

14.7 Likely Significant Landscape and Visual Effects

14.7.1 “Do-Nothing” Scenario

As reported in Chapter 3 of this EIAR, the “Do-Nothing” scenario land-use option to developing a renewable energy project at the Proposed Wind Farm site would be to leave the site as it is, with no changes made to the current land use of commercial forestry, agricultural pastural land, mixed forest and transitional woodland-shrub on the Proposed Wind Farm site, or to the public road corridors, private tracks, and private land principally used by agriculture along the Proposed Grid Connection route. The established trends in respect of land use/landcover and the baseline landscape and visual context are likely to remain largely consistent with the scenario described in the preceding baseline sections of this chapter.

In terms of landscape and visual effects, in this alternative scenario the principal visual components, i.e. the proposed turbines, would not be materially introduced into the landscape, nor would their associated infrastructure or ancillary components be introduced, and the temporary effects of the underground Proposed Grid Connection would not occur.

It is considered that there would likely be future interest in developing this landscape for wind energy production, which is demonstrated given the level of existing, permitted and proposed wind farms outlined in the previous Section 14.6 Cumulative Context (these wind farms are considered to form part of the “Do-Nothing” scenario). Characteristic commercial forestry operations across the Proposed Wind Farm site and adjoining areas are expected to continue, along with the current land use of low intensity agriculture. Should the “Do-Nothing” scenario occur, the residual landscape and visual effects would be None and the impact would be Neutral in the context of this EIAR.

By implementing this “Do-Nothing” alternative, however, the opportunity to capture the available renewable energy resource would be lost, as would the opportunity to contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions.

The opportunity to generate local employment, local authority development contributions, rates and investment in the local area would also be lost. Furthermore, the opportunity to implement the measures outlined in the Biodiversity Management and Enhancement Plan (BMEP) would also be lost. Please see Appendix 6-4 BMEP for details.

14.7.2 Construction Phase Effects

It is estimated that the construction phase of the Proposed Project will last between 18 and 24 months. Construction of the development will involve the installation of the 14 no. turbines with a maximum blade-tip height of 185m and all associated works, as well as the construction of the proposed on-site 110kV substation, BESS and associated works including underground cabling.

Construction phase effects will also include the associated effects resulting from the movement of construction and turbine transport vehicles into and out of the Site, to allow for construction of all Proposed Project elements.

14.7.2.1 Landscape Effects during Construction Phase

Proposed Wind Farm

Associated earthworks, such as the cut and fill required to facilitate construction of the Proposed Project, have the greatest potential for landscape effects. Where excavation is required, the existing landcover, vegetation and spoil will be removed during the construction phase. In most instances, groundworks and excavation trenches will be re-instated upon completion of the construction. Where spoil arising from construction activities is managed within the Proposed Wind Farm site, the vegetative top-soil layer will be removed and re-instated following spoil management taking place. The construction activities may potentially cause temporary impacts on the landscape such as the introduction of temporary structures, dust, minor soil erosion and minor alterations to drainage. It is considered that this is a “Slight”, “Short-term”, “Negative” effect in terms of landscape effects, which is not significant.

Proposed Grid Connection Route

The Proposed Grid Connection Route underground electrical cabling is to be located underground; therefore, the greatest effects attributed to this element of the Proposed Project will occur during the construction phase. The majority of underground electrical cabling works are to be carried out along existing public road corridors. The construction phase of the proposed underground cabling will be temporary, localised, and transient in nature, as the works move along the Proposed Grid Connection Route. The works will include soil stripping, excavation, and other associated construction activities. These activities will cause temporary change to the physical landscape along the Proposed Grid Connection Route; however, these changes will be localised to the immediate environment surrounding the route and will not affect the character of the landscape setting or visual amenity of the wider area. The Proposed Grid Connection Route works are likely to cause “Slight”, “Short-term”, “Negative” landscape effects, which are not significant.

Proposed Onsite 110kV Substation and BESS. During the construction phase, landscape effects will occur owing to construction works and related activities of the proposed on-site 110kV substation and BESS compound, and with material alteration of the Proposed Wind Farm site within the footprint. Landscape effects will occur with the installation of the associated temporary construction compound due to the earthworks and requisite construction activities. The earthworks and construction activities will cause a substantial change to the landscape fabric in the immediate area (footprint and immediately adjacent). Landscape effects of the proposed substation and BESS will be highly localised and are likely to be “Negative”, “Short-Term” and “Slight”, which is not significant.

Mitigation Measures for Landscape Effects during Construction

The above predicted landscape effects during construction assume the implementation of the following mitigation measures for the Proposed Wind Farm and Proposed Grid Connection Route. All construction activities will follow best practice methods to reduce impacts upon the environment and landscape of the Site. Further details are presented in the Construction and Environmental Management Plan (CEMP) contained in Appendix 4-5 of this EIAR. The following measures should be implemented to mitigate landscape effects during the construction phase of the Proposed Project:

- In all circumstances, excavation depths and volumes will be minimised, and excavated material will be re-used where possible.
- For the proposed Grid Connection, where the cable trench is to be located in the road verge, subsoil will be piled on-site and re-used after cabling works. Should any medium planting be removed, it should be replaced with the same or similar species whenever it is not possible to salvage and reinstate.

- Any areas of bare soil remaining after the landscaping phase will be seeded as soon as possible with a grass-seed mix to minimise sediment run-off.

14.7.2.2 Visual Effects during Construction Phase

Proposed Wind Farm

The most substantial visual effects will arise from requisite construction activities on the Proposed Wind Farm site itself, such as assembling tower sections and erecting the proposed turbines. There shall be temporary scenarios during the construction phase in which the proposed turbines will be partially constructed and may be seen as either stand-alone tower sections, or incomplete turbines where only one or two blades are visible. The equipment and vehicles required to transport and erect the Proposed Wind Farm components include large cranes and large haulage vehicles. These construction activities will cause “Slight”, “Short-term”, “Negative” visual effects, which are not significant. General housekeeping measures, necessary for Health & Safety requirements, will ensure that the active construction areas will be kept tidy, mitigating localised visual impacts during the construction phase.

Site Access Roads and Hardstand Areas. The proposed access roads and hardstand areas are flat features and will be most visible within their immediate surroundings, within the Proposed Wind Farm site where there are no sensitive visual receptors. Every use will be made of the existing access tracks within the Site. Some tracks will be upgraded appropriately whilst several stretches of new internal roads will need to be constructed. The visual impact of the construction of these flat and hard surfaces will be very localised to the Proposed Wind Farm site itself. The visual effects arising from the construction of access roads and hardstand areas are likely to be “Negative”, “Short-term” and “Slight”, which is not significant.

Meteorological (Met) Mast. One permanent met mast is proposed as a part of the Proposed Wind Farm, to be erected approximately 453m southwest of proposed turbine T04 within the footprint of a proposed temporary construction compound. This is a slender structure, 103.5m in height, and will not be an imposing structure in terms of visual impact. The visual effects of the construction of the proposed met mast will be localised, considering that construction activities related to this will be most visible within their immediate surroundings. Within the Proposed Wind Farm site and its immediate landscape setting, the visual effects arising from the construction of the proposed met mast and associated temporary construction compound are likely to be highly localised “Negative”, “Short-term”, “Slight” effects, which is not significant.

Proposed Grid Connection Route

As reported above, the greatest effects attributed to the underground Proposed Grid Connection will occur during the construction phase and are largely related to landscape changes. As the Proposed Grid Connection shall be located underground, changes of a visual nature will not affect the visual amenity of the wider area. The Proposed Grid Connection underground cabling works are likely to cause “Negative”, “Short-term”, “Slight” visual effects, which are not significant.

Proposed Onsite 110kV Substation and BESS. During the construction phase, visual effects will occur as the proposed on-site 110kV substation, the BESS and the associated temporary construction compound are built due to the earthworks and requisite construction activities; these will cause a substantial but localised change to views in the immediate area. As established in the baseline investigations, the proposed on-site 110kV substation is located approximately 436m east of the L1154 local road, southeast of proposed turbine T13, and the BESS adjoins the substation onsite. During construction works, the proposed on-site 110kV substation and BESS and adjacent temporary construction compound will be temporarily visible from along the road. Visual effects of the proposed substation are likely to be highly localised, “Negative”, “Short-Term” and “Slight”, which are not significant.

Turbine Delivery Route (TDR)

Works such as road widening will be required along the turbine delivery route to accommodate the large vehicles used to transport turbine components to Proposed Wind Farm site (see Section 4.4.3 in Chapter 4 for specific details). In some instances, minor temporary alterations will be required to the existing streetscape and roundabout islands, temporary local road widening, overruns of roundabout island and temporary relocation of some signs and street furniture. Full details of the assessment are included as part of the traffic impact assessment set out in Chapter 15: Material Assets, Section 15.1 of this EIAR. The landscape value and sensitivity of these temporary works areas are deemed to be “Low” and the change to occur will be highly localised. These works are likely to cause “Negative”, “Short-term”, “Slight” visual effects, which is not significant

Mitigation Measures for Visual Effects during Construction

General housekeeping measures, necessary for Health & Safety requirements, will ensure that the active construction areas will be kept tidy, mitigating localised visual impacts during the construction phase.

14.7.3 Operational Phase Effects

Planning permission is being sought for a 35-year operational life of the proposed turbines from the date of full commissioning of the wind farm and subsequent decommissioning which will involve the removal of the proposed turbines from the Proposed Wind Farm site. Potential impacts of the Proposed Project during the operational phase are defined as “Long-Term” as per the definition for duration in EPA, 2022. The proposed turbines would be removed from the Proposed Wind Farm site at the end of the Operational Phase. Therefore, potential landscape and visual impacts effects on receptors caused by the proposed turbines are not permanent and are reversible.

14.7.3.1 Landscape Effects during Operation

14.7.3.1.1 Landscape of the Wind Farm Site

The landscape of the Proposed Wind Farm site will undergo substantial changes by the introduction of the proposed turbines as vertical, man-made structures within the material area of the site. The turbines themselves are visually prominent, and the material footprint on the landscape itself is over a moderate extent of the total land area and retains large areas of natural landscape between the turbine hardstand areas. On balance, there will be a “Substantial” magnitude of change to the landscape in localised areas within the Proposed Wind Farm site where the landscape is materially altered (infrastructure footprint). The landscape value and sensitivity of the Proposed Wind Farm site as determined in the Landscape Baseline of this LVIA is reported as “Low.”

As reported in the Landscape Baseline, the proposed turbines are sited within landscape having high compatibility to wind energy development and high capacity to accommodate development without significantly impacting scenic quality, and which is of lower sensitivity and capable of absorbing considerable change (TCDP 2022-2028); see detailed policy quotations below in Section 14.7.3.1.4 LCA Assessment Outcomes. All proposed turbines are sited within a modified working landscape of marginal upland comprising agricultural fields and commercial forestry, where potential wind energy development is acceptable (“Open for Consideration” TCDP RES 2022-2028).

The “Low” sensitivity balanced with “Substantial” magnitude of change amounts to long-term landscape effects of “Moderate” significance upon the physical fabric of the landscape of the Proposed Wind Farm site (see *Appendix 14-1: LVIA Methodology*, Section 1.7 Assessing Landscape Effects). The landscape effects shall be highly localised to the footprint of the Proposed Project within the Proposed Wind Farm site. Landscape effects on the perceptual and aesthetic character of the Proposed Wind Farm site are deemed to be “Long term”, “Negative” and of “Moderate” significance, which is not significant.

14.7.3.1.2 Landscape of the Proposed Grid Connection Route

As the Proposed Grid Connection Route cabling is located underground, landscape effects during the Operational Phase will be “Imperceptible” once vegetation has re-established along the roadway following earthworks during the Construction Phase. The landscape effects occurring during the Construction Phase of the Proposed Grid Connection Route are reported above in Section 14.7.2 Construction Phase Effects.

Proposed Onsite 110kV Substation and BESS. During the operational phase, landscape effects will occur with the proposed on-site 110kV substation and BESS compound being materially installed on-site, thereby substantially altering the physical fabric of the landscape within the footprint of the compound. Landscape effects of the proposed substation will be highly localised to the footprint of the substation and its ancillary features, giving rise to “Negative”, “Long-Term” and “Moderate” landscape effects, which is not significant.

14.7.3.1.3 Mitigation Measures for Landscape Effects during Operation

Regarding mitigation measures to help reduce landscape effects of the Proposed Wind Farm, this LVIA points to the Biodiversity Management and Enhancement Plan (BMEP) which has been prepared as part of this EIAR (see Appendix 6-4). The BMEP will have the dual effect of providing ecological enhancement to the landscape area of the Proposed Wind Farm site as well as potential visual screening of some lower lying infrastructure of the Proposed Wind Farm, thereby also mitigating effects on landscape character during the Operational Phase.

The following measures from the BMEP which have been included in the Proposed Wind Farm design are deemed to have the effect of avoiding or reducing direct effects on landscape receptors, meaning individual landscape features and the landscape character of the Proposed Wind Farm site as a whole:

- New planting and management of native woodland habitat within the Proposed Wind Farm site, including new planting of advance stock native trees.
- Riparian woodland planting and linear connectivity to create commuting for foraging fauna and other protected fauna.
- Protection and maintenance of high diversity wet grassland habitat which occurs outside the development footprint within the Proposed Wind Farm site.

14.7.3.1.4 LCA Assessment Outcomes (Appendix 14-2)

Table 14-13 Summary of LCA Assessment Effects Outcomes (Appendix 14-2)

| LCA Ref. | Name | LCA Sensitivity | Magnitude of Change in LCA | Significance of Effect |
|-----------|---------------------------------|-----------------|----------------------------|-------------------------|
| T-LCA-2 | Thurles Hinterland | Low. | Negligible. | Imperceptible. |
| T-LCA-4 | River Suir Central Plain | Low. | Slight. | Not Significant. |
| T-LCA-17a | Hollyford Hills Mountain Mosaic | Low. | Moderate. | Slight. |
| L-LCA-1 | Agricultural Lowlands | Low. | Slight. | Not Significant. |

“Imperceptible” and “Not Significant” Landscape Effects (LCA-1, LCA-2, LCA-4). All LCAs were determined to be of Low sensitivity to wind energy development. LCA-2 Thurles Hinterland is located at the far northeast of the LCA Study Area and no infrastructure of the Proposed Project will be located within the LCA, hence the magnitude of change will be “Negligible.” LCA-4 River Suir Central Plain

comprises a vast area to the southeast and south of the Proposed Wind Farm site and LCA-1 Agricultural Lowlands is located at the far southwest of the study area; LCA-4 and LCA-1 both contain portions of the Proposed Grid Connection Route hence the magnitude of change will be “Slight” owing to material alteration of the landscape that is temporary, localised and transient in nature. All LCAs comprise lowland plains within river valleys with landscapes primarily of flat, open pastoral fields and localised, gentle undulations in terrain. All LCAs are considered as robust or low sensitivity with unremarkable scenic quality and with high levels of human intervention (modified working landscapes) including population centres, sparse rural development and extensive networks of roads and utility lines. The key characteristics of these LCAs include wide rolling vistas of pastoral land and the well-developed nature of hedgerows extensive along field boundaries. From these LCAs, the proposed turbines will be visible at great distance (up to 15km from the Proposed Wind Farm site) and would thus be perceived at modest scale in the background of views. From locations in the LCAs within 3-5km of the Proposed Wind Farm site, the proposed turbines may have a higher degree of visibility where open views occur in the direction of Knockbane peak and the foothills of the Slieve Felim Mountains, yet the proposed turbines will be viewed in a landscape already well-established with wind energy development. For these reasons, there will be “Imperceptible” effects in LCA-2 where the landscape will not be materially altered and the proposed turbines will be viewed at great distance, and there will be “Not Significant” effects in LCA-1 and LCA-4 where some material alteration of the landscape will take place and the proposed turbines may be viewed from some locations in closer proximity.

“Slight” Landscape Effects (T-LCA-17a). The greatest landscape effects will occur within Co. Tipperary LCA-17a Hollyford Hills Mountain Mosaic where all 14 no. proposed turbines are located, owing to the material alteration of the landscape where the proposed turbines are to be introduced. The direct physical changes to the landscape will be highly localised to within the footprint of the Proposed Wind Farm site and small portion of the Proposed Grid Connection Route that falls within this LCA, with no physical changes to the landscape beyond the Proposed Wind Farm site boundary. These areas collectively occupy a very small percentage of the total LCA land area. In addition, LCA-17a is designated in the TCDP 2022-2028 as having “High” capacity for wind energy development and was determined to be “Low” sensitivity in this LVIA. Further, LCA-17a is defined in the local policy as having “*capacity to accommodate development without undue deterioration in the scenic quality*” and is classed as “*Medium Sensitivity*” such that “*Change or Development is generally acceptable*” because “*the landscape is somewhat degraded, so undergoing change or the precedent for such and similar development is set and the landscape is capable of absorbing considerable change without detriment*” (TCDP 2022-2028). Finally, effects on the key visual sensitivity of LCA-17a, being “*spectacular views towards the south taking in most of the County, from the area’s southern hilltops,*” are limited due to the nature of spatial enclosures among the marginal foothills terrain and extensive forestry which reduce visibility of the proposed turbines and cumulative turbines. For these reasons the magnitude of change for LCA-17a is reported as “Moderate,” resulting in overall “Slight” landscape effects.

The key mitigating factors that reduce the potential for effects on landscape character of designated LCAs in the LCA Study Area are:

- The compatibility of LCA-17a to “Windfarm” land-use type is given as “High” (Table 6.2, p.50), which is the highest compatibility classification for wind energy development out of a five-tier compatibility scale—only two LCAs in the county have been given this capacity rating for the wind energy land-use type. This favourable compatibility rating indicates that the landscape is highly suitable for wind energy development.
- LCA-17a is defined as having “*capacity to accommodate development without undue deterioration in the scenic quality*” (TCDP 2022-2028).
- LCA-17a is classed as “*Medium Sensitivity*” such that “*Change or Development is generally acceptable*” because “*the landscape is somewhat degraded, so undergoing change or the precedent for such and similar development is set and the landscape is capable of absorbing considerable change without detriment*” (TCDP 2022-2028).
- Effects on the key visual sensitivities of LCA-17a, being “*extensive views eastwards from elevated points across to Kilkenny and the south of the county*” and “*spectacular views*”

towards the south taking in most of the County, from the area’s southern hilltops,” are limited due to the nature of spatial enclosures among the marginal foothills terrain and extensive forestry which reduce visibility of the proposed turbines and cumulative turbines.

- The uplands of Slieve Felim Mountain range and Knockbane peak is generally robust landscape characterised by small spatial enclosures and undulating terrain which has effectively absorbed multiple wind energy developments to date.
- See further mitigation measures for effects on LCAs in the tables of *Appendix 14-2*.

14.7.3.15 **Landscape Effects on Co. Tipperary Secondary Amenity Area**

The proposed turbines are located within the Slievephelim Complex Secondary Amenity Area; landscape views from within the amenity area are shown in Plate 14-8 below. This is considered a “High” sensitivity landscape receptor and while there are no specific key sensitivities listed in the TCDP 2022-2028 for this amenity area, this LVIA considers the value of scenic views within the amenity area and looking out to the wider landscape from the amenity area. Therefore, the potential landscape effects are herein discussed in terms of theoretical visibility of the proposed turbines within the amenity area.



Plate 14-8 Landscape views from within Slievephelim Complex Secondary Amenity Area (TCDP 2022-2028), where the proposed turbines are located

Theoretical visibility within this Secondary Amenity Area is limited to within 5km of the proposed turbines. Beyond 5km to the north, the majority of this Secondary Amenity Area has no theoretical visibility of the proposed turbines. The TCDP 2022-2028 policy 11-7 states that “*Developments should avoid visually prominent locations and be designed to use existing topography to minimise adverse visual impact on the character of primary and secondary amenity areas.*” This LVIA determines that the design of the Proposed Project effectively utilises screening of the existing topography in order to minimise visual impact of the proposed turbines from multiple vantage points; discussed as follows.

From vantage points in the north of Slievephelim Complex beyond 5km of the Proposed Wind Farm site, the steep mountainous terrain visually screens the turbines from views, thereby minimising adverse visual impact on the character; this is evident in ZTV mapping. Within 5km of the proposed turbines, visibility in the direction of the proposed turbines is varied. Photomontages VP03, VP06 and VP09 represent views from equal or higher elevations as the Proposed Wind Farm site, effectively looking down towards the proposed turbines or at the same level. The assessment in *Appendix 14-3* shows that the proposed turbines do not impact scenic views in the foreground and do not obstruct the long-ranging views of the River Suir valley. The proposed turbines are spaced such that long-ranging views are not fully obscured and are still available looking between and beyond the towers and blades. The proposed turbines are set back beyond visible ridgelines, thereby not obstructing existing scenic views of agricultural fields and mature vegetation within the foothills at the same elevation.

The proposed turbines will alter the physical character of Slievephelim Complex Secondary Amenity Area because they are located within it; therefore, the magnitude of change arising as a result of the Proposed Project will be “Moderate.” However, as there will be no visual effects for the majority of the

amenity area and the impact on long-ranging views is limited, the residual landscape effect is deemed to be “Slight,” which is not significant.

14.7.3.2 Visual Effects during Operation

14.7.3.2.1 Viewpoint Assessment Outcomes (Appendix 14-3)

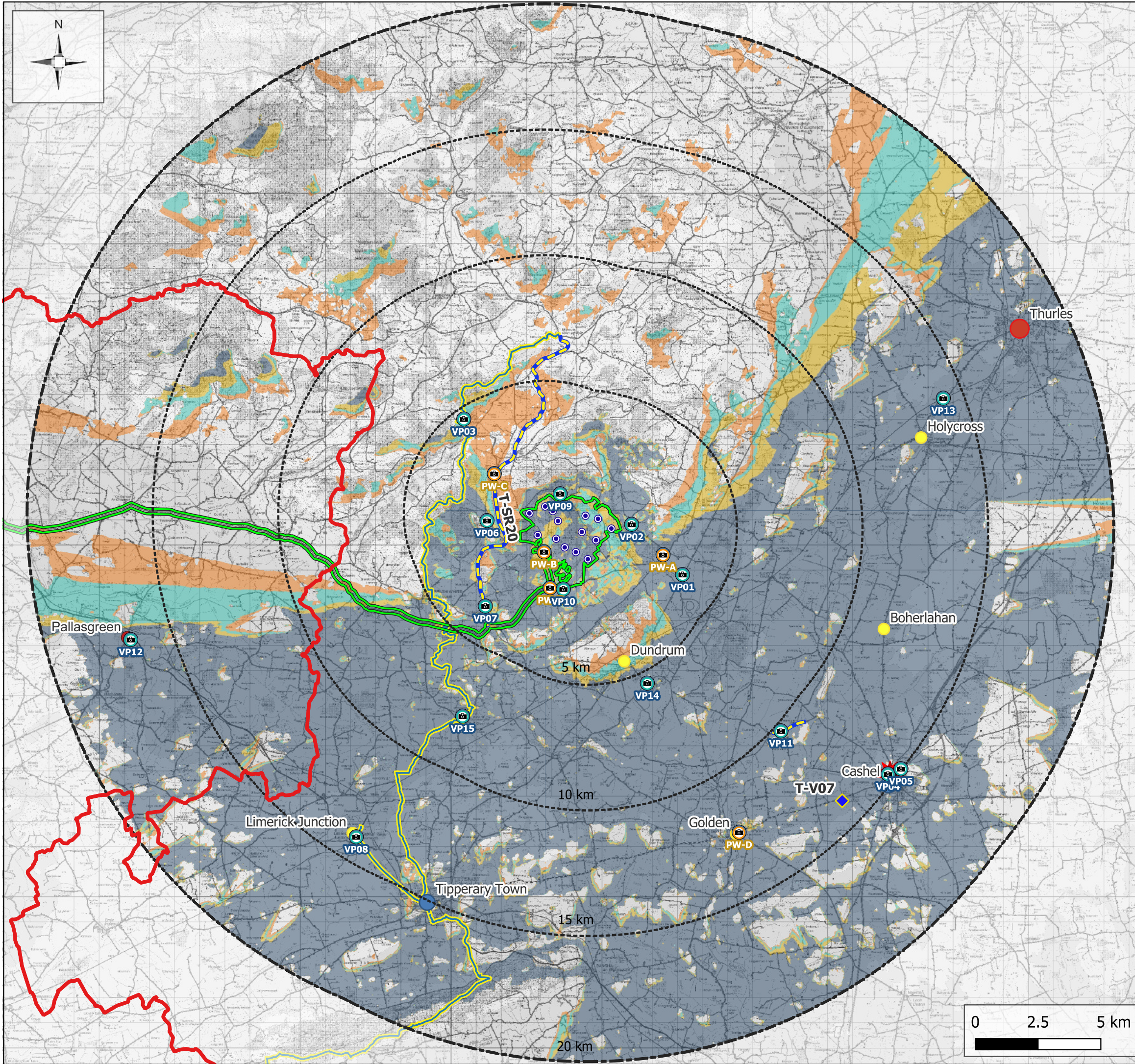
Figure 14-14 below maps the viewpoints with all visual receptors included in the assessment as well as the ZTV showing theoretical visibility for all assessed visual receptors. The impact assessment outcomes of VP01-VP15 are summarised in Table 14-14 below. This table and *Appendix 14-3* should be read in conjunction with the *EIAR Volume 2: Photomontage Booklet*.

Regarding the proposed turbines, whether a visual effect is deemed to be positive, negative or neutral, involves a degree of subjectivity; this approach is based on the GLVIA3 (p.113, para.6.29) which outlines the general subjectivity of describing visual effects in an LVIA context. The GLVIA3 highlights that what appears to be a positive effect to one viewer could be deemed to be a negative effect by another viewer. In this LVIA, all predicted visual effects of the viewpoints below are ‘Long-Term’ and ‘Direct’ effects, and the indication of “Positive,” “Negative” or “Neutral” is stated in the discussions.

Alternative Photowire Viewpoints

To aid discussions of visual effects in this LVIA, imagery from 5 no. alternative viewpoint locations was produced, classified as Type 3 Visualisations in the LI TGN 06/18. These images constitute early-stage draft photomontage imagery which were not assessed in the LVIA. The images are draft and do not include modelling of cumulative permitted or proposed developments in the LVIA Study Area. The photowires locations are mapped on Figure 14-14 below as orange icons and represent the following locations where visibility of the proposed turbines is limited:

- PW-A: L1282 at Gorteennamona. View from the L1282 Local Road in the townland of Gorteennamona. Located approximately 2.3km south-east of the nearest turbine (T10). Grid Reference: E 598398, N 649659.
- PW-B: L1154 at Moheragh. View from the L1154 Local Road in the townland of Moheragh. Located approximately 705m south-west of the nearest turbine (T04). Grid Reference: E 593659, N 649773.
- PW-C: N74 at Golden Village. View from the N74 National Road in the Village of Golden. Located approximately 12.4km south east of the nearest turbine (T12). Grid Reference: E 591677, N 652884.
- PW-D: L5108 at Curraheen. View from the L5108 Local Road in the townland of Foilaclug. Located approximately 1.9km west of the nearest turbine (T07). Grid Reference: E 601426, N 638609.
- PW-E: L1290 at Scarrough. View from the L1290 Local Road in the townland of Scarrough. Located approximately 1.8km south-west of the nearest turbine (T03). Grid Reference: E 593899, N 648342.



Map Legend

- County Boundaries
- LVIA Study Area
- EIA Site Boundary
- Proposed Turbine Locations
- 📷 Photomontage Viewpoint Locations
- 📷 Photowire Viewpoint Locations
- Co. Tipperary**
- Co. Tipperary Designated Scenic Routes
- ◆ Co. Tipperary Designated Scenic Views
- Co. Tipperary Settlement Hierarchy**
- Key Towns
- District Towns
- Service Centres
- Co. Limerick Settlement Hierarchy**
- Large Village
- Recreational & Tourist Destinations**
- ★ Rock of Cashel point
- Way Marked Walking Trails
- Zone of Theoretical Visibility**
- 1-4 Turbines Theoretically Visible
- 5-8 Turbines Theoretically Visible
- 9-11 Turbines Theoretically Visible
- 12-14 Turbines Theoretically Visible

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Drawing No.

Figure 14-14

Drawing Title

Visual Receptors & ZTV

Project Title

Carrow Wind Farm

| | | | | |
|-----------|-------------|------------|----------|------------|
| Scale | Project No. | Date | Drawn By | Checked By |
| 1:147,500 | 231102 | 04.02.2026 | JC | RS |



Table 14-14 Summary of Viewpoint Impact Assessment Outcomes (Appendix 14-3)

| VP No. | Description | Grid Ref. | Visual Sensitivity of Receptors | Magnitude of Visual Change | Significance of Residual Visual Effect |
|--------|--|------------------------|---------------------------------|----------------------------|--|
| VP01 | R661 Northeast of Dundrum: View from the R661 Regional Road in the townland of Gorteennamona. Located approximately 3.7km south-east of the nearest turbine (T10). | E: 599173 N: 648868 | Medium. | Slight. | Slight. |
| VP02 | Glenough Lower: View from the L1284 Local Road in the townland of Glenough Lower. Located approximately 820m east of the nearest turbine (T10). | E: 597145 N: 650868 | High. | Moderate. | Moderate. |
| VP03 | Multeen Way near Tooreen: View from the Multeen Way near Tooreen peak, way-marked walking trail on the L5105 Local Road in the townland of Birchgrove. Located approximately 4.6km north-west of the nearest turbine (T07). | E: 590463 N: 655059 | High. | Slight. | Not Significant. |
| VP04 | Rock of Cashel: View from the Rock of Cashel in the townland of St. Patricksrock. Located approximately 14.7km south-east of the nearest turbine (T12). | E: 607355 N: 640928 | Very High. | Slight. | Slight. |
| VP05 | Setting of Rock of Cashel: View from the L5409 Local Road in the townland of Palmers Hill. Located approximately 15km south-east of the nearest turbine (T12). | E: 607869 N: 641138 | High. | Negligible. | Not Significant. |
| VP06 | Foilaclug above SR-20: View from the L5108 Local Road in the townland of Foilaclug, situated above Co. Tipperary designated Scenic Route 20. Located approximately 1.7km west of the nearest turbine (T07). | E: 591387 N: 651016 | High. | Moderate. | Moderate. |
| VP07 | SR-20 at Drumminacunna: View from Co. Tipperary designated Scenic Route 20 (R497) in the townland of Drumminacunna. | E: 591323 N: 647614 | High. | Slight. | Slight. |

| VP No. | Description | Grid Ref. | Visual Sensitivity of Receptors | Magnitude of Visual Change | Significance of Residual Visual Effect |
|--------|--|------------------------|---------------------------------|----------------------------|--|
| | Located approximately 3.5km south-west of the nearest turbine (T08). | | | | |
| VP08 | N24 at Limerick Junction: View from the N24 National Road in the townland of Ballykisteen. Located approximately 14.2km south-west of the nearest turbine (T13). | E: 586180 N: 638427 | Low. | Slight. | Not Significant. |
| VP09 | Glencarbry: View from the L51161 Local Road in the townland of Glencarbry. Located approximately 750m north-east of the nearest turbine (T06). | E: 594301 N: 652082 | High. | Substantial. | Significant. |
| VP10 | Scarrough: View from the L1282 Local Road in the townland of Scarrough. Located approximately 1.5km south-west of the nearest turbine (T12). | E: 594430 N: 648290 | High. | Moderate. | Moderate. |
| VP11 | SR-33 at Ballynahinch: View from Co. Tipperary Scenic Route 33 on the R505 Regional Road in the townland of Ballynahinch. Located approximately 10.3km south-east of the nearest turbine (T12). | E: 603092 N: 642644 | High. | Slight. | Not Significant. |
| VP12 | Pallasgreen: View from the N24 National Road in the townland of Kilduff. Located approximately 16.7km south-west of the nearest turbine (T08). | E: 577201 N: 646280 | Low. | Slight. | Not Significant. |
| VP13 | R660 at Beakstown: View from the R660 Regional Road in the townland of Beakstown, representing views from Thurles. Located approximately 14.2km north-east of the nearest turbine (T10). | E: 609557 N: 655888 | Low. | Negligible. | Not Significant. |

| VP No. | Description | Grid Ref. | Visual Sensitivity of Receptors | Magnitude of Visual Change | Significance of Residual Visual Effect |
|--------|--|------------------------|---------------------------------|----------------------------|--|
| VP14 | R505 at Dundrum: View from the R505 Regional Road in the townland of Dundrum. Located approximately 5.5km south-east of the nearest turbine (T12). | E: 597771 N: 644546 | Medium. | Slight. | Slight. |
| VP15 | Multeen Way at Donohill: View from the Multeen Way in the River Suir valley at Donohill village, way-marked walking trail on L4206 Local Road in the townland of Donohill Lands. Located approximately 7.8km south-west of the nearest turbine (T13). | E: 590415 N: 643233 | Low. | Slight. | Not Significant. |

14.7.3.2.2 Visual Effects on Designated Scenic Routes and Views

Co. Tipperary SR-20

Co. Tipperary designated Scenic Route SR-20 (R497) traverses N-S through the Slieve Felim Mountains and passes within 1km of the Proposed Wind Farm site at its western boundary. SR-20 has none to limited theoretical visibility of the proposed turbines for most of its length owing to its location within steep mountainous terrain that limits the potential for visibility; this is evident on the ZTV map (extracted below in Figure 14-15). The protected views are defined as “Views in all directions from Ironmills to Milestone Road (R497)” (TCDP 2022-2028). Views from SR-20 are represented by photomontages VP06 and VP07 located to the west and southwest of the Proposed Wind Farm site.

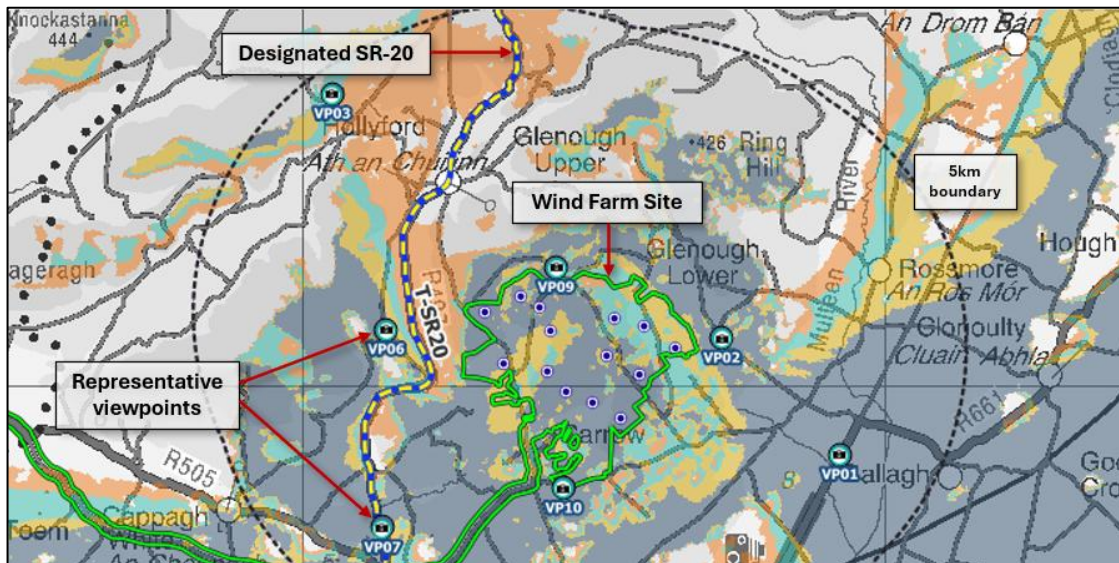


Figure 14-15 Position of SR-20 and representative viewpoints relative to the Proposed Wind Farm site, and theoretical visibility of the proposed turbines (ZTV follows legend of Figure 14-14)

For the avoidance of doubt, VP06 was captured on elevated terrain above the scenic route to show more open visibility in the direction of the proposed turbines; however, the view does not represent the majority of views which would be experienced on the route. Most views from SR-20 itself will have considerably less visibility than what is shown in in the photomontage image, or none at all from vantage points in the north. VP06 was given “High” sensitivity on account of representing the scenic route and the magnitude of change was deemed to be “Moderate” as the proposed turbines are partially visible at moderate/large scale relative to the landscape and there are cumulative effects with existing visible turbines. The setback distance exceeds the recommended guidance set out in the WEDGs and the proposed turbines are setback beyond ridgelines from this vantage point and do not obstruct long-ranging or short-ranging scenic views; thereby resulting in a “Negative” and “Moderate” residual visual effect, which is not significant.

VP07 was captured directly on the scenic route at the only location shown to have Full theoretical visibility of the proposed turbines, located 3.5km southwest of the Proposed Wind Farm site. VP07 was given “High” sensitivity on account of representing the scenic route and the magnitude of change was deemed to be “Slight” as follows. The imagery demonstrates that visibility of the proposed turbines is limited by a number of factors including distance, the nature of setback positioning within the modified working landscape of agricultural fields, and visual screening by dense vegetation along field boundaries and roads. The residual visual effect was determined to be “Negative” and “Slight,” which is not significant.

Co. Tipperary SR-33

Co. Tipperary designated Scenic Route SR-33 (R505) is relatively short in total length (less than 1.3km) and is located greater than 10km from the Proposed Wind Farm site. SR-33 is located in an area with full theoretical visibility of the proposed turbines; however, the protected views are defined as “Views south along road R505 at Drehideenglashanatooha Bridge” (TCDP 2022-2028) thus the protected views look in the opposite direction of the Proposed Wind Farm. Owing to its location in the lowlands of the River Suir valley there is potential for visibility of the proposed turbines in the long-distance views looking north towards Knockbane peak and the foothills of the Slieve Felim Mountains, which are not part of the protected views. Therefore, for the avoidance of doubt, VP11 was captured on SR-33 looking north towards the proposed turbines and represents views which are looking in the opposite direction of the protected views to the south. As VP11 is located on the designated scenic route, the sensitivity is deemed “High.” The assessment in *Appendix 14-3* indicates that, from this vantage point, the proposed turbines are seen in the background of views and are perceived at very modest scale relative to the landscape, and that multiple proposed turbines are partially screened from view by terrain features in the distance. There will also be partial visibility of cumulative existing turbines in the background of views in the same landscape as the proposed turbines and perceived at the same modest scale relative to the landscape, thereby giving a “Slight” magnitude of change. The residual visual effect was determined to be “Negative” and “Not Significant.”

Co. Tipperary T-V07

Co. Tipperary designated scenic view T-V07 is located >14km from the Proposed Wind Farm site and is defined as “Views from N74 at Deerpark, Cashel” (TCDP 2022-2028). The ZTV indicates “Full” theoretical visibility and the on-site appraisal indicates that there is potential for visibility of the proposed turbines at this location. Views from T-V07 are very similar to those from the Rock of Cashel historical site, which are represented by VP04 and assessed below in Section 14.7.3.2.3, see discussions on the residual visual effect of “Not Significant.”

14.7.3.2.3 Visual Effects on Rock of Cashel

The Rock of Cashel historical site, also known as St. Patrick’s Rock, sits on top of a prominent localised hillock in Cashel townland, Co. Tipperary overlooking broad views of the River Suir valley and countryside (see Plate 14-9 below).



Plate 14-9 Rock of Cashel historical site in Co. Tipperary

The Rock of Cashel is located 14.7km from the Proposed Wind Farm site and is a nationally renowned popular tourist destination with high historical and archaeological value. In this LVIA, views from the historic site itself (VP04) are considered “Very High” sensitivity, as the site is a destination for visitors to

come and experience the landscape views and historical landscape setting and appreciate the archaeological significance of the site. Views of the wider landscape setting (VP05) in which Rock of Cashel can be seen are considered “High” sensitivity as these views occur mainly from local road networks surrounding the site and would be experienced primarily in a journey scenario without stationary focus.

In addition, one designated scenic view, T-V07 defined as “*Views from N74 at Deerpark, Cashel*” in the TCDP 2022-2028, has similar views to that of VP04 (those from the Rock of Cashel site itself) and therefore has potential visibility of the proposed turbines. The assessment of the similar views at VP04 is applicable to T-V07, as discussed below.

The assessment in *Appendix 14-3* determined that, in views both from the Rock of Cashel historic site and in views of the Rock of Cashel within its wider landscape setting, the proposed turbines are perceived at very modest scale relative to the landscape in the distant background of views and are do not obstruct scenic views of the River Suir valley or scenic views of historic structures. The proposed turbines are greatly set back beyond the River Suir valley landscape and are seen to add a low number of new visual elements to the landscape background which is already established with wind energy development. On account of the distance from Rock of Cashel to the Proposed Wind Farm site, the proposed turbines are effectively accommodated in the long-ranging and expansive panoramic views.

For views from the Rock of Cashel site (VP04), which are “Very High” sensitivity, and the similar views from designated scenic view T-V07, the magnitude of change is deemed “Slight” owing to the great distance and small perceived scale of visible turbines relative to the landscape; thereby resulting in a “Negative” “Slight” residual visual effect, which is not significant. For similar views of the wider landscape setting in which Rock of Cashel and other historic structures are viewed (VP05), the magnitude of change is deemed “Negligible” on account of the general views being experienced in the distant background of a journey scenario through the landscape which is wide and extensively panoramic in nature. The panoramic views are intermittent in a journey scenario, as the road network traverses amongst localised hilly terrain, as evidenced by VP05 where the Rock of Cashel site can be seen at the left of the image and the partial panoramic view of distant mountains in the background is screened to the right by hilly terrain in the foreground, resulting in “Negative” “Not Significant” residual visual effects.

14.7.3.2.4 **Visual Effects on Multeen Way Trail**

The waymarked walking trail Multeen Way is a linear walking route from Milestone to Co. Tipperary town, traversing N-S through the Slieve Felim Mountains and at its closest point passes within 2.7km of the Proposed Wind Farm site near the western boundary. Within 5km of the Proposed Wind Farm site, the Multeen Way has None to Full theoretical visibility of the proposed turbines for views looking to the east; this is evident on the ZTV map (extracted below in Figure 14-16).

Views from the Multeen Way are represented by photomontages VP03 and VP15, located northwest and southwest of the Proposed Wind Farm site. VP03 was captured on the trail near Tooreen peak and represents views effectively looking down onto the setting of the proposed turbines from a higher elevation where visibility in the direction of the proposed turbines is generally limited by the nature of steep mountainous terrain. In contrast, VP15 was captured on the trail (aligning the L4206 Local Road) in the lowland plains, representing views from the valley landscape looking up towards the foothills of Knockbane peak and the Slieve Felim Mountains where most views have Full theoretical visibility of the proposed turbines.

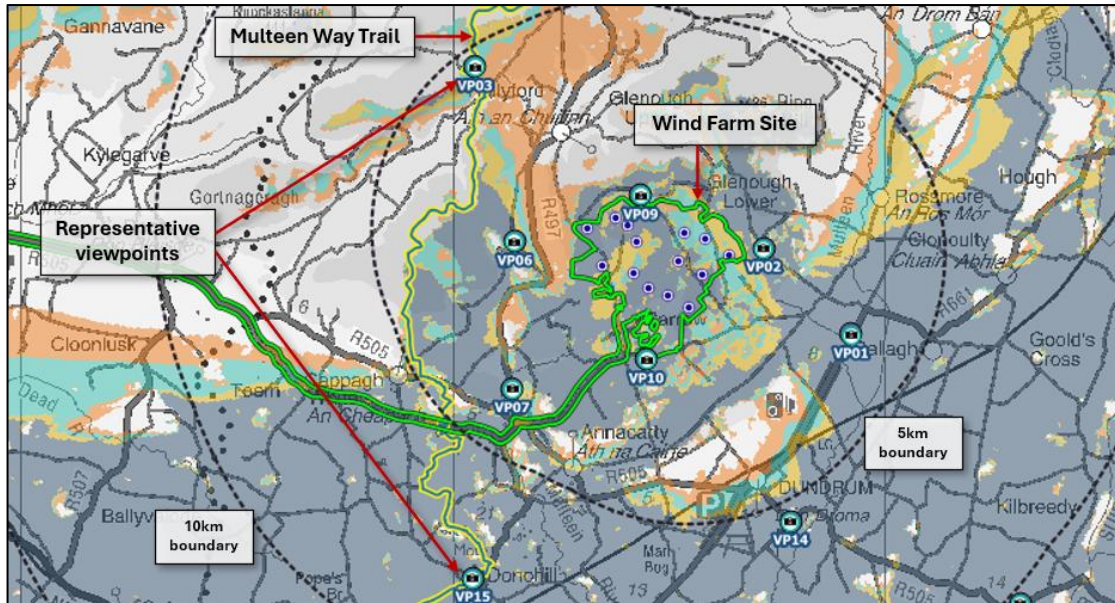


Figure 14-16 Position of Multeen Way Trail and representative viewpoints relative to the Proposed Wind Farm site, and theoretical visibility of the proposed turbines (ZTV follows legend of Figure 14-14)

VP03 (4.6km from the site) and VP15 (7.8km) were both given “High” sensitivity on account of the recreational value of the waymarked walking trail. The magnitude of change for both VPs was determined to be “Slight,” as for views from higher elevations the proposed turbines are set back beyond ridgeline and for views from lower elevations the proposed turbines are perceived at very modest scale relative to the landscape. The proposed turbines add a low number of new elements to the landscape which is already established with wind energy development. VP03 demonstrates that the nature of dense vegetation and steep undulating topography at higher elevations considerably limits visibility in the direction of the proposed turbines and that the proposed turbines do not impact scenic views in the foreground and do not obstruct the long-ranging views of the River Suir valley. Likewise, VP15 demonstrates that from lower elevations in the valley, proposed turbines are intermittently screened from view by vegetation in the foreground and terrain features in the distance, and the nature of the wide sweeping landscape views effectively absorbs the proposed turbines in the background of views. As a result, the residual visual effects on Multeen Way are “Negative” and “Not Significant.”

14.7.3.2.5 Visual Effects on Dunderum Village

Dunderum Village is located within 5km of the proposed turbines, to the southeast of the Proposed Wind Farm site and shows theoretical visibility on the ZTV Map ranging from None to Full. Views from Dunderum are represented by VP14 (5.5km from the site) captured near recreational woodlands from a higher vantage point with open views looking up toward the foothills in the direction of the proposed turbines. From this vantage point, the proposed turbines are partially screened for being set back beyond the ridgeline and occupy a small horizontal extent of the view. They have an even height profile and are showing full blades visible above the horizon which avoids visual confusion. More distant views in the direction of the proposed turbines from R661 Regional Road coming into Dunderum from the northeast within the valley lowlands are represented by VP01 (3.7km from the site). From this vantage point in the lowlands, the proposed turbines are seen to be set back beyond the lowland fields and mature vegetation which are visible in the foreground, and some turbines are set back beyond the visible ridgeline within the foothills. Multiple proposed turbines are partially screened from view by vegetation in the foreground and terrain features in the distance; this is supported by photowire PW-A (2.3km from the site) captured on the L1282 Local Road in the townland of Gorteenamona (see *Appendix 14-5 Photowire Booklet*). As a result, the residual visual effects on Dunderum are “Negative” and “Slight,” which is not significant.

14.7.3.2.6 Visual Effects on Thurles Town

Thurles (Key Town) is located within 15-20km of the proposed turbines to the northeast of the Proposed Wind Farm site within the River Suir valley lowlands and views are represented by VP13, captured near the village of Holycross on R660 Regional Road at a distance of 14.2km from the proposed turbines. The assessment in Appendix 14-3 shows that from this vantage point of VP13, the proposed turbines are partially visible on the distant slopes of Knockbane peak, alongside turbines of other existing cumulative wind farms. From this distance, the proposed turbines are perceived at very modest scale relative to the landscape and are seen in the background of views and multiple proposed turbines are partially screened from view by terrain features in the distance. Thurles Town is located at greater distance from the site than VP13 and therefore the visibility from Thurles Town itself are likely to be even less. The sensitivity is deemed “Low” and the magnitude of change is deemed “Negligible,” resulting in residual visual effects which are “Negative” and “Not Significant.” Cumulative effects are discussed in Section 14.7.4 Cumulative Landscape and Visual Effects.

14.7.3.2.7 Visual Effects in the Southeast of the LVIA Study Area

Views towards the proposed turbines from the southeast lowlands within the River Suir valley are represented by Photowire PW-D (see *Appendix 14-5 Photowire Booklet*) captured in the village of Golden located 12.4km from the Proposed Wind Farm site. From this vantage point, PW-D shows that there is limited visibility of the proposed turbines owing to undulating terrain and dense vegetation throughout the lowland fields which partially screen the proposed turbines. Some proposed turbine blades and towers will be visible above the horizon, and the view of proposed turbines occupies a very small horizontal extent. For Golden and from similar vantage points in the southeast of the LVIA Study Area, the residual visual effects are likely to be “Negative” and “Not Significant.”

14.7.3.2.8 Visual Effects in the Southwest of the LVIA Study Area

Views towards the proposed turbines from the southwest of the LVIA Study Area are represented by VP08 captured at the overpass of Limerick Junction located 14.2km from the Proposed Wind Farm site. VP08 is also located on the waymarked walking trail, Ballhoura Way, which traverses the southernmost part of the LVIA Study Area (approx. 15-20km from the site) and passes through mountains, hills and ridges and overlooks the Glen of Aherlow. The assessment in *Appendix 14-3* shows that visibility is limited from this vantage point owing to the great distance and degree of visual screening in the flat landscape by intervening features such as localised undulating landforms, built structure and dense vegetation. The proposed turbines are visible on the distant slopes of Knockbane peak, on the near side of the foothills, perceived at very modest scale relative to the landscape, and are visible amongst cumulative existing turbines, also in the distance. With “Low” sensitivity and a “Slight” magnitude of change, the residual visual effects on Limerick Junction and the Ballyhoura Way are found to be “Negative” and “Not Significant.” Cumulative effects are discussed in Section 14.7.4 Cumulative Landscape and Visual Effects.

14.7.3.2.9 Visual Effects in the West of the LVIA Study Area

Views towards the proposed turbines from the southwest of the LVIA Study Area are represented by VP08 captured at the overpass of Limerick Junction located 14.2km from the Proposed Wind Farm site. The assessment in *Appendix 14-3* shows that visibility is limited from this vantage point owing to the great distance and degree of visual screening in the flat landscape by intervening features such as localised undulating landforms, built structure and dense vegetation. The proposed turbines are visible on the distant slopes of Knockbane peak, on the near side of the foothills, perceived at very modest scale relative to the landscape, and are visible amongst cumulative existing turbines, also in the distance. With “Low” sensitivity and a “Slight” magnitude of change, the residual visual effects are found to be “Negative” and “Not Significant.” Cumulative effects are discussed in Section 14.7.4 Cumulative Landscape and Visual Effects.

Views towards the proposed turbines from the west of the LVIA Study Area in the Dead River and Mulkear River valley are represented by VP12 captured at the outskirts of Pallasgreen village located 16.7km from the Proposed Wind Farm site. The assessment in Appendix 14-3 indicates that from this vantage point, the proposed turbines are partially visible on the distant slopes of Knockbane peak, perceived at very modest scale relative to the landscape, and are mostly visually screened behind the terrain or vegetation because the proposed turbines are set back beyond the foothills. With “Low” sensitivity and a “Slight” magnitude of change, the residual visual effects are found to be “Negative” and “Not Significant.” Cumulative effects are discussed in Section 14.7.4 Cumulative Landscape and Visual Effects.

14.7.3.2.10 Visual Effects on Local Residential Receptors (<2km)

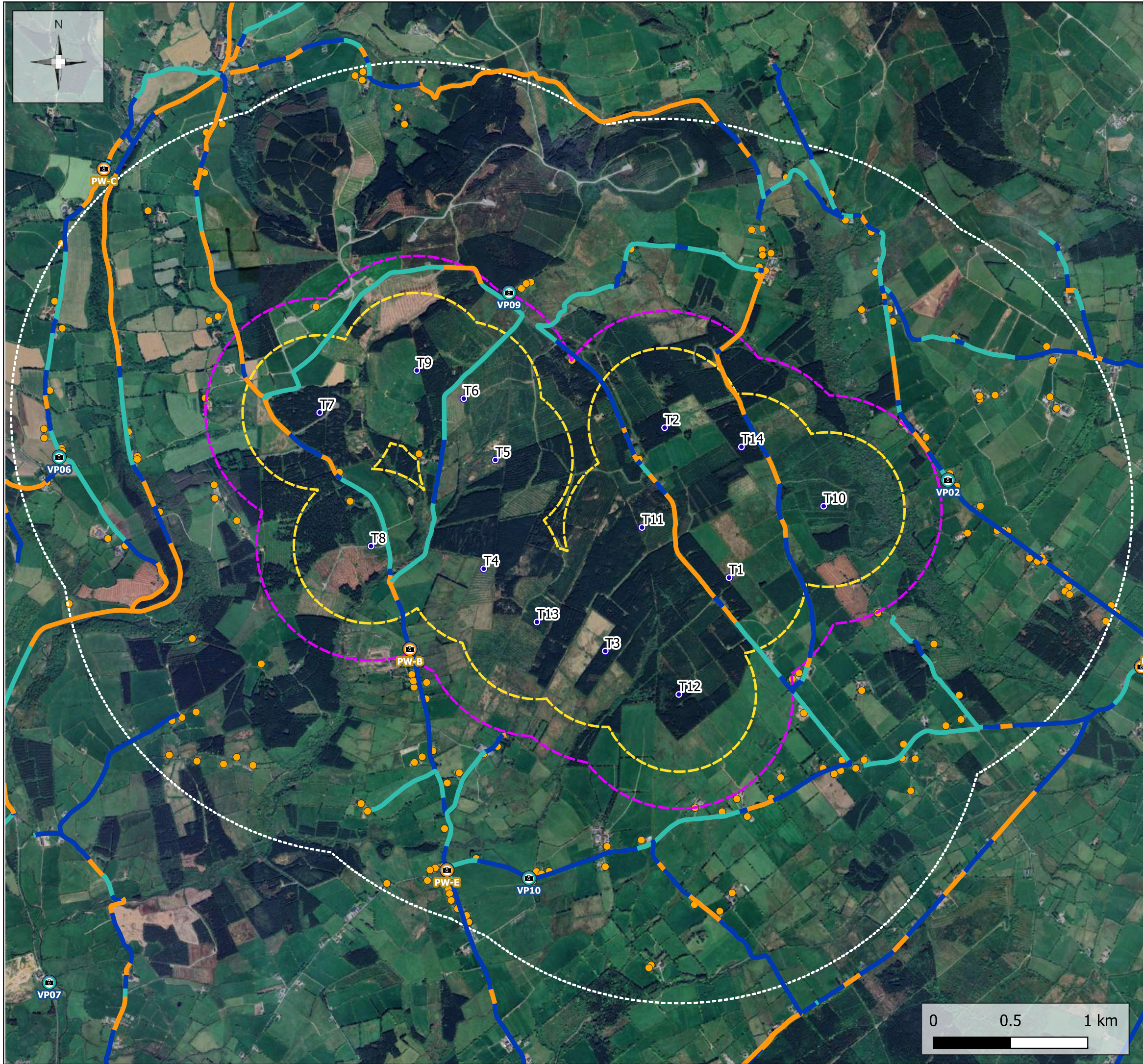
The Proposed Wind Farm site is located in a sparsely populated marginal upland landscape, well set-back from sensitive landscape and visual receptors, large population centres and most receptors protected in local planning policy. During the site selection process, early stage LVIA appraisals identified local residential receptors as having potential to be adversely impacted by the proposed turbines with regard to visual impacts. Consequently, visual impact assessment on local residential receptors was considered during site selection and throughout the iterative design process for the Proposed Project.

This LVIA has determined that receptors beyond 2km of the proposed turbines will have very limited visibility of the proposed turbines. Therefore, this section focuses on local residential receptors within 2km of the proposed turbines. The assessment uses analysis of aerial maps, photomontages and photowire visualisations with the intention of identifying the theoretical precautionary scenario for potential visual effects on residential receptors. As detailed in Chapter 5: Population and Human Health, the landscape surrounding the Proposed Wind Farm site has a significantly low population density (see Table 5.2 in Chapter 5); therefore, the predicted visual effects discussed below would be experienced by a very low number of receptors.

The Proposed Project exceeds the recommended 500m set-back distance in the DoEHLG 2006 Guidelines and also the 4-times-tip-height set-back distance ($4 \times 185\text{m} = 740\text{m}$) explicitly set out for residential amenity prescribed by the Draft 2019 Guidelines. No dwellings are within 740m of the proposed turbines.

Viewpoints VP02, VP06, VP09 and VP10 are located within 2km of the proposed turbines, representing views from the east, west, north and south, respectively, of the Proposed Wind Farm site and are assessed in *Appendix 14-3* in detail. These viewpoints were specifically selected to assess the visual effects on local receptors in close proximity to the proposed turbines and represent “High” sensitivity viewpoints. The viewpoints selected for the LVIA are sufficient to represent the residential receptors within the LVIA Study Area, including the “*distribution of population*” (para 6.18, GLVIA3). In addition, photowires PW-A, PW-B, PW-C and PW-E are representative of similar views approximately 2km distant, to the east, south, southwest and northwest, respectively, of the Proposed Wind Farm site.

Figure 14-17 below maps all residential dwellings within 2km of the proposed turbines and indicates the minimum setback distances according to the DoEHLG 2006 Guidelines. The map overlays the Route Screening Analysis results previously presented in Section 14.3.5, to show the visual screening classes recorded on site. It can be seen that many roads within 2km of the proposed turbines are classed with “Intermittent/Partial” and “Dense/Full” visual screening, meaning that visibility of the proposed turbines will be limited or none from these areas.



Map Legend

- Proposed Turbine Locations
- 2km Buffer
- Set Back Distance Compliance - 500 metres (DoEHLG, 2006)
- Set Back Distance Compliance - 740 metres 4 x tip height (DoHPLG, 2019)
- ⦿ Photomontage Viewpoint Locations
- ⦿ Photowire Viewpoint Locations
- Dwellings within 2km of the proposed turbines

Route Screening Analysis

- Class 1 - No / Very Little Screening
- Class 2 - Partial / Intermittent Screening
- Class 3 - Dense / Full Screening

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Drawing No.

Figure 14-17

Drawing Title

Visibility Appraisal for Local Residential Receptors

Project Title

Carrow Wind Farm

| Scale | Project No. | Date | Drawn By | Checked By |
|----------|-------------|------------|----------|------------|
| 1:24,000 | 231102 | 04.02.2026 | JC | RS |



Receptors to the North

Photomontage VP09 is located 750m northwest of the proposed turbines and represents views from the local road network immediately north of the Proposed Wind Farm site, on the south-facing aspect of Knockbane peak where long-ranging views are available to the south, overlooking the River Suir valley and towards distant landscape features beyond the LVIA Study Area, including Slievenamon.

In terms of the long-ranging views from this vantage point, the Proposed Project has been designed such that there is even spacing between most towers of the proposed turbines such that long-ranging views are visible beyond the infrastructure. This is demonstrated in VP09 – View A imagery, where the distant Slievenamon is visible beyond the blades of proposed turbines T10 and T14 at the left of the image.

Within 2km of the VP09 location, the RSA results show a mix of mostly “Little/No” visual screening along the local road network, with patches of “Dense/Full” and “Intermediate/Partial” visual screening. The assessment in *Appendix 14-3* indicates that from this vantage point, the proposed turbines are visible across the rounded terrain of Knockbane peak, set within forestry tracts on the near side as well as beyond the ridgeline, with full blades visible above the horizon. The proposed turbines are perceived at large scale relative to the landscape and are prominent within the views. In addition, regarding three specific residences in close proximity to VP09 (see Figure 14-17 above), there is potential for “surrounding” effects owing to the presence of the existing Glencarbry 1 turbines located behind the viewpoint on Knockbane peak (see further discussions and Figure 14-18 in Section 14.7.4.1.2 Cumulative Visual Effects during Operation). Therefore, the magnitude of change is deemed “Substantial,” resulting in “Significant” residual visual effects.

Importantly, the residual significant impacts identified for VP09 only occur for a small number of receptors and are not representative of effects on receptors in a vast proportion of the LVIA Study Area.

It is to be anticipated that wind farms inevitably cause “Significant” visual effects on proximate sensitive visual receptors due to the prominence of turbines within landscape views and the ‘Substantial’ magnitude of change which will arise in close proximity to a wind farm development. A key focus in this LVIA is identifying the scenarios where the greatest likelihood of Significant effects occurs.

Factors which mitigate the visual effects from the vantage point of VP09 include (see *Appendix 14-3*):

- The Proposed Project exceeds the recommended 500m setback from residences (DoELHG 2006 Guidelines) and adheres to the prescribed 4-times-tip-height (740m) setback distance for residential visual amenity (Draft 2019 Guidelines) in the Wind Energy Development Guidelines, or WEDGs.
- The landscape is sparsely populated with few receptors, and this view represents a vantage point with a high degree of open visibility towards the proposed turbines; many receptors in the area with similar views may experience far less visibility of turbines.
- Scenic views looking out over the River Suir valley from this elevated vantage point are facing the opposite direction from the proposed turbines.
- The proposed turbines are set back within undulating terrain and mature vegetation and are therefore likely to be intermittently and partially visually screened from view at many locations in the area, including many properties of residential receptors.
- The proposed turbines are seen within a low sensitivity, modified working landscape of marginal upland where potential wind energy development is acceptable (“Open for Consideration” TCDP RES 2022-2028).
- This is not a view of county, regional or national renown and not a protected view in local policy

Photowire PW-C (see *Appendix 14-5*) located 1.9km northwest of the proposed turbines is located on the north side of Knockbane peak from the proposed turbines and demonstrates the nature of limited visibility from this side of the peak, owing to steep mountainous terrain and turbines being sited within separate spatial enclosures. In addition, the RSA results show mainly “Dense/Full” visual screening along the local road network in this area.

Receptors to the West

VP06 is located 1.7km west of the site, situated above SR-20, and represents views from the local road network in the mountainous terrain west of the site. VP06 is assessed in detail in *Appendix 14-3* and the “Moderate” residual visual effect is discussed above in Section 14.7.3.2.2. From this vantage point, the proposed turbines are set back beyond the ridgeline of Knockbane peak (similar to views shown in photowire image PW-C, see *Appendix 14-5*), thereby not obstructing existing scenic views of agricultural fields and mature vegetation within the foothills, which is the main focus of views in this area (rather than the long-distance views beyond the mountains to the south). The steep topography of the marginal terrain provides areas of spatial enclosures which limit views and visually screen turbines, both the proposed turbines as well as existing cumulative turbines in the area; see discussions on cumulative effects in Section 14.7.4.1.2.

Receptors to the South

VP10 is located 1.5km south of the proposed turbines and represents views along the local road network from elevations lower than the proposed turbines and looking up into the foothills of Knockbane peak. The RSA results indicate primarily “Intermittent/Partial” visual screening along the road network in this area, with patches of “Little/No” visual screening. The assessment in *Appendix 14-3* indicates that the proposed turbines are visible amongst the rolling hills of farmland and commercial forestry, with other cumulative existing turbines visible as well. While the turbines are prominently visible on the hillside, they are set back beyond the ridgeline and within the rolling terrain, thereby showing a “Moderate” magnitude of change and resulting in a “Moderate” residual visual effect.

Photowire PW-B (see *Appendix 14-5*) was captured 705m south-west of the proposed turbines on the local road network where the RSA results indicate primarily “Intermittent/Partial” visual screening. It can be seen in PW-B that, in addition to roadside screening, the proposed turbines are also partially visually screened by steep topography in some cases owing to the location of the Proposed Wind Farm site within marginal upland terrain. Photowire PW-E (see *Appendix 14-5*) is located 1.8km south-west of the proposed turbines on the local road network where the RSA results indicate a mix of “Intermittent/Partial” and “Little/No” visual screening. In PW-E, it can be seen that the turbines are set back beyond the landscape and are partially visually screened by a mix of mature vegetation in the foreground and dense field boundary vegetation in the mid ground. The proposed turbines are viewed in a sparsely populated modified working landscape and networks of utility poles and overhead lines are visible.

Receptors to the East

VP02 is located 820m east of the proposed turbines and represents views along the local road network from elevations at roughly the same level as the proposed turbines, looking across the foothills of Knockbane peak. The RSA results indicate primarily “Intermittent/Partial” and “Dense/Full” visual screening along the road network in this area. VP02 was therefore captured at one of the only locations with visibility of the proposed turbines. Importantly, VP02 represents the view looking up towards the peak of the mountain, which is not the main focus of views in this area—from this area, long-ranging views looking over the River Suir valley are available to the south, which is looking in the opposite direction of the proposed turbines. The assessment in *Appendix 14-3* indicates that the proposed turbines are visible across the top of the slope and beyond the ridgeline, some with full towers and blades visible or only blade-tips visible, or are fully screened from view. The proposed turbines are

seen with a range of perceived heights. For these reasons, the magnitude of change is deemed “Moderate” and the residual visual effect is “Moderate.”

Photowire PW-A (see Appendix 14-5) was captured 2.3km southeast of the proposed turbines on the local road network where the RSA results indicate primarily “Intermittent/Partial” visual screening, with one pocket of “Little/No” visual screening. PW-A was captured in the pocket of open visibility. It can be seen in PW-A that, even in the area of open visibility, the proposed turbines are almost entirely visually screened by commercial forestry.

14.7.4 Cumulative Landscape and Visual Effects

The assessment of cumulative landscape and visual effects must be proportional, meaning that the focus of the assessment is on the extent to which the Proposed Project contributes toward cumulative effects on the particular receptors under assessment; these contributions are clearly explained in the narrative on cumulative impact assessment.

14.7.4.1.1 Cumulative Landscape Effects during Operation

The landscape of Slieve Felim Mountains which comprises LCA-17a and the Slievephelim Complex Secondary Amenity Area is currently characterised by numerous wind energy developments. The proposed turbines will therefore cumulatively contribute to the effects on the character of this upland landscape.

The Proposed Wind Farm will introduce additional wind energy infrastructure into the material landscape of LCA-17a Hollyford Hills Mountain Mosaic and Slievephelim Complex, which is well-established with wind energy developments totalling 11 no. developments besides the Proposed Project. Of the existing developments, Glencarbry 1 Wind Farm (9 no. turbines) is located nearest to the Proposed Wind Farm site, within 700m of proposed turbine T07 and T09. However, the two wind farms are within different spatial enclosures of the mountainous terrain—located on either side of the highest part of Knockbane peak—and therefore will not materially alter the same enclosed basin.

The key landscape characteristics of LCA-17a include its description as a “*Complex arrangement of rounded hills and steep sided valleys*” that is “*Sparsely populated particularly in central area with remote character*” (TCDP 2022-2028). The sensitivities include visual landscape characteristics of “*Extensive views eastwards from elevated points across to Kilkenny and the south of the county*” and “*Spectacular views towards the south taking in most of the County, from the area’s southern hilltops*” (TCDP 2022-2028). As reported above in Section 14.7.3.1, effects on these key visual sensitivities of LCA-17a are limited due to the nature of spatial enclosures among the marginal foothills and extensive forestry which reduce visibility of the proposed turbines and cumulative turbines. The local policy regarding development within Secondary Amenity Areas (i.e. Slievephelim Complex) is reported above in Section 14.4.1.2 indicates that developments should “*integrate and respect the visual quality of the amenity area.*” This LVIA considers that the proposed turbines integrate relatively well into the established wind energy setting, explained as follows.

The landscape of LCA-17a and Slievephelim Complex is generally robust and is characterised by small spatial enclosures and undulating terrain which has effectively absorbed multiple wind energy developments to date. LCA-17a is rated in local policy as having high compatibility and good capacity to absorb wind energy development and is envisioned to be utilised for wind energy in the Co. Tipperary WES in the areas classed as “Open to Consideration,” as where the proposed turbines are sited. The landscape of LCA-17a is considered in local policy to be somewhat degraded and therefore is likely to absorb change without detriment and can be improved by development projects which upgrade certain aspects of the landscape (recall previous Section 14.7.3.1.3 Mitigation Measures for Landscape Effects during Operation). Considering these points, the predicted cumulative landscape effects will be limited, and the Proposed Wind Farm is likely to be effectively absorbed into the landscape.

14.7.4.1.2 Cumulative Visual Effects during Operation

Within 5km of the Proposed Wind Farm site, the greatest potential for cumulative visual effects is with Glencarbry 1 Wind Farm, located within 700m to the proposed turbines at its closest point, and sited on the northern aspect of Knockbane peak which is within a different spatial enclosure than the Proposed Wind Farm. The proposed turbines will introduce infrastructure into the landscape that is taller (185m height) than that of Glencarbry 1 and other existing wind energy developments (ranging 75m-140m height). The photomontage assessment in *Appendix 14-3* indicates that in-combination visual effects with the proposed turbines and Glencarbry 1 turbines will be limited owing to visual screening by the steep landform enclosures and existing forestry stands. The degree of screening will vary from vantage points along the local road network surrounding the Proposed Wind Farm site. These effects will apply to designated SR-20 which traverses within close proximity of the proposed turbines and other cumulative turbines (see Figure 14-18 below); for users of SR-20 in a journey scenario northward, the proposed turbines will be visible to the east and cumulative turbines will be visible as the receptors continues northward and there may be in-combination views.

Figure 14-18 shows the local road network around Knockbane peak in white and dwellings in yellow, followed by photowire imagery extracted from photowire PW-C which demonstrates that some of the Glencarbry turbines are visible from the vantage point of PW-C, while most of the proposed turbines are not visible as they are sited on the far side of Knockbane peak from this position.

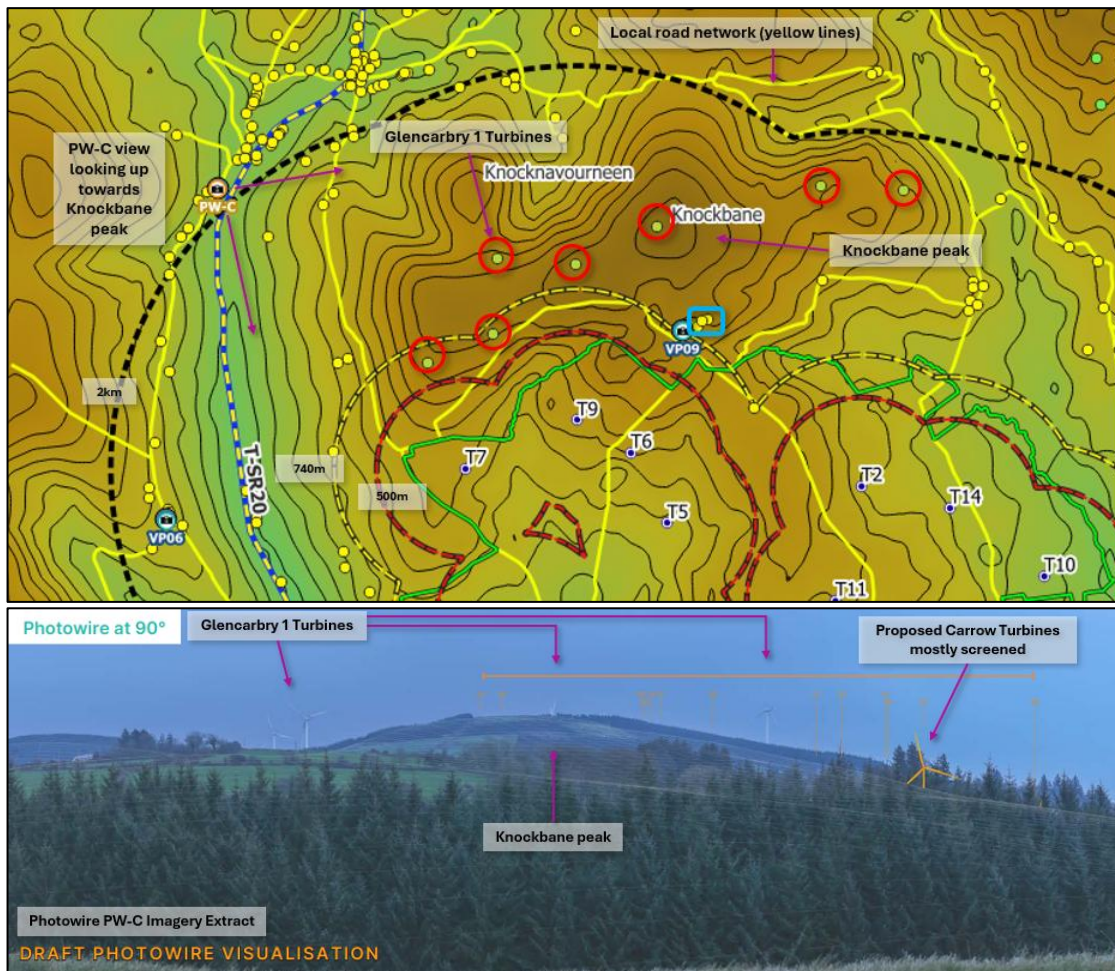


Figure 14-18 Position of Glencarbry 1 existing turbines and local road network with example view (PW-C) towards Knockbane peak from the north; topography follows the legend of Figure 14-9

Cumulative effects with Glencarbry 1 may arise from vantage points along the local road network in the case where cumulative turbines are visible or partially visible in succession or in combination. The number of receptors potentially experiencing these views is low because the landscape is sparsely

populated. For receptors in certain vantage points, including three residences in close proximity to the location of VP09 (see blue box above in Figure 14-18), there is the potential to experience “surrounding” effects where Glencarbry 1 turbines may be partially visible in one direction and the proposed turbines would be visible in the opposite direction. Any potential effects will be offset by the nature of visual screening by steep topography and the presence of commercial forestry stands and dense, mature vegetation. Plate 14-10 below, extracted from VP09 photomontage imagery, looks west in the direction of the existing Glencarbry 1 turbines and shows the nature of thick vegetation and forestry at the location of VP09 such that the existing turbines are not visible.



Plate 14-10 Example of dense forestry and vegetation at VP09 looking west towards existing Glencarbry 1 turbines, which are not visible

Within 5km of the Proposed Wind Farm site, there is potential for in-combination cumulative visual effects with specific clusters of other wind farms located at greater distance from the site than Glencarbry 1; these are: Glenough, Turaheen, Glencarbry 2 and Holyford to the northeast, Garacummer and Mienvee to the northwest, and Cappawhite A and B to the west. The photomontage assessment in *Appendix 14-3* determined the following. In views looking up into the mountains to the northeast (e.g. VP06, VP07, VP10), the proposed turbines may be seen to increase the extent of visible turbines both vertically and horizontally to a limited extent. In views looking up into the mountains to the northwest (e.g. VP01, VP02), the proposed turbines will add visible elements to the view which bring the presence of turbines slightly closer to receptors at certain vantage points. From vantage points looking down the mountains from elevations higher than the Proposed Wind Farm site (e.g. VP03, VP06), existing turbines may potentially be visible behind receptors on higher slopes and on visible aspects of nearby ridgelines. Considering the visual screening of the proposed turbines and the setting within steep and undulating terrain with existing turbines being set within separate spatial enclosures and on the far side of different peaks, the proposed turbines will have a limited contribution to the cumulative visual effects.

Beyond 5km and throughout the remainder of the LVIA Study Area, the proposed turbines will be visible from vantage points in the lowland plains and river valleys in the east, south and west, comprising the River Suir and Multeen River valleys and the Dead River and Mulkear River valley. The photomontage assessment in *Appendix 14-3* determined that the proposed turbines will generally be viewed in the distant background of views at modest or very modest scale relative to the landscape and will be seen within marginal upland landscape that is well-established with wind energy development. In many cases, the proposed turbines will be barely discernible along the horizon. The proposed turbines will be visible within the same visual extent as the existing developments and perceived at similar size and scale to the existing wind farms relative to the landscape. From closer vantage points (e.g. VP08, VP13, VP14, VP15) the proposed turbines may be seen to widen the vertical or horizontal extent of visible cumulative turbines to a small degree. On balance, the proposed turbines will have limited or very limited contribution to the cumulative visual effects beyond 5km from the Proposed Wind Farm site.

Cumulative Effects on Rock of Cashel

Photomontages VP04 and VP05 were assessed in Appendix 14-3 showing views from the Rock of Cashel historic site and views towards the Rock of Cashel within its wider landscape setting. VP04 is also representative of Co. Tipperary Designated Scenic View T-V07. The Rock of Cashel is located 14.7km from the Proposed Wind Farm site and sits on top of a prominent localised hillock overlooking broad views of the River Suir valley and countryside. T-V07 is located 14.0km from the Proposed Wind Farm site as is defined as “Views from N74 at Deerpark, Cashel.” Views from the Rock of Cashel site and views of the wider landscape setting are looking northwest over the River Suir valley towards the foothills of Slieve Felim Mountain range in the distance.

Overall, the LVIA determined that on account of the distance, the proposed turbines and cumulative turbines are effectively accommodated in the long-ranging and expansive panoramic views both from the Rock of Cashel site (VP04) and views towards it (VP05). As reported above in Section 14.7.3.2.4, VP04 resulted in “Slight” residual visual effects and VP05 resulted in “Not Significant” residual visual effects. As shown in the Photomontage Booklet (VP05), the Rock of Cashel, when viewed in its landscape setting, is seen in the foreground with the proposed turbines and cumulative turbines visible in background of panoramic views. In a journey scenario, these panoramic views are intermittent due to screening by localised topography, and the proposed turbines and cumulative turbines are seen in the background of views at small scale relative to the landscape. In addition, there is no potential for cumulative views in succession with Kill Hill Wind Farm which is nearby the Rock of Cashel and T-V07, located in the other direction from the proposed turbines. This is discussed as follows.

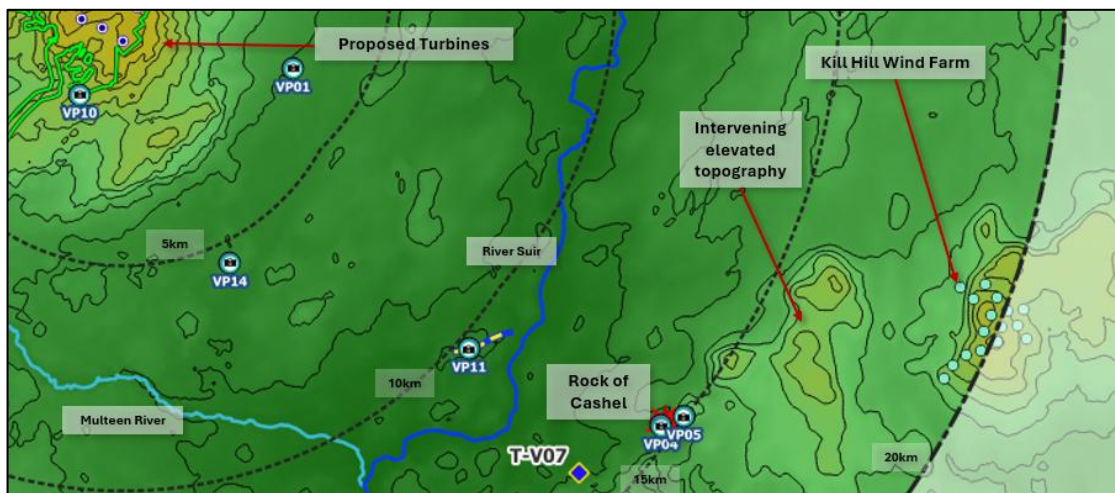


Figure 14-19 Location of the existing Kill Hill Wind Farm turbines behind the Rock of Cashel; topography map follows the legend of Figure 14-9

The closest cumulative wind energy development to the Rock of Cashel site and T-V07 is the existing Kill Hill Wind Farm (17 no. turbines, 82m height), located behind the Rock of Cashel approximately 6km to the east, at the edge of the LVIA Study Area (see Figure 14-19 above). The Kill Hill turbines are located on the west-facing aspects of hilly terrain near Mt. O’Meara, thereby suggesting that they may potentially be visible for receptors visiting the Rock of Cashel site. However, GIS analysis and onsite visibility appraisal found that there is no visibility of the existing Kill Hill turbines from the locations of VP04, VP05 owing to screening by mature vegetation and intervening topography.



Figure 14-20 View direction east from Rock of Cashel showing no visibility of existing cumulative turbines

Figure 14-20 above shows an extraction and enlargement from the photomontage 360-degree imagery captured at VP04 (Rock of Cashel historical site), showing the view from VP04 looking east in the direction of the existing Kill Hill Wind Farm; no existing turbines are visible. In addition, onsite visibility appraisal found that there is no potential for cumulative visibility of the existing Kill Hill turbines and the proposed turbines from the location of T-V07.

The assessment in *Appendix 14-3* shows that for both photomontages VP04 and VP05, the turbines of thirteen existing wind farms are visible from the Rock of Cashel site looking northwest, as well as in the background of wider landscape views, all of them barely discernible on the horizon. In a future receiving environment, the permitted Upperchurch Wind Farm will also be visible amongst the existing wind farms along the horizon, perceived at the same size and scale as the existing wind farms relative to the landscape, which is barely discernible. As discussed above in Section 14.7.3.2.3, the proposed turbines will be viewed amongst the existing turbines at the same size and scale, which is barely discernible, and will occupy a very small horizontal extent of the view.

Overall, considering the distance of all cumulative turbines from the Rock of Cashel and the broad landscape setting with wide expansive views, the proposed turbines have a limited contribution to the cumulative visual effects.

14.7.5 Decommissioning Phase Effects

The landscape and visual effects during the Decommissioning Phase are anticipated to be of a similar nature as those occurring during the Construction Phase.

The important element of decommissioning from an LVIA perspective is the dismantling and removal of the proposed turbines. This will occur for a limited period of time and will predominately involve the placement of cranes adjacent to the proposed turbines during the dismantling process. Upon decommissioning of the Proposed Wind Farm, the proposed turbines will be disassembled in reverse

order to how they were erected. The proposed turbines will be disassembled with a similar model of crane that was used for their erection. The proposed turbines will likely be removed from the Proposed Wind Farm site using the same transport methodology adopted initially for delivery.

Turbine foundations/handstand would remain in place underground and would be covered with earth and reseeded as appropriate. This naturalisation process shall revert the landscape of the Proposed Wind Farm site back to a condition similar to the current landscape baseline.

Removal of the proposed turbines and ancillary infrastructure (except the proposed on-site 110kV substation and access roads) from the Proposed Wind Farm site during decommissioning will result in ‘Short-Term’, ‘Slight’, ‘Negative’ visual effects, which are not significant. The residual landscape and visual effects associated with the underground Proposed Grid Connection are reported above as ‘Imperceptible’ owing to the connection route being underground. A ‘Decommissioning Plan’ has been prepared (Appendix 4-6 of this EIAR), the details of which will be agreed upon with the Local Authority prior to any decommissioning. The Decommissioning Plan will be updated prior to the end of the operational period in line with decommissioning methodologies that may exist at the time and will be agreed upon with the competent authority at that time.

14.8

Conclusion

The Proposed Project is an appropriately designed development, sited in a modified working landscape of significantly low population density within marginal upland, deemed capable of accommodating wind energy development. This LVIA assessed the likely significant effects of the Proposed Project on key sensitive landscape and visual receptors, as well as visual effects on local residential receptors in close proximity to the proposed turbines, including cumulative effects with other wind energy developments within 20km of the proposed turbines. The Proposed Wind Farm adheres to good wind farm design with respect to the location, spatial extent, spacing, layout, height and cumulative effect of the proposed turbines in Transitional Marginal landscape type prescribed by the WEDGs (DoEHLG 2006 Guidelines, Draft 2019 Guidelines). The LVIA was informed by desk study, field surveys, on-site visibility appraisals, GIS analysis including Zone of Theoretical Visibility (ZTV) and Route Screening Analysis (i.e. on-the-ground visibility appraisal within 3-5km), as well as the production of verified photomontages.

The LVIA (Chapter 14 of the EIAR) is accompanied by one volume booklet and five appendices as follows:

- **EIAR Volume 2: Photomontage Booklet:** A1-banner photomontage booklet presenting verified photomontage visualisations from representative viewpoints (15 no.);
- **Appendix 14-1, LVIA Methodology:** An appendix detailing the methodology and guidance used for the assessments reported in this chapter;
- **Appendix 14-2, LCA Impact Assessment:** An assessment of effects on designated Landscape Character Areas (LCAs);
- **Appendix 14-3, Photomontage Visual Impact Assessment Tables:** A visual impact assessment of the representative viewpoints (15 no.) included in the Photomontage Booklet;
- **Appendix 14-4, A0 LVIA Baseline Map:** A large-scale (A0) map showing all baseline landscape and visual receptors and LVIA tools (e.g. viewpoints and visibility mapping);
- **Appendix 14-5, Photowire Visualisation Booklet:** Draft early-stage photomontage visualisations from alternative viewpoint locations (5 no.) not included in the final Photomontage Booklet.

All 14 no. proposed turbines and Proposed Wind Farm infrastructure are sited within landscape of Co. Tipperary designated as having “High” compatibility to “Windfarms” in the Co. Tipperary County Development Plan (TCDP) 2022-2028 and is classed as “*Medium Sensitivity*” such that “*Change or Development is generally acceptable*” because “*the landscape is somewhat degraded, so undergoing*

change or the precedent for such and similar development is set and the landscape is capable of absorbing considerable change without detriment.” In addition, the landscape is defined as having “*capacity to accommodate development without undue deterioration in the scenic quality*” (TCDP 2022-2028). The Proposed Grid Connection underground electrical cabling route is sited within the same landscape and extends into other low sensitivity landscape areas to the west of the site and is confined primarily to public road corridors.

Considering the 20km LVIA Study Area, no residual Significant effects will occur on designated landscape and visual receptors or scenic sensitivities of county, regional or national renown. There are no significant effects on designated or protected views as set out in the TCDP 2022-2028 or the LDP 2022-2028. There are no District Towns or Local Towns as defined in the TCDP 2022-2028 within 20km of the proposed turbines and no Cities, Key Towns, Towns or Rural Clusters as defined in the LDP 2022-2028 within 20km. There are no recreational, popular cultural heritage or tourism destinations located within 5km of the proposed turbines and none with the potential for visual effects within 10km.

The Proposed Project exceeds the recommended 500m setback from residences (DoELHG 2006 Guidelines) and adheres to the prescribed 4-times-tip-height (740m) setback distance for residential visual amenity (Draft 2019 Guidelines) in the WEDGs. Within the Proposed Wind Farm site, all proposed turbines T01-T14 are sited within land area zoned as “Open to Consideration” to wind energy development in the TCDP 2022-2028 Wind Energy Strategy (WES). The landscape type and character of the area where the proposed turbines are sited comprises modified working landscape types of low sensitivity and can effectively accommodate wind energy development, i.e. marginal upland, agricultural fields, commercial forestry.

The proposed turbines at 185m tip height, deemed the essential aspect of the Proposed Project from an LVIA perspective, are sited on the south-facing aspect of Knockbane peak in the foothills of the Slieve Felim Mountain range, and are thereby not visible from receptors in a vast area in the north of the LVIA Study Area. The siting of the proposed turbines within undulating marginal upland terrain that features steep topography and spatial enclosures also provides visual screening to some extent for many receptors within 5km of the Proposed Wind Farm site.

15 no. photomontage viewpoints were selected and assessed to represent a good geographic spread of views from within the 20km LVIA Study Area, focussed in the direction of the proposed turbines. The LVIA determined the potential for visual effects ranging from “Not Significant” and “Slight” at all viewpoints greater than 3km from the proposed turbines, and visual effects of “Moderate” at viewpoints within 1.7km. Regarding the potential for visual effects on local residential receptors within 2km of the proposed turbines, the LVIA determined that, in general, the steep marginal upland topography with enclosed spatial areas and multiple tracts of commercial forestry partially or fully visually screen the proposed turbines from view in many cases. In many cases, long-ranging scenic views of the River Suir valley to the south of the Proposed Wind Farm site are not obscured, as the proposed turbines are to be situated on the slopes in the opposite direction of the scenic views, at higher elevations.

The potential for “Significant” residual visual effects was predicted for one viewpoint located 750m north-east of the nearest proposed turbine (T06). In this case, the proposed turbines are spaced such that long-ranging scenic views of the River Suir valley are not fully obscured and are still available looking between and beyond the towers and blades. The viewpoint imagery was captured from the only location in that vicinity with unobstructed views of as many of the proposed turbines as possible, thereby representing the greatest degree of visual effects. The receptors include three residences in close proximity to the viewpoint, and the overall number of receptors likely to experience these effects is very low as the landscape surrounding the Proposed Wind Farm site has a significantly low population density. Other factors such as roadside screening from dense, mature vegetation and undulations in local topography would allow for most receptors in the vicinity to experience visual effects of a lesser degree.

One factor contributing to the mitigation of visual impacts is the degree of “Dense/Full” and “Intermittent/Partial” visual screening by mature forestry and roadside vegetation along more than 70%

of local roads within 3-5km of the proposed turbines, as well as visual screening by steep upland terrain, spatial enclosures and localised undulations in topography which allow a sense of set-back from most receptors in cases where the proposed turbines are partially visible. In addition, from a distance, the layout of the proposed turbines ensures a relatively even height profile and even spacing between proposed turbines are seen to be sited on or near elevated peaks within a small spatial extent and with slightly irregular spacing in a clustered layout of relatively even height profile, thereby aligning with best practice siting and design for wind energy developments in Transitional Marginal Landscape Types (WEDGs – DoEHLG 2006 Guidelines, Draft 2019 Guidelines).

4 no. designated Landscape Character Units (LCUs) were assessed for effects on landscape character within 15km of the proposed turbines, including cumulative effects. All LCUs were deemed to be “Low” sensitivity and no “Significant” landscape effects are predicted to occur. Factors contributing to the mitigation of effects on landscape character include the following. The compatibility of LCA-17a to “Windfarm” land-use type is given as “High,” which is the highest compatibility classification for wind energy development out of a five-tier compatibility scale—only two LCAs in the county have been given this capacity rating for the wind energy land-use type. This favourable compatibility rating indicates that the landscape is highly suitable for wind energy development. The uplands of Slieve Felim Mountain range and Knockbane peak is generally robust landscape characterised by small spatial enclosures and undulating terrain which has effectively absorbed multiple wind energy developments to date. No key sensitivities of the LCUs are predicted to be affected as a result of the Proposed Project.

Within 5km of the Proposed Wind Farm, 1 no. designated scenic route (T-SR-20) was scoped in for assessment and had determined residual visual effects of “Slight” to “Moderate.” The designated “Secondary Amenity Area” of Co. Tipperary in which the proposed turbines are sited was determined to have residual visual effects of “Slight” to “Moderate” and landscape effects of “Moderate” significance, which is not significant. 1 no. waymarked walking trail (Mulleen Way) which passes within 2.7km of the proposed turbines at its closest point had determined residual visual effects of “Not Significant.”

Beyond 5km of the Proposed Wind Farm, 1 no. designated scenic route (T-SR-33) was determined to have “Not Significant” residual visual effects. The Rock of Cashel historical site, located 14.2km from the Proposed Wind Farm site, was assessed for two types of views—those from the historic site itself and views towards the Rock of Cashel within its wider landscape setting. Likewise, views from the designated scenic view T-V07 located near the Rock of Cashel were deemed to be similar to the views from the historical site and were assessed in tandem. Residual visual effects on the Rock of Cashel were determined to be “Not Significant” and “Slight,” which is not significant.

No “Significant” residual visual effects are predicted for any receptors located greater than 1km from the proposed turbines; the predicted visual effects for receptors within 1km were reported previously in this conclusion section in relation to the photomontage viewpoint assessment. The LVIA focussed on assessing the visual impact on local residential receptors (those within 2km of the proposed turbines) considered high-sensitivity owing to their close proximity and determined that most receptors within 2km—those to the west, north, east, south and southeast of the Proposed Wind Farm site—are predicted to experience “Slight” to “Moderate” visual effects, which are not significant.

The presence of wind turbines in the rural landscape of Ireland is consistent with evolving national climate policy and the changing character of Ireland’s working landscapes. The focus for the LVIA of the Proposed Project was on a combination of distance, arrangement, location and potential disruption to key scenic sensitivities, rather than simply on whether turbines are visible or not from a particular vantage point. The outcome of the LVIA, with regards to the EPA, 2022 definition of significance, is calibrated in the overall context of LVIA of wind energy developments in Ireland as well as what is acceptable in the context of emerging baseline trends and the acceptability of wind turbines within views as a result of national policy. The Proposed Project is therefore considered acceptable in this context and is in alignment with emerging baseline trends.