magnitude of change contained Table 13-5 and Table 13-9 above, can lead to a failure to properly account for the full range of circumstances and factors at play in the determination of the significance of a visual effect (see section 3.35, GLVIA, 2013). A wide range of factors, mitigating or otherwise, can factor into such a determination, and it is not possible to capture the complexity involved in balancing all considerations within the necessarily limited definitions contained in these tables. This then naturally results in circumstances whereby the process of the determination of significance using the formulaic method involved with the matrix shown in Table 13-5 and Table 13-9 above can result in misrepresentations of the significance of visual effects. It is only with professional judgement, and narrative descriptions of effect, that such complexity can be integrated into the



determination of significance. Therefore, the formulaic methods based upon the matrix presented above is combined with professional judgement in the determination of significance. This is illustrated in Figure 13-2 below where the professional judgment of the competent expert is used to properly determine the significance of an effect taking all considerations into account.

A focus is placed upon the narrative description of effects (see section 3.36, GLVIA, 2013) given the naturally subjective nature of the significance determination process, particularly in relation to visual effects, ensuring that the rationale for the overall judgement is clear (see sections 3.28-3.29, GLVIA, 2013). The comprehensive assessment of viewpoints included in Section 13.5.6 aims to provide a transparent and robust determination of residual visual effects utilising the graph in Figure 13-2 below in combination with a clear and logical narrative.

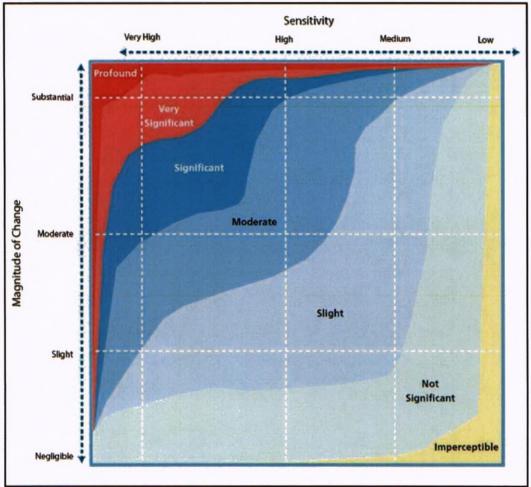


Figure 132 Visual Effect Significance Graph (adapted from EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, 2022)

13.2.8 Methodology for Assessing Cumulative Landscape and Visual Effects

13.2.8.1 Cumulative Landscape Effects

The Nature Scot 2021 publication Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments identifies two principal areas of cumulative landscape effects, on the physical fabric of the landscape and on the landscape character, which state:



- Cumulative effects on the physical fabric of the landscape arise when two or more developments affect landscape components such as woodland, dykes, rural roads or hedgerows. Although this may not significantly affect the landscape character, the cumulative effect on these components may be significant for example, where the last remnants of former shelterbelts are completely removed by two or more developments.
- Cumulative effects on landscape character arise when two or more developments introduce new features into the landscape. In this way, they can change the landscape character to such an extent that they create a different landscape character type, in a similar way to large scale afforestation. That change need not be adverse; some derelict or degraded landscapes may be enhanced as a result of such a change in landscape character.

Potential changes to the physical fabric outlined above are predominantly restricted to the Proposed Development site and the LCUs in which the site is located. Therefore, these landscape receptors will be assessed for cumulative landscape effects on the physical fabric of the landscape arising from the Proposed Development. Cumulative effects on the landscape character will be assessed in the Landscape Character Units (LCUs) that have theoretical visibility of the Proposed Development with particular emphasis on the LCU in which the existing turbines are located.

For this assessment, the Nature Scot (2021) definition of cumulative effects as additional changes caused by a Proposed Development in conjunction with other similar developments, is used, however, this assessment also considers other types of developments. The definition in the DoEHLG Guidelines (2006) defines cumulative impacts in terms of wind farms, as the perceived effect on the landscape of two or more wind energy developments visible from any one place.

The GLVIA (2013) and Nature Scot (2021) guidance also note that cumulative visual effects can be experienced in combination, where two or more developments are visible from one viewpoint, either simultaneously or in succession, as well as sequentially, where a viewer moves to another viewpoint or along a transport or recreational route and sees the same or different developments. These types of cumulative visual effects are considered in the assessment of visual effects in Section 13.5.6. The viewpoints illustrate combined visibility, and analysis of the viewpoints as well as site visits and field work undertaken allows sequential visibility to be assessed.

The guidance on cumulative effects given in the DoHPLG 2019 'Draft Revised Wind Energy Development Guidelines' relating to the Proposed Development site is as follows:

- "Similarity in the siting and design approach is preferred where a number of wind energy developments are located in the same landscape character area, particularly within the same viewshed. However, an alternative approach where a particular aesthetic effect is sought may be acceptable.
- Different wind energy developments can appear as a single collective unit if located near each other.
- It is preferable to avoid locating turbines where they can be seen one behind another, when viewed from highly sensitive key viewpoints (for example, viewing points along walking or scenic routes, or from designated views or prospects), as this results in visual stacking and, thus, confusion. This may not be critical, however, where the wind energy development to the rear is in the distant background.
- Wind energy developments within relatively close proximity to one another, while in different landscape character contexts, may be so close as to be within the same visual unit and, therefore, should involve the same siting and design approach."

The SNH 2017 publication Siting and Designing Wind Farms in the Landscape states that 'introducing turbines that are not similar in form, design, colour and scale may increase visual complexity and clutter'.



Therefore, the cumulative assessment will concentrate on the following issues:

- Whether the existing turbines increase the spatial extent of turbines in the view
- Whether the different wind energy developments can appear as a single collective unit or there is separation
- > Whether 'visual stacking' occurs
- Whether the contrast of different size and design between different wind developments creates visual clutter.

As cumulative visual effects depend on the aspect from which the turbines will be seen various viewpoints were selected to give a thorough overview of the how the existing turbines will appear in conjunction with turbines already present.

The assessment of cumulative effects is included in the viewpoint assessment tables in Section 13.7.3.2 of this chapter.

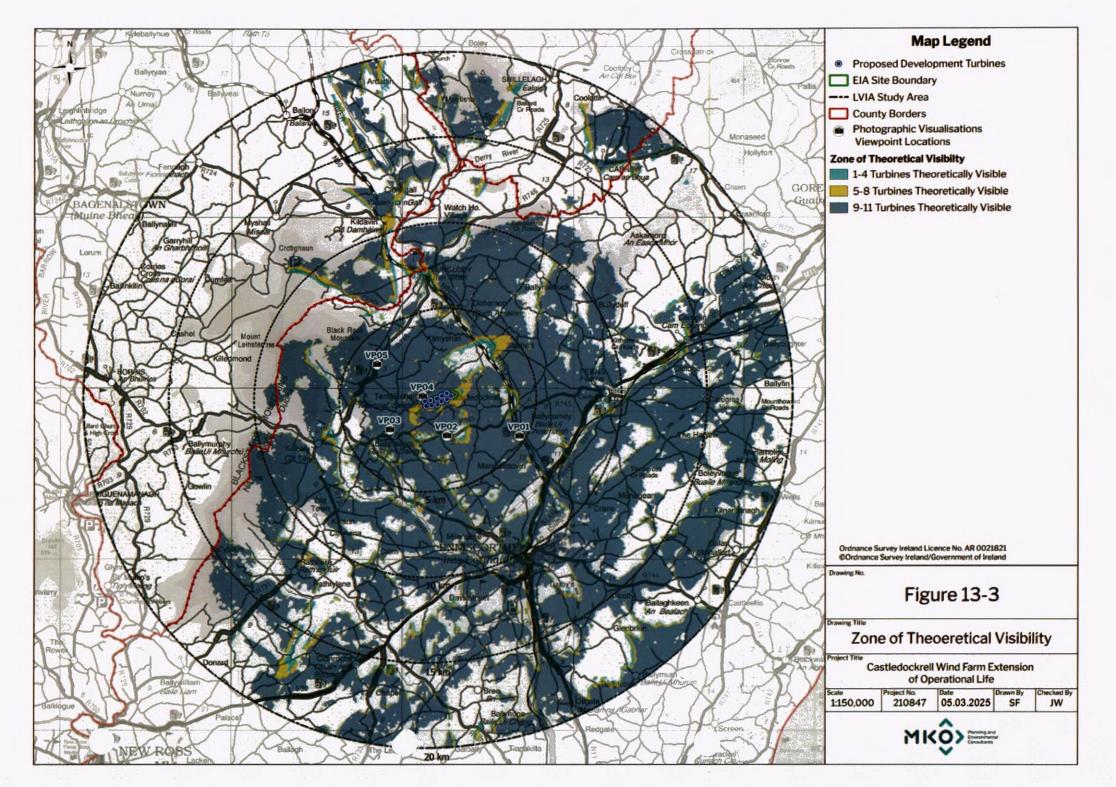


Zone of Theoretical Visibility (ZTV) Mapping:

13.3.1 Theoretical Visibility of the existing turbines

ZTV mapping is an important step in the LVIA process, in that it clearly shows which areas will have theoretical visibility of the existing turbines and which areas will have no theoretical visibility. Section 0 – *Methodology* provides information about the utility and limitations ZTV and how it is produced. The half-blade ZTV map of the Proposed Development site and LVIA Study Area is shown below in Figure 13-3.

The ZTV is a useful tool for scoping out receptors from assessment that do not have theoretical visibility of turbines. In the context of this assessment where the existing turbines already exist within the landscape, the ZTV ensures on-site visibility appraisals and identification of sensitive receptors can be focussed on areas the Proposed Development is most likely to be visible.



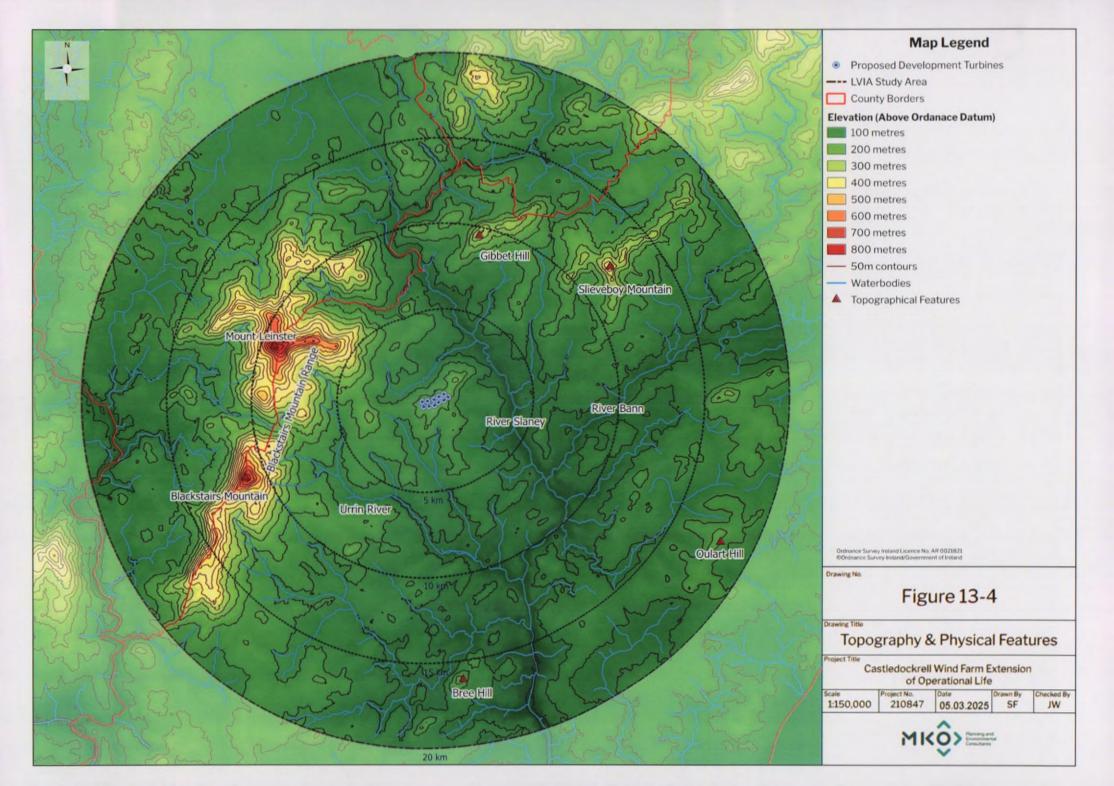




Figure 13-4 above depicts the elevation gradient and topographical features which exist within the LVIA Study Area. These geographical features define the distribution of theoretical visibility of the existing turbines as illustrated in the ZTV map - Figure 13-3. As seen in the above figures, the Proposed Development is located in northwest County Wexford, close to the county border with Co. Carlow. The Proposed Development is situated in a hilly landscape enclosed by the large landform of the Blackstairs mountain range. Mount Leinster, Blackrock Mountain and Blackstairs Mountain are located approximately 10km west of the Proposed Development. Topographic features and landforms in the LVIA Study Area and in proximity to the site such as hills, mountains, ridges, undulating river valleys restrict visual exposure (theoretical visibility) of the existing turbines in a large proportion of the LVIA Study Area.

13.3.1.1.1 Distribution of Theoretical Visibility within 5km of the Existing Turbines

The ZTV map displayed in Figure 13-9 shows that there is mostly full theoretical visibility of the Castledockrell Wind Farm within 5km of the site. However, due to the undulating, hilly nature of the landscape, there are some areas with no theoretical visibility or reduced numbers of theoretically visible turbines.

As shown by the topography map above, the wider landscape setting shows lots of topographic variation. The site is located in undulating marginal farmland at the foot of Mount Leinster, within the Blackstairs Mountain range which generally comprises small river valleys which drain to the River Slaney and then the coast to the south and east. The Sliabh Bhuí mountains are another substantial landform located to the north-east of the Proposed Development site that provides screening to the north-east of the LVIA Study Area.

13.3.1.1.2 Distribution of Theoretical Visibility beyond 5km of the Wind Farm Site

The Blackstairs Mountain range is a substantial and prominent landform located approximately 5km west of the site, at its closest point, and is deemed to be an upland landscape. Given the proximity of the site to the Backstairs Mountain range, that runs roughly north/south along the border between County Carlow and County Wexford, there is extremely low theoretical visibility, beyond the mountain range, to the north and west of the LVIA Study Area.

The hilly and undulating nature of the site and its immediate setting provides some enclosure, resulting in large areas of no theoretical visibility to the south and east of the LVIA Study Area. To the south of the Site, Bree Hill and the undulating nature of the landscape limit visibility of the existing turbines from this direction.

The Sliabh Bhuí mountains, which lie approximately 12km northeast of the site, Oulart Hill, which lies 16km to the east of the site, and other areas of higher elevation restrict theoretical visibility in the east within the LVIA Study Area.

Site visits and viewpoint assessment show that the actual visibility of the as-built turbines is far less than the theoretical visibility shown by the ZTV mapping.



13.4 Landscape Baseline

The Landscape Baseline identifies relevant landscape policy and designations pertaining to the Proposed Development and LVIA Study Area in local planning policy, it also reports baseline information about the receiving landscape of the Proposed Development site and its wider landscape setting. The Landscape Baseline is broken down into the following sections:

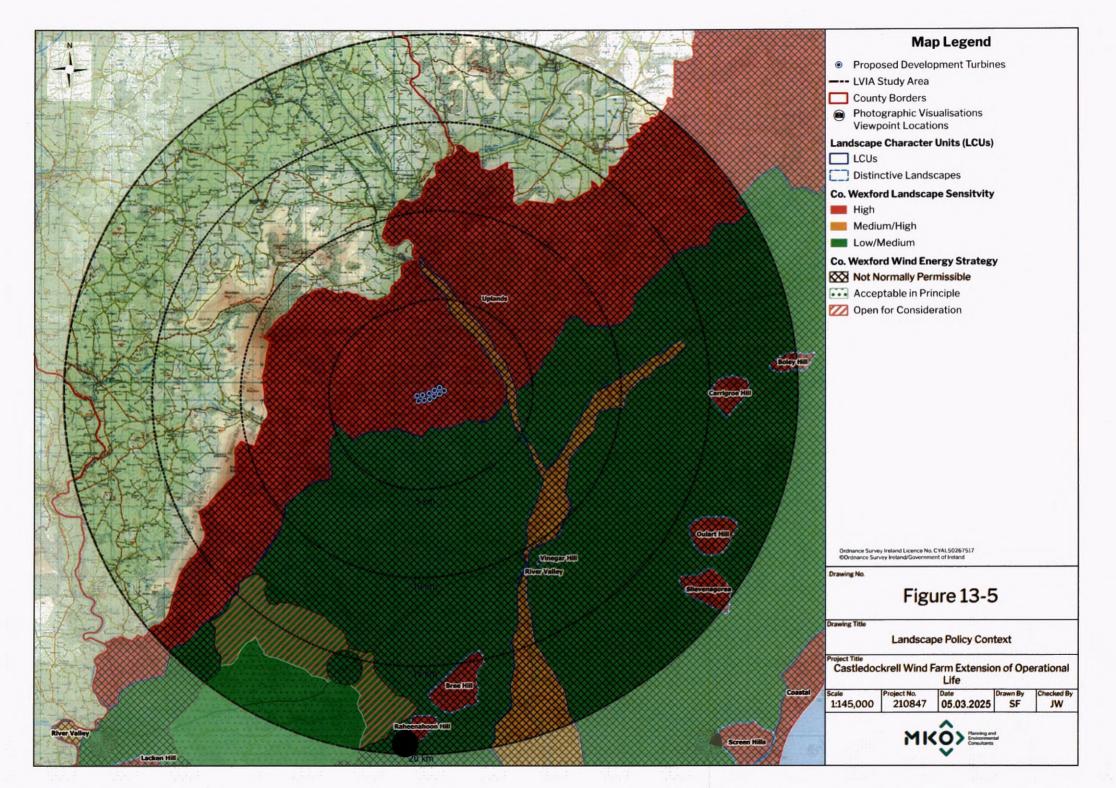
- Landscape Designations and Policy Context Policy setting pertaining to the location and nature of the site from a landscape perspective based on:
 - Wexford County Development Plan 2022-2028
- Landscape Character of the Castledockrell Wind Farm Site A description of the physical landscape and characteristics of the site and its immediate landscape setting, this includes the following considerations:
 - Landscape characteristics based upon findings from site visits conducted in November 2023.
 - A review of the Wind Energy Development Guidelines (DoEHLG, 2006; DoHPLG, 2019) and siting guidance relating to the landscape characteristics of the site.
- Landscape Character of the wider LVIA Study Area A description of landscape in a wider setting including the identification of designated Landscape Character Areas (LCUs) located within 15 km of the Proposed Development site based upon:
 - Landscape Character Assessment, Wexford County Council (2022-2028).

13.4.1 Landscape Designations and Policy Context

This section reviews the policies and objectives of various planning policy documents relating to landscape, planning, and the locational siting of wind farms, as they relate to the site of the Proposed Development. This section also identifies sensitive landscape and visual receptors protected in local planning policy that are located within the LVIA Study Area.

The Proposed Development is located in County Wexford and therefore the Wexford County Development Plan 2022-2028 (hereafter referred to as the 'WCDP') was consulted to identify relevant landscape designations and policies within in the LVIA Study Area. Additionally, general landscape policy and landscape policy pertaining to wind energy development are also included in this section of the LVIA.

The LVIA Study Area is situated in areas of Counties Wexford and Wicklow and Carlow. However, on the basis of distance and lack of visibility from any sensitive receptors, as seen in the ZTV in Figure 13-3, the parts of the LVIA Study within County Wicklow and Carlow have been scoped out from assessment in this Chapter where Significant landscape or visual effects are not deemed to arise.





13.4.1.1 Wexford County Development Plan 2022-2028 (WCDP)

Chapter 11 of the WCDP outlines the policy related to landscape and visual amenity within County Wexford. The WCDP references the Landscape Character Assessment that can be used to:

"Analyse the character, value and sensitivity of landscapes identified within a particular area. By understanding how different landscapes developed and evolved from both a natural and social perspective, decisions relating to the management and planning of the landscape can be made on an informed basis."

The Landscape Character Assessment is contained in Volume 7 of the WCDP and identifies designated Landscape Character Units (the equivalent of Landscape Character Areas (LCAs) in other counties). The LCUs which are located within the LVIA Study Area are outlined in section 13.3.2 below. The WCDP contains the following relevant planning policy related to landscape and the Proposed Development:

"Objective L01 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

Objective L11 - 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 prospect."

The following sections address the specific elements covered by this planning policy including the designations of the landscape character assessment, the Distinctive Landscapes and Scenic Routes and Views.

13.4.1.1.1 Co. Wexford Designated Scenic Routes and Protected Views

Section 11.9 of the WCDP states that it does not designate specific Scenic Routes or specific protected views, but that scenic routes fall into several categories. These categories are described as:

- **Routes through Upland, Coastal, River Valley and Distinctive Landscapes
- Trails such as the Eurovelo, Norman Way, Greenways and Wexford Walking Trails where sightseeing visitors are more likely to be concentrated along these routes"

"Other scenic views might include:

- views to the sea and views towards land from the sea and rivers in locations which may host tourism or amenity/journeys arrivals by boat.
- views from landmark structures such as bridges and urban settlements;
- Planned views and vistas such as those associated with planned settlements and heritage properties and gardens;"

As stated in the WCDP there are no specific designated scenic routes and views, and they are not mapped in the planning policy. The visibility appraisals and impact assessments in this LVIA have been cognisant of the categories and criteria listed above that relate to protected scenic amenity in the county.



13.4.1.2 Wexford County Landscape Character Assessment

The WCDP recommends the consultation of "Wexford County Landscape Character Assessment in future local area plans and the assessment of planning applications."

As reported in Chapter 11.7 of the WCDP, the character, value, and sensitivity of different designated landscape areas within County Wexford must refer to Volume 7 of the Landscape Character Assessment of County Wexford.

13.4.1.3 Co. Wexford LCUs (Landscape Character Areas)

The WCDP's Volume 7: Landscape Character Assessment designates areas of County Wexford into four Landscape Character Units (LCU) that are defined by:

"An LCU has a distinct, recognisable and consistent pattern of elements that makes it different from its neighbouring landscape. Each LCU has its own distinctive character, based upon patterns of geology, landform, land use, cultural, historical and ecological features".

The WCDP recognises 5 LCUs: (Uplands, Lowlands, River Valleys, Coastal and Distinctive Landscapes. The 'Uplands', 'Lowlands', 'River Valleys', and 'Coastal' LCUs are similar designations to Landscape Character Areas (LCAs) and/or Landscape Character Types in other County Development Plans. The 'Distinctive Landscapes' are an exception and are for policy purposes grouped and designated as LCUs (with Uplands, Lowlands, River Valley and Coastal), however they are not typical of regular Landscape Character Areas. The Distinctive Landscape LCUs are distinct landscape receptors or specific features of the landscape and both Chapter 11 of the WCDP and Volume 7 Wexford Landscape Character Assessment assign higher sensitivity and protections on these specific landscape receptors. For the purposes of this LVIA, the regular LCUs (typical of regular LCAs/LCTs) are assessed to 15km (See Section 13.2.1 previously – *Scope and Definition of LVIA Study Area*), which is the LVIA Study Area for assessment of designated LCAs. Whereas the high sensitivity 'Distinctive Landscape LCUs' are addressed and assessed to a distance of 20km, the outer boundary of the LVIA Study Area as they are specific landscape receptors of High sensitivity.

Three of the County Wexford standard LCUs are located within the LVIA Study Area for assessment of landscape character (15km from the existing turbine locations), and are listed below:

Standard LCUs within 15km of the LVIA Study Area

- River Valley
- Uplands
- Lowlands



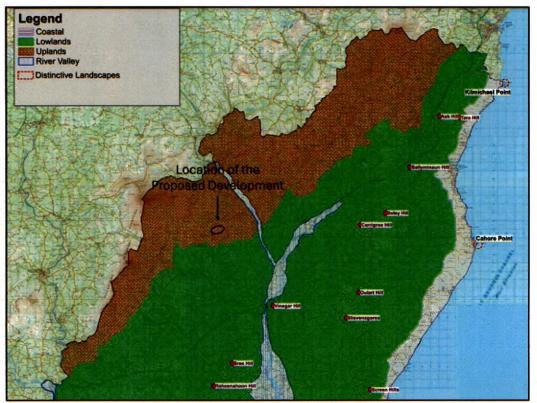


Figure 13-6 Landscape Character Units (extract from Map 7.1 within Volume 7 of the WCDP)

Uplands LCU

The Proposed Development is situated within the Uplands LCU, as indicated in Figure 13-6 above, which according to Table No. 7-1 of the WCDP is characterised by:

"fields that 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".

Lowlands LCU

The Lowlands LCU fall within close proximity to the Proposed Development site and account for a large portion of the LCUs found within the LVIA Study Area. The WCDP describes this LCU as mainly consisting of:

"Undulating lands", where "lands tend to be characterised by views across larger fields as a result of the generally low well-trimmed hedges." Furthermore, the WCDP states that this 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."

River Valley LCU

As seen in Figure 13-6 the River Valley LCU makes up a much smaller area of the LVIA Study Area. The WCDP describes this LCU as:



"The Slaney and Barrow River Valleys have similar characteristics to that of the Lowlands but have a more scenic appearance due to the presence of the rivers and their associated topography and riparian and woodland habitats. This unit is sensitive to development."

The Slaney River Valley is contained within the LVIA Study Area.

13.4.1.4 Distinctive Landscape Character Units

As noted previously, the WCDP describes Distinctive Landscapes as "a variety of different characteristics and features that have been grouped for the purpose of policy application". Therefore, while they are not technically an LCU, as they do not follow the LCU description outlined in the WCDP, the WCDP treats these Distinctive Landscapes as another LCU for policy purposes.

The Landscape Character Assessment in Appendix 7 of the WCDP notes that these landscapes "generally represent features in the landscape and seascape which have visual interest and prominent. Certain landscapes also have particular values which communities or individuals attach to them".

The Distinctive Landscapes include hills, waterbodies, coastal promontories, peninsulas, 'Kettle and Kame' landscapes, sloblands and islands. The Distinctive Landscapes within the LVIA Study Area are included below and can be seen in the Landscape Character Units map in Figure 13-6 previously.

There are 7 Distinctive LCUs within the LVIA Study Area:

- Boley Hill
- Carrigroe Hill
- > Slievenagorea
- Oulart Hill
- > Vinegar Hill
- Bree Hill
- Raheenahoon Hill

13.4.1.5 Landscape Sensitivity

Volume 7 of the WCDP rates sensitivity in the four different LCUs. Of these 4 no. LCUs, only Lowlands is not designated as having a High Sensitivity rating.

	Landscape Sensitivity Rating		
	Low	Moderate	High
Uplands			
Lowlands	MINNE		
River Valleys	mail and	Hala Vassassas	
Coastal			and the second
Distinctive			
Landscapes			

Figure 13-7 Sensitivity Ratings for LCUs - Extracted from Volume 7 of the WCDP

The sensitivity ratings for the LCUs in the WCDP are reproduced above. In a regional or national context, it is unrealistic to designate the vast majority of the county as 'High' Sensitivity. The ratings in



the table above and the descriptions of the LCUs in the WCDP have been considered to adapt sensitivity ratings to align with the sensitivity classifications and hierarchy used for the assessment process in this LVIA, as detailed in Section 13.2.7.2.1 of this Chapter - Assessing Landscape Sensitivity. Adaption for sensitivity ratings is also cognisant of Wind Energy Development Strategy, within Volume 10 of the WCDP, and also guidance in relation to landscape types set out in the WEDGs. To conduct a balanced and appropriate LVIA, LCU Sensitivity classifications have been assigned as follows in mind of their sensitivity to wind farm development:

- Uplands Medium Sensitivity
- Lowlands Low Sensitivity River Valleys Medium Sensitivity
- Coastal Medium Sensitivity
- Distinctive Landscapes 'High' or 'Very High' Sensitivity depending on which distinctive landscape is represented.

13.4.1.6 Wind Energy Designations

Under the Energy Strategy, Volume 10, of the Wexford County Development Plan, Section 1.2 outlines vision of energy for County Wexford to become

"a more energy secure, low carbon county in line with national energy targets whilst balancing the need to protect the environmental, social and heritage assets of the county".

This is reflected in the 'Strategic Aims of the Energy Strategy', section 1.3 of volume 10, of the WCDP, where one of its aims is:

"To support the attainment of national renewable energy and carbon reduction targets and to position the County as a leader in renewable energy generation and energy efficiency."

The current Wind Energy Zoning for County Wexford is shown in Map 14 of Volume 10 of the WCDP. The Proposed Development is located in an area currently designated as 'Not Normally Permissible' for wind. It is to be noted that this designation covers a vast proportion of the County – approximately 96%. Only 1.4% of the county is designated as 'Open to Consideration' and 2.6% is designated as 'Acceptable in Principle'. It is assumed that the policy direction in Volume 10 of WCDP relating to the current wind energy zoning in Co. Wexford is generally directed at the introduction of new wind renewable energy development into the landscape. The Proposed Development constitutes an existing wind farm and an existing and established part of the existing landscape, so this assessment has taken the view that the 'Not Normally Permissible' zoning is less relevant in the context of the Proposed Development in the modern day. The Proposed Development was strategically sited in a marginal upland/farmland landscape of medium sensitivity, enabling set back from densely populated areas and many receptors of high sensitivity. A more comprehensive description of the landscape of the Site is included below in the following Sections.

13.4.2 Landscape Character of Castledockrell Wind Farm

The term 'Landscape Character' refers to the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how people perceive this. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement, and creates the particular sense of place found in different areas. The identification of landscape character as outlined in the Landscape and Landscape Assessment Guidelines (DoEHLG, 2000) comprises the identification of primarily physical units (areas defined by landform and landcover) and, where appropriate, of visual units.



13.4.2.1 Site Visit Findings

The Proposed Development site was visited in November 2023 where a preliminary assessment of topography, landcover and land use was conducted in conjunction with other LVIA surveys. Information gathered during this site visit has informed the following site descriptions.



Figure 13-8 Infrastructure Footprint of the Proposed Development site

Topography

The Proposed Development comprises a cluster of existing turbines sited upon a gently sloping hill within a landscape of rolling farmland. The turbines are sited in a staggered linear formation either side of the most elevated ridgeline of the hill which runs south-west to north-east across the landscape and has a maximum elevation of 218m AOD as seen in Figure 13-8 above. From the central ridgeline the site slopes down gently in all directions to a local road network which surrounds the site in all directions excepting the north-east.

Whilst the Proposed Development is sited in an LCU termed 'upland' the landform of this site and its landscape setting is not representative of an upland landscape type and would be better classified as Hilly Farmland in the context of the landscape characteristics described for landscape Types identified in the WEDGs (2006, DoEHLG).



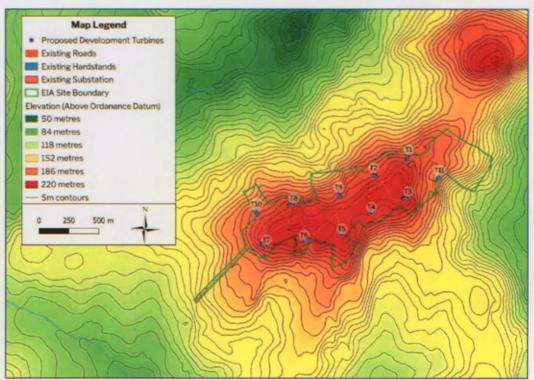


Figure 139 Topography of the Castledockrell Wind Farm Site

Drainage

There are no watercourses within the EIAR Site Boundary, however a number of streams were recorded downhill surrounding the Proposed Development site. Two streams are located to the north of the Proposed Development site, approximately 400m northwest of T09 and 600m northwest of T01which run in a northerly direction towards the River Glasha into the River Slaney northeast of the Proposed Development site, ultimately draining into Wexford Harbour. Surface water runoff on the Proposed Development site typically drains in all directions due to the sloping topography of the site and its surrounds. A local hydrology map is presented as Figure 9-2, while the EIAR Study Area is defined in Chapter 1 of this EIAR.

Landcover and Land Use

Landcover is the term used to describe the combinations of vegetation and land-use that cover the land surface. It comprises the more detailed constituent parts of the landscape and encompasses both natural and man-made features.

The primary land cover on the site is agricultural land, with existing wind turbines and wind farm infrastructure located throughout the Site. The existing 11 no. turbines are all Enercon E70 model with a combined maximum total capacity of 25.3 MW. The turbines have a hub height of 84.5m, a rotor diameter of 71m and an overall tip height of 120m. Additionally, the existing operational wind farm includes a control building, site roads, and associated underground internal cabling.





Plate 13-1 Existing 110KV substation

The landcover amongst the existing wind farm infrastructure comprises a mosaic of small agricultural fields used for grazing pasture for livestock and arable farming. As shown in the Plate 13-2 and Plate 13-3 below, the field cells within the EIAR Site Boundary are enclosed by hedgerows and fences. This landcover is synonymous with the landscape surrounding the site.

Current land-use on the site comprises of agricultural use around the existing turbines. As seen in Plate 13-2 below, fields around the turbines are used as grazing pasture for livestock. The predominant land use in the wider landscape setting surrounding the Proposed Development is working agricultural land and small patches of commercial forestry to the east, with scattered one-off housing and occasional rural settlement centres.



Plate 13-2 existing land use of the site



13.4.2.2 Views from within Castledockrell Wind Farm

The existing turbines are the most prominent visual feature within the site. Plate 13-3 and Plate 13-4 below, show a view of the existing turbines and road infrastructure, as well as the agricultural land use at the site.



Plate 13-3 Existing Castledockrell Turbines and road infrastructure

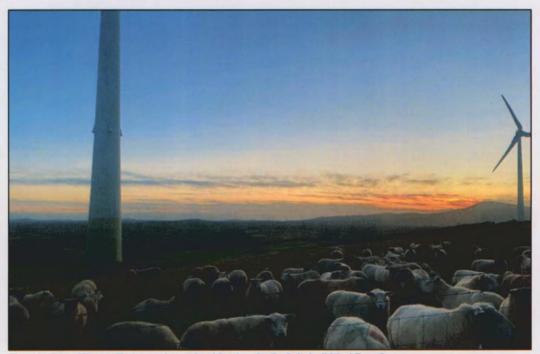


Plate 134 Base of Existing Turbine and agricultural Land on the Castledockrell Wind Farm Site

Due to the site's elevation, long ranging views can be seen in all directions. Views to the west are of the Blackstairs mountains.





Plate 13-5 Westerly view from the Castledockrell Wind Farm site, with Blackstairs Mountain Range in the background

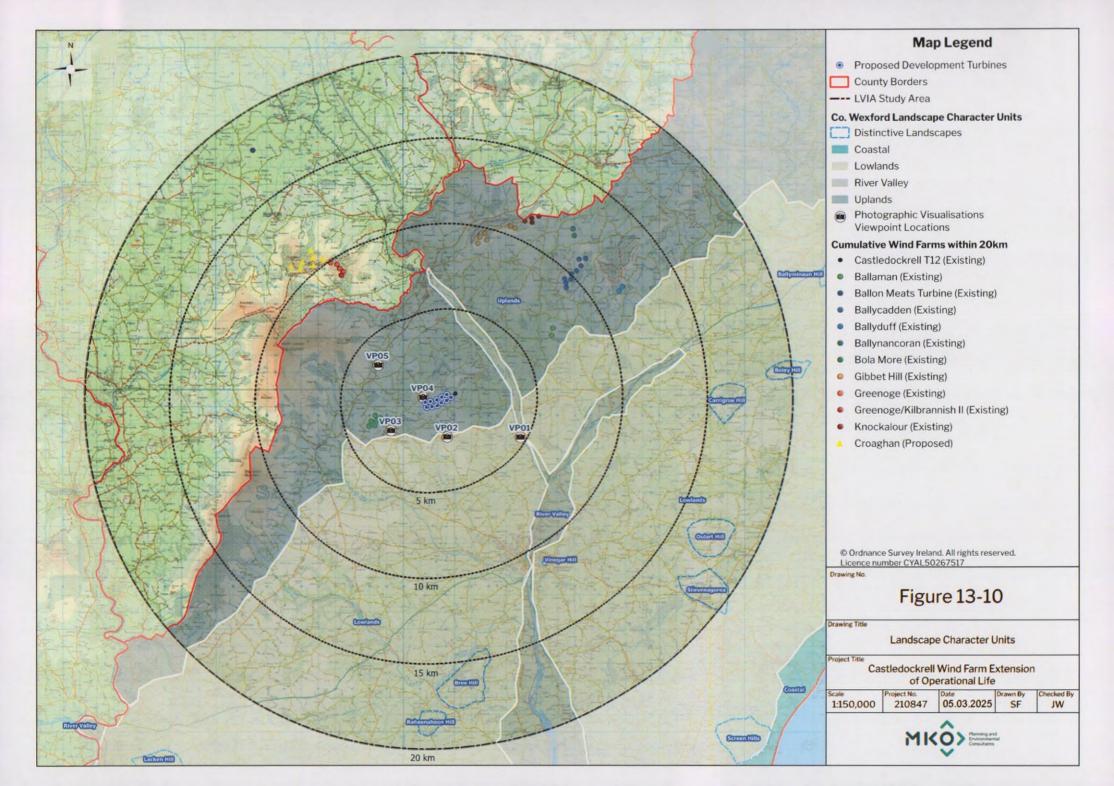
13.4.3 Landscape Character of the Wider Landscape Setting

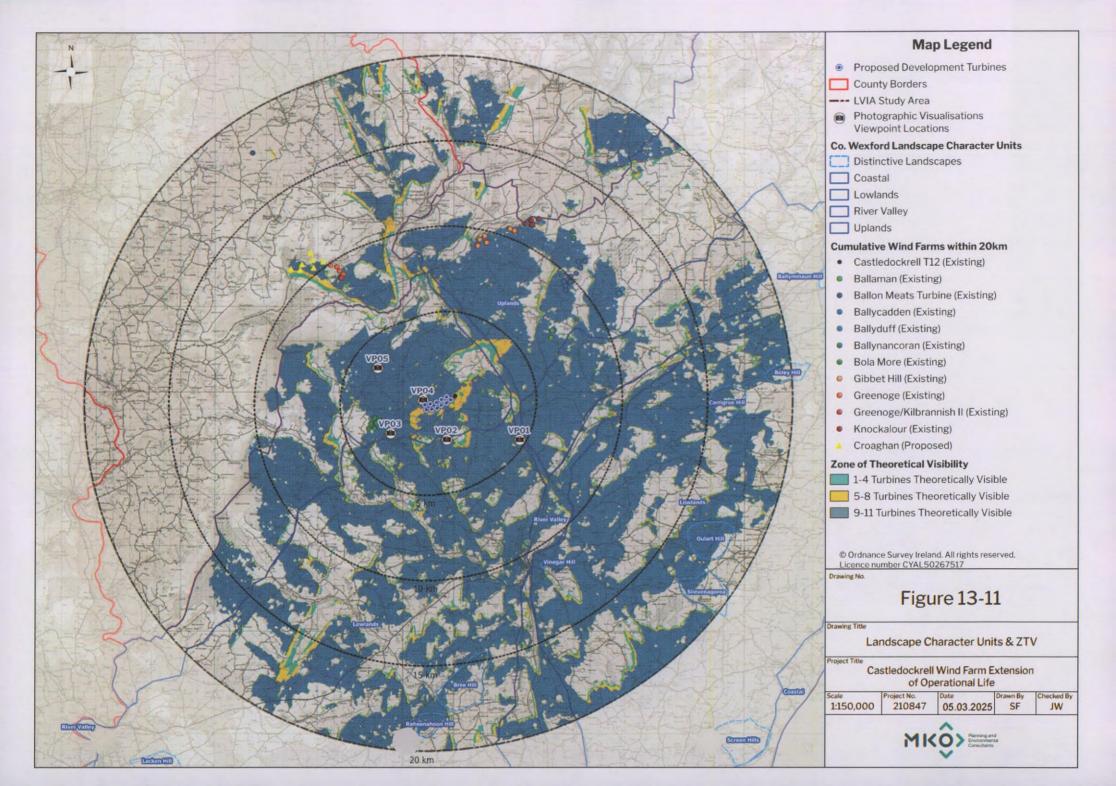
13.4.3.1 Landscape Character Areas

As noted in Section 13.2.1 the LVIA Study Area for assessment of landscape character extends to 20km from the Castledockrell turbines to include the 'Distinctive Landscapes'. In the previous section - Landscape Designations and Policy Context, No. 10 designated LCUs were identified within 20 km of the Proposed Development site, in County Wexford.

13.4.3.1.1 LCU Preliminary Assessment

A map showing all LCUs within 20km and the distribution of theoretical visibility of the Castledockrell turbines occurring in each LCU is shown in Figure 13-10 below.







Each LCU is listed below in Table 13-10 as well as a description of theoretical visibility within each LCU, as indicated by the ZTV in Figure 13-11 above. The actual visibility of the existing turbines was appraised during site surveys in November 2023 from all LCUs within the Study Area. The ZTV and on-site visibility appraisals determines which LCUs are scoped in for full assessment later in this chapter (see Section 0), the scoping result is noted in Table 13-10.

Table 13-10 LCU Assessment Table

LCU	Theoretical Visibility (TV) as indicated by ZTV	Actual Visibility	Scoped in for Assessment
Up to 5 km			PC
Uplands	Within 5km of the Proposed Development there are large areas of full and partial theoretical visibility, however there are also significant areas of no theoretical visibility. Beyond 5km there is a mix of full, partial and no visibility	There will be visibility of the existing turbines from multiple locations within this LCU. Visibility of the existing turbines reduces beyond 5km of the existing turbines.	Yes
Lowlands	there is a combination of full, partial and no visibility of the existing turbines within this LCU. Beyond 10km, areas of no visibility increase.	There will be visibility of the existing turbines from multiple locations within this LCU. Visibility of the existing turbines reduces beyond 5km of the existing turbines.	Yes
River Valley	This LCU is a mix of full partial and no visibility. Beyond 10km areas of no visibility increase.	Actual visibility is very limited throughout this LCU as there is a large amount of vegetation along the river screening views towards the existing turbines. Views will be intermittent through vegetation and limited to areas of high elevation within the LCU.	Yes
10 to 15 km	The second		
Vinegar Hill	Primarily full theoretical visibility with patches of zero visibility	There is visibility of the existing turbines from the elevated areas within this LCU	Yes
Bree Hill	Areas of full theoretical visibility to the northwest of this LCU.	Actual visibility will be very limited due to the vegetation screening from	No



LCU	Theoretical Visibility (TV) as indicated by ZTV	Actual Visibility	Scoped in for Assessment
		coniferous forestry within this LCU.	
15 to 20km			
Carrigroe Hill	Areas of full theoretical visibility to the west of this LCU.	Actual visibility is very limited due to the vegetation screening from coniferous forestry within this LCU.	No
Oulart Hill	The ZTV shows full theoretical visibility from the majority of this LCU, beyond the hill to the east there is no theoretical visibility due to the topographical screening.	There is visibility of the existing turbines from the elevated areas within this LCU Vegetation screening limits views of the existing turbines from other areas of this LCU.	Yes
Slievenagorea	There is no theoretical visibility for the majority of this LCU. There is a small area of full theoretical visibility to the west of this LCU.	Actual visibility is very limited due to the vegetation screening from coniferous forestry within this LCU.	No
Raheenahoon Hill	There is full theoretical visibility for the majority of this LCU.	In reality there is no actual visibility of the existing turbines, due to the vegetation screening from coniferous forestry within this LCU.	No
Boley Hill	Limited theoretical visibility throughout this LCU	There is limited visibility of the turbines from this location due to distance and visual screening	No