# Proposed Ballynalacken Windfarm Project

# Environmental Impact Assessment Report

# Chapter 14: The Landscape (Landscape and Visual Assessment)

**Topic Chapter Authors:**

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**Glossary of Terms**

| Term | Definition |
|---|---|
| Ballynalacken Windfarm Project | Ballynalacken Windfarm including 12 No. turbines, turbine foundations and hardstanding areas, Windfarm Site Roads, Internal Windfarm Cabling, Windfarm Control Building, Site Entrances, ancillary works at and for the windfarm, along with the Internal Cable Link, Tinnalintan Substation and ancillary works, and Ballynalacken Grid Connection and grid connection works to the Eirgrid Ballyragget Substation. The Project also involves works and activities along the turbine component haul route remote from the site, including the construction of a temporary Blade Transfer Area at HR8. |

**List of Abbreviations**

| Abbreviation | Full Term |
|---|---|
| AH | Tourism, Amenity and Heritage Features |
| CDP | County Development Plan |
| CP | Centres of Population |
| DSR/SV | Designated Scenic Routes and Views |
| EIA | Environmental Impact Assessment |
| KV | Key Views |
| LCA | Landscape Character Area |
| LCT | Landscape Character Type |
| LCV | Local Community Views |
| LIA | Landscape Impact Assessment |
| LVIA | Landscape and Visual Impact Assessment |
| MR | Major Route |
| VIA | Visual Impact Assessment |
| VRP | Viewshed Reference Point |
| ZTV | Zone of Theoretical Visibility |

# CHAPTER 14 THE LANDSCAPE (LANDSCAPE AND VISUAL ASSESSMENT)

## EIAR 14.1 INTRODUCTION

This chapter describes the landscape context of the proposed Ballynalacken Wind Farm and assesses the likely landscape and visual impacts of the scheme on the receiving environment. Although closely linked, landscape and visual impacts are assessed separately.

**Landscape Impact Assessment (LIA)** relates to changes in the physical landscape brought about by the proposed development, which may alter its character, and how this is experienced. This requires a detailed analysis of the individual elements and characteristics of a landscape that go together to make up the overall landscape character of that area. By understanding the aspects that contribute to landscape character, it is possible to make judgements in relation to its quality (integrity) and to identify key sensitivities. This, in turn, provides a measure of the ability of the landscape in question to accommodate the type and scale of change associated with the proposed development without causing unacceptable adverse changes to its character.

**Visual Impact Assessment (VIA)** relates to assessing effects on specific views and on the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements. Visual impacts may occur from; Visual Obstruction (blocking of a view, be it full, partial or intermittent) or; Visual Intrusion (interruption of a view without blocking).

**Cumulative landscape and visual impact assessment** are concerned with additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future.

This LVIA uses methodology as prescribed in the following guidance documents:

- Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements.
- Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment – Third Addition (2013).
- NatureScot Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments (2021)
- Department of the Environment, Heritage and Local Government Wind Energy Development Guidelines (2006).
- Scottish Natural Heritage (SNH) Visual representation of wind farms: Best Practice Guidelines (version 2.2 - 2017).

### EIAR 14.1.1 Statement of Authority

This Landscape and Visual Assessment (LVIA) report was prepared by Richard Barker (MLA MILI) of Macro Works Ltd, a specialist Landscape and Visual Impact Assessment (LVIA) company with over 20 years of experience in the appraisal of effects from a variety of energy, infrastructure and commercial developments. Relevant experience includes LVIA work on over 140 onshore wind farm proposals throughout Ireland, including six Strategic Infrastructure Development (SID) wind farms. Macro Works and its senior staff members are full/corporate members of the Irish landscape Institute.

### EIAR 14.1.2 Description of the Development

The proposed Ballynalacken Windfarm Project will comprise the following elements:

- 12 No. Wind Turbines and associated works including hardstanding areas, windfarm roads, internal underground cabling, telecoms relay pole, met mast in Byrnesgrove; Commons; Ballymartin; Ballynalacken; Ballyoskill and Loughill townlands (EIAR nomenclature, *Ballynalacken Windfarm*);
- the 12 No. Ballynalacken Windfarm turbines will have a total capacity of c.50.4MW;
- Electrical Control Building in Ballymartin townland (EIAR nomenclature, the *Windfarm Control Building*);
- 110kV Electrical Substation in Tinnalintan townland (EIAR nomenclature, the *Tinnalintan Substation*),
- Underground Electrical Cabling connecting the Windfarm Control Building to the Tinnalintan Substation (EIAR nomenclature, the *Internal Cable Link to the Tinnalintan Substation*),
- Underground Grid Connection from Tinnalintan Substation to the EirGrid Ballyragget Substation (EIAR nomenclature, the *Ballynalacken Grid Connection*).
- Works/Activities along the Public Road to facilitate turbine delivery and access to the turbine sites (EIAR nomenclature, the *Haul Route Works & Activities*).

### EIAR 14.1.3 Definition of Study Area

The Wind Energy Development Guidelines published by the Department of the Environment, Heritage and Local Government (2006) specify different radii for examining the zone of theoretical visibility of proposed wind farm projects (ZTV). The extent of this search area is influenced by turbine height, as follows:

- 15 km radius for blade tips up to 100m;
- 20 km radius for blade tips greater than 100m and;
- 25 km radius where landscape features of national and international importance exist.

In the case of this project, 11 No. of the turbine blade tips will be 155m high and 1 No. turbine blade tip will be 142m high, however a worst case scenario of 155m high for all turbines is assumed, thus the minimum ZTV radius recommended is 20 km from the outermost turbines of the scheme (refer to Figure 14.1 below). There are not considered to be any sites of national or international importance between 20 – 25km and thus, the radius of the study area will remain at 20km. Notwithstanding the full 20km extent of the LVIA study area, there will be a particular focus on receptors and effects within the central study where there is higher potential for significant impacts to occur. When referenced within this assessment, the 'central study area' is the landscape within approx. 5km of the site.

The Tinnalintan Substation is proposed for a site within the 'central study area'. The Substation is shown on the Photomontages (photomontage Viewshed Reference Points VP24, VP25, VP26 and VP28) where it appears as part of the baseline in the viewshed. See **EIAR Landscape Illustration Pack.**

The site met mast in Loughill townland is 30m in height. The site telecoms relay pole in Ballynalacken townland is 18m in height. These are small and narrow features of a typical form found throughout rural landscapes and will not have a material influence on the overall landscape and visual effects of the proposed development. Consequently, they will be scoped out of further assessment.

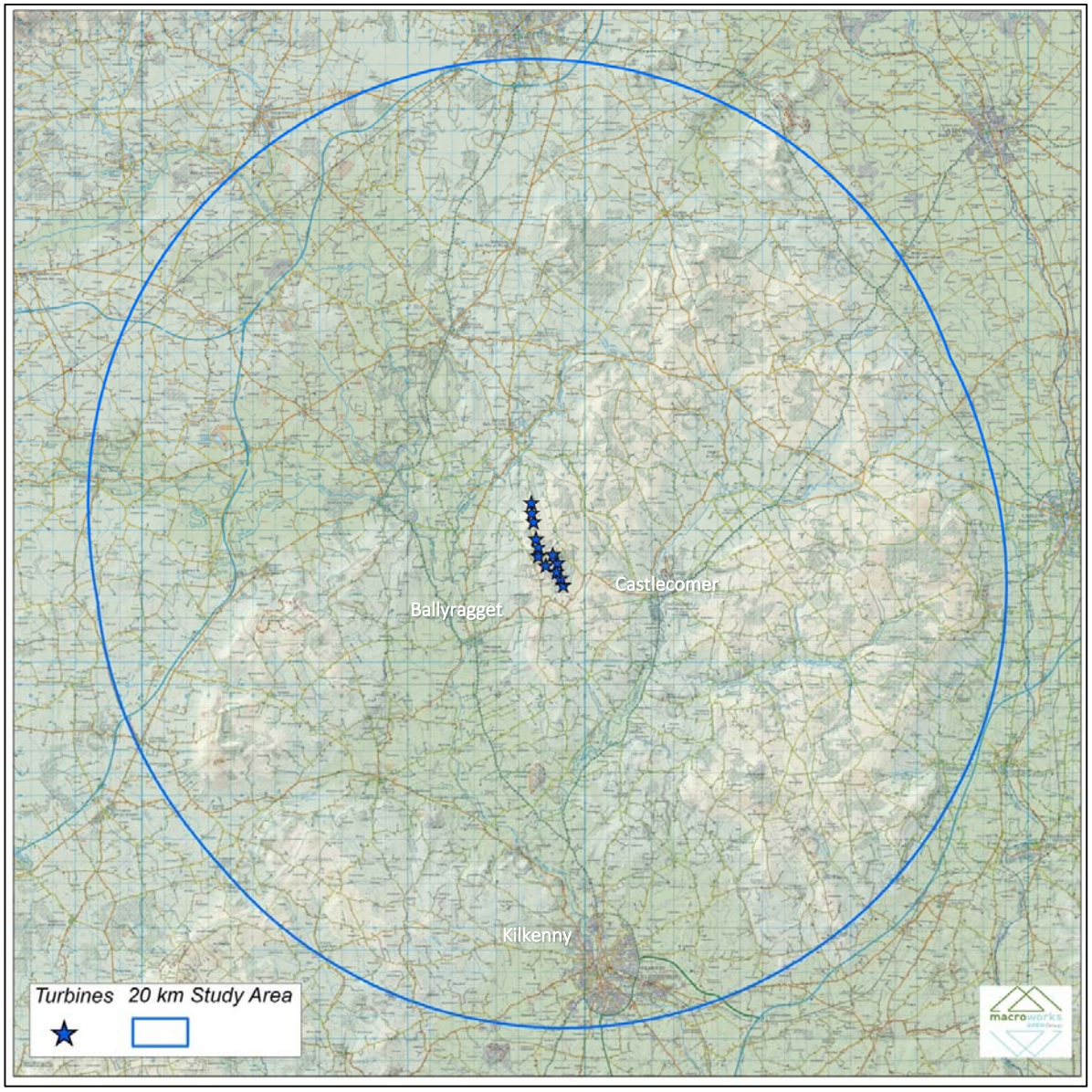


**Figure 14.1: 20km Study Area**

## EIAR 14.2 ASSESSMENT METHODOLOGY

Production of this Landscape and Visual Impact Assessment involved baseline work in the form of desktop studies and fieldwork comprising professional evaluation by qualified and experienced Landscape Architects. This entailed the following:

### EIAR 14.2.1 Desktop Study

- Establishing an appropriate Study Area from which to study the landscape and visual impacts of the proposed wind farm;
- Review of a Zone of Theoretical Visibility (ZTV) map, which indicates areas from which the development is potentially visible in relation to terrain within the Study Area;
- Review of relevant County Development Plans, particularly with regard to sensitive landscape and scenic view/route designations;
- Selection of potential Viewshed Reference Points (VRPs) from key visual receptors to be investigated during fieldwork for actual visibility and sensitivity;

### EIAR 14.2.2 Fieldwork

- Recording of a description of the landscape elements and characteristics within the Study Area.
- Selection of a refined set of VRP's for assessment. This includes the capture of reference images and grid reference coordinates for each VRP location for the visualisation specialist to prepare photomontages. See **EIAR Landscape Illustration Pack.**

### EIAR 14.2.3 Appraisal

- Consideration of the receiving landscape with regard to overall landscape character as well as the salient features of the study area including landform, drainage, vegetation, land use and landscape designations.
- Consideration of the visual environment including receptor locations such as centres of population and houses; transport routes; public amenities and facilities and; designated and recognised views of scenic value.
- Consideration of design guidance and planning policies.
- Consideration of potentially significant effects and the mitigation measures that could be employed to reduce such effects.
- Estimation of the significance of residual landscape impacts.
- Estimation of the significance of residual visual impacts aided by photomontages prepared at all of the selected VRP locations. See **EIAR Landscape Illustration Pack** accompanying the EIAR.
- Estimation of cumulative landscape and visual effects in combination with other surrounding developments that are either existing or permitted.

### EIAR 14.2.4 Assessment Criteria for Landscape Impact

The classification system used by Macro Works to determine the significance of landscape and visual impacts is based on the Institute of Environmental Management and Assessment (IEMA) Guidelines for Landscape and Visual Impact Assessment (2013). When assessing the potential impacts on the landscape resulting from a wind farm development, the following criteria are considered:

- Landscape character, value and sensitivity
- Magnitude of likely impacts; and
- Significance of landscape effects

The sensitivity of the landscape to change is the degree to which a particular landscape receptor (Landscape Character Area (LCA) or feature) can accommodate changes or new features without unacceptable detrimental effects to its essential characteristics. Landscape Value and Sensitivity is classified using the following criteria outlined in **Table 14-1** below;

**Table 14-1 Landscape Value and Sensitivity**

| Sensitivity | Description |
|---|---|
| Very High | Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (World Heritage Site/National Park), where the principal management objectives are likely to be protection of the existing character. |
| High | Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level (Area of Outstanding Natural Beauty), where the principal management objectives are likely to be considered conservation of the existing character. |
| Medium | Areas where the landscape character exhibits some capacity and scope for development. Examples of which are landscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use. |
| Low | Areas where the landscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated landscapes that may also have some elements or features of recognisable quality, where landscape management objectives include, enhancement, repair and restoration. |
| Negligible | Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value. |

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed development. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the proposal site boundary that may have an effect on the landscape character of the area. **Table 14-2** refers.

**Table 14-2 Magnitude of Landscape Impacts**

| Magnitude of Impact | Description |
|---|---|
| Very High | Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality. |
| High | Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new |

| | |
|---|---|
| | uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality. |
| Medium | Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to changes in landscape character, and quality. |
| Low | Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements. |
| Negligible | Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable. |

The significance of a landscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The significance of landscape impacts is arrived at using the following matrix set out in **Table 14-3**.

**Table 14-3 Impact Significance Matrix**

| | Sensitivity of Receptor | | | | |
|---|---|---|---|---|---|
| Magnitude | Very High | High | Medium | Low | Negligible |
| Very High | Profound | Profound-substantial | Substantial | Moderate | Slight |
| High | Profound-substantial | Substantial | Substantial - moderate | Moderate-slight | Slight-imperceptible |
| Medium | Substantial | Substantial - moderate | Moderate | Slight | Imperceptible |
| Low | Moderate | Moderate-slight | Slight | Slight-imperceptible | Imperceptible |
| Negligible | Slight | Slight-imperceptible | Imperceptible | Imperceptible | Imperceptible |

Note: The significance matrix provides an indicative framework from which the significance of impact is derived. The significance judgement is ultimately determined by the assessor using professional judgement. Due to nuances within the constituent sensitivity and magnitude judgements, this may be up to one category higher or lower than indicated by the matrix. Judgements indicated in orange/yellow are considered to be 'significant impacts' in EIA terms.

### EIAR 14.2.5 Assessment Criteria for Visual Impact

As with the landscape impact, the visual impact of the proposed wind farm will be assessed as a function of receptor sensitivity versus magnitude. In this instance, the sensitivity of visual receptors, weighed against the magnitude of visual effects.

#### EIAR 14.2.5.1 Visual sensitivity

Unlike landscape sensitivity, visual sensitivity has an anthropocentric basis. Visual sensitivity is a two-sided analysis of receptor susceptibility (people or groups of people) versus the value of the view on offer at a particular location.

To assess the susceptibility of viewers and the amenity value of views, the assessors use a range of criteria and provide a four-point weighting scale to indicate how strongly the viewer/view is associated with each of the criterion. Susceptibility criteria is extracted directly from the IEMA Guidelines for Landscape and Visual Assessment (2013), whilst the value criteria relate to various aspects of a view that might typically be related to high amenity including, but not limited to, scenic designations. These are set out below:

Susceptibility of receptor group to changes in view

This is one of the most important criteria to consider in determining overall visual sensitivity because it is the single category dealing with viewer susceptibility.

In accordance with the IEMA Guidelines for Landscape and Visual Assessment (3rd edition 2013), visual receptors most susceptible to changes in views and visual amenity are;

- Residents at home;
- People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on particular views;
- Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience;
- Communities where views contribute to the landscape setting enjoyed by residents in the area; and
- Travellers on road, rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened.

Visual receptors that are less susceptible to changes in views and visual amenity include;

- People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape; and
- People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life.

Values Associated with the View

- **Recognised scenic value of the view** (County Development Plan designations, guidebooks, touring maps, postcards etc). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the case of County Development Plans, at least, a public consultation process is required;
- **Views from within highly sensitive landscape areas**. Again, highly sensitive landscape designations are usually part of a county's Landscape Character Assessment, which is then incorporated with the County Development Plan and is therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;
- **Intensity of use, popularity**. Whilst not reflective of the amenity value of a view, this criterion relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at county or regional scale;
- **Provision of elevated panoramic views**. This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;
- **Sense of remoteness and/or tranquillity**. Remote and tranquil viewing locations are more likely to heighten the amenity value of a view and have a lower intensity of development in comparison to dynamic viewing locations such as a busy street scene, for example;

- **Degree of perceived naturalness**. Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by obvious human interventions;
- **Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a promontory headland, lough or castle;
- **Historical, cultural or spiritual value**. Such attributes may be evident or sensed at certain viewing locations that attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;
- **Rarity or uniqueness of the view**. This might include the noteworthy representativeness of a certain landscape type and considers whether other similar views might be afforded in the local or the national context;
- **Integrity of the landscape character in view**. This criterion considers the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;
- **Sense of place**. This criterion considers whether there is special sense of wholeness and harmony at the viewing location; and

those locations where highly susceptible receptors or receptor groups are present and which are deemed to satisfy many of the view value criteria above are likely to be judged to have a high visual sensitivity and vice versa.

#### EIAR 14.2.5.2 Visual Impact Magnitude

The magnitude of visual effects is determined on the basis of two factors: the visual presence of the proposal and its effect on visual amenity.

Visual presence is a somewhat quantitative measure relating to how noticeable or visually dominant the proposal is within a particular view. This is based on a number of aspects beyond simply scale in relation to distance. Some of these include the extent of the view as well as its complexity and the degree of existing contextual movement experienced such as might occur where turbines are viewed as part of / beyond a busy street scene. The backdrop against which the project is presented and its relationship with other focal points or prominent features within the view is also considered. Visual presence is essentially a measure of the relative visual dominance of the proposal within the available vista and is expressed as such i.e., minimal, sub-dominant, co-dominant, dominant, highly dominant.

For wind energy developments, a strong visual presence is not necessarily synonymous with adverse impact. Instead, the 2012 Fáilte Ireland survey entitled 'Visitor Attitudes On The Environment – Wind Farms' found that *"Compared with other types of development in the Irish landscape, wind farms elicited a positive response when compared to telecommunication masts and steel electricity pylons"*…. and that *"most* (tourists) *felt that their presence did not detract from the quality of their sightseeing, with the largest proportion (45%) saying that the presence of the wind farm had a positive impact on their enjoyment of sightseeing…*". The purpose here is not to suggest that turbines are either inherently liked or disliked, but rather to highlight that the assessment of visual impact magnitude for wind turbines is more complex than just the degree to which turbines occupy a view. Furthermore, a clear and comprehensive view of a wind farm might be preferable in many instances to a partial, cluttered view of turbine components that are not so noticeable within a view. On the basis of these reasons, the visual amenity aspect of assessing impact magnitude is qualitative and considers such factors as the spatial arrangement of turbines both within the scheme and in relation to surrounding terrain and land cover. It also examines whether the project contributes positively to the existing qualities of the vista or results in distracting visual effects and disharmony.

It should be noted that as a result of this two-sided analysis, a high order visual presence can be moderated by a low level of effect on visual amenity and vice versa. Given that wind turbines do not represent significant bulk, visual impacts result almost entirely from visual 'intrusion' rather than visual 'obstruction' (the blocking of a view). The magnitude of visual impacts is classified in the following table:

**Table 14-4 Magnitude of Visual Impact**

| Criteria | Description |
|---|---|
| Very High | The proposal obstructs or intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. An extensive degree of visual change will occur within the scene completely altering its character, composition and associated visual amenity |
| High | The proposal obstructs or intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual change will occur within the scene substantially altering its character, composition and associated visual amenity |
| Medium | The proposal represents a moderate intrusion into the available vista and is a readily noticeable element. A noticeable degree of visual change will occur within the scene perceptibly altering its character, composition and associated visual amenity |
| Low | The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene |
| Negligible | The proposal would be barely discernible within the available vista and/or it would not influence the visual amenity of the scene |

### EIAR 14.2.6 Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix included for Landscape Impact Significance at **Table 14-3**.

### EIAR 14.2.7 Quality and Duration of Effects

In addition to assessing the significance of landscape effects and visual effects, EPA Guidance for EIAs requires that the quality of the effects is also determined. This could be negative/adverse, neutral, or positive/beneficial. In the case of new energy / infrastructure developments within rural and semi-rural settings, the landscape and visual change brought about by an increased scale and intensity of built form is seldom considered to be positive / beneficial. Thus, unless otherwise stated in this report, the quality of landscape and visual effects of the proposed wind farm is considered negative/adverse.

Landscape and Visual effects are also categorised according to their duration:

- 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.

### EIAR 14.2.8 Assessment Criteria for Cumulative Effects

The NatureScot Guidance 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (2021) identify that cumulative effects on visual amenity relate to 'combined' or 'sequential' visibility. The same categories were also adopted in the Landscape Institute's 2013 revision of the Landscape and Visual Impact Assessment Guidelines.

Combined visibility occurs where the observer is able to see two or more developments from one viewpoint. Combined visibility may either be in combination (where several wind farms are within the observer's arc of vision at the same time) or in succession (where the observer has to turn to see the various wind farms).

Sequential effects occur when the observer has to move to another viewpoint to see different developments. The occurrence of sequential effects may range from frequently sequential (the features appear regularly and with short time lapses between, depending on speed of travel and distance between the viewpoints) to occasionally sequential (long time lapses between appearances, because the observer is moving very slowly and / or there are large distances between the viewpoints.)'

Cumulative effects of wind farms tend to be adverse rather than positive as they relate to the addition of moving manmade structures into a landscape and viewing context that already contains such development. Based on guidance contained within the SNH Guidelines relating to the Cumulative Effects of Wind Farms (2012) and the DoEHLG Wind Energy Guidelines (2006), cumulative effects can be experienced in a variety of ways. In terms of landscape character, additional wind energy developments might contribute to an increasing sense of proliferation. A new wind farm might also contribute to a sense of being surrounded by turbines with little relief from the view of them. The term 'skylining' is used to describe the *effect where an existing windfarm is already prominent on a skyline the introduction of additional structures along the horizon may result in development that is proportionally dominant. The proportion of developed to non-developed skyline is therefore an important landscape consideration.*

In terms of visual amenity, there is a range of ways in which an additional wind farm might generate visual conflict and disharmony in relation to other wind energy developments. Some of the most common include visual tension caused by disparate extent, scale or layout of neighbouring developments. A sense of visual ambivalence might also be caused by adjacent developments traversing different landscape types. Turbines from a proposed wind farm that are seen stacked in perspective against the turbines of nearer or further developments tend to cause visual clutter and confusion. Such effects are exacerbated when, for example, the more distant turbines are larger than the nearer ones and the sense of distance is distorted. Table 14-5 below provides criteria for assessing the magnitude of cumulative effects.

**Table 14-5: Magnitude of Cumulative Effect Criteria**

| Magnitude of Effect | Description |
|---|---|
| Very High | • The proposed wind farm will strongly contribute to wind energy development being the defining element of the surrounding landscape.<br>• It will strongly contribute to a sense of wind farm proliferation and being surrounded by wind energy development.<br>• Strongly adverse visual effects will be generated by the proposed turbines in relation to other turbines. |
| High | • The proposed wind farm will contribute significantly to wind energy development being a defining element of the surrounding landscape.<br>• It will significantly contribute to a sense of wind farm proliferation and being surrounded by wind energy development. |

| | |
|---|---|
| | • Significant adverse visual effects will be generated by the proposed turbines in relation to other turbines. |
| Medium | • The proposed wind farm will contribute to wind energy development being a characteristic element of the surrounding landscape.<br>• It will contribute to a sense of wind farm accumulation and dissemination within the surrounding landscape.<br>• Adverse visual effects might be generated by the proposed turbines in relation to other turbines. |
| Low | • The proposed wind farm will be one of only a few wind farms in the surrounding area and will be viewed in isolation from most receptors or perceived as an extension to another development.<br>• It might contribute to wind farm development becoming a familiar feature within the surrounding landscape.<br>• The design characteristics of the proposed wind farm accord with other schemes within the surrounding landscape and adverse visual effects are not likely to occur in relation to these. |
| Negligible | • The proposed wind farm will most often be viewed in isolation or occasionally in conjunction with other distant wind energy developments.<br>• Wind energy development will remain an uncommon landscape feature in the surrounding landscape.<br>• No adverse visual effects will be generated by the proposed turbines in relation to other turbines. |

# EIAR 14.3 BASELINE DESCRIPTION

## EIAR 14.3.1 Landscape Baseline

The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape brought about by the proposal will be assessed. This also includes reference to any relevant landscape character appraisals and the current landscape policy context (both are generally contained within County Development Plans).

A description of the landscape context of the proposed wind farm site and wider study area is provided below under the headings of landform and drainage and vegetation and land use. Centres of population, transport routes and tourism, recreation and heritage features form part of the visual baseline and are dealt with in Section EIAR EIAR 14.3.3 below.


**Figure 14.2 Aerial photograph showing the landscape context of the site and its immediate surrounds (Note: blue star icon denotes proposed turbine locations**

#### EIAR 14.3.1.1 Landform and Drainage

On a broad scale, the proposed development is located along the western extent of the Castlecomer Plateau, a broad upland area located in the northeast of County Kilkenny. At a more local level, the proposed wind farm is situated along elevated terrain at the westernmost edge of this broad plateau that ranges between c. 210 –310m AOD and provides an expansive skyline for many receptors in the western and northern half of the wider study area. East and south of the site within the central study area, the terrain is characterised by this broad elevated upland plateau. However, immediately west and north of the site, the terrain swiftly descends towards the more lowlands in the surrounds of the River Nore. The Tinnalintan Substation is proposed for a site within the central study area to the west of the plateau at a lower elevation of 76m AOD. Whilst the River Nore, which is some c. 3.5km west of the windfarm site, is one of the most notable watercourses within the study area, it is not the nearest. A small stream flows immediately east of the northernmost turbines in the array and empties into the Owenbeg River, which is situated some 1.6km north of the northernmost turbine at its nearest point. Other notable watercourses within the central study area included the River Dinin, which traverses the eastern periphery of the central study area and passes through the settlement of Castlecomer.

The wider study area has similar landform characteristics to the central study area comprising relatively broad but not highly distinctive elevated areas such as the Slieveardagh Hills located in the wider western half of the study area. Broad areas of lowland landscape also exist in the wider study area and principally occur in the northwest quadrant of the wider study area in addition to the wider southern half of the study area in the surrounds of the River Nore Valley. Other notable watercourses include the River Barrow, situated on the study area's easternmost periphery.

#### EIAR 14.3.1.2 Vegetation and Land Use

The principal land use within the central and wider study area is pastoral farmland bound by an intricate network of mixed hedgerow vegetation. Pockets of mature conifer forestry are also located throughout the central and wider study area and often cloak upland hills and ridges. The site itself and the immediate landscape context are cloaked in areas of conifer forestry, some of which appear to be recently harvested. Some notable areas of riparian vegetation also exist within the central and wider surrounds of the study area and often cloak the corridors of the rivers and streams within the study area. In the northern half of the wider study area, some extensive areas of peat bog occur, which are typical of the midlands of Ireland. Combined with the more traditional rural land uses, the study area also encompasses some highly anthropogenic land uses, including quarries, and extensive industrial facilities such as the existing Tirlán factory located on the western periphery of the central study area, in addition to a network of major route corridors. Several notable urban centres within the central study area also influence the study area, including Ballinakill, Castlecomer and Ballyragget. Kilkenny City also occupies a notable portion of the southern half of the wider study area, whilst the outskirts of the settlement of Portlaoise are located along the northern periphery of the study area.

### EIAR 14.3.2 Landscape Policy Context and Designations

#### EIAR 14.3.2.1 The Department of Environment, Heritage and Local Government Wind Energy Development Guidelines (2006)

The Wind Energy Development Guidelines (2006) provide guidance on wind farm siting and design criteria for a number of different landscapes types. The site of the proposed development is considered to be located within a landscape that is generally consistent with the 'Hilly and Flat Farmland' landscape type and the associated guidance is applicable.

In terms of the 'Location' guidance for this landscape type, the guidelines state:

"Location on ridges and plateaux is preferred, not only to maximise exposure, but also to ensure a reasonable distance from dwellings. Sufficient distance should be maintained from farmsteads, houses and centres of population in order to ensure that wind energy developments do not visually dominate them. Elevated locations are also more likely to achieve optimum aesthetic effect."

In terms of 'Spatial Extent,' the Guidelines state:

"This can be expected to be quite limited in response to the scale of fields and such topographic features as hills and knolls. Sufficient distance from buildings, most likely to be critical at lower elevations, must be established in order to avoid dominance by the wind energy development."

In terms of 'Spacing,' the Guidelines state:

"The optimum spacing pattern is likely to be regular, responding to the underlying field pattern. The fields comprising the site might provide the structure for spacing of turbines. However, this may not always be the case and a balance will have to be struck between adequate spacing to achieve operability and a correspondence to field pattern."

In terms of 'layout,' the Guidelines state:

"The optimum layout is linear, and staggered linear on ridges (which are elongated) and hilltops (which are peaked), but a clustered layout would also be appropriate on a hilltop…"

Whilst the guidance in respect of 'height' of turbines is quite conservative for this landscape type, it is important to recognise that exceptions are made for ridge top developments. In this regard, the Guidelines state:

"Turbines should relate in terms of scale to landscape elements and will therefore tend not to be tall. However, an exception to this would be where they are on a high ridge or hilltop of relatively large scale. The more undulating the topography the greater the acceptability of an uneven profile, provided it does not result in significant visual confusion and conflict."

Lastly, for 'Cumulative effect' for this landscape type, the Guidelines state:

"It is important that wind energy development is never perceived to visually dominate. However, given that these landscapes comprise hedgerows and often hills, and that views across the landscape will likely be intermittent and partially obscured, visibility of two or more wind energy developments is usually acceptable."

Overall, it is considered that the proposed development design, particularly the linear ridgetop turbine arrangement, is fully in accordance with the guidance for this landscape setting. Even in respect of turbine height, which the guidance states would; *"tend not to be tall"* is acceptable because of the exception made for ridgelines of a relatively large scale and the fact that these are not tall turbines by current standards.

**EIAR 14.3.2.2 'Kilkenny County Development Plan (CDP) 2021-2027**

A Landscape Character Assessment was prepared for Kilkenny County in 2003, which still informs and provides a framework for landscape-related policy in the current CDP 2021-2027 as expressed in Section 9.2.12 Landscape of the current CDP.

The Landscape Character Assessment identifies four landscape character types, which are subdivided into 14 landscape character areas, with some areas identified as being of special landscape character value, or possessing features and areas of high landscape sensitivity.

**Landscape Character Types (LCT):** The site is located within the 'Upland' LCT, with the nearest 'transition zone' (between the upland and lowland zone) aligning the western side of the site, while the nearest 'river valley' LCT is located approx. 4km west of the site (see Figure 14.3, below).

Similarly, the site is not contained within an area that is designated as 'Highly scenic / Visually pleasing' while the nearest such area to the site is located approx. 4km west of the site (see Figure 14.3 below), along the River Nore valley.

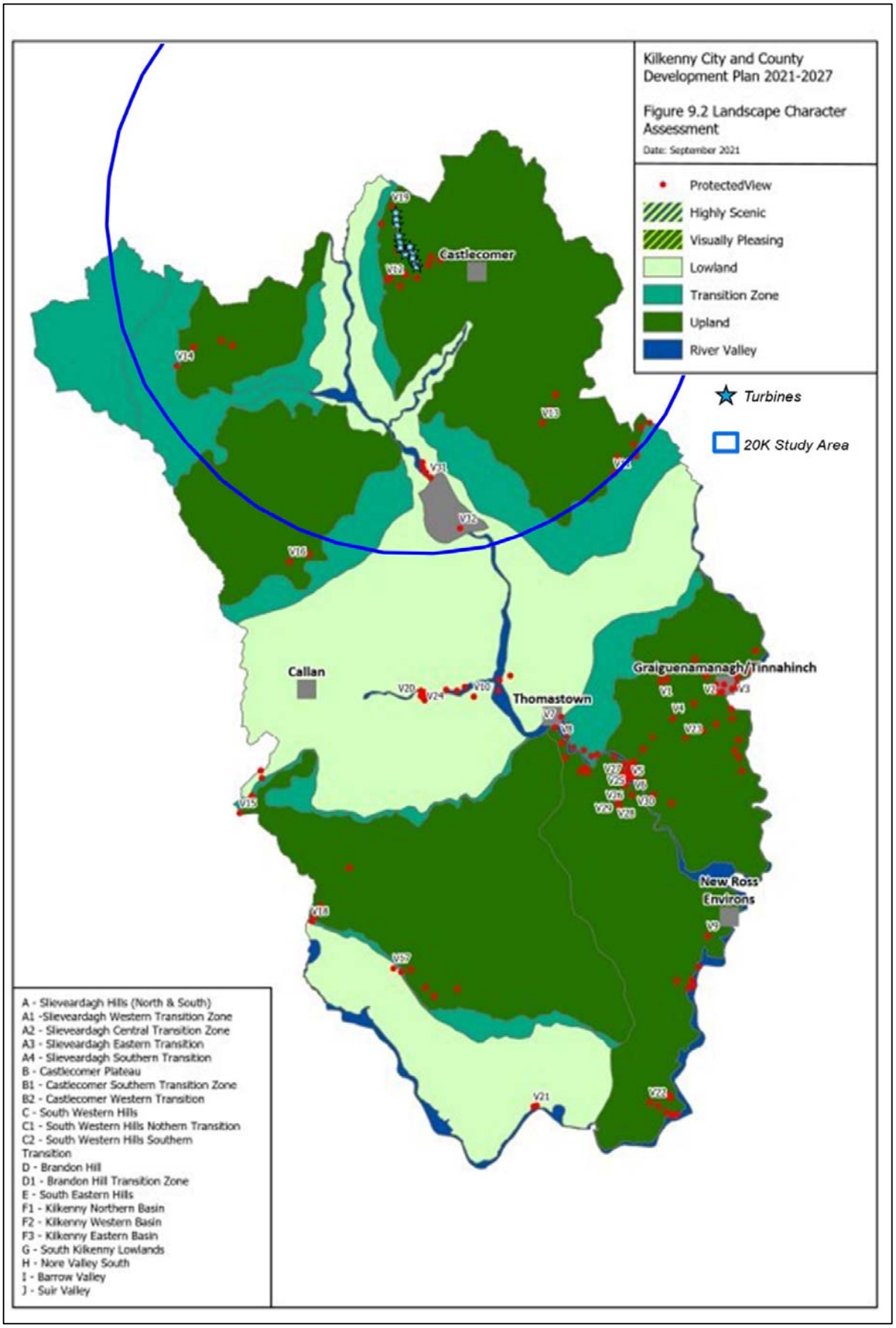


**Figure 14.3 Extract of 'Map 9.2 – Landscape Character Assessment' of the Kilkenny CDP.**

EIAR 14.3.2.2.1 Landscape Character Areas

The Landscape Character Assessment has identified fourteen Landscape Character Areas (LCAs) within County Kilkenny (see Figure 14.4, below). The site is set within the western extents of **LCA B 'Castlecomer Plateau'**, whilst only a short distance to the west of the site is **LCA 'B2 – Castlecomer Western Transition'**, whilst slightly further west again is the **LCA 'F1 – Kilkenny Northern Basin'**.

***LCA B: Castlecomer Plateau:*** Section 9.2.12.3 of the current CDP refers back to the more detailed description in the previous 2008 Plan which describes the distinctive character of the different Landscape Character Areas, based upon patterns of geology, landform, landuse, cultural, historical and ecological features. For the detailed description the current Plan refers to the Landscape Character Assessment, which formed Appendix C to the 2008 Development. According to Section 4.2 of the Landscape Character Assessment of the 2008 plan, LCA B: Castlecomer Plateau is described as:

"The Castlecomer Plateau is an extensive upland area with an almost circular shape that lies between the valleys of the Rivers Nore and Barrow, covering most of the north-east of the County. The terrain steeply slopes from the river valleys to the surface of the Plateau, which gently undulates and gives rise to several small ridgelines at an elevation of between 200 and 340m above the sea level. The elevated nature of this physical unit provides a defined skyline and significant and scenic views over the Kilkenny basin and the Nore and Barrow river valleys. The area is generally perceived as special in landscape terms, however suitable for certain type of potential developments."

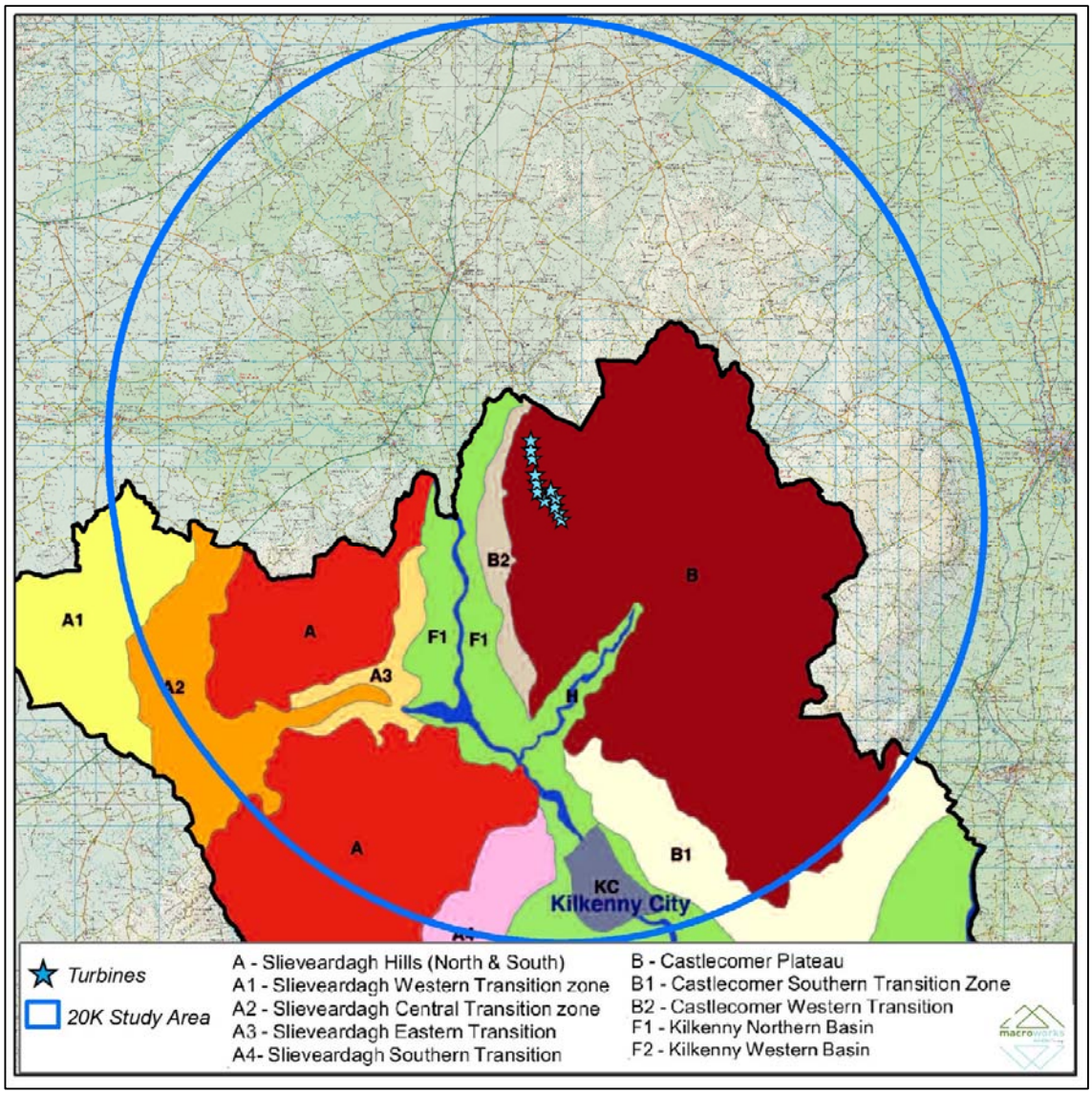


**Figure 14.4 Extract of 'Map 13 - Landscape Character Areas' of the County Kilkenny Landscape Character Assessment in the 2008 CDP showing the LCA numbering (for reference)**

EIAR 14.3.2.2.2 Kilkenny CDP 2021-2027 Landscape Character Sensitivities

**Section 9.2.12.4** Landscape Character Values identifies 'landscape areas of highly scenic and significant visual amenity value.' The nearest of these designations in the study area is along the River Nore, approx. 4km from the site. In addition, these riverine designations adhere to the banks of the watercourse and its immediate vicinity, and not beyond.

**Section 9.2.12.5** describes Landscape Character Sensitivity as being:

"The sensitivity of the Landscape Character Areas is defined as its overall resilience to sustain its character in the face of change and its ability to recover from loss or damage to its components."

Landscape sensitivity within County Kilkenny is addressed by 'areas of greater sensitivity'. These are:

"… Areas throughout the county that are highly sensitive to development and have a limited capacity for change … These areas take account of areas of higher altitude in the county and of land cover. In general areas of elevated topography, with low growing or sparse vegetation and little existing development are landscapes of high sensitivity and have a low potential to absorb new development".

"Sensitive land-use categories include areas which are open and exposed with sparse or low growing vegetation cover which is insufficient to provide screening. Even if planting is introduced, the exposed nature of these areas will not support any significant tall vegetation. Due to this, any development would be visible over a wide area."

Landscape sensitivity within the CDP is closely tied in with Figure 9.3 Landscape Sensitivities of the County Kilkenny Landscape Character Assessment. From that Figure, the three landscape sensitivity factors that are of relevance to the site have been extracted and added, for the sake of clarity, to the Figure 14.5, below. These factors are:

- 'Altitude above 200m';
- 'Principal Ridgeline';
- 'Slopes greater than 10%.'

However, it is worth noting that these individual elements are considered as component parts of the overall landscape character of an area, as none are indisputably sensitive in isolation.

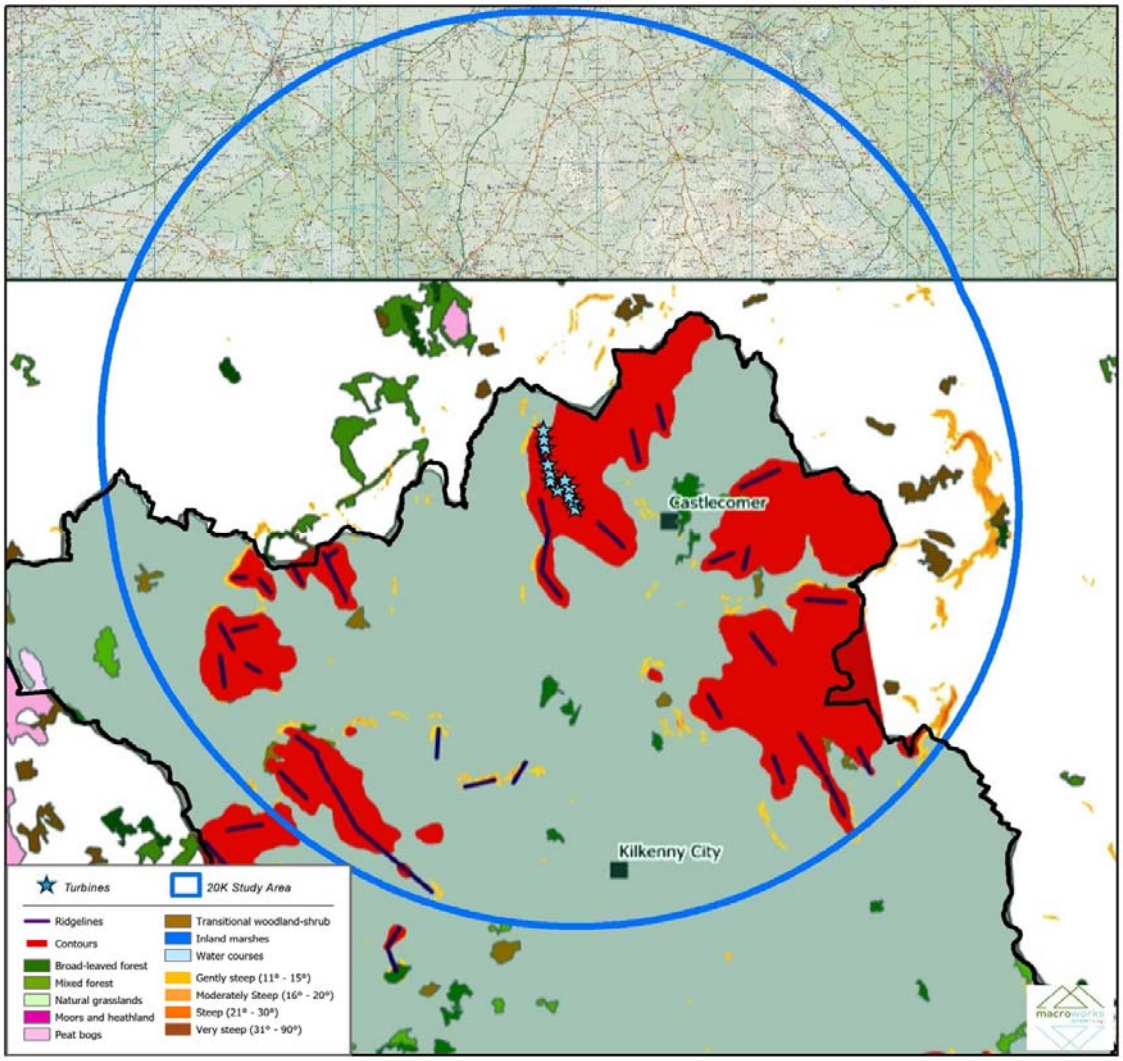


**Figure 14.5 Extract of 'Figure 9.3 Landscape Sensitivities' of the Kilkenny CDP in relation to the proposed turbines.**

EIAR 14.3.2.2.3 County Kilkenny Views & Prospects

Section 9.2.12.6 of the CDP pertains to Views and Prospects. It states that:

"There is a need to protect and conserve views and prospects adjoining public roads and river valleys throughout the county where these views are of high amenity value. In conserving views, it is not proposed that this should give rise to the prohibition of development along these routes but development, where permitted, should not seriously hinder or obstruct these views and should be designed and located to minimise their impact … The Planning Authority will be cognisant of the impact of developments within the county on views from neighbouring counties."

It also states that:

"The Council will preserve and support the improvement of places or areas from which views or prospects of special amenity value exist, as identified in Appendix H and on Figure 9.2."

The protected views of the county are illustrated in Figure 14.3, above. Of the 32 designated protected views listed in Appendix H of the CDP, only four are of potential relevance to the proposed development i.e., a view that is within the study area, with the indicated direction of that view being in the broader general direction of the site of the proposed development.

In order of proximity, these are:

- **V12:** "Views overlooking Castlecomer and Ballyragget on the Castlecomer/Ballyragget Road (R694) between its junctions with road nos. LT5852 and LT5847."
- **V19:** "View west towards the Slieve Bloom Mountains on road no's L5840 and L5839 from the junction with road nos. LS5839 and LS5846 (Ballymartin Cross Roads)."
- **V14:** "Views north and east on the Johnstown/Gattabaun Road No. LP1805 between junctions with Road nos. LT18054 and LT18056."
- **V13:** Views southwest over Kilkenny City and southeast over Carlow on Ballysallagh/Kanesbridge Road No. LP 1851 between the junctions with road nos. LT6654 and LS5886

The CDP also sets out a number of 'development management requirements,' most of which relate to the site and the proposed development, and are listed below:

- "To protect the landscape character, quality and local distinctiveness of County Kilkenny, and have regard to the guidance set out in the Landscape Character Assessment;
- Where necessary, to require that applications are accompanied by a visual impact assessment, particularly in upland areas, river valleys and areas of greater sensitivity;
- To facilitate appropriate development that reflects the scale, character and sensitivities of the local landscape throughout the county, and require that developments minimise the loss of natural features such as trees, hedgerows and stone walls;
- To facilitate, where appropriate, developments that have a functional and locational natural resource requirement to be situated on steep or elevated sites (e.g. reservoir, telecommunications or wind energy structures) with reference to the appropriate County strategies currently in place, and to ensure that any residual adverse visual impacts are minimised or mitigated;
- To ensure that development in upland areas or on steep slopes will not have a disproportionate or dominating visual impact (due to excessive bulk, scale or inappropriate siting) and will not significantly interfere or detract from scenic upland vistas, or when viewed from public areas, scenic routes, viewpoints or settlements;

- To have particular regard to the potential impacts of new development on sensitive upland areas, and to materially consider the difficulty of establishing and maintaining screening vegetation when assessing development proposals in these areas.
- To continue to permit development that can utilise existing structures and settlement areas whilst taking account of the local visual absorption opportunities provided by existing topography and prevailing vegetation and to direct new development whenever possible towards the vicinity of existing structures and mature vegetation in the Lowland Areas, River Valleys and Transitional Areas.
- To maintain the visual integrity of areas of greater sensitivity in the county and ensure that any development in these areas is appropriately sited and designed. Applicants shall demonstrate that the proposed development can be assimilated into the landscape and will not have a disproportionate visual impact on the landscape.

EIAR 14.3.2.2.4 Wind Energy Development Strategy in the Kilkenny CPD 2021 - 2027

According to Chapter 11: Renewable Energy: Section 11.5.3.3 of the CDP,

"Both quantitative and qualitative factors are used to estimate the potential for impact of Wind Energy developments on the landscape. In accordance with the Wind Energy Guidelines, these are comprised in four parts, being:

- Landscape sensitivity (ranging from very low sensitivity to very high sensitivity;
- Visual presence of the wind energy development (ranging from minimal presence to highly dominant);
- Aesthetic impact of the wind energy development on its landscape context (ranging from major positive impact to major adverse impact);
- Significance of the impact (ranging from insignificant to major).

The Planning Authority will use these four elements of landscape impact assessment in considering the potential for impact of proposed Wind Energy Development on the landscape."

Within Appendix K Wind Energy Development Strategy of the Kilkenny CDP, Figure 8 designates three policy areas as 'Acceptable in Principle', 'Open for Consideration', and 'Not normally Permissible.'

As demonstrated in Figure 14.6, below, the site of the proposed wind energy development is located on lands deemed to be 'Acceptable in Principle' to wind energy development in the Appendix K. In addition, much of the surrounding area is either deemed similarly or else 'Open to Consideration' to wind energy development.

According to Appendix K, 'Acceptable in principle' is described as:

"This is the preferred area for wind energy development, characterised by high wind speeds, and no significant conflict with environmental designations or sensitivities."

Meanwhile, 'Open for consideration' is described as:

"This area is characterised by no significant conflict with environmental designations or sensitivities."

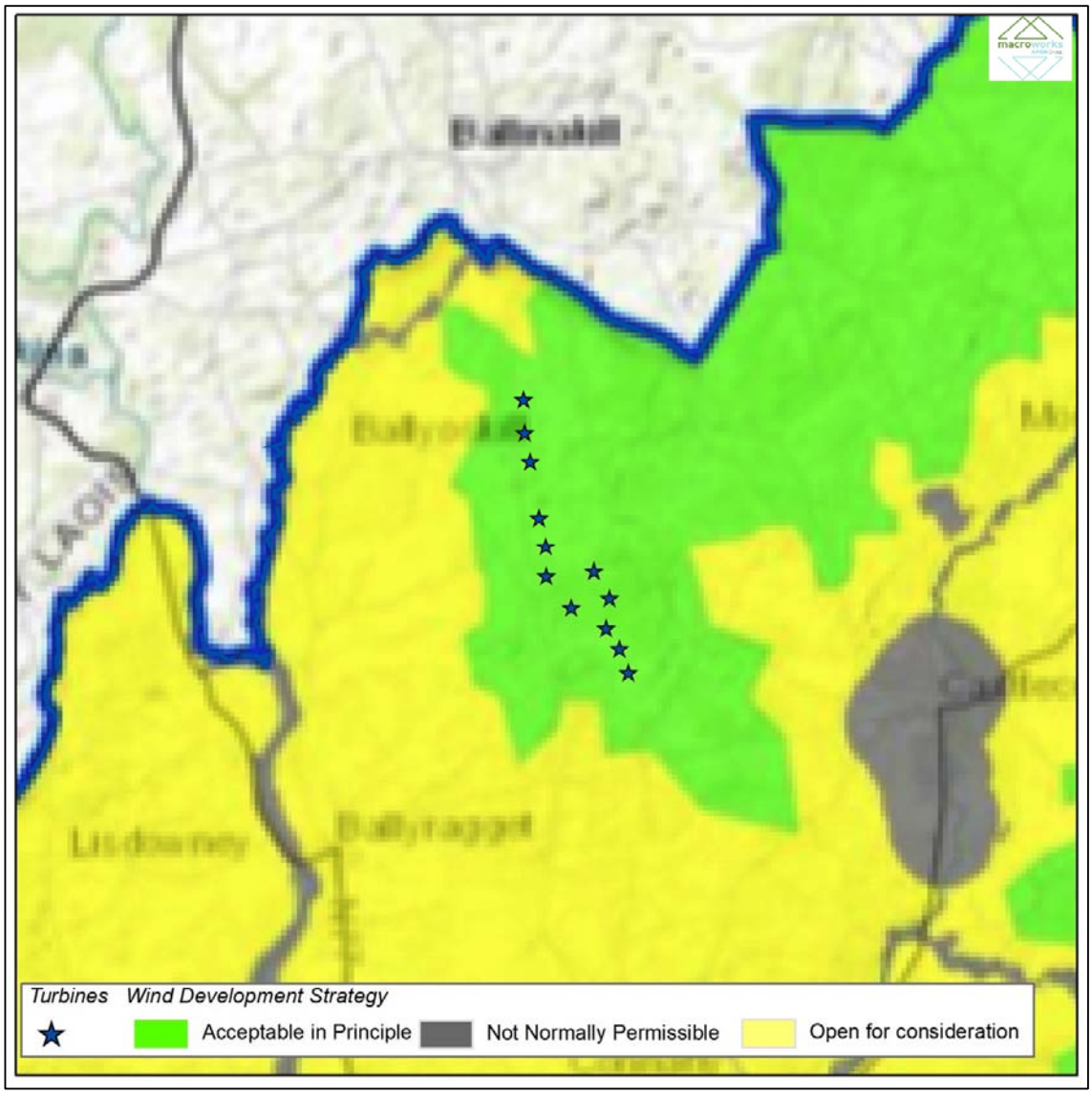


**Figure 14.6 Extract of Figure 8 within Appendix K Wind Energy Development Strategy of the Kilkenny CDP, showing the location of the proposed turbines being within an area designated as being 'Acceptable in Principle' for wind energy development.**

EIAR 14.3.2.2.5 Chapter 11 Renewable Energy of Kilkenny County Development Plan 2021-2027

The detailed policies for the development of wind energy projects in these strategy areas are set out in Chapter 11: Renewable Energy. The policy areas are identified in Figure 11.4: Wind Strategy Areas of Chapter 11.

The status of these strategy areas is discussed in Chapter 1 of this EIA Report. In summary, the wind strategy areas on Figure 11.4, were modified at Draft Plan stage in June 2021, removing areas of 'acceptable in principle' in the south of County Kilkenny. The Kilkenny County Development Plan 2021-2027 came into effect on 15th October 2021. Also on 15th October, the Minister at the Department of the Housing, Local Government and Heritage, notified Kilkenny County Council of his intention to issue a Direction to the Council to address inconsistencies with statutory requirements in its CDP. The Draft Direction states that those parts of the Kilkenny City and County Development Plan 2021-2027 referred to in the Minister's Notice shall not have effect namely - Section 11.4: Kilkenny Targets; Section 11.5.1: Current status and targets; and Figure 11.4: Wind Strategy Areas. This was in response to the removal of areas of 'acceptable in principle' and the effects on the Kilkenny County targets for renewable energy installations. The perfected Ministerial Direction has not been issued to date (January 2024).

The area of the County where the proposed Ballynalacken Windfarm is located was not altered from "Acceptable in Principle" at Draft Plan stage, by the Elected Representatives which instigated the Draft Ministerial Direction.

#### EIAR 14.3.2.3 Laois County Development Plan (CDP) 2021-2027

The most northerly turbine (T12) is c.1.5km from the Co. Laois border, and therefore, it is important to consider landscape related policy in County Laois.

A County Laois Landscape Character Assessment has been prepared as part of the current Laois County Development Plan (CDP). Section 4 of Appendix 6 of the Assessment entails "Landscape Trends of County Laois," with section 4.2 relating to "Infrastructure and Industry," which states that:

"…Wind energy is also a visually prominent form of development and should be located away from highly sensitive landscapes and those of exceptional value. One landscape character type in the county being considered for this form of development is harvested peatland. While substantially lower than hill and mountain locations, the potential landscape impact will still need careful appraisal."

Section 4.8 of the Assessment relates to 'Likely forms of Development.' This entails 'Wind turbines, installed as single turbines or wind farms,' which states that:

"…Increasing renewable energy provision is a key element of central and regional government policy and is also emphasised in the Laois County Development Plan, 2021-2027. Key impacts on landscape character will include visual impact on long and short-range views, sensitive historic landscapes and cumulative impacts of other wind farms, including those in neighbouring counties […]. Physical impacts on sensitive landscape features such as habitats, historic artefacts and vegetation will also need to be considered and mitigated against."

##### EIAR 14.3.2.3.1 County Laois Landscape Sensitivity:

In Section 5 of the County Laois Landscape Character Assessment, the county is divided up into seven Landscape Character Areas (i.e., distinct types of landscape that are relatively homogenous in character). The Co. Laois Landscape Character Area that is nearest to the site, aligning the Co. Kilkenny border at this point, is the 'Mountains, Hills and Upland Areas' LCA (refer to Figure 14.7 below). This LCA is classified with a 'Medium Sensitivity', which are described as "*areas with the capacity to accommodate a range of uses without significant adverse effects on the appearance or character of the landscape having regards to localised sensitivity factors".* It is also worth noting that the Lowland LCA is also located within the northwest quadrant of the central study area and is classified with a 'Low Sensitivity'. This landscape character area is described as *"areas within the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area*".

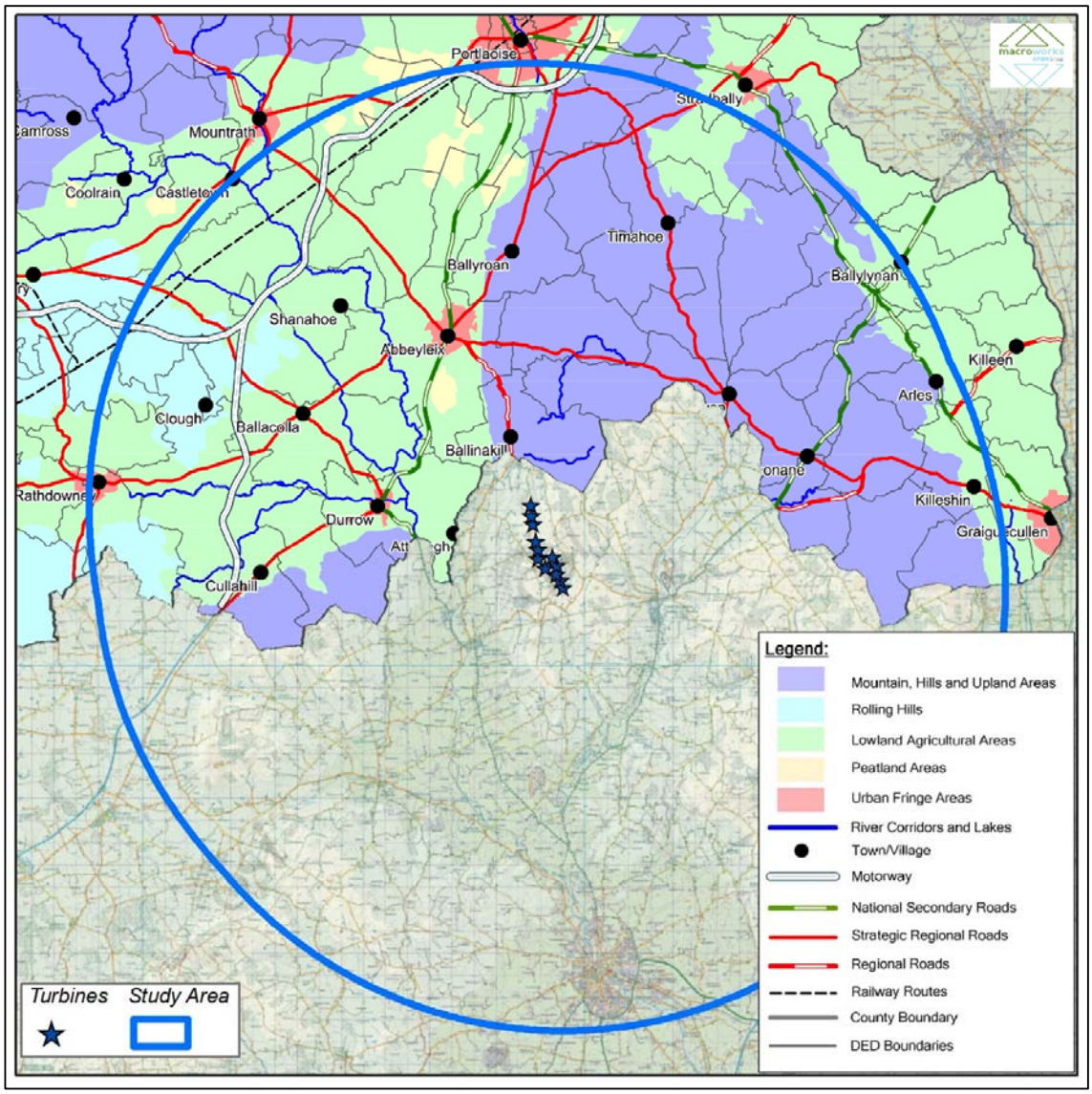


**Figure 14.7 Extract of Co. Laois Landscape Character Types, in relation to the site. Please note that the Co. Laois LCT closest to the site is 'Mountain, Hills and Upland area'**

EIAR 14.3.2.3.2 County Laois Views & Prospects

The current Laois County Development Plan identifies 23 views and prospects throughout the county, which are identified in Table 11.7 of the current CDP and on map 11.8 (refer to Figure 14.8 below). Of the 23 designated amenity views and prospects listed in Table 11.7 of the Laois CDP, only two of these are of potential relevance to the proposed development i.e., a view/prospect that is within the study area, with the indicated direction of that view being in the broader general direction of the site of the proposed development.

These include both views 22 and 23, both of which are located within Heywood Demesne (refer to Figure 14.8, below). Heywood Demesne is located approx. 4km north of the site. In the subsequent Visual Impact Assessment of this LVIA, these protected views are represented by VP6 and VP7. Refer to Figure 14.11, below.

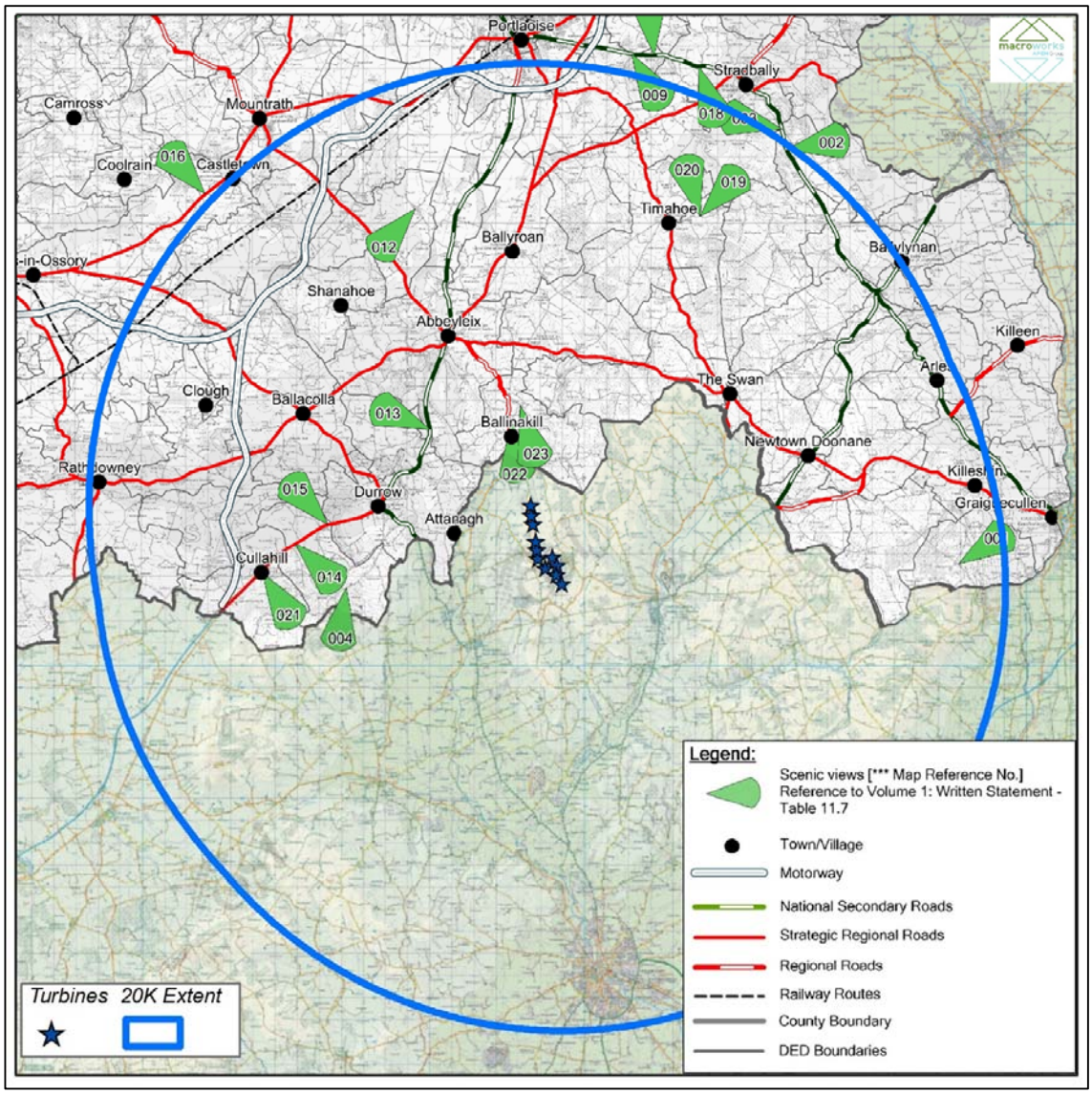


**Figure 14.8 Extract of Co. Laois scenic designations map in the current CDP.**

EIAR 14.3.2.3.3 County Laois Wind Energy Strategy

A Wind Energy Strategy has been prepared for County Laois, which forms part of the County Development Plan, being found in Appendix 5. Section 4.5 of the Strategy entails the Landscape Character Types in County Laois, and the potential suitability of each for wind energy development. According to the Strategy, of the aforementioned seven Landscape Character Types (LCTs) identified for the county:

"The main areas that were under consideration for wind energy development during the last county development plan were mainly in the following landscape type areas: Hills and Upland Areas; Peatland Areas; Rolling Hill Areas."

As per the current Wind Energy Strategy for County Laois, the nearest sections of the Kilkenny – Laois border are contained in a mix of 'Areas Open for Consideration' and 'Areas Not Open for Consideration' (refer to Figure **14.9**).

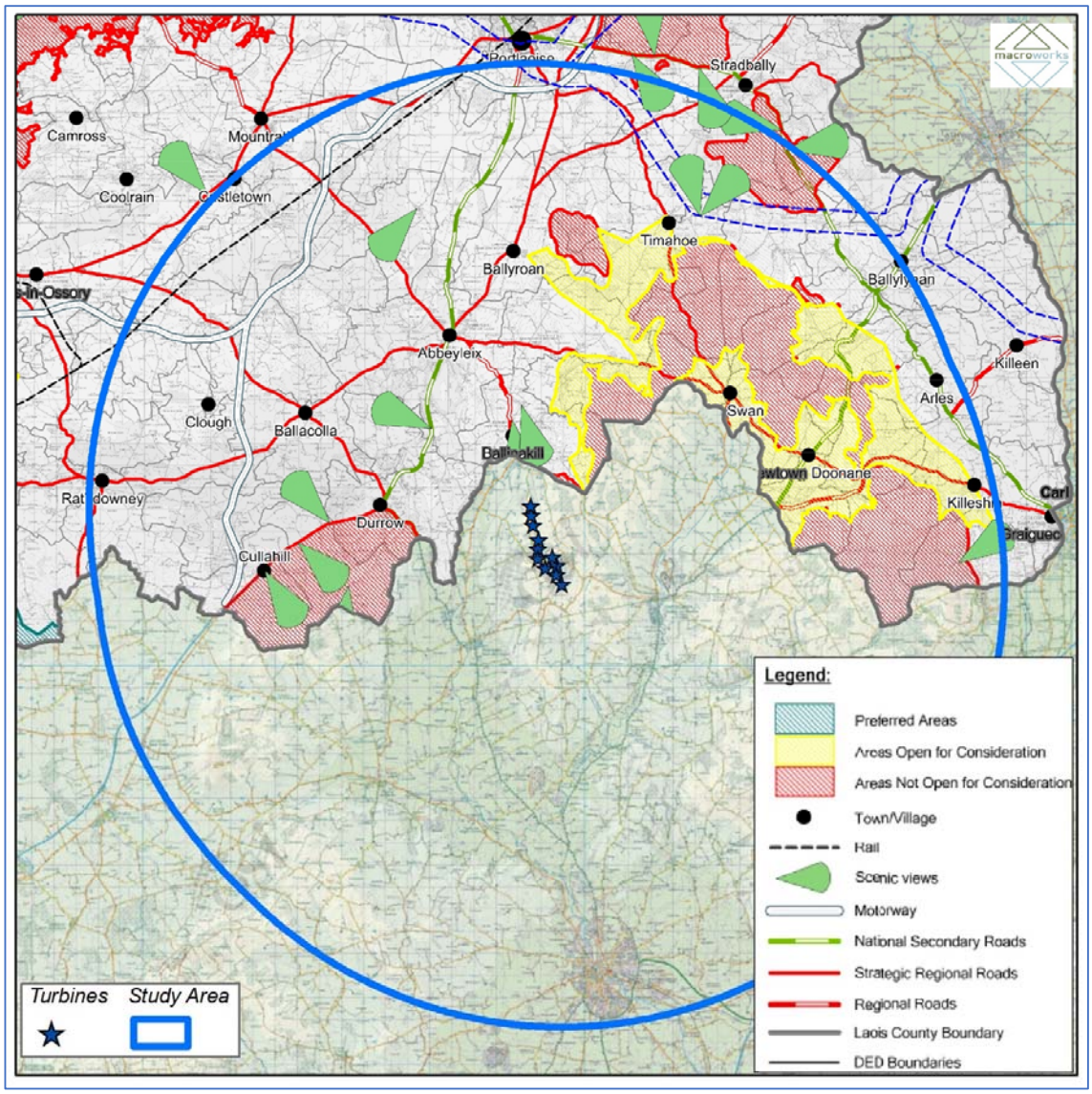


**Figure 14.9 Mapping of Co. Laois wind energy suitability areas, in relation to the site.**

### EIAR 14.3.2.4 Carlow County Development Plan (CDP) 2022-2028

The Carlow County bounds is some 13km southeast of the site. As the proposed turbines have a very limited potential to influence the landscape character of County Carlow from this distance, the most relevant designations relate to protected views and prospects. Part 6 of the Carlow Landscape Assessment, which forms part of the CDP, includes a schedule of scenic views and scenic routes. Those located within the study area are outlined below:

- Scenic View 31: Vista east, panorama across central plain to Blackstairs;
- Scenic View 32: Views east and north, of River Barrow
- Scenic Route 6: L7123-0, Central Plain (Ridge Cross Roads)
- Scenic Route 7: L3037-11, Panorama across central plain (Road to the Butts)
- Scenic Route 8: L7130-26, Panorama to southeast (Tomard Wood)
- Scenic Route 9: Panorama across central plain (Tomard Lower)

Many of the scenic designations outlined above are oriented in the opposite direction to the site across the wider Carlow landscape. Nonetheless, as scenic routes are experienced as a journey and not as static view in

one single direction, a representative view has been included for these scenic designations. VP29 (Local road east of Muckalee) is included within the following visual assessment and is highlighted on Figure 14.11 below.

#### EIAR 14.3.2.5 Ecological Designations

Ecological designations such as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Natural Heritage Areas (NHAs) are relevant to the landscape and visual assessment as they can identify areas that are likely to exhibit naturalistic character and low levels of built development. They also highlight areas to which landscape conservation values are attached and they are commonly associated with outdoor amenity facilities where people go to enjoy the landscape setting.

Within the Central Study Area there are no Natural Heritage Areas (NHAs). There are several Special Protection Areas, Special Areas of Conservation (SACs), proposed Natural Heritage Areas (pNHAs) within the Central Study Area. In order of proximity to the windfarm site, these are:

- River Barrow And River Nore SAC – located 1.6km northwest of the site.
- River Nore SPA – located c. 1.7km northwest of the site.
- Lisbigney Bog SAC - located c. 3km northwest of the site.
- Lisbigney Bog pNHA – located c.3km northwest of the site.
- River Nore/Abbeyleix Woods Complex pNHA – located c. 3.5km west of the site.

### EIAR 14.3.3 Visual Baseline

Only those parts of the study area that potentially afford views of the proposed EIA Development are of interest to this part of the assessment. Therefore, the first part of the visual baseline is establishing a 'Zone of Theoretical Visibility' and subsequently, identifying important visual receptors from which to base the visual impact assessment.

#### EIAR 14.3.3.1 Zone of Theoretical Visibility (ZTV)

A computer-generated Zone of Theoretical Visibility (ZTV) map has been prepared to illustrate from where the proposed Development is potentially visible. The ZTV below is based on a tip height as a worst-case scenario for potential visibility within the study area. A large scale map of a ZTV showing the potential visibility up to the hub height of the proposed turbines is also included in the **EIAR Landscape Illustration Pack** which accompanies this EIAR. The ZTV map is based solely on terrain data (bare ground visibility), and ignores features such as trees, hedges or buildings, which may screen views. Given the complex vegetation patterns within this landscape, the main value of this form of ZTV mapping is to determine those parts of the landscape from which the proposed development will definitely not be visible, due to terrain screening within the 20km study area. Refer to Figure 14.10, below.

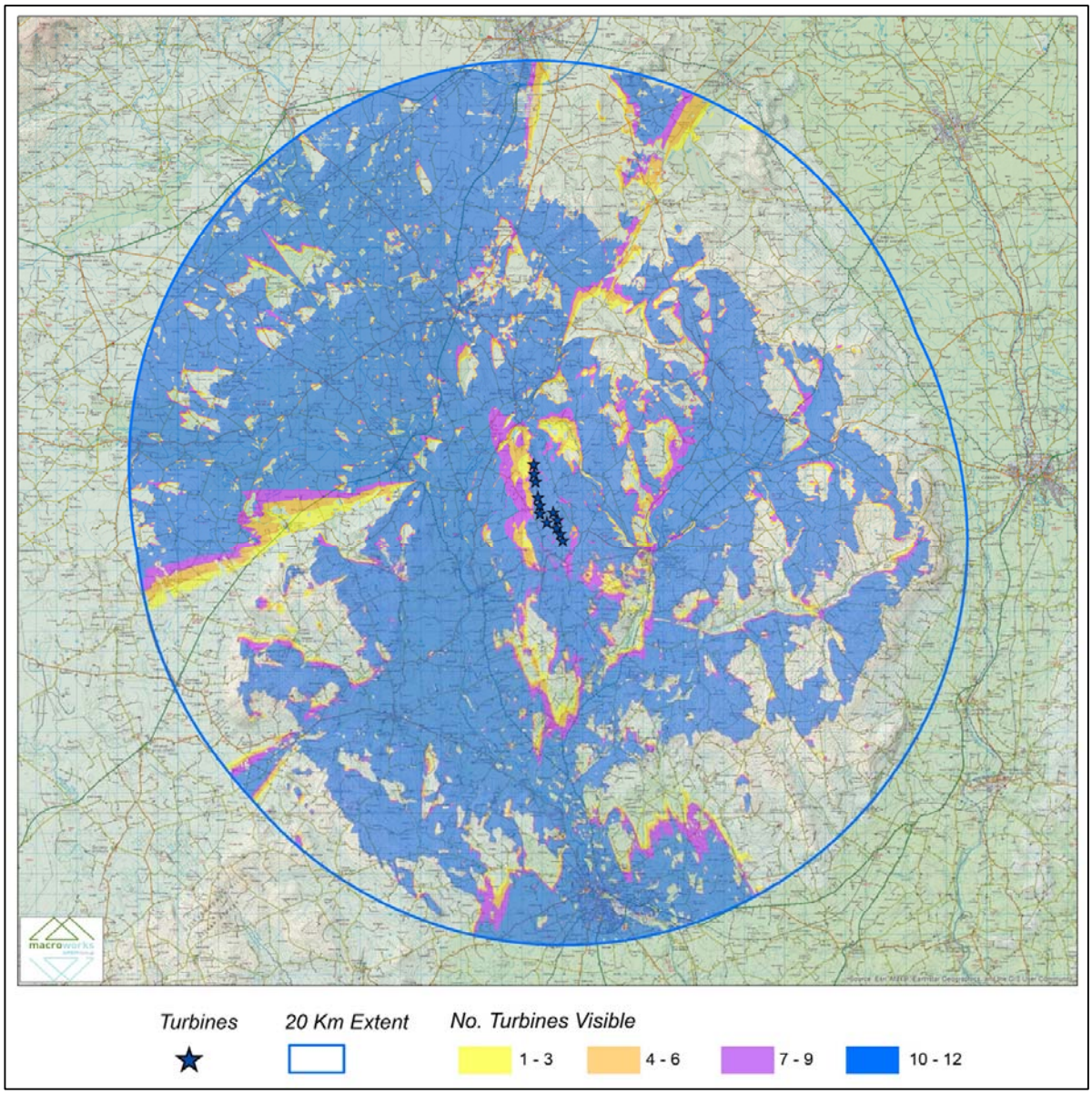


**Figure 14.10 ZTV map (See EIAR Landscape Illustration Pack for full scale annotated ZTV maps generated from hub height and blade tip)**

- There is relatively consistent ZTV coverage across much of the central study area due to the elevated nature of the proposed development site. Some brief areas of limited and no ZTV pattern (no colour/ no yellow/orange pattern) are located in the near surrounds of the site and relate to the immediate edge of the elevated Castlecomer plateau, contained river and stream valleys and locally rolling hills.
- Much of the northwest quadrant of the central and wider study area will afford comprehensive theoretic visibility of the proposed turbines due to the relatively flat terrain here, combined with the elevated nature of the site.
- Whilst comprehensive ZTV pattern occurs within the northwest quadrant of the study area, potential visibility tends to dissipate beyond the central study area as a result of the elevated rolling terrain in the northern and north-eastern aspects of the central and wider study area.
- The ZTV pattern is relatively similar throughout the eastern and south-eastern aspects of the study area, where much of the elevated lands within the Castlecomer Plateau and its surround will afford notable areas of comprehensive theoretic visibility (blue colour pattern). Nonetheless, due to the rolling nature of the terrain here, there will also be some notable areas of no turbine visibility, which often relate to

river valleys and the opposite sides of elevated hills and ridges to the site. Furthermore, visibility is almost entirely eliminated beyond c. 16-17km from the site to the northeast, east and southeast of the site, beyond the context of the elevated terrain within the Castlecomer Plateau.

- While there is more consistent ZTV coverage in the southern half of the study area, there are still some notable blocks of no ZTV pattern where the terrain transitions towards the lowlands. Relatively consistent ZTV coverage occurs in the lowlands in the immediate surrounds of the River Nore and in the direction of Kilkenny City.
- The western half of the study presents with some broad areas of consistent ZTV coverage, especially in the central study area. Nonetheless, some of the more elevated lands west of the River Nore corridor and in the wider western half of the study area will contain potential visibility of the turbines for receptors in the wider western periphery of the study area.
- Almost all the settlements within the central study have some theoretic potential to afford turbine visibility. Nonetheless, due to the relatively contained nature of the settlement of Castlecomer, there will be limited potential to afford views of the proposed turbines.
- The most important point when reviewing the ZTV map in an undulating study area such as this is that it is not a true representation of likely visibility, as it takes no account of the screening provided by vegetation. Such screening 'on the ground' can be considerable and may limit views of even tall turbines within very short distances. The main benefit of the ZTV map in this instance is to indicate where views of the turbines are not available.

See **EIAR Landscape Illustration Pack.**

## EIAR 14.3.4 Visual Receptors

### EIAR 14.3.4.1 Centre's of Population and Houses

The proposed development sits between three notable population centres, including Ballinakill, Castlecomer and Ballyragget. The settlement of Ballinakill is the nearest of the three and is located just over 3km north of the northernmost turbine. Second to this is the valley-side settlement of Castlecomer, the outskirts of which are situated just under c. 4km southeast of the site. Located east of the banks of the River Nore, Ballyragget is located c. 4.2km southwest of the southernmost turbine at its nearest point. The small village of Attanagh is also located in the central study area along the Owenbeg River corridor and some 3.5km west of the site, while the small village of Ballyouskill is located at the base of the ridge 1.9km to the west of the site. Aside from some cross-road settlements and notable linear clusters of dwellings, there are no other notable population centres within the central study area. In terms of the nearest residential dwelling to the proposed development, these tend to occur along the local roads that traverse to the east and west of the site.

The wider study area also encompasses an array of centres of population of varying scales. The most notable of these is Kilkenny City, the outskirts of which are situated some c. 15km south of the site at their nearest point. Second to this is the settlement of Portlaoise, which is located some c. 19km north of the site. Other notable settlements within the wider study area include Durrow, Abbeyleix, Freshford, and Johnstown. Numerous other small cross-road settlements and small village settlements are also located throughout the wider study area.

### EIAR 14.3.4.2 Transport Routes

The most notable major transport routes within the central study area include the N77 and N78 national secondary routes, both of which are located along its outer periphery, one to the southeast (N78) and one to the southwest of the site (N77). The N78 is the nearer of the two by a small margin, passing through the centre of the settlement of Castlecomer, some c. 4.4km southeast of the nearest turbine. The N77 passes some 4.7km southwest of the site as it follows the corridor of the River Nore and passes directly through the

riverside settlement of Ballyragget. The central study area also comprises a network of regional roads, the nearest of which, the R694, is situated less than c. 800m southeast of the southernmost turbine in the array. The R432 regional road is located just over 1.8km northwest of the proposed turbine array, connecting the village of Ballinakill to the settlement of Ballyragget. Aside from these major routes, the study area also encompasses a network of interconnecting local roads, the nearest of which occur immediately east and west of the proposed array.

Within the wider study area, the most notable transport routes include the M7 and M8 motorways, which are situated in the outer western half of the study area. The M8 motorway is located some c. 13km west of the site at its nearest point, whilst the M7 motorway is some c. 15km northwest of the proposed array. The M9 motorway is situated just over 20km southeast of the site at its nearest point. The N77 and N78 also traverse the wider study area and connect some larger settlements, including Kilkenny City, Portlaoise, Abbeyleix and Durrow. In similar circumstances to the central study area, the wider study area also encompasses a network of interconnecting regional and local roads that connect some of the smaller town and village settlements and local population centres.

A section of the national railway line also enters the wider study area in its northern and southern periphery in the surrounds of the settlements of Portlaoise and Kilkenny City.

#### EIAR 14.3.4.3 Tourism, Recreational and Heritage Features

There is a diverse array of amenity and heritage locations within the central and wider study areas.

Within the central study area, a section of the North Kilkenny Cycle Route passes along a local road connecting the settlements of Castlecomer and Ballyragget and is located less than c.1.2km south of the site at its nearest point. Several looped woodland walking trails are also located within Castlecomer Discovery Park, located immediately east of the River Dinin, some c. 4.5km east of the site at its nearest point. The central study area also encompasses several cultural heritage features, which include churches, graveyards, castle remnants and stately demesne. One of the most notable is Heywood Gardens, an 18th Century demesne landscape comprising gardens, lakes, woodland and architectural features. Heywood Gardens, located north of the Laois – Kilkenny boarder, some 3.8km north of the site.

Within the wider Study Area, there are multiple walking trails. The North Kilkenny Cycle Route meanders through most of the south-eastern quadrant; just over 5km west of the site is the Durrow Leafy Loops - Leafy Loop Walk, while approx. 5.4km northwest of the site is the Abbeyleix-Killamuck Bog Loop Walk. Some c. 10km southwest of the site is the Cullahill - Heathy Way Loop Walk and Gathabawn Loop Walk, whilst several other local walks occur between 10-20km from the site within the western and southern extent of the study area, including; Granstown Wood and Lame Woodland Trail, Jenkinstown Wood Trails and the Freshford Loop Walk. Either within or in the vicinity of several towns, as well as Kilkenny City, there are golf courses, while there are also a handful of large, landed estates about the study area. In and near several of the villages and towns, there are GAA club grounds, while elsewhere, there are multiple protected archaeological and cultural heritage sites.

#### EIAR 14.3.4.4 Scenic Designations

Views of recognised scenic value are primarily indicated within County Development Plans in the context of scenic views/routes designations, but they might also be indicated on touring maps, websites, guidebooks, and roadside rest stops, or on post cards that represent the area. In this instance there are not considered to be any iconic views that are not otherwise included as the aforementioned designated scenic views and/or routes in the three aforementioned relevant county development plans. Thus, all such scenic designations within the study area have previously been identified and described in Section EIAR EIAR 14.3.2, above.

### EIAR 14.3.5 Identification of Viewshed Reference Points as a Basis for Assessment

The results of the ZTV analysis provide a basis for the selection of Viewshed Reference Points (VRP's), which are the locations used to study the landscape and visual impact of the proposed wind farm in detail. It is not warranted to include each and every location that provides a view of this development as this would result in an unwieldy report and make it extremely difficult to draw out the key impacts arising from the project. Instead, a variety of receptor locations was selected that are likely to provide views of the proposed wind farm from different distances, different angles and different contexts.

The visual impact of a proposed development is assessed using up to 6 categories of receptor type as listed below:

- Key Views (from features of national or international importance)(KV);
- Designated Scenic Routes and Views (DSR/SV);
- Local Community views (LCV);
- Centres of Population (CP);
- Major Routes (MR); and
- Amenity and heritage features (AH);

Where a VRP might have been initially selected for more than one reason it will be assessed according to the primary criterion for which it was chosen. The characteristics of each receptor type vary as does the way in which the view is experienced. These are described below. See also **EIAR Landscape Illustration Pack.**

**Key Views (KV)**

These VRPs are at features or locations that are significant at the national or even international level, typically in terms of heritage, recreation or tourism. They are locations that attract a significant number of viewers who are likely to be in a reflective or recreational frame of mind, possibly increasing their appreciation of the landscape around them. The location of this receptor type is usually quite specific.

**Designated Scenic Routes and Views (DSR/SV)**

Due to their identification in the County Development Plan this type of VRP location represents a general policy consensus on locations of high scenic value within the Study Area. These are commonly elevated, long distance, panoramic views and may or may not be mapped from precise locations. They are more likely to be experienced by static viewers who seek out or stop to take in such vistas.

**Local Community Views (LCV)**

This type of VRP represents those people who live and/or work in the locality of the proposed EIA Development, usually within a 5 km radius of the site. Although the VRPs are generally located on local level roads, they also represent similar views that may be available from adjacent houses. The precise location of this VRP type is not critical; however, clear elevated views are preferred, particularly when closely associated with a cluster of houses and representing their primary views. Coverage of a range of viewing angles using several VRPs is necessary in order to sample the spectrum of views that would be available from surrounding dwellings.

**Centres of Population (CP)**

VRPs are selected at centres of population primarily due to the number of viewers that are likely to experience that view. The relevance of the settlement is based on the significance of its size in terms of the Study Area or its proximity to the site. The VRP may be selected from any location within the public domain that provides a clear view either within the settlement or in close proximity to it.

**Major Routes (MR)**

These include national and regional level roads and are relevant VRP locations due to the number of viewers potentially impacted by the proposed development. The precise location of this category of VRP is not critical and might be chosen anywhere along the route that provides clear views towards the proposal site, but with a preference towards close and/or elevated views. Major routes typically provide views experienced whilst in motion and these may be fleeting and intermittent depending on screening by intervening vegetation or buildings.

**Tourism, Amenity and Heritage Features (AH)**

These views are often one and the same given that heritage locations can be important tourist and visitor destinations and amenity areas or walking routes are commonly designed to incorporate heritage features. Such locations or routes tend to be sensitive to development within the landscape as viewers are likely to be in a receptive frame of mind with respect to the landscape around them. The sensitivity of this type of visual receptor is strongly related to the number of visitors they might attract and, in the case of heritage features, whether these are discerning experts or lay tourists. Sensitivity is also heavily influenced by the experience of the viewer at a heritage site as distinct from simply the view of it. This is a complex phenomenon that is likely to be different for every site. Experiential considerations might relate to the sequential approach to a castle from the car park or the view from a hilltop monument reached after a demanding climb. It might also relate to the influence of contemporary features within a key view and whether these detract from a sense of past times. It must also be noted that the sensitivity rating attributed to a heritage feature for the purposes of a landscape and visual assessment is not synonymous with its importance to the Archaeological or Architectural Heritage record.

The Viewshed Reference Points selected in this instance are set out in the Table 14-6 and Figure 14.11 below.

See also the **EIAR Landscape Illustration Pack.**

Note: There are also a selection of heritage views (CH012 + CH013, CH074, CH110, CH285, CH287, CH289 (1), CH289 (2), CH293, CH309 (1), CH309 (2), CH310, CH312, CHD1, CHD2, CHD3) that were selected principally to cover heritage assets at the request of the project heritage specialist. Where these relate to heritage features that are in the public domain and regularly visited, they are also relevant to the visual impact assessment and will be assessed herein. These views form part of the Cultural Heritage assessment - Chapter 15, with the assessment of the Visual Impact Magnitude contained in Appendix 15.11. Photomontages, compiled by Macroworks, are also included for these Cultural Heritage Views in Appendix 15.11.

**Table 14-6 Outline description of selected Viewshed Reference Points (VRPs)**

| VRP No. | VP Title/Location | Representative of: | Distance to nearest visible turbine | Direction of view |
|---|---|---|---|---|
| VP1 | Portlaoise Rugby Club, Portlaoise | CP | N/A (T12) | S |
| VP2 | Ballyroan Abbey GAA Club, Ballyroan | CP | 10.9km (T12) | S |
| VP3 | Local Church, Abbeyleix | AH, CP, MR | 8.5km (T12) | SE |
| VP4 | L1596 local road overbridge of the M7 at Kilcotton | MR | 18.8km (T12) | SE |
| VP5 | The Swan/Crettyard/R430 | MR, CP | 11.3km (T5) | SW |
| VP6 | Heywood Demesne | SV, AH | 4.5km (T12) | S |

| | | | | |
|---|---|---|---|---|
| VP7 | Laois County Council Scenic Viewpoint at Ballinkill GAA club | DSV, CP, LCV, AH | 4.0km (T12) | S |
| VP8 | L7799 local road at Ironmills (Kilrush) | LCV | 2.8km (T12) | SW |
| VP9 | Local Road at Attenagh | LCV, AH | 3.9km (T11) | E |
| VP10 | National Road N77 northeast of Durrow | MR, CP | 6.5km (T12) | SE |
| VP11 | L5591 overbridge of the M8 east of Cannonswood Cross Roads | MR | 13.9km (T12) | E |
| VP12 | Local road at Ballyouskill | LCV, SV | 1.3km (T11) | E |
| VP13 | Local road at Ballynalackan | LCV | 1.1km (T10) | W |
| VP14 | Local Road L5846 at Ballynalacken | LCV | 0.4km (T6) | E |
| VP15 | Local road (Cromwell's Road) | LCV, SV | 0.4km (T10) | E |
| VP16 | Local Road at Skehana | LCV, AH | 3.1km (T5) | E |
| VP17 | National Road N78 at Cloneen | MR | 9.4km (T5) | W |
| VP18 | Regional Road R432 at Tinnalintan south of Glashagal Bridge | MR, LCV | 3.2km (T7) | E |
| VP19 | Regional Road R694 at Glenmagoo or Firoda Lower | SV, LCV | 1.8km (T1) | E & N |
| VP20 | Local Load L5846 intersection of the R694 | LCV, SV | 1km (T1) | NW |
| VP21 | National Road N77 at Ballynaslee, west of the River Nore | MR | 5km (T7) | E & NE |
| VP22 | L5853 local road west of Castlecomer | CP, LCV, AH | 3.6km (T1) | NW |
| VP23 | Regional Road R694 at Finnan | MR, SV, LCV | N/A (T1) | NE |
| VP24 | Lisdowney | CP, AH | 8.0km (T7) | NE |
| VP25 | Local Road L5853 at Rathkyle | LCV | 1.6km (T1) | N |
| VP26 | St Patricks GAA Club, Ballyragget | CP, MR | 5.2km (T1) | NE |
| VP27 | Local road at Frankford, south of Gathabawn Village | SV, CP, AH | 14.1km (T7) | NE |
| VP28 | Local Road L1820 north of Kilmacar | CP, AH, LCV | 4.5km (T1) | N |
| VP29 | Local road east of Muckalee | CP | 9.9km (T1) | NW |
| VP30 | L7122 local road northwest of Ridge Crossroads | DSR | 15.3km (T1) | NW |
| VP31 | St. Lachtains GAA Club, Freshford | CP, AH | 12.1km (T1) | NW |
| VP32 | St Canice's Round Tower, Kilkenny City | CP, AH, KV | 17.2km (T1) | N |

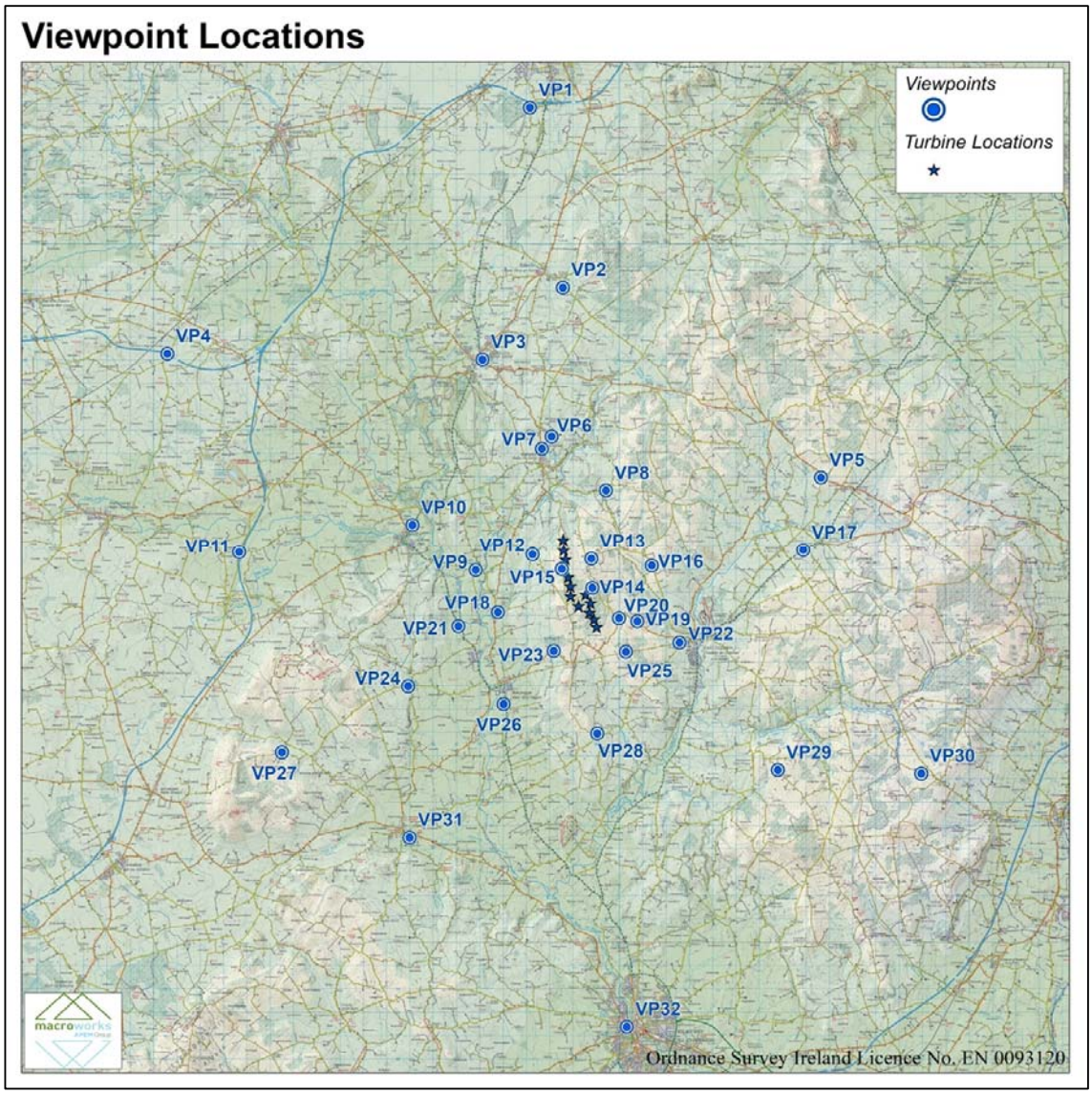


**Figure 14.11 Map of Viewpoint Locations**

Note: Full size Figure 14.11 in the **EIAR Landscape Illustration Pack**

## EIAR 14.4 POTENTIAL IMPACTS

Based on the assessment criteria employed herein, potential significant impacts are considered most likely to occur in instances where highly sensitive landscape and visual receptors coincide with high order landscape and visual effects (see descriptions Table 14-1, Table 14-2 and Table 14-4). From Macro Works previous experience of this type of development in a rural/upland setting, it is considered that potentially significant landscape and visual impacts have the potential to occur in the following ways:

Landscape Impacts

a) Irreversible physical effects on sensitive landscape features
b) Disruption of existing land use patterns
c) Incongruous change to areas of sensitive landscape character

Visual Impacts

a) A combination and spatial dominance as seen from highly sensitive receptor locations. This is most likely to occur within 3km of the proposed development.
b) Visual clutter and ambiguity as seen from highly sensitive receptor locations. This can occur at any distance, but tends to occur beyond 2-3km as turbines become stacked in perspective and a more two-dimensional layout is perceived.
c) A combination of both of the above effects.

In terms of potential landscape impacts, from baseline studies and early-stage assessment specific to the proposed development (as previously detailed in Section EIAR 14.3.2.2 and EIAR 14.3.2.3), the site of the proposed development contains three sensitive elements: 'Altitude above 200m', 'Principal Ridgeline' and 'Slopes greater than 10%.' However, it is worth repeating that these individual elements are considered as component parts of the overall landscape character of an area, as none are indisputably sensitive in isolation.

The most sensitive visual receptors in this instance, tend to be the scenic designations (identified in Section EIAR 14.3.2.2) that are located within 5km and, marginally less so, 5-10km from the site.

## EIAR 14.5 MITIGATION MEASURES

Given the highly visible nature of commercial wind energy developments it is not generally feasible to screen them from view using on-site measures as would be the primary form of mitigation for many other types of development. Instead, landscape and visual mitigation for wind farms must be incorporated into the early-stage site selection and design phases.

In this instance, the two main forms of landscape and visual mitigation employed were:

- Mitigation by avoidance and design
- Buffering of Residential Receptors

### EIAR 14.5.1 Mitigation by Avoidance and Design

With regards to mitigation by avoidance, all of the proposed turbines are set back several hundred metres from both local roads and the aforementioned trails/loops within the locality. In addition, while there will be some clear views of the proposed turbines afforded from the scenic route to the south of the site, the turbines are not considered to present in an overbearing manner from this or other scenic designation nor will they block sensitive views or vistas. Furthermore, the proposed turbines are typically viewed in the opposite direction to the main aspect of scenic amenity and/or the orientation of the nearest scenic designations.

In terms of design, as highlighted in Section EIAR 14.3.2.1, it is considered that the proposed development design is largely in accordance with the guidance for this 'Hilly and Flat Farmland' landscape type, as set out in the Department of Environment, Heritage and Local Government Wind Energy Development Guidelines. While the 'height' of turbines "tend not to be tall" for this landscape type, according to those guidelines, "*an exception to this would be where they are on a high ridge or hilltop of relatively large scale.*" In terms of setting, the site is located across a broad ridgeline in an area of the county that is deemed 'Acceptable in principal' for such wind energy developments. The surrounding landscape is also influenced by more typical working rural land uses such as pastoral farmland, areas of commercial conifer forest plantations and numerous highly anthropogenic built features i.e. sizable industrial facilities, major routes, quarries and modest-sized settlements.

With regards to the Tinnalintan Substation, it is substantially screened from view by an existing hedgerow to the south and west. To screen views from local community/amenity to the north a new berm and hedgerow will be planted on the northern side of the substation compound (Mitigation measure OMM20).

With regards to the windfarm hardstanding areas, a minimum construction footprint has been applied to the project. Roads have followed field margins where technically possible, heritage features have been avoided. Following erection of turbines c 35% of the crane hardstand area will be covered over with topsoil and reseeded.

A viewpoint/picnic area will be provided at Site Entrance No. 7 in Ballynalacken townland, where a car can pull off the road and enjoy the view west over the River Nore valley towards the Slieve Bloom Mountains. This will afford a safe place to enjoy Viewpoint V19 "View west towards the Slieve Bloom Mountains on road no's L5840 and L5839 from the junction with road nos. LS5839 and LS5846 (Ballymartin Cross Roads) as described in Kilkenny City and County Development Plan 2021 - 2027. The proposed Ballynalacken Windfarm turbines will be behind the viewer and therefore not visible within the Viewpoint V19 viewshed west (Mitigation measure OMM27).

### EIAR 14.5.2 Buffering of Residential Receptors

For the proposed Ballynalacken Wind Farm, the minimum distance of any turbine from the nearest residential receptor is 535m.

Variation in residential buffer distances within the nearest kilometre has a much more noticeable effect on perceived turbine scale than when it occurs in the context of more distant views. This is due to the law of perspective – that doubling the distance to an object halves its perceived height. The reduction factor is even more pronounced when considered in the context of the 'swept area' of turbine blades and not just their tip height. This exponential 'scale in relation to distance scenario is illustrated in Figure 14.12 below.

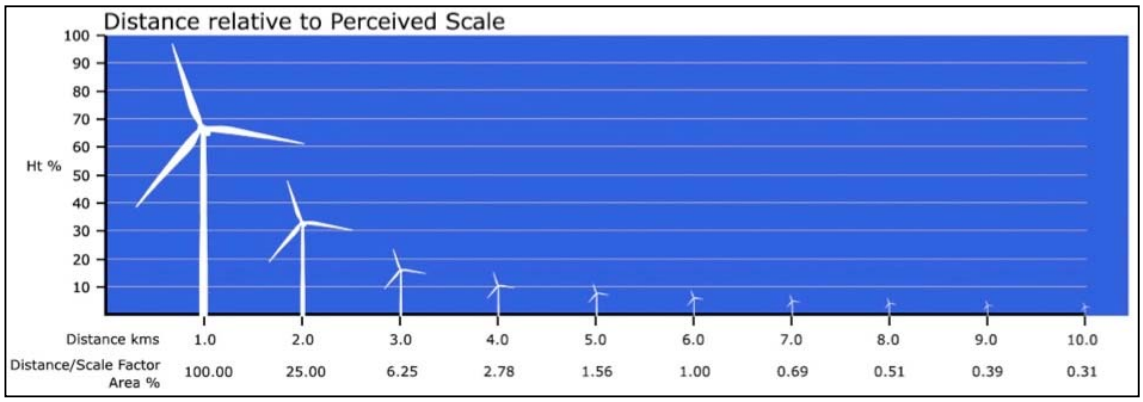


**Figure 14.12 Turbine 'scale in relation to distance' relationship**

#### EIAR 14.5.2.1 County Development Plan Development Management Requirements

The development management requirements listed in Section EIAR 14.3.2.2 of this chapter were also considered for mitigation by design effects. The location and design of the proposed development is in accordance with the development management requirements as listed above, particularly in the context of this is an area that is Acceptable in Principle for Wind Energy development in Appendix K Wind Energy Development Strategy of the same CDP.

## EIAR 14.6 LANDSCAPE EFFECTS

### EIAR 14.6.1 Landscape Character, Value and Sensitivity

Effects on landscape character will be considered at both the localised scale of the site and its immediately surrounding landscape (<5km), as well as the broader scale of the study area (5-20km). Landscape sensitivity in this project level LVIA context needs to go beyond the generic measures of sensitivity employed in the county Landscape Character Assessment and focus on the attributes of the receiving landscape and proposed development. In terms of sensitivity to this proposed wind farm development, the most sensitive landscapes and landscape features are likely to be those that exhibit enclosed, intricate landform and land use patterns, and/or a strong sense of heritage or past times not strongly influenced by modern development. Areas with a strong sense of the naturalistic, or with low levels of built development, are also likely to be sensitive to this wind farm proposal.

#### EIAR 14.6.1.1 Central Study Area (< c. 5km from nearest turbines)

The principal land use that has the greatest influence on the landscape character of the study area is pastoral farmland comprising a mix of irregularly shaped fields bound by mixed hedgerow vegetation and areas of mature trees. Extensive commercial conifer forest plantations also have a notable influence on the landscape of the central study area, especially within the more elevated lands surrounding the site and the eastern half

of the central study area. Indeed, these land uses are typical of traditional working landscapes throughout rural Ireland and are not incredibly rare or unique. Nonetheless, despite this, the location of the site and some aspects of the study area have some sense of distinctiveness due to the elevated plateau landscape they are contained within. The site is situated along the westernmost edge of the Castlecomer Plateau, a broad elevated part of the midlands of Ireland, principally contained within northeast Kilkenny, but immediately adjacent to its border with both counties Laois and Carlow. Other notable landscape features within the central study area include the River Nore corridor, which is situated along the western periphery of the study area, whilst the River Dinin flows along the eastern periphery of the study area through the contained settlement of Castlecomer.

In terms of landscape value, the central study area is typical of a working rural landscape, where much of the landscape values relate to the subsistence of the rural economy as opposed to any other highly susceptible sense of recreation or the naturalistic. This is further reflected by the broad array of more traditional working land uses and large industrial facilities, such as the existing Tirlán factory, which is situated along the western periphery of the central study area. Nonetheless, there is some sense of scenic amenity within the central and immediate study area, which is heavily associated with the elevated lands in the surrounds of the site. Nonetheless, whilst several scenic designations occur within the site's immediate vicinity, the principal aspect of scenic amenity is typically oriented away from the site's immediate vicinity and towards the broad rolling landscape throughout the wider study area. Despite this, many of these scenic designations afforded views across a traditional rural landscape that is currently influenced by existing anthropogenic features such as the aforementioned industrial facility and more distant existing wind energy development. The study area also has a strong historical association with industrial land uses, as the Castlecomer Plateau was previously the home of the Leinster coalfield, Ireland's largest coalfield.

Regarding the landscape designations within the Kilkenny CDP, the site is not contained within an area designated as ‘Highly scenic / Visually pleasing,’ a factor that informs why it is also deemed ‘Acceptable in Principle’ to wind energy production. While no sensitivity is ascribed to the Landscape Character Areas of the county, the site of the proposed development contains three sensitive elements (i.e., ‘Altitude above 200m’, ‘Principal Ridgeline’ and ‘slopes steeper than 10%). However, it is worth repeating that these individual elements are not considered component parts of the overall landscape character of an area, as none are indisputably sensitive in their own right. The northern aspect of the central study area is located within County Laois, and therefore it is important to consider landscape designations in County Laois also. The northern parts of the central study area within County Laois encompass the ‘Mountains, Hills and Upland Areas’ and Lowland Areas’ landscape units, which are classified with a ‘Medium’ and ‘Low’ sensitivity, respectively. This further reflects the fact that the central study area is a robust and modified landscape that comprises some localised sensitivities, however overall, it is not considered to be highly susceptible to change.

Furthermore, as part of a project specific landscape character assessment such as this, the Guidelines for Landscape and Visual Impact Assessment (GLVIA3) suggests that existing Landscape Character Assessments be considered as a “first step in establishing the landscape baseline” (p77), but not that they be applied directly in determining landscape sensitivity for the specific site context. As is standard practice for LVIA in Ireland, universal criteria are used by assessors to determine landscape sensitivity of the development site and its surrounding context (refer to Table 14-1).

For these reasons, on balance, the sensitivity of the central study area is generally considered to be **Medium-low**.

#### EIAR 14.6.1.2 Wider Study Area (c. 5km – 20km from nearest turbines)

In a general sense, the landscape of the central and wider study area share very similar characteristics. However, there is a more notable variation in landform and land use patterns throughout the wider study area due to its extensive scale. Indeed, the northwest quadrant of the study area is characterised by landscape typical of the midlands of Ireland, comprising broad flat land and vast areas of peatlands surrounded by extensive areas of pastoral farmland.

Whilst the wider study area encompasses some locally sensitive landscape areas such as demesne landscape, cultural heritage sites and the 'Highly scenic / Visually' pleasing landscape designation that contains the River Nore corridor, there are no extensive highly sensitive or susceptible landscape areas of note. Instead, the wider study area is that of a highly modified and typical rural landscape, which is further reflected by the high degree of major route corridors, medium to large settlements and a variety of highly anthropogenic built features, including existing wind farm development.

Overall, it is considered that much of the wider study area constitutes a typical modified rural landscape where landscape values relate mostly to rural productivity and the subsistence of the rural economy. On balance of the reasons outlined above, it is considered that the wider study area has a combined '**Medium-low**' landscape sensitivity, albeit some of the heritage features in Kilkenny City and throughout the wider landscape have localised but discreet pockets of high and even very high landscape sensitivity.

See **EIAR Landscape Illustration Pack**.

### EIAR 14.6.2 Magnitude of Landscape Impact

The proposed turbines, as well as ancillary development such as access roads and hardstanding areas, along with the control building and Tinnalintan Substation, are certain to impact the physical landscape of the proposed development site, as well as its character. However, the only likely landscape impact upon the wider central study (i.e., outside the proposed development site) will be the impact of the proposed turbines upon landscape character. The small scale of the Tinnalintan Substation within the central study area in comparison to the turbine structures can be seen in the foreground of the photomontages from Viewpoints VP25: Local Road L5853 at Rathkyle and VP28: Local Road L1820 north of Kilmacar. See **EIAR Landscape Illustration Pack.**

#### EIAR 14.6.2.1 Construction-stage Effects

It is considered that the proposed development will have a proportionately modest physical impact on the landscape within the proposed development site, because none of the proposed features have an extensive physical 'footprint'.

The topography and land cover of the proposed development site will remain largely unaltered. Aside from the erection of 12 no. proposed turbines, the main construction works will be limited to foundations and hardstanding areas for the turbines, an onsite control building, and separate 110kV windfarm substation compound, met masts and numerous access tracks. Smaller ancillary works include haul route works and activities, which include the provision of a blade transfer area, the widening of bends and junctions and some hedgerow/tree trimming along the turbine component haul route. Ancillary works onsite include underground cabling, storage of overburden, extraction of rock from on-site borrow pits and widening of existing farm entrances.

Excavations will tie into existing ground levels and will be the minimum required to ensure efficient working. Any temporary excavations or stockpiles of material will be re-graded to marry into existing site levels and reseeded appropriately, in conjunction with advice from the project ecologist. Following the construction of the turbines, the full extent of the hardstanding areas is not required for the vast majority of operational maintenance works, and it is proposed to cover over c.35% of the hardstands with a layer of topsoil, and that

these areas are sown with grass species. Similarly, widened bends/junctions and the blade transfer area will be covered over with a layer of topsoil and revegetated following the construction of the turbines, and only reopened to facilitate the very infrequent transport of large turbine components where required during the operational phase.

The finalised internal track layout, of which there will be approx. 1.67km of upgraded access tracks and approx. 6.32km of new access tracks, has been designed to try and avoid environmental constraints, and every effort has been made to minimise the length of necessary tracks by upgrading existing tracks. Furthermore, the internal track layout has been designed to follow the natural contours of the land, wherever possible.

In order to provide sufficient bat buffer zones at the turbine locations, and in some cases to facilitate access to the site, a total of 1.4km of hedgerow and 12 trees will be removed during construction. To mitigate these loss, 1.6km of new hedgerow which will include 43 trees will be planted at the windfarm site, with 140m planted at the Tinnalintan Substation compound. In addition, 4.1km of existing hedgerow on the windfarm site will be improved by planting gaps with hedgerow species. In order to facilitate the construction and erection of the turbines, and to provide bat buffers 19.9ha of forestry will be felled. The felled areas will be levelled, stumps and brash removed and the area sown with a native grasses and wildflowers. The 19.9ha that will be felled at the Ballynalacken site will be replanted at a new location under an afforestation licence. The location of this new afforestation area is not currently known, however the developer is committed to the replant lands being outside of the Nore and Barrow river catchments, which puts the potential replant lands outside of the study area.

The internal cables at the windfarm will be installed underground and will link the wind turbines to a Control Building in Ballymartin townland, within the windfarm site. The Control Building in Ballymartin townland will be a 25m x 18m single storey control building. The Control Building will be surrounded by an existing field boundary, while mature hedgerows will remain in place to the west and south of the Control Building compound. The Control Building will be linked via underground cabling (Internal Cable Link) to a new 110kV Tinnalintan Substation, which is proposed in Tinnalintan townland in the valley to the west of the windfarm,

The proposed 110kV Tinnalintan Substation will have a compound spanning an area of c. 128m length and 58m width. The largest building within in the compound will be a 8.3m-high25m-long single storey control building, with the substation compound being enclosed by an approx. 2.6m high security fence. The tallest mast within the compound will be 15m in height.

In order to further screen the Tinnalintan Substation compound from view, a new berm and hedgerow will be planted to the north the full length of the substation compound.

The proposed Internal Windfarm Cables, Internal Cable Link and Grid Connection will run underground from the Turbines to the Control Building to the Tinnalintan Substation, and then to the Ballyragget Substation in Moatpark. The physical impact of this will equate to modest, relatively narrow trench that will then be fully infilled to pre-existing surface levels. Where possible the cable routes are located under the windfarm access roads or existing farm tracks or public roads to reduce the extent of cabling crossing greenfield lands.

There will be some long-term/permanent effects on the physical landscape in the form of turbine foundations and hardstands, access tracks and a substation, but only the Tinnalintan Substation is likely to remain in perpetuity as part of the national grid network. The Tinnalintan Substation is substantially screened from view by an existing hedgerow to the south and west. To screen views from local community/amenity to the north a new berm and hedgerow will be planted on the northern side of the substation compound (Mitigation measure OMM20). It is likely that with the exception of some residually useful access tracks, all other development features will be removed from the project site, and it will be reinstated to agricultural land in the event of decommissioning of the windfarm. Thus, the construction stage landscape effects of the

proposed development are largely reversible. As the construction stage of the proposed wind farm is estimated to take 12-18 months, construction-stage impacts are considered short-term, by the EPA Guidance terms (i.e., effects lasting from one to seven years).

In summary, the magnitude of construction-stage effects on the physical landscape are deemed to be **High-medium**, with a Negative quality of effect and short-term in duration.

As outlined in Section EIAR 14.2 above, the significance of landscape impacts is a function of landscape sensitivity weighed against the magnitude of the landscape impact. This is established on the basis of the significance matrix (Table 14-3) in conjunction with professional judgement. Accordingly, when combined with a Medium-low landscape sensitivity of the receiving environment, the proposed development is deemed to have a short-term **Moderate** significance of construction-stage effect on the physical landscape and local landscape character, which will have a Negative quality of effect.

#### EIAR 14.6.2.2 Operational & Decommissioning-stage Effects on Landscape Character

For most commercial wind energy developments, the greatest potential for landscape impacts to occur is as a result of the change in character of the immediate area, due to the introduction of tall structures with moving components. Thus, wind turbines that may not have been a characteristic feature of the area become a new defining element of that landscape character.

Whilst not a highly familiar feature of the central or wider study area, several existing wind turbines are located along elevated lands in the study area's wider eastern and western half. Despite their elevated nature, the turbines (permitted, not yet constructed) to the east tend to be well contained, thus, limiting their potential to notably influence the surrounding landscape character. To the west, although small in scale is the Lisdowney Wind Farm (4 turbines) and this existing development is located along the elevated Slieveardagh Hills and is viewed throughout the broad River Nore valley and surrounding sloping lands to the east and west. In a much broader sense, wind farm development is becoming an ever more familiar feature of rural landscapes, especially within the midlands of Ireland. Whilst the effect within the immediate study area will be that of the introduction of a new large-scale built feature, overall, it represents the intensification of wind energy development within the wider landscape context.

In terms of scale and function, the proposed development is well assimilated within the context of the central study area, which consists of a range of productive rural land uses. Indeed the broad nature of the underlying ridge can well accommodate a development of this scale and nature. Although it represents a higher level of built development than currently exists on the site, it will not detract significantly from its productive elevated rural character. Site activity will be at its greatest during the construction phase, due to the operation of machinery on site, as well as movement of heavy vehicles to and from site. This phase will have a more significant impact on the character of the site, but it is a temporary impact that will cease as soon as the proposed development is constructed and becomes operational.

It is important to note that in terms of duration, with the exception of the access tracks the proposed development represents a long term, but not permanent, impact on the landscape and it is reversible. The lifespan of the project 35 years, after which time, if continuance of use is not approved it will be dismantled and the landscape reinstated to prevailing conditions. However, the proposed Tinnalintan Substation will remain in-situ after decommissioning because it will be operated as part of the National Grid. Within 2-3 years of decommissioning, there would be little evidence that a wind farm ever existed on the site.

The decommissioning phase will have similar temporary impacts as the construction phase, with the movement of large turbine components away from the proposed development. There may be a minor loss of roadside and trackside vegetation that has grown during the operation phase of the development, but this will be reinstated upon completion of decommissioning. Areas of hard standing that are of no further use will be reinstated and reseeded to blend with the prevailing land cover in the direct vicinity at that time.

In summary, there will be physical impacts on the land cover of the site as a result of the proposed development, but these will be relatively minor in the context of this much-modified, permanently evolving, elevated rural landscape. While 12 turbines are being proposed for this development, they will be positioned across an area almost 4km stretching north to south. Overall, such scale of development can be assimilated into this landscape context without undue conflicts of scale with underlying landform and land use patterns.

The Tinnalintan Substation is proposed for a lower elevation and is substantially screened from view by vegetation and topography, within the central study area.

On balance of the reasons outlined above, the magnitude of Operational & Decommissioning-stage Effects on Landscape Character are deemed to be **Medium** within the central study area, reducing at increasing distances beyond this threshold as the wind farm becomes a proportionally smaller feature of a wider landscape context. In essence, the site itself will be defined by the wind farm, whilst the landscape character beyond will principally remain that of a mix of low rolling working rural areas and elevated working rural areas.

As outlined in above, the significance of landscape impacts is a function of landscape sensitivity weighed against the magnitude of the landscape impact. This is established on the basis of the significance graph (Table 14-3) in conjunction with professional judgement.

Accordingly, the significance of operational and decommissioning stage impacts on landscape character is deemed to be **Moderate** within the central study area, which will have a Negative Quality of effect and be long-term in duration. However, the significance will reduce to **Slight and Imperceptible** at increasing distances thereafter, as the development becomes a progressively smaller component of the wider landscape fabric.

## EIAR 14.7 RESIDUAL VISUAL EFFECTS

Table 14-7 below summarises the full textual assessment of visual effects for each Viewshed Reference Point (VRP) contained in Appendix 14.1 at the end of this chapter. Whilst the 'receptor sensitivity analysis table' and full textual assessment for each VRP is normally contained within the landscape and visual chapter, in this instance, given the considerable number of VRPs, it is considered more prudent to place this material in a separate appendix and focus herein on the significance of the findings. The left-hand side of the table incorporates statistical data associated with the view of turbines, whilst the right-hand side contains professional judgements in respect of the view. It is important to note that the professional judgements are based on the effects experienced in relation to the view and are not directly influenced by the statistical data. These aspects are only combined within Table 14-7 in order to identify patterns of effect to better inform the conclusions of this assessment.

Please note, that as the 'duration of effect', as raised in section EIAR EIAR 14.6.2, is deemed to be 'Long term' in every instance, for the sake of brevity, this does not need to be repeated in every case in Table 14-7, below.

**Table 14-7 Summary of Visual Effects at Viewshed Reference Points (VRP's)**

| VRP No. | Distance to nearest turbine (km) | Visual receptor Sensitivity | Visual Impact Magnitude | Significance of impact/ quality of effect |
|---|---|---|---|---|
| VP1 | N/A (T12) | Medium-low | Negligible | **Imperceptible / Neutral / Long Term** |
| VP2 | 10.9km (T12) | Medium-low | Low-negligible | **Slight-imperceptible / Negative / Long Term** |
| VP3 | 8.5km (T12) | Medium | Negligible | **Imperceptible / Neutral / Long Term** |
| VP4 | 18.8km (T12) | Medium-low | Low-negligible | **Slight-imperceptible / Negative / Long Term** |
| VP5 | 11.3km (T5) | Medium | Low | **Slight / Negative / Long Term** |
| VP6 | 4.5km (T12) | High-medium | Medium-low | **Moderate / Negative / Long Term** |
| VP7 | 4.0km (T12) | High-medium | Medium-low | **Moderate / Negative / Long Term** |
| VP8 | 2.8km (T12) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP9 | 3.9km (T11) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP10 | 6.5km (T12) | Medium-low | Low | **Slight / Negative / Long Term** |
| VP11 | 13.9km (T12) | Medium-low | Low-negligible | **Slight-imperceptible / Negative / Long Term** |
| VP12 | 1.3km (T11) | Medium | Medium | **Moderate / Negative / Long Term** |
| VP13 | 1.1km (T10) | Medium | High-medium | **Substantial-moderate / Negative / Long Term** |
| VP14 | 0.4km (T6) | Medium-low | High | **Substantial-moderate / Negative / Long Term** |
| VP15 | 0.4km (T10) | Medium | High | **Substantial-moderate / Negative / Long Term** |
| VP16 | 3.1km (T5) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP17 | 9.4km (T5) | Medium-low | Low | **Slight / Negative / Long Term** |
| VP18 | 3.2km (T7) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP19 | 1.8km (T1) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP20 | 1km (T1) | Medium | Medium | **Moderate / Negative / Long Term** |
| VP21 | 5km (T7) | Medium-low | Low | **Slight / Negative / Long Term** |
| VP22 | 3.6km (T1) | Medium-low | Low-negligible | **Slight-imperceptible / Negative / Long Term** |
| VP23 | N/A (T1) | Medium | Negligible | **Imperceptible / Neutral / Long Term** |

| VRP No. | Distance to nearest turbine (km) | Visual receptor Sensitivity | Visual Impact Magnitude | Significance of impact/ quality of effect |
|---|---|---|---|---|
| VP24 | 8.0km (T7) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP25 | 1.6km (T1) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP26 | 5.2km (T1) | Medium-low | Medium-low | **Moderate-slight / Negative / Long Term** |
| VP27 | 14.1km (T7) | High-medium | Low-negligible | **Slight-imperceptible / Negative / Long Term** |
| VP28 | 4.5km (T1) | Medium | Low | **Slight / Negative / Long Term** |
| VP29 | 9.9km (T1) | Medium | Low-negligible | **Slight-imperceptible / Negative / Long Term** |
| VP30 | 15.3km (T1) | Medium | Low-negligible | **Slight-imperceptible / Negative / Long Term** |
| VP31 | 12.1km (T1) | Medium-low | Low | **Slight / Negative / Long Term** |
| VP32 | 17.2km (T1) | High | Low-negligible | **Slight-imperceptible / Negative / Long Term** |

See **EIAR Landscape Illustration Pack**

### EIAR 14.7.1 Impacts on Designated Views

Due to the elevated nature of the landscape within the study area, there is notable potential for broad views to be afforded across the wider lowlands. Thus, the study area, most notably the central study area, comprises a variety of scenic designations. Scenic designations within the study area are represented by eight viewpoints, including VP6, VP12, VP15, VP19, VP20, VP23, VP27 and VP30. The most potential for scenic routes to be impacted relates to those scenic designations located nearest to the proposed turbines. Thus, a particular focus will be placed on those scenic designations within the central study area. Scenic designations within the central study area include Protected View 19 (Kilkenny), Protected View 12 (Kilkenny), and Scenic View 22 and 23 (Laois).

Viewpoints VP12, VP15 and VP19 were all selected to represent Protected View 19 in the current Kilkenny CDP, which relates to elevated views "*west towards the Slieve Bloom Mountains*" from a series of local roads that traverse the westernmost edge of the Castlecomer Plateau. Whilst all three views will have clear visibility of the turbines at a notable scale, the most important point to note is that the turbines will be viewed in the opposite direction to the main aspect of scenic amenity, which is to the west across the wider Kilkenny landscapes and towards the Slieve Bloom Mountains. In terms of the visual receptor sensitivity weighting for these representative viewpoints, they have all been slightly downgraded due to their orientation, which is in the opposite direction to the scenic designation and typically affords views across the working uplands, which are not considered as highly susceptible as the much broader and panoramic views afforded to the west. Nonetheless, due to the perceived scale of the turbines from one of the nearest of these viewpoints (Viewpoints VP15), it has been classified with a 'Substantial-moderate' significance of impact. Whilst the apparent scale of the proposed turbines will result in them becoming some of the most prominent visual features in the views to the west, they are well assimilated into this robust working upland context and do not block or obstruct the scenic designations afforded to the west.

Protected View 12 in the current Kilkenny CDP is associated with "*Views overlooking Castlecomer and Ballyragget*" from elevated sections of the R694 to the south of the site. This scenic designation is represented by viewpoint VP20 and VP23. Nonetheless, in similar circumstances to Protected View 19 above, Protected View 12 is oriented in the opposite direction to the proposed turbines and, thus, has limited potential to be notably impacted by the proposed turbines. VP20 is oriented uphill in the direction of the near ridge, which is cloaked in extensive areas of commercial conifer forestry and surrounded by broad

pastoral fields. The turbines will be viewed at a near distance and at a notable scale; however, several of the turbines will be partially, intermittently or, in some instances, entirely screened by the near elevated ridge. Viewpoint VP20 affords a relatively clear view of the nearest proposed turbines at a considerable scale. In contrast to this, VP23 affords a heavily screened view towards the proposed turbines such that they will not be visible. The significance of visual impact was deemed 'Moderate' at VP20 and 'Imperceptible' at VP23 with an acknowledgement that felling of the intervening forestry would result in an effect of 'Slight' significance at the latter.

Scenic Viewpoints 22 and 23 in County Laois relate to views across Heywood Demesne, which is situated north of the settlement of Ballinakill. Viewpoint VP6 was selected as a representative viewpoint for these scenic designations and afforded a broad view across the demesne landscape from Heywood Gardens. The proposed turbines will be clearly visible from this landscape context at a distance of c. 4.5km, where they present in a condensed cluster along elevated terrain at the westernmost edge of the Castlecomer Plateaux. Whilst the proposed turbines are considered to have a sub-dominant visual presence from here, they will generate some notable negative aesthetic effects, which principally relate to stacked and highly cluttered views of the proposed turbines. Overall, the residual magnitude of visual impact was deemed 'Moderate', which also reflects the 'high-medium' visual receptor sensitivity of this scenic designation, although the demesne itself is much modified by the presence of modern secondary school building and ancillary buildings and facilities. The only clear view from the demesne is from the site of the former Heywood House, which no longer exists. From most of the other features within the Heywood Demesne i.e. Orangery, Sham Castle, Obelisk, Lutyens Sunken Garden, School and Carpark, the view of the windfarm is largely screened by trees and topography.

Viewpoints VP27 and V30 were also selected to represent scenic views in the wider study area. However, whilst visibility of the proposed turbines will be afforded from both representative viewpoints, both are located over 14km from the proposed wind farm development, where the turbines will present as small-scale distant background features. The Tinnalintan Substation will not be visible from these Viewpoints. Thus, the residual visual impact at both viewpoints, VP27 and VP30, was deemed 'Slight-imperceptible'.

In summary, the proposed wind farm development **will not generate significant visual impacts in relation to scenic designations** within the study area.

See **EIAR Landscape Illustration Pack**

### EIAR 14.7.2 Impacts on Local Community Views

Local Community views are considered to be those experienced by those people who live, work and move around the area within approximately 5km of the site (i.e., the central study area). These are generally the people that are most likely to have their visual amenity affected by a wind energy proposal due to proximity to the turbines, a greater potential to view turbines in various directions, or having turbines as a familiar feature of their daily views.

In total, 13 of the 32 representative viewpoints (VP7, VP8, VP12, VP13, VP14, VP15, VP16, VP18, VP19, VP20, VP22, VP23 and VP28) were selected as local community receptors. The sensitivity of these views typically ranges from 'Medium-low' to 'Medium', with those of a higher sensitivity attributed to the scenic designations and/or broad views afforded from elevated and locally elevated locations. Of the 13 views, the highest significance of visual impact is 'Substantial-moderate', which generally relates to the nearest views afforded of the proposed turbines, some of which are also associated with scenic designations.

Three views were classified with a significance of 'Substantial-moderate' and include VP13, VP14 and VP15, representing some of the nearest potential views of the proposed development from within its elevated ridgetop setting. As viewpoints VP15 is also representative of one of the nearest scenic designations, a

summary is included in Section EIAR EIAR 14.7.1 above. Viewpoint VP13 is located along a locally elevated local road immediately east of the site and affords a broad view across the entire development. Whilst the proposed turbines will present at a considerable scale and with a dominant visual presence from here, they do not generate any sense of overbearing due to the dispersed nature of the layout and present in a clear and comprehensible manner. Furthermore, in the context of this working upland setting which comprises extensive areas of commercial conifer forest and exposure to the elements, the proposed turbines will not appear out of place.

Viewpoints VP12 and VP20, which both represent the local community and scenic designation (refer to Section EIAR EIAR 14.7.1) above were classified with a residual visual impact significance of '**Moderate'**, whilst all other local community receptors were classified with a visual impact significance ranging between '**Moderate-slight'** and '**Slight-imperceptible'**. The turbines typically present from these local community receptors in a clear and legible manner, especially when viewed directly from the east or west, where the turbine present well-spaced across the broad underlying ridge with limited overlapping of the proposed turbine blade sets.

On balance of the reasons outlined above, it is considered that the proposed wind farm development **will not generate significant visual impacts in respect of local community receptors**.

See **EIAR Landscape Illustration Pack**

### EIAR 14.7.3 Impacts on Centres of Population

Due to the settled nature of the landscape context of the study area, up to 14 representative viewpoints (VP1, VP2, VP3, VP5, VP7, VP10, VP22, VP24, VP26, VP27, VP28, VP29, VP30, VP31) were selected to represent centres of population within the study area. Settlements within the central study area include Ballinakill (VP7), Attanagh (VP9), Castlecomer (VP22) and Ballyragget (VP26). It is worth noting that all of these centres of population are located further than 3km from the proposed turbine array. The significance of visual effects is deemed to be **Moderate** for VP7 within Ballinakill due to the relatively clear cross-valley view of tightly clustered turbines afforded from the settlement. At most other centres of population within the central study area the significance of effect was deemed **Moderate-slight** as generally the proposed development is presented in a clear and comprehensible manner of the rural hinterland without being an imposing feature on the context of the settlements. From VP22 on the outskirts of Castlecomer, the significance of effect was deemed **'Slight-imperceptible'** as the proposed turbines will be heavily screened from here.

The wider study area encompasses a broad mix of settlement types, from small villages and modest-sized settlements to large urban centres such as Kilkenny City. The residual significance of visual impact at centres of population within the wider study area ranged from 'Slight' to 'Imperceptible', with the majority of settlements classified with a visual impact significance of '**Slight-imperceptible'**, which reflects their distance from the proposed development combined with the robust working nature of the surrounding landscape context.

As a result of the reasons outlined above, **it is considered that the proposed development will not result in significant visual impacts at centres of population** within the study area.

See **EIAR Landscape Illustration Pack**

### EIAR 14.7.4 Impacts on Major Routes

A total of 10 viewpoints, including VP3, VP4, VP5, VP10, VP11, VP17, VP18, VP21, VP23 and VP26, were selected to represent major routes within the central and wider study area. Some of the nearest major routes to the development include the R694 and R432, which are represented by viewpoints VP18, VP20 and VP23,

all of which have been summarised above as they are also representative views for scenic designations and/or local community receptors.

The study area's most notable major routes include the M7 and M8 motorways and the N77 and N78 national secondary routes. The M7 is represented by VP4, where a partial view of the proposed development is afforded from a considerable distance of over c. 18.8km and results in a visual impact significance of **'Slight-imperceptible'**. VP11 was selected as a representative for the M8 motorway and similarly afforded a partial view of the proposed turbines from a distance of c. 13.9km, resulting in a **'Slight-imperceptible'** residual significance of visual impact. The N77 and N78 national routes traverse along the periphery of the central study area, with most of their routes located within the wider study area. VP17 was selected as a representative view from the N78, where a partial view of the proposed turbines is afforded. Nonetheless, there is potential for intermittent clear views of the turbines from sections of the N78, albeit from a distance. As identified in the wireframe views, the turbines will present in a clear and comprehensible manner from sections of the N78 and are not considered to generate a residual significance of visual impact greater than **'Slight'**. The N77 national secondary route traverses the western half of the study area and is represented by viewpoint VP21. This represents one of the nearest sections of this major route to the proposed development, which is still just over c. 5km from the nearest turbine. The proposed turbines will be viewed in a clear and legible manner from here and will result in a residual visual impact significance of **'Slight'**.

In summary, it is considered that the proposed development will **not result in significant visual impacts at major route receptors** within the study area.

See **EIAR Landscape Illustration Pack**

### EIAR 14.7.5 Impacts on Tourism, Recreational and Heritage Features

In terms of tourism, recreational and heritage features many of these overlap with other visual receptors such as scenic designation and centres of population within the study area. Six representative viewpoints were included for the purposes of the LVIA and a further fifteen were prepared principally to support the Cultural Heritage assessment and in the interests of a full and robust assessment they have also been assessed as part of the LVIA. Overall the following viewpoints have been selected to represent Tourism, Recreational and Heritage Features; VP3, VP6, VP16, VP22, VP27 and VP32, as well as Cultural Heritage views CH012 + CH013, CH074, CH110, CH285, CH287, CH289 (1), CH289 (2), CH293, CH309 (1), CH309 (2), CH310, CH312, CHD1, CHD2, CHD3 of which ten represent locations within Heywood Gardens. Whilst the study area encompasses an array of recreational and heritage features, it is not highly synonymous with outdoor recreation. Indeed, there are many localised areas that include walking trails and local heritage features, however, overall, the study area is representative of a robust working landscape.

In terms of tourism and recreational receptors, the nearest and most notable of these is a section of the North Kilkenny Cycle Route. Due to the considerable expanse of this route, there is potential for varied visibility of the proposed wind turbines, ranging from views from up to 1.5km south of the turbines at its nearest point, from views of the turbines as far south as Kilkenny City. Some of this route's most visually sensitive parts relate to elevated sections of the route that pass just over 1.5km south of the site. Nonetheless, whilst visibility of the turbines will likely be afforded from here (see VP23 as a representative view), the turbines will always be viewed in the opposite direction to the main aspect of visual amenity, typically to the south, southeast and west. Other notable recreational features include walking trails at Castlecomer, Durrow, Abbeyleix and Gathabawn. In some instances, there will be no potential for turbine visibility from some of these walking trails/sections of these trails as they are located in heavily contained areas. Nonetheless, where visible and partially visible, the turbines will increase the intensity of development in the surrounding landscape context, however, their potential to notably impact the local landscape character is limited as the majority of these walking trails are located well beyond the central study area.

Some of the more notable heritage features within the study area include Heywood Gardens and Demesne and St Canice's Round Tower in Kilkenny City. Heywood Gardens and Demesne are represented by VP6 and CH289 (1), CH309 (1), CH310, CHD1, CH285, CH287, CH289(2), CH309 (2), CHD2, CHD3, with the former representing a scenic designation in the Laois County Development Plan. As previously noted, the turbines, when visible from Heywood Gardens, will be viewed in a highly cluttered manner due to the southern orientation of the view, which results in stacked views of the proposed turbines running away from the viewer along the middle distance ridge. The resulting significance of visual impact from VP6 was deemed **Moderate**, which in this instance, is heavily influenced by the sensitivity of the visual receptor as opposed to the visual impact magnitude. From the other Cultural Heritage views within Heywood Gardens, around half have views of the turbines and the significance of effect ranges between **Moderate and Moderate-slight** similar to that assessed for VP6 (CH289 (1), CH310, CH287, CH289 (2) and CHD3). However, the remaining five have little or no view due to terrain and vegetation screening attracting impacts of **Slight to Imperceptible**. The setting within the demesne includes a large school building and facilities.

St. Canice's Round Tower is represented by VP32 and afforded a broad panoramic view where the turbines will occupy a brief lateral extent of the distant background. Due to the considerable viewing distance and minimal visual presence of the proposed turbines, the significance of visual impact was deemed **Slight-imperceptible**.

In summary, it is considered that the proposed development will **not result in significant visual impacts at tourism, recreational and heritage receptors within the study area**.

See **EIAR Landscape Illustration Pack**

### EIAR 14.7.6 Summary of Visual Impacts

Based on the visual impact assessment outlined in Sections EIAR EIAR 14.7.1 to EIAR EIAR 14.7.5 above, it is considered that the proposed development will **not generate significant visual impacts at receptors in the central or wider study area**. Instead, the proposed development is considered an appropriate addition to this elevated working landscape context, which is currently heavily influenced by productive upland land uses. Furthermore, whilst the turbines will be one of the defining built features in their immediate surrounds, the do not appear out of place in terms of their scale or function in this exposed, robust and modified landscape.

## EIAR 14.8 DO NOTHING SCENARIO

In a Do-Nothing scenario, the existing areas of commercial forestry and pastoral farmland managed as is. There would likely be further proposals for wind energy development within the central and wider study area as a result of the 'acceptable in principal' designation that contains the site and part of the central and wider study area and the general landscape suitability and wind resource in the study area.

## EIAR 14.9 CUMULATIVE IMPACTS

Please refer to Section EIAR EIAR 14.2.8 for the assessment criteria for cumulative effects.

### EIAR 14.9.1 Cumulative Impact in relation to DoEHLG guidelines

As set out in Section EIAR 14.2.2.1, the DoEHLG guidelines provide direction on wind farm siting and design criteria for a number of different landscape types. This proposal site is deemed to be contained within a landscape context that is consistent with the 'Hilly and Flat Farmland' landscape type and the associated guidance is applicable, with respect to cumulative effect in this landscape type:

"It is important that wind energy development is never perceived to visually dominate. However, given that these landscapes comprise hedgerows and often hills, and that views across the landscape will likely be intermittent and partially obscured, visibility of two or more wind energy developments is usually acceptable."

General guidance in relation to cumulative effects is provided in Chapter 6 of the Guidelines - 'Aesthetic Considerations in Siting and Design'. The most relevant aspect of guidance in this instance is contained in the fourth bullet point, which states:

"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 and 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."

Given the considerable separation distance to other existing and permitted wind energy developments within the study area, the proposed development accords with the relevant cumulative guidance for the 'Hilly and Flat Farmland' landscape type.

For these reasons, it is considered that the siting and design of the proposed development is consistent with the Wind Energy Development Guidelines in respect of cumulative effects.

### EIAR 14.9.2 Cumulative Impact Assessment

There are two existing/operational wind farms, and four permitted wind farms contained within the study area. These are set out in below in Table 14-8.

**Table 14-8 Cumulative Wind Farms within the study area**

| Wind Farm Name | Number of turbines | Distance and Direction from nearest proposed turbine | Status |
|---|---|---|---|
| Pinewood Wind Farm | 11 | 4.15km northeast | Consented |
| Cullenagh Wind Farm | 18 | 9.69km north | Consented |
| Lisdowney Wind Farm | 4 | 10.31km southwest | Existing |
| White Hill Wind Farm | 7 | 13.49km southeast of site | Consented |
| Gortahile Wind Farm | 8 | 14.12km east of site | Existing |
| Bilboe Wind Farm | 5 | 15.38km southeast of site | Consented |

The appraisal of cumulative impacts with other wind energy developments is based on the cumulative ZTV maps and wireframes provided in the **EIAR Landscape Illustration Pack**. A further discussion on potential cumulative impacts is included in section EIAR EIAR 14.9.2.1 below.

#### EIAR 14.9.2.1 Nature of Cumulative Visibility

The nature of cumulative visibility within the study area is analysed in Table 14-9 below using the same viewpoints that are used for the main visual impact assessment.

**Table 14-9 Nature of cumulative visibility**

| VRP Ref. | VRP Location | Number of other wind farms potentially visible | Nearer or further than the Proposed Development | **Combined View** (within a single viewing arc - 90) | **Succession View** (within a series of viewing arcs from the same location) | **Sequential View** (view of different developments moving along a linear receptor) | **Opposite View/Outside of 180˚ arc** |
|---|---|---|---|---|---|---|---|
| VP1 | Portlaoise Rugby Club | 2 | Nearer | Pinewood, Cullenagh | - | - | |
| VP2 | Ballyroan Abbey GAA Club | 2 | Nearer | Pinewood, Cullenagh | - | - | |
| VP3 | Local Church, Abbeyleix | 3+ | Nearer | Pinewood,Lisdowney | Cullenagh | - | Cullenagh |
| VP4 | L1596 over M7 at Kilcotton | 3+ | Similar & Further | Pinewood, Gortahile group | | Yes | Lisdowney. Cullenagh |
| VP5 | Regional Road R430 between The Swan and Crettyard | 3+ | Nearer & Further | Pinewood, | | Cullenagh, White Hill | |
| VP6 | Heywood Demesne | 2 | Nearer & Further | Lisdowney (further) | Pinewood (nearer) | - | |
| VP7 | Ballinakill GAA | 2 | Further | - | | Pinewood, Lisdowney | |
| VP8 | L7799 at Ironmills (Kilrush) | 0 | - | - | - | - | - |
| VP9 | Local Road at Attanagh | 1 | Further | Pinewood | - | - | Cullenagh |
| V10 | National Road N77 at Durrow | 2 | Further | Pinewood | | - | Cullenagh |

| VRP Ref. | VRP Location | Number of other wind farms potentially visible | Nearer or further than the Proposed Development | **Combined View** (within a single viewing arc - 90) | **Succession View** (within a series of viewing arcs from the same location) | **Sequential View** (view of different developments moving along a linear receptor) | **Opposite View/Outside of 180˚ arc** |
|---|---|---|---|---|---|---|---|
| VP11 | L5591 over M8 east of Cannonswood Cross Roads | 3 | Similar & Further | Cullenagh, Pinewood | | - | Lisdowney |
| VP12 | Local Road at Ballyouskill | 1 | Further | - | Pinewood (partially) | - | - |
| VP13 | Local Road at Ballynalacken | 0 | - | - | - | - | |
| VP14 | Local Road at Ballynalacken | | further | - | Pinewood | - | |
| VP15 | Local Road (Cromwells Road) immediately west of site | 3+ | Further | Cullenagh, Pinewood, | Gortahile, Bilboa, White Hill, | | Lisdowney, Bruckana, Lisheen, and Slieveardagh group also visible from Cromwells Road in the opposite direction |
| VP16 | Local Road at Skehana | 0 | - | | | - | |
| VP17 | National Road N78 at Cloneen | 2 | Similar & Further | Pinewood | Cullenagh | Yes | |
| VP18 | R432 at Tinnalintan south of Glashagal Bridge | 2 | Further | - | Pinewood (partial), Cullenagh (partial) | - | |
| VP19 | R694 Glenmagoo or Firoda Lower | 2 | Further | - | Pinewood,Cullenagh | | |

| VRP Ref. | VRP Location | Number of other wind farms potentially visible | Nearer or further than the Proposed Development | **Combined View** (within a single viewing arc - 90) | **Succession View** (within a series of viewing arcs from the same location) | **Sequential View** (view of different developments moving along a linear receptor) | **Opposite View/Outside of 180˚ arc** |
|---|---|---|---|---|---|---|---|
| VP20 | L5846 Intersection of the R694 | 2 | Further | - | Pinewood,Cullenagh | Pinewood,Cullenagh | |
| VP21 | N77 at Ballynaslee, west of the River Nore | 2 | Further | Pinewood, | | Cullenagh | |
| VP22 | L5853 west of Castecomer | 1 | Further | | Pinewood (partially) | | Pinewood |
| VP23 | R694 at Finnan | 1 | Further | - | `- | - | Lisdowney |
| VP24 | Lisdowney | 1 | Further | Pinewood | | | |
| VP25 | L5853 at Rathkyle | 3+ | Further | - | | Lisdowney, Pinewood & Cullenagh (partially) | Gortahile/Bilboa/White Hills group and Slieveardagh group on clear days with good visibility. |
| VP26 | St Patricks GAA Club, Ballyrget | 2 | Further | Pinewood (partially) | | - | Lisdowney |
| VP27 | Frankford, south of Gathabawn | 3+ | Nearer & Further | Lisdowney | Gortahile, Bilboa and Whitehills in far distance | - | - |
| VP28 | L1820 Kilmacar | 3+ | Further | | Gortahile, Bilboa and Whitehills in far distance | | - |
| VP29 | Muckalee | 3 | Further | Lisdowney | - | Pinewood, Cullenagh | - |

| VRP Ref. | VRP Location | Number of other wind farms potentially visible | Nearer or further than the Proposed Development | **Combined View** (within a single viewing arc - 90) | **Succession View** (within a series of viewing arcs from the same location) | **Sequential View** (view of different developments moving along a linear receptor) | **Opposite View/Outside of 180˚ arc** |
|---|---|---|---|---|---|---|---|
| VP30 | L7122 Ridge Crossroad | 3+ | Nearer & Further | White Hill (nearer), Pinewood, Cullenagh (further away) | White Hill | Gortahile, Bilboa | - |
| VP31 | St Lachtains GAA, Freshford | 3+ | Nearer & Further | Cullenagh | Lisdowney, Gortahile, Bilboa, White Hills | - | - |
| VP32 | St Canice's Round Tower | 3+ | Further | - | Slieveardagh group | - | |

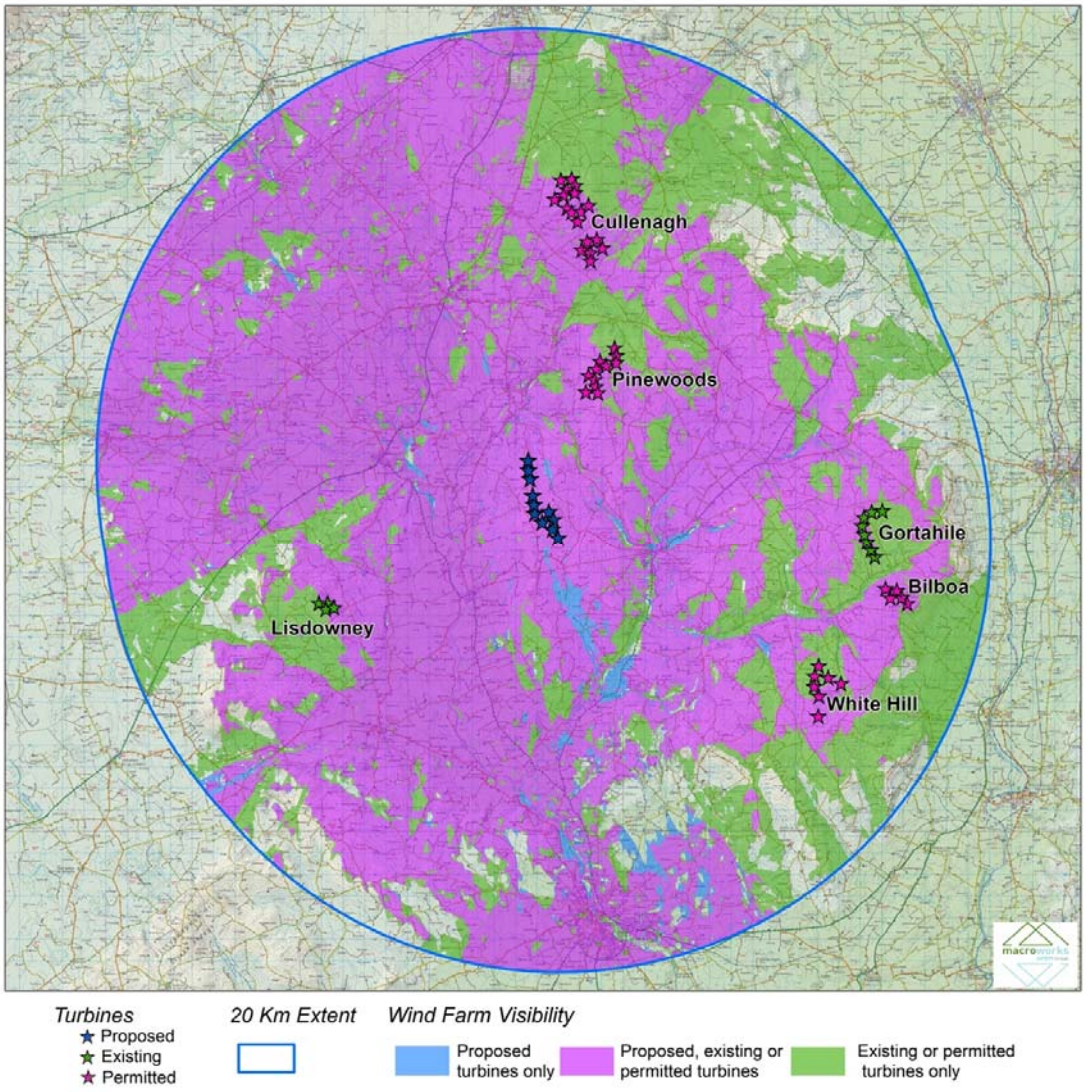


**Figure 14.13 Cumulative ZTV Map (Tip Height) for Ballynalacken Wind Farm, identifying the potential intervisibility of the proposed Wind Farm and all other existing, and permitted wind farms within the study area (See the EIAR Landscape Illustration Pack for larger version with more detailed legend)**

Although the analysis contained in Table 14-9 and consideration of the Cumulative ZTV map in EIAR Landscape Illustration Pack and Figure 14.13 relates principally to cumulative visual impacts (i.e. utilising the selected VP set), it also informs the closely related assessment of cumulative landscape impacts, particularly those relating to cumulative effects on the overall landscape character of the study area. The assessment below, therefore, relates to both cumulative visual effects and cumulative landscape effects.

The cumulative ZTV map (**see the EIAR Landscape Illustration Pack**) shows the potential for cumulative visibility between the proposed turbines and all other existing wind farm developments within the 20km study area. At present, there are two operating wind farms within the study area in addition to four other permitted developments. For ease of assessment, the cumulative wind farms within the study area can be broken down into 3 clusters; the existing Lisdowney development in the western half of the study area and consented wind energy developments in the northern half of the study area, and existing/permitted wind farms in the wider eastern portions of the 20km study area. The ZTV map (based on a bare-ground scenario) identifies that the proposed Ballynalacken Wind Farm has the potential to be viewed in isolation for only

1.6% of the study area, which is principally related to the two consented developments located to the north of the site, which it is most likely to be viewed in combination with. It is also important to note that this is based on a bare-ground scenario, and therefore, once existing screening is taken into consideration, this is likely to be considerably less. Only 11.2% of the study will have no potential view of permitted or existing turbines.

Table 14-9 above gives an analysis of the nature of cumulative visibility within the study area based on the selected VRP's. In almost all cases where the proposed project will be clearly visible, it will also be theoretically visible in combination with at least one other existing/permitted development. This is principally a consequence of the near distance of the two permitted developments to the north of the proposal site, which combined, have a total of 29 turbines. The degree of intervisibility between the permitted development in the northern extent of the study area is reflected in many of the views in the northern half of the study area, in addition to several of the views in the immediate vicinity of the site. Furthermore, whilst most often viewed in the opposite direction to the proposed development, the existing Lisdowney turbines will be visible in the distance from many of the elevated views afforded in the immediate site surrounds. The elevated nature of the other existing and permitted developments in the wider eastern extent of the study area further results in a high degree of cumulative turbine visibility throughout the study area and its wider surrounds. Nevertheless, the considerable separation distance between the existing and permitted turbines in the wider eastern and western extents of the study area limits the potential for any notable negative cumulative effects.

Some of the more sensitive receptors within the study area include the scenic views located within the immediate vicinity of the site. Almost all of these will afford views of existing and permitted turbines, with the existing development more prominent along some routes than others. Nonetheless, as highlighted in Section EIAR EIAR 14.7.1, the proposed turbines will typically be viewed in the opposite direction to the scenic designation, whereas existing turbine visibility (Lisdowney Wind Farm and Gortahile Wind Farm) forms part of the designated aspect of the view from both protected views 12 and 19 in the Kilkenny CDP.

In terms of sequential views, the proposed turbines have the potential to be visible along a number of linear receptors within the study area. The most notable are the North Kilkenny Cycle Route, the M7 and M8 motorways, and N77 and N78 national routes. Sequential cumulative impacts are highly likely to occur along the North Kilkenny Cycle Route as it traverses the elevated terrain that contains the site, where views of existing wind farm developments are already afforded. With regard to the motorways within the study area, there is a more limited potential for sequential views of the existing, permitted and in-planning developments due to the relatively contained nature. Nonetheless, on a much broader scale, views of wind farm development from a distance are relatively common along both routes. Furthermore, sequential visibility of existing and permitted development will likely occur along sections of the N77 and N78 national routes. Most notably, road users travelling along the N78, which traverses the western extents of the study area, will likely afford views of the existing and permitted development in the wider western half of the study area, in addition to the permitted development to the north of the site. Nevertheless, with regard to all major route corridors within the study area, the proposed turbines will only be briefly and intermittently visible along these routes, and more often than not, the proposed turbines will be heavily screened as these road corridors are often enclosed by dense roadside vegetation.

Overall, it is considered that the proposed Ballynalacken turbines will more often than not be viewed in combination with existing and permitted wind farm developments within the study area. The most notable potential for in-combination effects relates to the two permitted developments in the northern half of the study area. It is considered that the proposed development will result in some sense of wind farm proliferation within the Castlecomer Plateau and its immediate surrounds. However, this upland plateau has a strong working character and is not considered highly unique or rare. With reference to Table 14-5 above,

the proposed Ballynalacken Wind Farm is considered to contribute an additional cumulative effect that is in the order of **Medium** within the Castlecomer plateau and its immediate surrounds, which will reduce to **Low** in the wider surrounds of the study area where the proposed turbines will appear as small-scale distant features and are unlikely to generate any negative cumulative aesthetic effects with other wind energy development. Overall, it is considered that **the proposed development will not result in significant cumulative effects**.

## EIAR 14.10 CONCLUSION

This Landscape and Visual Impact Assessment has separately considered landscape effects, visual effects and cumulative effects in the context of relevant planning policy and a comprehensive baseline study of the 20km radius study area. The assessment is also based on the most relevant, best practice guidance documents for landscape and visual impact assessment of onshore wind farms in Ireland.

**Based on the findings of this assessment, the proposed Ballynalacken wind farm will result in noticeable landscape and visual change, particularly within its immediate context. However, even these localised effects are not considered to be significant and will reduce rapidly with increased viewing distances and broader landscape context.**

**Overall, it is considered that the proposed wind farm will not give rise to any significant landscape or visual impacts.**

## EIAR 14.11 REFERENCE LIST FOR THE LANDSCAPE

Carlow County Council (2022) *Carlow County Development Plan 2022-2028*.

Environmental Protection Agency (2003) *Advice Notes on current practice in the preparation of Environmental Impact Statements*.

Environmental Protection Agency (2022) *Guidelines on the information to be contained in Environmental Impact Assessment Reports*.

Fáilte Ireland (2012) *Visitor Attitudes on the Environment – Wind Farms*.

Ireland, Department of the Environment, Heritage and Local Government (2006) *Wind Energy Development Guidelines*.

Kilkenny County Council (2021 a) *Kilkenny City and County Development Plan 2021-2027 Volume 1 County*.

Kilkenny County Council (2021 b) *Kilkenny City & County Development Plan 2021-2027 – Appendices*.

Landscape Institute (2013) *Guidelines for Landscape and Visual Impact Assessment Third Edition*, Landscape Institute, Institute of Environmental Management & Assessment.

Laois County Council (2021) *Laois County Development Plan 2021-2027*.

NatureScot (2021) *Guidance – Assessing the cumulative landscape and visual impact of onshore wind energy developments*.

Scottish Natural Heritage (2017) *Visual Representation of Wind Farms – Guidance*, Version 2.2.

## EIAR 14.12 LIST OF APPENDICES FOR THE LANDSCAPE

APPENDICES (overleaf)

| | |
|---|---|
| Appendix 14.1 | Appraisal of Visual Receptor Sensitivity |

## Appendix 14.1: Appraisal of Visual Receptor Sensitivity

# Appendix to Chapter 14: The Landscape

## Appendix 14.1: Appraisal of Visual Receptor Sensitivity

# Appendix 14.1 Appraisal of Visual Receptor Sensitivity

### Degree of Visual Sensitivity Association

| Strong association | Moderate association | Mild association | Negligible association |
|---|---|---|---|
| | | | |

### Receptor Sensitivity Criterion and Analysis at each Viewpoint

| Values associated with the view | VP1 | VP2 | VP3 | VP4 | VP5 | VP6 | VP7 | VP8 | VP9 | VP10 | VP11 | VP12 | VP13 | VP14 | VP15 | VP16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Susceptibility of viewers to changes in views | | | | | | | | | | | | | | | | |
| Recognised scenic value of the view | | | | | | | | | | | | | | | | |
| Views from within highly sensitive landscape areas | | | | | | | | | | | | | | | | |
| Primary views from residences | | | | | | | | | | | | | | | | |
| Intensity of use, popularity (number of viewers) | | | | | | | | | | | | | | | | |
| Provision of vast, elevated panoramic views | | | | | | | | | | | | | | | | |
| Sense of remoteness / tranquillity at the viewing location | | | | | | | | | | | | | | | | |
| Degree of perceived naturalness | | | | | | | | | | | | | | | | |
| Presence of striking or noteworthy features | | | | | | | | | | | | | | | | |
| Sense of Historical, cultural and / or spiritual significance | | | | | | | | | | | | | | | | |
| Rarity or uniqueness of the view | | | | | | | | | | | | | | | | |
| Integrity of the landscape character within the view | | | | | | | | | | | | | | | | |
| Sense of place at the viewing location | | | | | | | | | | | | | | | | |
| Overall sensitivity assessment | ML | ML | M | ML | M | HM | ML | ML | ML | ML | ML | M | M | ML | M | ML |

**N** = Negligible; **L** = low sensitivity; **ML** = medium-low sensitivity **M** = medium sensitivity; **HM** = High-medium sensitivity; **H** = high sensitivity; **VH** = very high sensitivity

| Values associated with the view | VP17 | VP18 | VP19 | VP20 | VP21 | VP22 | VP23 | VP24 | VP25 | VP26 | VP27 | VP28 | VP29 | VP30 | VP31 | VP32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Susceptibility of viewers to changes in views | | | | | | | | | | | | | | | | |
| Recognised scenic value of the view | | | | | | | | | | | | | | | | |
| Views from within highly sensitive landscape areas | | | | | | | | | | | | | | | | |
| Primary views from residences | | | | | | | | | | | | | | | | |
| Intensity of use, popularity (number of viewers) | | | | | | | | | | | | | | | | |
| Provision of vast, elevated panoramic views | | | | | | | | | | | | | | | | |
| Sense of remoteness / tranquillity at the viewing location | | | | | | | | | | | | | | | | |
| Degree of perceived naturalness | | | | | | | | | | | | | | | | |
| Presence of striking or noteworthy features | | | | | | | | | | | | | | | | |
| Sense of Historical, cultural and / or spiritual significance | | | | | | | | | | | | | | | | |
| Rarity or uniqueness of the view | | | | | | | | | | | | | | | | |
| Integrity of the landscape character within the view | | | | | | | | | | | | | | | | |
| Sense of place at the viewing location | | | | | | | | | | | | | | | | |
| Overall sensitivity assessment | **ML** | **ML** | **ML** | **M** | **ML** | **ML** | **M** | **ML** | **ML** | **ML** | **HM** | **M** | **M** | **M** | **ML** | **H** |

**N** = Negligible; **L** = low sensitivity; **ML** = medium-low sensitivity **M** = medium sensitivity; **HM** = High-medium sensitivity; **H** = high sensitivity; **VH** = very high sensitivity

| VP No. | Existing View | VP Sensitivity | Visual Impact Magnitude | Significance / quality / duration of Impact |
|---|---|---|---|---|
| **VP1** | **Portlaoise Rugby Club, Port Laoise** – This is a contained view afforded from Portlaoise Rugby Club on the outskirts of the settlement of Port Laoise, south of the M7 motorway. The view is contained at a short distance beyond the nearby sports pitches by a mature tree-lined hedgerow and stacked vegetation beyond. | **Medium-low** | The proposed wind farm will be entirely screened from here, and thus, the magnitude of visual impact is deemed **Negligible** by default. | **Imperceptible / Neutral / Long Term** |
| **VP2** | **Ballyroan Abbey GAA Club, Ballyroan –** This is a view from Ballyroan GAA Club sports pitches located southeast of the village settlement of Ballyroan. The depicted view is oriented to the south, away from the sports grounds and extends across flat to low-rolling terrain cloaked in a mix of pastoral farmland and dense stacked vegetation. The view is contained in the distance by low rolling ridges and stacked mature skyline vegetation. | **Medium-low** | The northernmost turbines in the proposed array will be partially and intermittently visible, rotating along the vegetated skyline at a distance of c. 11km. The turbines will present at a modest scale in the distance and are viewed backed by the sky with a very low degree of visual contrast. In the context of this broad view and the limited turbine visibility, the proposed development is considered to have a minimal visual presence. The visible turbines present here in a relatively condensed cluster with some degree of turbine overlap, which has the potential to generate a slight sense of visual clutter. Nonetheless, any negative aesthetic impacts will be heavily offset by the limited degree of turbine visibility combined with the considerable viewing distance. Therefore, on balance of the reasons outlined above, the magnitude of visual impact is deemed **Low-negligible**. | **Slight-imperceptible / Negative / Long Term** |
| **VP3** | **Local Church, Abbeyleix** - This is a heavily contained view afforded from a local church and graveyard west of the N77 at Abbeyleix. The view is contained at a short distance by the near-stacked vegetation and surrounding dwellings. This is a representative view from the centre of the settlement of Abbeyleix, which is afforded a similar degree of containment by its surrounding built development and dense intervening mature vegetation. | **Medium** | Whilst the wireframe view identifies the potential for some turbine visibility, the proposed development will be entirely screened from here by a combination of dense intervening vegetation and existing built development in the surrounds of the settlement. Thus, the magnitude of visual impact is deemed **Negligible** by default. | **Imperceptible / Neutral / Long Term** |
| **VP4** | **L1596 local road overbridge of the M7 at Kilcotton –** This is a locally elevated view afforded from a local road overpass | **Medium-low** | A brief view of the northernmost turbines in the array is afforded in the distant background, where they present with a very low | |

| | | | | |
|---|---|---|---|---|
| | of the M7 motorway at Kilcotton. Whilst this view has been chosen as a representative of the motorway corridor, it is important to note that visibility will be further limited along this contained section of the M7 motorway. The depicted view is oriented to the southeast along the M7 corridor, which is bound by areas of mature scrubby vegetation. A near overhead cable corridor and its associated pylon structures traverse the near-middle ground, which in the distance the view is contained by broad low ridges. | | degree of visual contrast backed by the sky. From this distance of c. 18.8km, the proposed turbines are unlikely to draw the eye and will have a minimal visual presence. It is worth noting that visibility of the turbines will likely be limited to brief glimpses along this section of the motorway. Even if viewed from here, the proposed turbines will have little notable impact on the visual amenity of this robust working landscape which is currently influenced by highly anthropogenic built features such as the motorway corridor and overhead electricity cables. Thus, the magnitude of visual impact is deemed **Low-negligible**. | **Slight-imperceptible / Negative / Long Term** |
| **VP5** | **Regional Road R430 between The Swan and Crettyard** – This is a view afforded from a slightly elevated section of the R430 looking to the west. The depicted view consists of broad views across a landscape cloaked in stacked vegetation and areas of pastoral farmland. It is a similar afforded from other sections of this road as well as the westward oriented dwellings that line it and the two settlements it links between – The Swan to the northwest and Crettyard to the southeast. The view is contained in the distance by a broad elongated ridgeline cloaked in dense areas of mature vegetation and pastoral fields. | **Medium** | A twelve of the proposed turbines are visible along the ridge in the distance, where they present in silhouette against the sky with a low degree of visual contrast. Whilst the moving turbine components have the potential to draw the eye, they are viewed as modest-scale distant features and are considered to have a sub-dominant visual presence. In terms of aesthetics, this is a highly legible view of a wind farm development that does not appear out of scale or out of context along the broad distant ridge. Overall, it is not considered that the proposed turbines will appear out of place in terms of their scale or function, and thus, the magnitude of visual impact is deemed **Low**. | **Slight / Negative / Long Term** |
| **VP6** | **Heywood Demesne** – This is a pleasant scenic view afforded from Heywood Demesne. The depicted view is oriented to the south across a broad area of pasture backed by low-rolling hills cloaked in dense mature woodland. In the background, the terrain rises swiftly from the lowlands, visible in the distance to the southeast. The view to the south is contained in the background by the elevated rolling terrain cloaked in a mix of pastoral farmland, dense vegetation and blocks of conifer forest. | **High-medium** | All twelve proposed turbines are visible in two condensed clusters in the view's background at a distance of c. 4.5km to the nearest visible turbine. The turbines will likely draw the eye in this scenic vista, characterised by more traditional rural land uses such as agriculture and forestry. Nonetheless, the proposed turbines present backed by the sky with a low degree of contrast and are considered to have a sub-dominant visual presence in this broad view.<br><br>Aesthetically, this is not an ideal view of a wind farm due to its condensed nature, which generates a notable degree of visual clutter and visual irritation. Nonetheless, the variation in the perceived scale of the turbines highlights the depth of the proposed development across the distant elevated lands. Furthermore, the proposed turbines do not appear incongruous | **Moderate / Negative / Long Term** |

| | | | | |
|---|---|---|---|---|
| | | | along the upland ridge, which is characterised by other working land uses and built features such as the extensive areas of commercial forestry and existing telecommunications towers. Nonetheless, the proposed development will marginally detract from the scenic amenity afforded in this pastoral scenic view. Thus, the magnitude of visual impact is deemed **Medium-low**. | |
| **VP7** | **Laois County Council Scenic Viewpoint at Ballinakill GAA club** – This view takes in rolling fields in the foreground that occur within the immediate hinterland of Ballinakill Village, the nearest houses from which can be seen a short distance to the south along with the silhouettes of two church spires. Rolling agricultural countryside continues to the south as the terrain ascends to an undulating skyline ridge in the middle distance. This is cloaked in farmland, woodland and commercial forestry and topped by communications masts. | **High-medium** | The proposed development presents in an almost identical manner as in VP6 above, albeit some of the proposed turbines present slightly stunted as the distant ridge will partially screen the towers of the southernmost turbines in the array. In general, the proposed turbines will be viewed here in a highly condensed cluster and will generate a degree of visual clutter and visual irritation. Nevertheless, in terms of scale and function, the proposed turbines will not appear as incongruous built features along the productive upland ridge. Thus, in similar circumstances to VP6 above, the magnitude of visual impact is deemed **Medium-low**. | **Moderate / Negative / Long Term** |
| **VP8** | **L7799 local road at Ironmills (Kilrush)** – This is a relatively contained view afforded from a section of a local road in the townland of Ironmills (Kilrush). The depicted view is oriented to the southwest and is partially truncated at a near distance by the adjacent dwelling and associated garden trees. Brief views across a rolling pleasant pastoral scene are also afforded across lower sections of the adjoining hedgerow, where the view is contained in the middle distance by a broad low ridge cloaked in extensive and mature commercial conifer forest plantations. | **Medium-low** | Intermittent visibility of three partial blade sets from the proposed turbines will be afforded from sections of this local road corridor, where they present in a relatively clear and comprehensible manner across the broad vegetated ridge in the distance. Whilst the moving turbine components are likely to catch the eye of the casual observer, they present in silhouette against the sky with a low degree of visual contrast and do not appear over scaled from this distance. Overall, the turbines are considered to have a visual presence in the order of sub-dominant from this local landscape context.<br><br>Aesthetically, the turbine blades are viewed cutting against the vegetated skyline in perspective, which can be slightly ambiguous and irritating. However, this is counterbalanced by the substantial degree of screening afforded. Whilst the turbines will not appear out of place in this robust working landscape, they will notably increase the intensity of built development along the elevated ridge. On balance of the reasons outlined above, the magnitude of visual impact is deemed to be Low in | **Moderate-slight / Negative / Long Term** |

| | | | | |
|---|---|---|---|---|
| | | | the current context, but potentially up to **Medium-low** in a scenario where the mature ridgetop forestry is felled revealing the turbines to a greater extent. | |
| **VP9** | **Local Road at Attenagh** – This is a cross-valley view from a slightly elevated location in the small settlement of Attenagh. Beyond the foreground townscape of loosely scatterd residential dwellings, commercial premises and the church spire can be seen a rolling tapestry of farmed fields and forestry blocks on the opposing slopes of the valley around 3km away. The view is contained at this middle distance by a modest and gently undulating ridge to the east. | **Medium-low** | All of the proposed turbines are substantially visible from here to varying degrees above the middle distance ridgeline and between foreground trees and buildings. They are viewed rotating across the broad ridge to the east at distances beyond c. 3.9km. The moving turbine components will likely draw the eye in this view and are viewed backed by the sky with a relatively low degree of visual contrast. In the context of this view, the proposed turbines are considered to have a Co-dominant to sub-dominant visual presence. The turbines present in a highly legible manner and are well assimilated in terms of their scale and function in this working landscape context. Whilst there will be some minor instances of turbine overlap from the proposed turbines in the southern extent of the array, the majority of the proposed turbines present here in an orderly manner that will dilute the minor negative aesthetic effects. Nonetheless, the turbines will notably increase the intensity of built development along the distant ridge, and the magnitude of visual impact is deemed **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **VP10** | **N77 northeast of Durrow –** This is a pleasant view afforded from the corridor of the N77 national secondary route northeast of the settlement of Durrow. A view of the landscape beyond the immediate road corridor is contained from here by a low roadside hedge, whilst a view of low rolling hills cloaked in mature stacked vegetation is afforded in the distance. The view is contained in the background by a broad ridge cloaked in a mix of agricultural farmland and blocks of forestry. | **Medium-low** | All twelve proposed turbines are visible along the broad working ridgeline in the view's background. The moving turbine components present at a notable scale from this distance of c. 6.5km, albeit they present backed by the sky with a low degree of visual contrast. Overall, the turbines are considered to have a sub-dominant visual presence along this busy section of the N77. The proposed turbines are viewed here in a clear and legible manner, with some very minor instances of turbine overlap in the southern half of the array. The proposed turbines present with clear spacing characteristics and do not appear incongruous in this working landscape context and across the broad working ridge in the distance. Overall, the magnitude of visual impact is deemed **Low.** | **Slight / Negative / Long Term** |

| | | | | |
|---|---|---|---|---|
| **VP11** | **L5591 overbridge of the M8 east of Cannonswood Cross Roads** – This is a locally elevated and partially contained aspect of the view afforded from a local road overbridge of the M8 motorway east of Cannonswood Cross Roads. The depicted view is oriented to the east along the local road corridor and is partially contained at a near distance by stacked mature tree-lines that surround a near farmstead. More distant views across the intervening landscape are also afforded and are contained in the background by broad low ridges cloaked in a mix of agricultural lands and blocks of conifer forestry. | **Medium-low** | The proposed turbines are briefly and intermittently visible at a very small scale in the distant background. The turbines are viewed here with a very low degree of visual contrast backed by the sky from this distance of over c. 13.9km and will have a minimal visual presence from this landscape context. Due to the limited visibility of the proposed turbines combined with their minimal visual presence, the proposed turbines will have no notable effect on the visual amenity of this working scene. It is also worth noting that the proposed turbines will likely be entirely screened along the nearest sections of the M8 motorway corridor. As a result of the reasons outlined above, the magnitude of visual impact is deemed **Low-negligible**. | **Slight-imperceptible / Negative / Long Term** |
| **VP12** | **Local road at Ballyouskill** – This is a view afforded from a local road intersection along a scenic route designation in the townland of Ballyouskill. The depicted view is oriented to the east towards a steep broad ridge cloaked in a mix of pastoral farmland and extensive areas of commercial conifer forestry. An existing telecommunications mast is also visible along the skyline ridge in the distance. It is important to note that the scenic designation here relates to views in the opposite direction to the west across a broad working rural scene. | **Medium** | Only seven of the twelve turbines will be visible here, ranging from views of partial blade sets to almost fully revealed turbines. The proposed turbines are visible here at a notable scale from this distance of just over c. 1.3km, which is further accentuated by the uphill nature of the view. Nonetheless, the turbines present beyond the ridgeline, with their towers partially screened by a combination of the terrain and ridgetop vegetation and are considered to have a co-dominant visual presence.<br><br>In terms of aesthetics, the proposed turbines present here in a relatively clear and legible manner, albeit some of the turbines present slightly stunted as the ridgetop vegetation partially screens their towers. In addition, the proposed turbine array generates a strong sense of rhythm along the ridge due to their almost even spacing characteristics, however, there are some minor instances of turbine overlap with the southernmost turbines in the array. It is also worth noting that the proposed development is viewed in the opposite direction to the scenic designation, which is to the west. Overall, the turbines will contribute to a marked increase in the intensity of built development along the ridge, and thus, the magnitude of visual impact is deemed **Medium**. | **Moderate / Negative / Long Term** |

| | | | | |
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| **VP13** | **Local road at Ballynalackan** – This is a broad elevated view afforded from a local road in the townland of Ballynalackan. The depicted view is oriented to the west across a low valley cloaked in pastoral fields and dense intervening vegetation. The more southern aspect of the depicted view is partially contained at a near distance by areas of nearby mature vegetation, whilst directly to the west, the view is contained in the distance by a broad upland ridge cloaked in a mix of agricultural lands and blocks of commercial forestry. Further to the north, a more distant view is afforded across a working rural landscape and is contained in the distance by a broad low ridge. | **Medium** | Visibility of all twelve of the proposed turbines has the potential to be afforded from this elevated landscape setting, albeit some of the southernmost turbines in the array are partially screened here by sections of nearby roadside hedgerow. The proposed turbines are viewed here at a considerable scale, most notably, those turbines in the northern half of the array, which are viewed at a distance of just over c. 1km. Nonetheless, whilst the proposed turbines present here with a dominant visual presence, they do not present with any sense of overbearing in this broad elevated context.<br><br>This is a highly legible view of wind energy development in an elevated working landscape context. The turbines are well-spaced across the broad ridge, some of which rise from extensive areas of conifer forest. There is some potential to afford stacked views of the turbines in the southern extent of the array from this local landscape context, however, any negative aesthetic effects will be heavily diluted by the clearer views of the other visible turbines in the northern half of the array. Overall, the proposed turbines will contribute to a considerable increase in the intensity of built development in this working upland setting and represent a marked visual change. However, the turbines do not block any sensitive viewing aspects, nor do they appear out of place in this robust working upland setting. Therefore, on balance of the reasons outlined above, the magnitude of visual impact is deemed **High-medium**. | **Substantial-moderate / Negative / Long Term** |
| **VP14** | **Local Road L5846 at Ballynalacken –** This is a view to the west across the upland setting that contains the wind farm site. It is a rolling plateau of low intensity grazing and forestry plantations dotted with occasional farmsteads. Two communications masts can be seen rising above the near ridge to the west that otherwise contains the view at a relatively short distance. Slightly longer distance views are afforded downslope to the north. | **Medium-low** | The proposed turbines wrap around the containing ridge to the south and west of the viewer at close quarters and will be a prominent and slightly enclosing feature. The nearest turbine to the southwest is close and uphill from the viewer giving a slight sense of overbearing, but by comparison, the remaining turbines are not overbearing or over-scaled in broad upland terrain and land cover context. The turbines will become one of the defining elements of this visual setting and substantially increase the intensity of built development. However, they are not incongruous in this productive setting and the view of them is clear and legible. | **Substantial-moderate / Negative / Long Term** |

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| | | | It should be noted that the nearest turbine (T6) is only 400m away from the viewer on the public road at this location and this is c. two-thirds the distance that a dwelling could be based on required residential setback distances.<br><br>Overall, the magnitude of visual impact is deemed to be **High**. | |
| **VP15** | **Local road (Cromwell's Road) at Attanagh immediately west of the site –** This is an elevated view from a local road scenic route along the westmost edge of the Castlecomer Plateau. The depicted view is oriented in a general easterly direction back towards the Castlecomer Plateau, although it is contained at a relatively near distance by a mix of low scrubby vegetation and mature conifer forest plantations. It is important to note that the most scenic aspect of this local road is the broad panoramic view afforded to the west across the wider Kilkenny landscape, which is the reason for its designation. It is also important to note that there are no residential dwellings along this section of the local road. Instead, this is representative of member of the local community travelling along this elevated local road. | **Medium** | All twelve proposed turbines are visible here to varying degrees ranging from fully revealed turbines rising in silhouette against the sky to partial views of turbine blade sets rotating along sections of the more distant vegetated skyline. The proposed turbines present here in a highly dominant from this near distance, with the nearest of the proposed turbines located less than c. 200m from the local road corridor. Due to the near distance to the proposed turbines, they have the potential to generate a slight sense of overbearing in this elevated upland setting. Nonetheless, any notable sense of overbearing is strongly diminished by the notable spacing between the proposed turbines in addition to the broad elevated view afforded in the opposite direction to the development to the east.<br><br>Despite the perceived scale of the proposed turbines, they are viewed here in a clear and comprehensible manner with notable spacing characteristics, which allow for a strong sense of visual permeability through the linear turbine array. The predominance of the proposed turbines are viewed to the southeast and present with a strong sense of perspective due to the variation in their perceived scale, which highlights the depth and dispersion of the proposed turbine across this working upland ridge. Whilst the turbine will be the most prominent built feature in this elevated setting, they will not appear out of place in the context of the other working upland land uses, such as the extensive areas of commercial conifer forestry. Furthermore, this elevated ridge is currently characterised by other built development, such as the existing telecommunications tower, which is visible to the north of this view. On balance of the above reasons, the magnitude of visual impact is deemed **High.** | **Substantial-moderate / Negative / Long Term** |

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| **VP16** | **Local Road at Skehana** – This is a broad and open westward view across a rolling landscape of farmed fields and hedgerows throughout the fore-to-middle ground. A low skyline ridge cloaked in forestry contains the view at a modest distance. | **Medium-low** | The proposed turbines will all be openly visible rising in silhouette above the skyline ridge with only their lower towers screened by intervening terrain and vegetation. They have a modest vertical scale at this distance of over 3km, but they have a broad lateral extent. The visual presence of the development in this visual context is deemed to be in the order of co-dominant to sub-dominant. The array is well spaced with a highly legible linear arrangement, with a profile that corresponds to the gently undulating nature of the ridge. Indeed, this is an exemplary layout relative to the WEDG 2013 guidance for this landscape type. Nonetheless, the turbines will notably increase the intensity of built development along the distant ridge, and the magnitude of visual impact is deemed **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **VP17** | **National Road N78 at Cloneen** – This is a locally elevated broad view afforded from the N78 national secondary route in the townland of Cloneen. The depicted view is oriented in a westerly direction across an area of gently sloping farmland and is partially interrupted by a clump of trees in the hedgerow that defines the neighbouring agricultural field. Otherwise, views extensive views are afforded across the wider undulating landscape, cloaked in a patchwork of forestry and farmland and contained in the background by a broad vegetated ridgeline. | **Medium-low** | Whilst several of the proposed turbines are partially screened by the nearby mature vegetation in the depicted view, there is potential for visibility of all of the turbines from the surrounding local landscape context. The proposed turbines will be viewed as relatively modest scale background features from this distance of over c. 9km from the nearest turbine. Furthermore, the proposed turbines will be viewed rising in silhouette against the sky with a low degree of visual contrast and are considered to have a sub-dominant visual presence. Whilst there is potential for some of the turbines to overlap with each other and rotate against the vegetated skyline ridge, any negative aesthetic effects will be strongly diluted by the clearer views of the remaining turbines and the viewing distance. Overall, the proposed turbines will result in an increase in the quantum of built development along the distant ridge, and thus, the residual visual impact is deemed **Low**. | **Slight / Negative / Long Term** |
| **VP18** | **R432 at Tinnalintan south of Glashagal Bridge** – This is a pleasant pastoral view afforded from the R432 regional road in the townland of Tinnalintan east of the River Nore. The depicted view is oriented to the east and affords a view across low rolling farmland in the foreground. A nearby low ridge contains much of the visibility of the middle distant landscape, whilst, in the background, the view is contained | **Medium-low** | The proposed turbines are viewed here at a distance of c. 3.2km and present with a broad lateral extent along the elevated elongated ridge in the background of the view. The rotating turbine components have the potential to catch the eye of the casual observer, although they do not appear over-scaled in the context of the broad underlying ridge. Furthermore, the turbines present here in silhouette against the sky with a low degree of | **Moderate-slight / Negative / Long Term** |

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| | by a broad elevated ridge cloaked in a mix of pastoral lands and blocks of commercial conifer forestry. | | visual contrast and are considered to have a visual presence in the order of sub-to-co-dominant in this westward view.<br><br>Aesthetically, the turbines present in a clear and comprehensible manner with only a very few minor instances of blade sets overlapping. In addition, the proposed turbines benefit from almost even spacing characteristics and are well assimilated along the underlying ridge in terms of their scale and function. Nonetheless, the turbine will notably increase the intensity of built development in this working rural scene, and thus, the magnitude of visual impact is deemed **Medium-low**. | |
| **VP19** | **Regional Road R694 at Glenmagoo or Firoda Lower** – This is an uphill view presented to those travelling northwest on the R694 regional road through the townland of Firoda lower. The view is relatively contained by terrain leading up to a nearby ridge as well as road side and ridgetop vegetation. Otherwise it is a rural context of farmed fields. | **Medium-low** | The blade sets of around 3 to 4 of the proposed turbines will be visible from here to varying degrees above and between intervening terrain and vegetation just to the left of the road alignment. Despite the substantial degree of screening, they will be prominent features at this modest distance of less than 2km and with blade sets rotating amongst intervening features. Aesthetically, this is a slightly ambiguous view of the development, albeit substantially obscured.<br><br>On balance of the factors outlined above, the magnitude of visual impact will be **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **VP20** | **Local road intersection of the R694 at Attanagh –** This is a locally elevated uphill view afforded from the R694 regional road in the townland of Attanagh. The depicted view is oriented to the northwest and follows the corridor of an adjacent local road. The uphill view is characterised by slopping farmland and intervening hedgerow vegetation, whilst the view is contained in the background by a low rolling ridge carpeted in a conifer forest plantation. It is important to note that the main aspect of scenic amenity is to the east/southeast in the opposite direction to the depicted view, which is the orientation of this scenic designation. | **Medium** | The proposed turbines present here at a notable but not overbearing scale along the near-vegetated skyline ridge. The moving turbine components will likely draw the eye from this distance of c. 1km and will have a visual presence in the order of co-dominant to dominant. Whilst the nearest turbines will be prominently visible in this uphill view, several of the turbines will be partially screened, whilst the more distant turbines in the northern extent of the array present at a modest scale and are viewed backed by the sky with a low degree of visual contrast.<br><br>Aesthetically, it is not ideal to have views of turbines rotating along a near ridge as it can generate a sense of visual clutter and irritation. Nonetheless, the nearest of the proposed turbines rise just above the underlying ridge, although they appear slightly | **Moderate / Negative / Long Term** |

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| | | | stunted as their towers are heavily screened. Due to the variation in the proposed turbines' perceived scale, they generate a strong sense of perspective, highlighting the depth and dispersion of the proposed wind farm development across the near-elevated working ridge. Overall, the turbines will contribute to a considerable increase in the intensity of built development along the elevated nearby ridge. However, the proposed turbines will be viewed in the opposite direction to the scenic designation, which is to the east/southeast across the broad River Dinin valley and towards the more distant uplands. Therefore, on balance of the reasons outlined above, the magnitude of visual impact is deemed **Medium**. | |
| **VP21** | **N77 at Ballynaslee, west of the River Nore** – This is a pleasant rural view afforded the N77 national secondary route in the townland of Ballynaslee. The depicted view is oriented east from the national secondary route towards the River Nore corridor, which is screened from view by dense stacked vegetation located within neighbouring foreground fields. The nearby stacked vegetation screens much of the middle ground landscape context, whilst, in the distance, the view is contained by a broad elevated ridge cloaked in a patchwork of pastoral farmland and blocks of conifer forestry. | **Medium-low** | The proposed turbines are viewed along the distant ridge and present backed by the sky with a low degree of visual contrast. The rotating turbine components are viewed at a modest but noticeable scale from this distance of c. 5km and are considered to have a sub-dominant visual presence. Whilst the proposed turbines present with a relatively broad visual envelope from this distance, there are viewed in a clear and comprehensible manner with some minor instances of overlapping blade sets. Overall, the proposed turbines will increase the intensity of built development along the distant ridge, however, they are well assimilated into this robust working landscape context in terms of their scale and function. Overall, the magnitude of visual impact is deemed **Low**. | **Slight / Negative / Long Term** |
| **VP22** | **L5853 local road west of Castlecomer –** This is a heavily contained view afforded from the Old Ballragget Road (L5853) west of the settlement of Castlecomer. A slightly uphill view is afforded from this section of the local road corridor and is truncated at a near distance by the roadside hedgerow and intervening hedgerow vegetation just beyond. | **Medium-low** | The proposed development will be heavily screened from this local landscape context on the western outskirts of the settlement of Castlecomer. It is important to note that the proposed turbines will be further screened within the central portions of the settlement of Castlecomer by a combination of terrain screening and additional areas of intervening vegetation and built development. Filtered glimpses of the rotating turbine components have the potential to be briefly viewed about the dense layers of intervening vegetation in the near foreground. They will have limited potential to notably impact the landscape character of the local landscape due to the minimal visual | **Slight-imperceptible / Negative / Long Term** |

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| | | | presence. Overall, the heavily screened view of the proposed development will result in a magnitude of visual impact no greater than **Low-negligible**. | |
| **VP23** | **Regional Road R694 at Finnan –** This is a locally elevated uphill view afforded from a section of the R694 regional road in the townland of Finnan northeast of Ballyragget. Whilst this viewpoint is representative of a scenic view, the main aspect of the scenic designation relates to broad views across the wider landscape to the west, in the opposite direction to the depicted view. The depicted view is oriented uphill to the northeast and is contained at a near distance by a combination of terrain and vegetation with a dwelling also located in the foreground. There is a dense conifer forest plantation that cloaks the elevated sections of the ridge only a short distance beyond the dwelling. | **Medium** | The proposed turbines will not be visible from here due to screening by intervening terrain and vegetation. Thus, in the current scenario, the magnitude of impact is deemed to be **Negligible** by default. In the circumstance that the forestry is felled, there is the potential to see the blades of around 4 of the proposed turbines above the bare ridge, in which case the future impact would still not exceed Low. | **Imperceptible / Neutral / Long Term** |
| **VP24** | **Lisdowney –** This is a slightly elevated framed view across a foreground of farmed fields and woodland thickets interspersed with dwellings at the periphery of the village of Lisdowney. A rural industrial facility is a notable feature of the valley beyond and rising in the distance is a long and low ridge cloaked in a patchwork of forestry and farmed fields. | **Medium-low** | The proposed turbines will all be openly visible rising in silhouette above the skyline ridge with a low degree of contrast. They have a modest vertical scale at this distance of over 8km, but they have a broad lateral extent. The visual presence of the development in this visual context is deemed to be sub-dominant. The array is well spaced with a highly legible linear arrangement, with a profile that corresponds to the flat form of the underlying ridge. Indeed, this is an exemplary layout relative to the WEDG 2013 guidance for this landscape type. Nonetheless, the turbines will subtly increase the intensity of built development along the distant ridge, and the magnitude of visual impact is deemed **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **VP25** | **Local Road L5853 at Rathkyle –** This is a short distance uphill view across a large pastoral field towards a forest lined ridge that contains the north-westerly view. | **Medium-low** | Nine of the proposed turbines will be visible rising to varying degrees in silhouette above the near ridgeline to the northwest. This ranges from full to partial blade sets with the nearest turbines presenting at a noticeable larger scale than the furthest visible turbines. This generates a sense of perspective that provides some visual rationale to the tightly stacked array, which runs away from the viewer along the ridgeline. At this viewing | **Moderate-slight / Negative / Long Term** |

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| | | | distance the turbines are a distinctive, but not prominent feature of the view and they do increase the intensity of built development within the view. There will be a degree of visual clutter due to the overlapping of turbines as well as blade sets rotating against the skyline forestry. However the sense of perspective also highlights the distance between turbines.<br><br>Overall, the magnitude of visual impact is deemed to be **Medium-low**. | |
| **VP26** | **St Patricks GAA Club, Ballyragget –** This is a partially contained view afforded from a local GAA club at the settlement of Ballyragget. The depicted view is oriented to the northeast and is partially contained beyond the context of the GAA grounds by neighbouring residential dwellings and mature trees. Nonetheless, a view of a distant broad ridge cloaked in a mix of pastoral fields and blocks of conifer forest is afforded in the background of the view and reduces the sense of containment. | **Medium-low** | All twelve turbines have the potential to be viewed from this local context, where they present in silhouette against the sky with a low degree of contrast against the broad working ridge in the background of the view. Whist the turbines do not appear over-scaled in this view, the moving turbine components will be notable features of the view's background. From this distance of just over c. 5km, the proposed development is considered to have a subdominant visual presence.<br><br>In terms of aesthetics, this is a highly legible view of a wind farm development that does not appear out of place or over-scaled, especially in the context of the broad underlying ridge. Whilst there are some minor instances of turbine overlap, the majority of turbines present in a clear and comprehensible manner with even spacing characteristics. Furthermore, the variation in the perceived scale of the turbines from farthest to nearest highlights the depth of the proposed development across the broad underlying ridge. Overall, the proposed wind farm will generate a notable increase in the quantum of built development in this view; however, the proposed turbines will not appear incongruous in this robust working context. Thus, the magnitude of visual impact is deemed **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **VP27** | **Local road at Frankford, south of Gathabawn Village –** This is a pleasant locally elevated scenic view afforded from a local road south of the small village settlement of Gathabawn. The elevated view extends across a broad landscape cloaked in a patchwork of pastoral farmland intersected by networks of mature hedgerow vegetation. | **High-medium** | Up to nine proposed turbines are visible as small-scale distant features in the view's background. The turbines are viewed at a distance of over c. 14km and will have a minimal visual presence, viewed at a considerably smaller scale than the existing Lisdowney turbines, which will be the more prominent of the two wind energy developments. Even if viewed from here, the | **Slight-imperceptible / Negative / Long Term** |

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| | The view is contained in the distance by a broad low-rolling ridge that contains the existing Lisdowney wind turbines. | | proposed turbines are viewed in a legible manner in the distant landscape and will have little notable effect on the visual amenity of this rural working scene. On balance of the above reasons, the magnitude of visual impact is deemed **Low-negligible.** | |
| **VP28** | **L1000 north of Barrack Village –** This pleasant locally elevated view is afforded from a local road intersection north of Barrack Village. The depicted view is oriented to the north and extends across slopping lands west of the River Cloghnagh valley. To the immediate north, the view is partially contained by dense vegetation along the immediate road corridor and within the adjoining intervening lands. Further in the distance to the north and northeast, the view is contained by a broad low ridge cloaked in pastoral fields and areas of conifer forest. It is also important to note that broad views of the neighbouring ridge are also afforded to the east, which is the principal orientation of the nearest residential dwellings. | **Medium** | Up to six of the proposed turbines are visible in the depicted view and are viewed rising from the distant elongated working ridge. The moving turbines present at a notable scale from this distance of just over 4.7km and have the potential to draw the eye of viewers looking across the near valley. Nonetheless, the turbines are viewed backed by the sky with a low degree of visual contrast and do not generate any sense of overbearing from this distance. Overall, the proposed turbines are considered to have a sub-dominant visual presence in this view. The proposed turbines generally present in a legible manner from this distance, albeit some of the proposed turbine blade sets are viewed stacked here, which can generate a sense of visual clutter and visual irritation. Nevertheless, whilst the proposed turbines will increase the intensity of built development in this landscape context, they will not appear incongruous in this robust working landscape and are viewed offset from the main aspect of amenity here, which is directly east across the broad valley. Overall, the magnitude of visual impact is deemed **Low**. | **Slight / Negative / Long Term** |
| **VP29** | **Local road east of Muckalee** – This is a pleasant locally elevated view afforded from a local road east of the small village of Muckalee. The view is oriented northwest of the local road corridor and extends across a typical rolling pastoral scene. The view is contained in the background by rolling hills and ridges cloaked in pastoral farmland and areas of commercial conifer forestry. | **Medium** | The proposed turbines are visible at a distance of c. 10km in the background of the view, where they rotate in silhouette against the sky with a low degree of visual contrast. The turbines present as modest-scale features in the distance and have a sub-dominant visual presence in this broad view. Whilst the southern cluster of turbines presents slightly stacked and will generate a minor sense of visual clutter, this is strongly diluted by the clearer and more legible views of the turbines in the northern half of the array. Overall, the turbines will increase the intensity of built development along the distant working ridge, however, they will not block or obstruct any sensitive viewing aspects. Thus, the magnitude of visual impact is deemed **Low-negligible**. | **Slight-imperceptible / Negative / Long Term** |

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| **VP30** | **L7122 local road northwest of Ridge Crossroads –** This is a slightly elevated view afforded from a local road northwest of Ridge Crossroads in the easternmost extents of the Castlecomer Plateau. The depicted view is oriented to the northwest along the descending local road corridor bound by agricultural lands, which are intermittently visible above and between roadside ditch vegetation. The view extends across extensive areas of commercial conifer forest plantations throughout a wider landscape to the west, which contains this aspect of the view. | **Medium** | The proposed turbines will be substantially visible from this locally elevated context in the distance, albeit several are partially screened be intervening vegetation. Due to the considerable viewing distance of over c. 15km, there is a low degree of visual contrast due to 'atmospheric perspective' (fading of distant objects), which heavily diminishes the visual presence of the proposed development, which in this instance is considered to be sub-dominant to minimal. When seen from this distance, the proposed development presents in a relatively legible manner and will have little material impact on the visual amenity of this productive elevated landscape context other than to introduce a distant built development of a familiar form. Thus, the magnitude of visual impact is deemed **Low-negligible**. | **Slight-imperceptible / Negative / Long Term** |
| **VP31** | **St. Lachtains GAA Club, Freshford** - This is a partially contained view afforded from St. Lacktains GAA sports pitches at the settlement of Freshford south of the R693 regional road. The depicted view is oriented to the north across the near playing field and is partially contained by an area of stacked mature vegetation that surrounds several dwellings to the north of the GAA grounds. Glimpses of a distant broad ridge are afforded in the background through gaps in the nearer vegetation. | **Medium-low** | Intermittent visibility of the proposed turbines will be afforded along the distant broad ridge above and between intervening tree tops. The turbines present as small-scale features from this distance of over c.12km and present with a low degree of visual contrast backed by the sky. When viewed from here, the proposed turbines have a sub-dominant visual presence and present in a clear and legible manner relatively evenly spaced along the skyline ridge. On balance of these reasons, the magnitude of visual impact is deemed to be **Low**. | **Slight / Negative / Long Term** |
| **VP32** | **St Canice's Round Tower, Kilkenny City –** This is an elevated 360-degree panoramic view afforded from the top of St. Canice's Round Tower in Kilkenny City. To the north, much of the near foreground is cloaked in the outskirts of Kilkenny City, which is principally contained in residential dwellings and other built development. The River Nore corridor is also discernible in the near foreground and is cloaked in dense riparian vegetation. The elevated view extends across the wider Kilkenny City and its surrounding suburban landscape context, where mature intervening vegetation becomes stacked in perspective and appears to cloak much of the middle distant landscape. The view is contained in the distance, rolling ridges cloaked in stacked vegetation, agricultural lands and blocks of conifer forestry. | **High** | The proposed turbines are visible along a broad working ridgeline in the distant background. The proposed turbines present as small-scale background features from this considerable distance of c. 17.3km. In the context of this broad sweeping panoramic view, the proposed development is considered to have a minimal visual presence. Whilst the proposed turbines are viewed here in a condensed cluster with a notable degree of turbine overlap, any negative aesthetic effects will be almost entirely offset by the viewing distances and minimal visual presence of the proposed development. Overall, the magnitude of visual impact is deemed **Low-negligible** in this broad panoramic view. | **Slight-imperceptible / Neutral-Negative / Long Term** |

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| **Cultural heritage Viewpoints**<br><br>To be read in conjunction with the Cultural Heritage Chapter where the emphasis is on the effects on the setting of the of the relevant heritage features. By comparison, the visual impact assessment below relates to effects on visitors (visual receptors) to these heritage features and their visual amenity. | | | | |
| **CH289 (1)** | **Heywood Gardens No.1** – This is a very similar view to VP6 from the LVIA set of viewpoints as it is from the same sequence of garden terraces that would have cascaded down from the front of the former Heywood House position in the direction of Ballynakill Village, which it is understood was the focal point of the designed view. For this reason, the depicted view has been oriented in this direction.<br><br>Beyond the formal garden terraces of manicured lawns fringed by ornamental shrub planting is a rolling pastoral demesne setting that descends into a wooded valley to the south. Distant hills of farmland, forestry and woodland can be seen to the southeast. | **High-medium** | All twelve proposed turbines are visible in two condensed clusters in the view's background at a distance of c. 4.5km to the nearest visible turbine. The turbines will likely draw the eye in this scenic vista, characterised by more traditional rural land uses such as immediate formal gardens, with agriculture and forestry beyond. Nonetheless, the proposed turbines present backed by the sky with a low degree of contrast and are considered to have a sub-dominant visual presence in this broad view.<br><br>Aesthetically, this is not an ideal view of a wind farm due to its condensed nature, which generates a notable degree of visual clutter and visual irritation. Nonetheless, the variation in the perceived scale of the turbines highlights the depth of the proposed development across the distant elevated lands. Furthermore, the proposed turbines do not appear incongruous along the upland ridge, which is characterised by other working land uses and built features such as the extensive areas of commercial forestry and existing telecommunications towers. Nonetheless, the proposed development will marginally detract from the scenic amenity afforded in this pastoral scenic view. Thus, the magnitude of visual impact is deemed **Medium-low**. | **Moderate / Negative / Long Term** |
| **CH309 (1)** | **Lutyens Sunken Garden at Heywood –** This is a view from within the concentric terraces of the Lutyens sunken garden within Heywood Demesne. It is an intimate and tranquil space with ornate stonework and planting and a central water feature fountain that is further enclosed by mature broadleaf trees just beyond its perimeter walls to the south and east. | **High-medium** | The proposed turbines will be substantially screened from view by a combination the perimeter wall and a series mature Beech trees (only semi-deciduous). Even in winter months, it is likely to be difficult to discern distant turbine blades through the dense intervening branches and dead leaves. Consequently, the magnitude of impact is deemed to be **Negligible**. | **Imperceptible / Neutral / Long Term** |
| **CH310** | **Gills Pond Road at Heywood –** This view is from the edge of the Heywood demesne in the direction of Ballynakill Village, where a small boat landing and folly-like shelter is provided. It is | **Medium** | The proposed development presents in an almost identical manner as in VP6 and VP7A from the LVIA viewpoint set. Some of the proposed turbines present slightly stunted as the distant | **Moderate-slight / Negative / Long Term** |

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| | understood to be a pond formerly used for recreational boating by the owners of Heywood House. The view to the south takes in an informal lake side path that leads down to Ballinakill village, which is framed by a thin band of riparian vegetation that partially obscures views of the pond. Scrubby farmland is evident on the opposite side of the pond and a distant farmed / forested ridge can be seen to the south. | | ridge will partially screen the towers of the southernmost turbines in the array. In general, the proposed turbines will be viewed from here in a highly condensed cluster and will generate a degree of visual clutter and irritation, especially due to the partial screening by intervening tree tops. Nevertheless, in terms of scale and function, the proposed turbines will not appear as incongruous built features along the productive upland ridge, which is very much a part of the background setting of this localised pond view. Thus, the magnitude of visual impact is deemed **Medium-low**. | |
| **CHD1** | **Walkway near The Obelisk at Heywood** – This is an enclosed view of the Obelisk flanked by near wooded slopes. It is an early view obtained by visitors to Heywood who have parked their cars in the front entrance car park and are making the their way towards the formal gardens. | **High-medium** | There is no potential for visibility of the proposed turbines from here due to screening by intervening landform and dense vegetation. The magnitude of effect is **Negligible** by default. | **Imperceptible / Neutral / Long Term** |
| **CH285** | **Sham Castle and Gothic Ruins at Heywood** – This is a key node and popular photo point for Heywood visitors who take advantage of framed views through the intact ruin windows backed by a dense woodland setting. This is the key view that has been depicted in the photomontage. Again, this is an historic built feature encountered by visitors moving between the car park and the formal gardens. | **High-medium** | There is no potential for visibility of the proposed turbines from here due to screening by the intervening historic structure and dense vegetation just beyond. The magnitude of effect is **Negligible** by default. | **Imperceptible / Neutral / Long Term** |
| **CH287** | **The Orangery at Heywood** – This is another historic garden folly-type feature of the Heywood Demesne encountered by those making their way between the car park and the formal gardens. However, it is important to note that the depicted view is from the elevated rear façade of the building from the school access road and this is not the main view of the front façade of the structure afforded to garden visitors. For these visitors, the uphill view of the ornate stonework structure is in the opposite direction to the site. The depicted view is used as a worst-case in relation to potential visual exposure to the proposed development within the context of the Orangery. For this reason the sensitivity is downgraded to Medium relative to other Heywood heritage receptors. | **High-medium** | The blade sets of the majority of the proposed turbines are visible from here between and above sections of dense intervening woodland vegetation. It is a cluttered and slightly ambiguous view of the turbines in terms of scale and distance as little can be seen of the distant hilltop context in which they are situated. However, it is a fleeting and oblique view of the distant turbines afforded to frequent visitors to the school, as opposed to tourists and garden visitors.<br><br>On balance of the reasons outlined above, the magnitude of visual impact is deemed to be **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **CH289 (2)** | **Heywood Gardens No.2** – The formal approach to the Lutyens sunken garden from the manicured terraces that fronted | **High-medium** | The view of the proposed turbines is very similar to that described previously from the nearby VP6 and CH1. Again, the | **Moderate / Negative / Long Term** |

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| | Heywood house is via a short terraced avenue lined by pleached lime trees. These frame the approach and sunken garden gateway but also afford framed lateral views to the south across the demesne as it blends into rural fields, forests and woodlands. Like the view from the house terraces, these lateral views are directed towards Ballinakill Village, but framed by hills in the middle distance to the southeast. | | view of the turbines is peripheral to the main view towards the sunken garden gateway, but also in the context of the perpendicular southward views towards Ballinakill. Contextually, the add an increased level of built development to the distant rural setting, but not one that is out of keeping with that productive landscape or one that unduly detracts from the visitor experience of Heywood gardens. Overall, the magnitude of visual impact is deemed to be **Medium-low**. | |
| **CH309 (2)** | **Heywood Gardens No.3** – Relative to view CH2 which is also within the context of Lutyens sunken garden, this view is slightly elevated and provides a greater sense of the rolling rural landscape that extends beyond the garden walls to the south. A linear woodland runs away from the viewer towards an upland context of farmland and forestry, but is substantially screened by a large Beech tree. | **High-medium** | The proposed turbines are substantially screened by the large foreground Beech tree with only two of the blade sets rotating amongst branches to the right hand side of it. Even in winter, the dense branches and dead leaves of the semi-deciduous specimen tree will provide substantial screening of the development. The path down into the garden descends directly below this point so the opportunity to obtain a clearer view by moving to the right is not readily available. Overall, the distant view of partial turbine blade sets within a separate productive rural area, does not materially diminish the visitor experience here and the visual impact is deemed to be **Low-negligible**. | **Slight / Negative / Long Term** |
| **CHD2** | **Heywood Gardens No.4** – This is a view obtained from a terraced cloister / arbour that lies to the western side and at a slightly lower level to the main terraced lawns that would have cascaded down from Heywood House. Its main orientation it to the west / southwest overlooking the river that runs through the demesne and is backed by woodland vegetation. | **High-medium** | There is no potential for visibility of the proposed turbines from here due to screening by the intervening historic structure. The magnitude of effect is **Negligible** by default. | **Imperceptible / Neutral / Long Term** |
| **CHD3** | **Walkway at Heywood** – This view is afforded from just downhill from the terraced arbour subject of CH9, which can be seen in the upper foreground. At the lower level is a pathway that leads along the river to the south which is flanked by mature woodland on its western side. | **High-medium** | Around five of the proposed turbines can be seen from here rising above a nearby grassy ridge. They are contained in a tight cluster which will generate visual clutter and there is also some scale / distance confusion as the more distant ridge on which they sit is obscured from view. Nonetheless they are seen at a modest scale, peripheral to the main woodland river corridor which is the principal source of visual amenity here.<br><br>Overall, the magnitude of visual impact is deemed to be **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **CH110** | **Hillfort at Toor More** – The Toor More Hillfort does not appear to be a regularly visited heritage feature that is contained within | **Medium** | The proposed turbines are nearly all openly visible from here except for the northernmost pair that begin to descend below | **Moderate-slight / Negative / Long Term** |

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| | private farmland. Consequently, it is not strictly a relevant view for the LVIA and this viewpoint location has principally been selected for the purposes of the Cultural Heritage Assessment. Nonetheless, in the interests of a robust assessment it will be considered that it gets some visitation. The very low number of viewers contributes to this receptor only having a Medium sensitivity from an LVIA perspective.<br><br>The view in question, runs along a broad ridge of farmland and forestry that is interspersed with occasional farmsteads. | | the ridge revealing only partial blade sets. The turbines are seen at a prominent scale, but are not overbearing in relation to the broad land form and landcover patterns from which they rise. They are seen in a clear and legible manner trailing along the ridge and are well accommodated in a thematic sense within this productive upland setting, albeit they introduce a considerably increased intensity of built development. It is not considered that they would unduly detract from the visitor experience at this ringfort site as they form a discrete part of the surrounding rural hinterland. On balance of these factors, the magnitude of visual impact is deemed to be **Medium-low**. | |
| **CH074** | **Cursus at Ballyoskill -** This Cursus does not appear to be a regularly visited heritage feature that is contained within private farmland. Consequently, it is not strictly a relevant view for the LVIA and this viewpoint location has principally been selected for the purposes of the Cultural Heritage Assessment. Nonetheless, in the interests of a robust assessment it will be considered that it gets some visitation. The very low number of viewers contributes to this receptor only having a Medium sensitivity from an LVIA perspective.<br><br>The view in question is directly uphill to the east where it takes in a slope of marginal grazing topped by hedgerow vegetation and forestry. There are also two communications masts on the near skyline ridge. | **Medium** | The partial blade sets of one close turbine can be seen along with the blades of three others at a slightly further distance, which are partially obscured by vegetation and one of the communications masts. The visible turbines are not overbearing, but will draw the attention of Cursus visitors. However, those same visitors will have had closer and clearer views of the turbines approaching the wind farm along the access road required to get to the Cairn. The substantial screening of the nearby turbines makes for a slightly ambiguous view of them rotating against the skyline ridge. However, it is also important to note that the principal visual amenity at this location relates to broad downslope views in the opposite direction to the development. Overall, the magnitude of visual impact is deemed to be **Medium**. | **Moderate / Negative / Long Term** |
| **CH293** | **Ballylarkin Abbey –** Ballyarkin Abbey does not appear to be a regularly visited heritage feature that is contained within private farmland. Consequently, it is not strictly a relevant view for the LVIA and this viewpoint location has principally been selected for the purposes of the Cultural Heritage Assessment. Although there is no dedicated car parking, there is a small turnstile gate at the roadside that invites visitation and in the interests of a robust assessment it will be considered that it gets some visitors. The very low number of viewers contributes to this receptor only having a Medium sensitivity from an LVIA perspective.<br><br>The view in question sweeps across a broad and undulating upland plateau of farmland, woodland and forestry and there are four modest sized wind turbines rising from it in the middle | **Medium** | Around six of the proposed turbines are seen lining the distant ridge at a small scale and with a low degree of contrast against the sky. They are considerably less noticeable than the nearer cluster of turbines which also make the proposed turbines an additional characteristic feature of the view rather than a novelle one. The proposed turbines, if noticed, are seen in a clear and legible manner. Overall, the magnitude of visual impact is deemed to be **Low-negligible**. | **Slight-imperceptible / Neutral-Negative / Long Term** |

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| | distance. A more distant ridgeline can also be seen to the north east. | | | |
| **CH312** | **Kilcronan Graveyard** – This is a view from next to the Kilcronan Graveyard near a local road intersection. It is an overgrown graveyard that does not appear to be frequently visited and would not normally be included in an LVIA set of receptors other than it also being representative of local community views. Undulating terrain cloaked in forestry and farmland leads to a vegetated ridgeline in the middle distance. | **Medium** | This is an end-on view of the proposed development as the turbines run away from the viewer along the ridge at a modest scale. The turbines range in visual exposure from fully visible to just blades depending on distance and intervening screening. The nearest cluster is seen tightly stacked in a cluttered manner as is the most distant group. There are two partially visible turbines that serve as a visual link between the two groups and provide some less cluttered legibility to the array. The proposed wind farm is well assimilated into this productive upland setting in terms of scale and function, but it does introduce a greater intensity of built development.<br><br>On balance of the factors outlined above, the magnitude of visual impact is deemed to be **Medium-low**. | **Moderate-slight / Negative / Long Term** |
| **CH012 + CH013** | **Moat adjacent to R432 at Moatpark** - This Moat does not appear to be a regularly visited heritage feature that is contained within private farmland. Consequently, it is not strictly a relevant view for the LVIA and this viewpoint location has principally been selected for the purposes of the Cultural Heritage Assessment. Nonetheless, in the interests of a robust assessment it will be considered that it gets some visitation. The very low number of viewers contributes to this receptor only having a Medium sensitivity from an LVIA perspective.<br><br>The view in question runs across a gently rising fore-to-middle ground of farmland and forestry and is framed my mature coniferous treelines in the foreground. A low ridge contains the view in the middle distance. | **Medium** | Five of the proposed turbines are visible from here rising with partial blade sets above the skyline ridge at a modest scale. They are well spaced and aside from not rotating freely above the ridge, they are seen in a legible manner. They are well accommodated in this productive rural vista, albeit they increase the diversity and intensity of built development. Overall, the magnitude of visual impact is deemed to be **Low**. | **Slight / Negative / Long Term** |