

14.4 Landscape Baseline

14.4.1 Landscape Policy Context

Figure 14-4 maps all identified landscape policy designations for the LVIA Study Area and Section 14.4.1 Landscape Policy Context details the relevant reported local policies and planning objectives. Wind energy zoning is mapped separately in Section 14.4.1.5 below and Landscape Character Areas (LCAs) are mapped separately in the next Section 14.4.2.

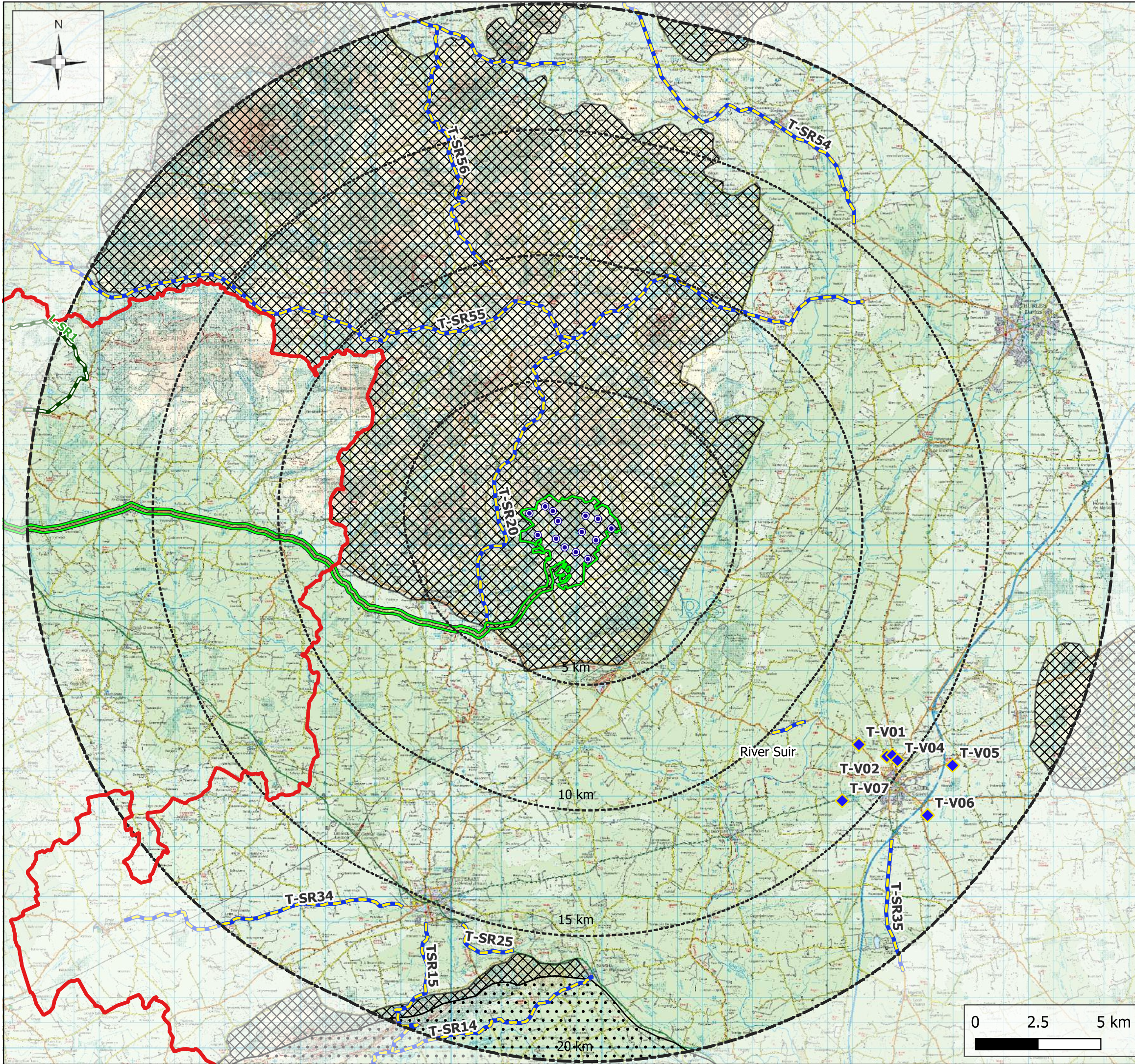
The Proposed Project is located in Co. Tipperary and some areas of Co. Limerick are contained within the LVIA Study Area boundary. The following policies were consulted to identify key sensitive landscape receptors for the LVIA (see Appendix 14-1, Section 1.7.1 Identifying Landscape Receptors for full details):

Landscape designations and protected amenities:

- Co. Tipperary County Development Plan (TCDP) 2022-2028:
 - Section 11.7 Landscape, under Ch.11 Environment and Natural Assets,
 - Section 11.7.1 Primary and Secondary Amenity Areas,
 - Section 11.7.2 Scenic Routes and Views,
 - Volume 3, Appendix 2 Scenic Routes and Views of Co. Tipperary,
 - Volume 3, Appendix 2, Table A: Schedule of Scenic Routes and Views.
- Limerick Development Plan (LDP) 2022-2028:
 - Section 6.4 Landscape and Visual Amenity,
 - Section 6.4.2 Views and Prospects,
 - Map 6.2 Views and Prospects.

Land area designations and/or policy for wind energy strategy:

- TCDP 2022-2028 Volume 1 Section 10.4 Renewable Energy Policy, under Ch.10 Renewable Energy and Bioeconomy,
- TCDP 2022-2028 Volume 2 forming the *Renewable Energy Strategy* for Co. Tipperary:
 - Appendix 2, Map 11 Wind Energy Policy Areas.
- LDP 2022-2028 Table 6.1 *Rural Landscape Characters Areas* which describes LCAs under policy objectives (called “Specific Objectives”) relating to wind energy development.



Map Legend

- County Boundaries
- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbine Locations

Co. Tipperary Scenic Designations

- ◆ Co. Tipperary Designated Scenic Views
- Co. Tipperary Designated Scenic Routes

Primary & Secondary Amenity Areas

- Primary Amenity Area
- Secondary Amenity Area

Protected Scenic Amenity

- Co. Limerick Views & Prospects

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Drawing No.

Figure 14-4

Landscape Policy Context

Carrow Wind Farm

Scale	Project No.	Date	Drawn By	Checked By
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14.4.1.1 Scenic Routes and Views

The TCDP 2022-2028 Section 11.7.2 identifies the following policy objective for projects potentially impacting designated scenic routes and views:

“In assessing new development, consideration will be given to ensuring that views are not obstructed or significantly altered, and that the visual impact of new development be minimised by careful design and siting.”

The TCDP 2022-2028 Volume 3 provides the schedule of names and basic descriptions of designated scenic routes and views within Co. Tipperary. Table 14-2 below lists 10 no. scenic routes and 7 no. scenic viewing points identified within the LVIA Study Area and indicates their position with relation to the Proposed Wind Farm site. The theoretical visibility of the identified designated scenic routes and views is investigated in Section 0 Visual Baseline and the relevant designations are mapped in that section.

Table 14-2 Co. Tipperary Scenic Routes and Views in the LVIA Study Area

Scenic Route/ View No.	Map Ref. in Figure 14-11	CDP Description	Location relative to the Proposed Wind Farm site
V01	T-V01	View towards the Rock of Cashel from Dunderum Road.	Southeast.
V02	T-V02	View towards the Rock of Cashel from Ardmayle Road.	Southeast.
V03	T-V03	View towards the Rock of Cashel from Boherlahan Road.	Southeast.
V04	T-V04	View towards the Rock of Cashel from Dublin Road.	Southeast.
V05	T-V05	View towards the Rock of Cashel from Dualla Road.	Southeast.
V06	T-V06	View towards the Rock of Cashel from Clonmel Road.	Southeast.
V07	T-V07	Views from N74 at Deerpark, Cashel.	Southeast.
V14	T-SR14	Views to Galtees and Slievenamuck along Bansha - Lisvernane road (R663).	South.
V15	T-SR15	Views to Galtees along Ballyglass - Newtown Road (R664).	South.
V20	T-SR20	Views in all directions from Ironmills to Milestone Road (R497).	West.
V25	T-SR25	Views along road from Co. Tipperary Town - Kilshane (N24).	South.

Scenic Route/ View No.	Map Ref. in Figure 14-11	CDP Description	Location relative to the Proposed Wind Farm site
V33	T-SR33	Views south along road R505 at Drehideenglashanatooha Bridge.	Southeast.
V34	T-SR34	Views to the south and south-east from Shronell crossroads (R515).	Southwest.
V35	T-SR35	Views of the Comeragh Mountains looking south on the R639 from Cashel.	Southeast.
V54	T-SR54	Views from the R498 from Bouladuff through Borrisoleigh.	Northeast.
V55	T-SR55	North and south of the R503 from Newport to Ballycahill.	North.
V56	T-SR56	East and west of the R497.	North.

14.4.1.2 Primary and Secondary Amenity Areas

The TCDP 2022-2028 Section 11.7.1 classifies landscape areas of “Primary” and “Secondary Amenity” which are valued for “*scenic and visual quality*” as well as their potential for “*significant opportunities for tourism development and rural recreational activities.*” The Primary and Secondary Amenity Areas occurring within the LVIA Study Area are mapped above in Figure 14-4 Landscape Policy Context Map.

The TCDP 2022-2028 does not specify separate policy objectives for Primary versus Secondary Amenity Areas, except that “Primary Amenity Area Designation” is listed in the Co. Tipperary Wind Energy Strategy (WES) as one criterion for deeming an area unsuitable to wind energy development. In the Co. Tipperary WES, many areas deemed appropriate for potential wind energy development overlap with Secondary Amenity Areas, including that in which the Proposed Wind Farm is located (see Table 14-3 below).

No Primary Amenity Areas are within 20km of the Proposed Wind Farm site. The proposed turbines are sited within the Slievephelim Complex Secondary Amenity Area, subject to the relevant policy objective from the TCDP 2022-2028:

“The Council will seek to ensure that a balance is achieved between the protection of sensitive landscapes and the appropriate socio-economic development of these areas. In this respect, development proposals will be required to demonstrate that they integrate and respect the visual quality of the amenity area.”

Additional landscape areas designated as Secondary Amenity are within the LVIA Study Area, located 15-20km to the north, south and southeast of the Proposed Wind Farm site. One small area of Primary Amenity is located along the southern border of the LVIA Study Area, approximately 20km south of the Proposed Wind Farm site. Table 14-3 below indicates preliminary analysis of these identified amenity areas; the potential effects on the scenic sensitivities of these amenity areas are reported in Section 14.7 Likely Significant Landscape and Visual Effects.

Table 14-3 Preliminary Analysis of Amenity Areas in the LVIA Study Area

Co. Tipperary Designated Amenity Area	Theoretical Visibility as indicated by ZTV	Actual Visibility	Scoped in?
Secondary Amenity Area - Slievephelim Complex	Contains all proposed turbines. Within 5km of the proposed turbines, there is full and partial theoretical visibility in the south of this amenity area. To the north of the proposed turbines there is very limited theoretical visibility due to topography.	Contains all proposed turbines. The proposed turbines are located within this amenity area. There will be visibility of the proposed turbines within 5km. To the north and beyond 5km, visibility will likely be considerably less.	Yes.
Secondary Amenity Area - Devil's Bit Mountain	None. Distance to the site: 18.6km.	None.	No.
Secondary Amenity Area - Slieveardagh Hills	Theoretical visibility ranges from None to Full throughout the portions of this amenity area that fall within the LVIA Study Area. Distance to the site: 18.1km.	Only one small portion of this amenity area is located within the LVIA Study Area. Due to the distance from the site and nature of dense vegetation throughout the area, visibility of the proposed turbines is unlikely.	No.
Primary Amenity Area - Galtee Mountains	One small patch in the east of this amenity area is located within the LVIA Study Area to the south of the Proposed Wind Farm site and has full theoretical visibility. Distance to the site: 16.6km.	Only one small portion of this amenity area is located within the LVIA Study Area. Due to the distance from the site and nature of dense vegetation throughout the area, visibility of the proposed turbines is unlikely.	No.
Secondary Amenity Area - Glen of Aherlow	This amenity area occurs as a linear patch at the south of the LVIA Study Area and indicates full theoretical visibility throughout. Distance to the site: 15.9km.	Site investigations determined that the majority of this amenity area is highly vegetated and will have very limited visibility.	No.

14.4.1.3 Protected Scenic Amenity

The LDP 2022-2028 Section 6.4.2 identifies and maps “Views and Prospects” as protected scenic amenity in Map 6.2 of the local policy document. 1 no. designated scenic route was identified in the LVIA Study Area, listed in Table 14-4 below; refer to Section 0 Visual Baseline below for ZTV mapping.

Table 14-4 Limerick Scenic Route in the LVIA Study Area

Scenic Route/ View No.	Map Ref. in Figure 14-11	CDP Description	Location relative to the Proposed Wind Farm site
Slieve Felim Scenic Drive	L-SR1	In the east of the County, the Slieve Felim way route close to Murroe, makes an attractive walking route to complement the attractions of the Clare Glens.	West.

14.4.1.4 Landscape Sensitivity Designations

The TCDP 2022-2028 Volume 3 Appendix 3 forming the *Landscape Character Assessment & Schedule of Routes and Views* for Co. Tipperary divides the county area into a landscape character framework as follows: four generalised landscape archetypes (Plains, Lakelands, Foothills and Uplands) are divided into seven Landscape Character Types (LCTs), which are then sub-divided again into 23 specific Landscape Character Areas (LCAs). A sensitivity rating framework is applied to the 23 LCAs which includes a 6-tier rating of general landscape sensitivity and two other rating tiers related to the compatibility of LCAs to land use types, including “Windfarm.” In addition, the “Likely Landscape Effects” of landscape archetypes are reported with respect to “Infrastructure – Energy – Wind Farms” as a driver of change in the landscape.

The proposed turbines are sited within the LCA called “LCA-17a Hollyford Hills Mountain Mosaic.” The sensitivity designations of LCA-17 are summarised below in Table 14-5; please see the later Section 14.4.2 Designated LCAs for a full description of LCAs assessed in this LVIA.

Importantly, the TCDP 2022-2028 Vol.3 App.3 Table 6.2 reports that LCA-17a is one of only two LCAs (out of 23 total LCAs) designated as “High” compatibility with “Windfarm” land-use and is deemed to be of “*Medium Sensitivity so Change or Development is generally acceptable*” because “*the landscape is somewhat degraded...and the landscape is capable of absorbing considerable change without detriment.*”

Table 14-5 Summary of Landscape Sensitivity Designations for LCA-17a (TCDP 2022-2028)

Source from TCDP 2022-2028	Designation	LCA-17a Rating/Definition
Vol.3 App.3, Table 6.2	Compatibility with “Windfarm” Land-Use	High compatibility. LCA-17a is one of only two out of 23 LCAs given “High” compatibility for windfarm land-use type.
Vol.3 App.3, Table 6.3	Compatibility of Sensitivity Factor with “Windfarm” Land-Use	4 – Likely to Be Compatible with Reasonable Care. Out of five classes. For the sensitivity factor of “Agricultural Land with Natural Vegetation” which

Source from TCDP 2022-2028	Designation	LCA-17a Rating/Definition
		best aligns with LCA-17a in the region of the Proposed Wind Farm site.
Vol.3 App.3, Table 5.1	Landscape Sensitivity	Class 3 – Sensitive. High sensitivity to change. Out of six classes. Objective: “Wise Use, Best Choice: Facilitate development that conclusively demonstrates wise use and best choices to continue and enhance established patterns of use and settlement without significant change to, or loss of, appearance or character.”
Vol.3 App.1, LCA Descriptions p.66-68	Principles for Management	Medium Sensitivity. “Change or Development is generally acceptable as it may beneficially alter, enhance or reinforce landscape character and value (e.g. the landscape is somewhat degraded, undergoing change or the precedent for such and similar development is set and the landscape is capable of absorbing considerable change without detriment).”
Vol.3 App.3, Table 2.1	Likely Landscape Effects for “Energy – Wind Farms”	Foothills Architype – High landscape effects. This is the lowest of two ratings given to the wind farm “Driver of Change” among the four landscape architypes. “Foothills” is described as “more robust.”

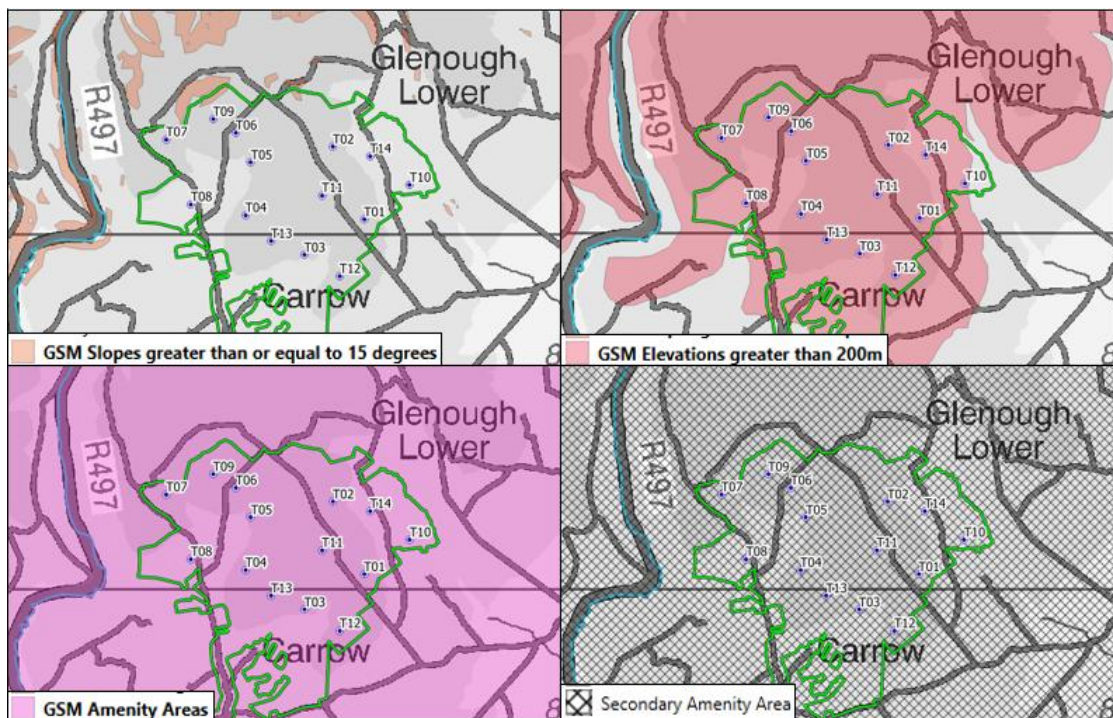


Figure 14-5 Sensitivity factors (TCDP 2022-2028) overlain with the Proposed Wind Farm site boundary

In addition, the Proposed Project has been designed such that no proposed turbines are sited on slopes greater than 15-degrees, which is an important factor contributing to the general sensitivity of landscapes in Co. Tipperary. This factor of the design ensures that the Proposed Project is compliant with TCDP 2022-2028 WES requirements for “Open to Consideration” areas (see further explanation in Section 14.4.1.5 Wind Energy Zoning).

The sensitivity in the TCDP 2022-2028 is derived considering four physical landscape factors: Elevation, Slope, Soil and Landcover. The combination of these factors which has been mapped on the landscape (TCDP 2022-2028 Vol.3 App.3 Figure 5.3, p.44 and TCDP 2022-2028 Vol.1 Figure 11.1, p.171) show that the following characteristics are observed for the land area within the boundary of the Proposed Wind Farm site (see Figure 14-5 above):

- No areas of “Slopes \geq 15-degrees,”
- All area has “Elevation > 200m,”
- The area is within designated “Amenity Area,”
- Category of designation is “Secondary Amenity Area.”

Lastly, LCA-17 is located in the wider landscape archetype “Foothills” and the LCT “C2 Forested Hills.” The TCDP 2022-2028 Vol.3 App.3 (p.22) defines Foothills as “*complex landscapes containing mixtures of settlements, forestry and farming that also contain extensive areas of semi-natural upland vegetation*” and indicates they are generally representative of “*transition between the Plains and the Uplands.*”

The LCT C2 Forested Hills is considered one of two primary activities within the Foothills landscapes, the other being “C1 Farmed,” and it is indicated that the “*mixture of these uses combine with topographic variety to provide areas that combine valued scenery and amenities with working landscapes and small communities.*” C2 Forested Hills is defined as follows (TCDP 2022-2028 Vol.3 App.3 Table 3.1, p.24, indicating that the important scenic amenity value of the landscape type is focused on elevated views looking down over the low-lying plains:

“The foothills of the west of the county are generally of higher elevations, steeper slopes and shallower soils with poorer drainage. This has resulted in significant concentrations of coniferous forestry – interspersed with smaller farms. These areas produce many fine views of the plains below – often framed by wooded foregrounds.”

14.4.1.5 Wind Energy Zoning

The TCDP 2022-2028 Volume 3 Appendix 2 contains the Renewable Energy Strategy for Co. Tipperary, dated 2016, and TCDP Vol.3 App.2 Appendix 1 contains the Wind Energy Strategy (WES). Section 10.4 of the TCDP 2022-2028 states that:

“The Renewable Energy Strategy for Co. Tipperary will be reviewed by the Council, in collaboration with stakeholders, over the lifetime of the Plan, and will incorporate the provisions of national government as they relate to renewable energy and climate action, the Co. Tipperary Climate Action Plan (when complete) and the Wind Energy Development Guidelines (when available).”

Therefore, while the Co. Tipperary WES is used in the assessment conducted in this chapter of the EIAR, it is noted that it is intended that this will be reviewed under the lifetime of the plan, although this process has not yet occurred.

The WES designates two categories within Co. Tipperary:

- *Areas Unsuitable for New Wind Energy Development,*
- *Areas Open for Consideration for New Wind Energy Development.*

The proposed turbines are sited within an area designated as (see Figure 14-6 below):

“Open for Consideration: Wind energy development in these areas may or may not be appropriate, depending on the character of the landscape and the potential impact of the proposed development. Any impact on the environment must be low and subject to proper planning and sustainable development, and the guidelines set out in this policy document.”

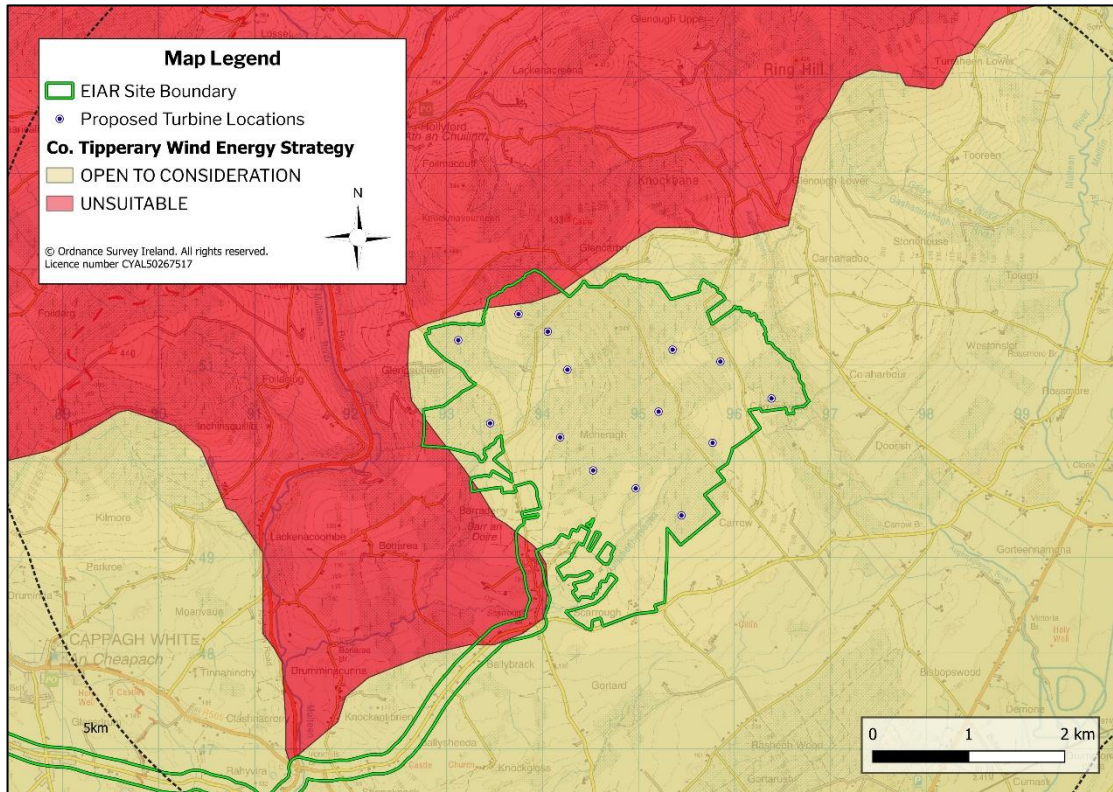


Figure 14-6 Wind Energy Zoning around the Wind Farm Site as per TCDP 2022-2028

The WES incorporates the Landscape Sensitivity ratings and Land-Use Compatibility ratings of the TCDP 2022-2028, as outlined in the previous section. The WES Section 5.2 lists criteria for areas “unsuitable for new wind energy development,” as follows:

- “Areas with a slope greater than or equal to 15° and with an elevation higher than 200m;
- Primary Amenity Areas Designation;
- Landscape Character Areas considered “Vulnerable”, “Transitional Vulnerable” and least compatible with wind farms;
- Areas with land cover in the following categories (based on CORINE 2012 data):
 Continuous Urban fabric, Discontinuous urban fabric, Broad-leaved forest, Mixed forest, Natural grassland, Moors and heaths, Transitional Woodland scrub;
- Inland marshes: Peat bogs, Water bodies;
- Areas with soils having the following classification: Acid shallow, Well-drained mineral, Blanket bog, Cutover peat, Lacustrine, Scree.”

Regarding these criteria, the land area within the Proposed Wind Farm site is greater than 200m elevation but has no areas of slope greater than 15-degrees, and no areas classified as “Primary Amenity Area” fall within the boundary of the Proposed Wind Farm site (recall Figure 14-4 above). No areas classed as “Vulnerable” or “Transitional Vulnerable” sensitivity, or “Least Compatible” to “Windfarm” land-use fall within the boundary of the Proposed Wind Farm site. No areas of the above land cover or soil types, and no inland marshes, fall within the boundary of the Proposed Wind Farm site.

As reported above in Section 14.4.1.4, the proposed turbines are sited within LCA-17a classified as “High” compatibility with “Windfarm” land-use. TCDP 2022-2028 Vol.3 App.3 Section 2.6 (p.18) states the following regarding wind farms as a driver of change in Co. Tipperary:

“Energy – Wind Farms: Co. Tipperary is already one the country’s leading producers of Renewables – this pattern is set to continue and is provided for in the Wind Energy Strategy that accompanies this LCA. To date these have been concentrated in uplands and cut-over bogs.”

14.4.2 Designated Landscape Character Areas (LCAs)

Following the next section, Figure 14-7 and Figure 14-8 map all identified LCAs for the 15km LCA Study Area and the theoretical visibility of the proposed turbines from within the LCAs.

The following policies were consulted to identify landscape character designations of the LCA Study Area (see Appendix 14-1, Section 1.7.1 Identifying Landscape Receptors for full details):

- TCDP 2022-2028 Volume 3 forming the Landscape Character Assessment & Schedule of Routes and Views for Co. Tipperary:
 - Table 2.1 Likely Drives of Change and Likely Landscape Effects,
 - Table 3.1 Derivation of Landscape Character Areas from Landscape Types and Archetypes,
 - Table 4.1 Generalised Descriptions of Landscape Character Areas of Co. Tipperary,
 - Table 5.1 Objectives and Policies for Types of Landscape Sensitivities,
 - Table 5.2 Sensitivity Rating of Landscape Character Areas,
 - Table 6.2 Land-use Compatibility between LCAs and Land-use Types,
 - Appendix 1 Landscape Character Areas of Co. Tipperary.
- LDP 2022-2028 Chapter 6.4 Landscape and Visual Amenity, forming the designation of Landscape Assessment and Landscape Character Areas for Co. Limerick:
 - Table 6.1 Rural Landscape Character Areas,
 - Map 6.1 Landscape Character Areas.

14.4.2.1 LCAs of the Study Area and Visibility of the Proposed Turbines

A total of 8 no. designated LCAs within Co. Tipperary and Co. Limerick fall within the 15km LCA Study Area, these are mapped below in Figure 14-7 and the visibility of the Proposed Project from within each LCA is mapped in the following Figure 14-8.

Designated LCAs containing the Proposed Project:

- L-LCA-1 Agricultural Lowlands,
- T-LCA-4 River Suir Central Plain,
- T-LCA-17a Hollyford Hills Mountain Mosaic – contains all proposed turbines.

Designated LCAs in the wider setting of the LCA Study Area:

- L-LCA-8 Slieve Felim Uplands,
- T-LCA-2 Thurles Hinterland,
- T-LCA-5 Templemore Plains,
- T-LCA-6 West Co. Tipperary Farmland Mosaic,
- T-LCA-17b Upperchurch – Kilcommon
- T-LCA-18 Silvermines – Rearcross.

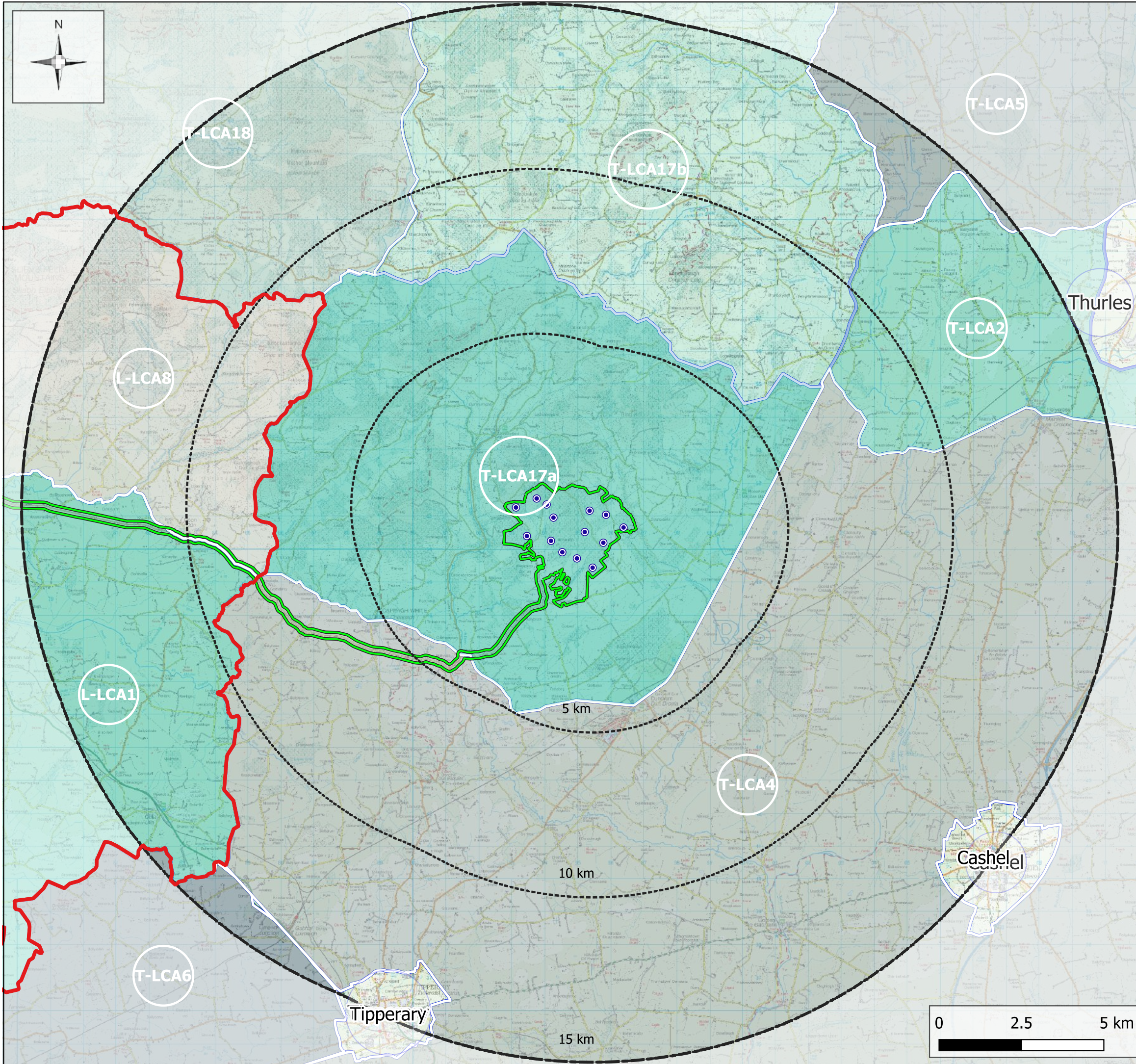
The TCDP 2022-2028 provides detailed information on designated LCAs in the TCDP 2022-2028 Volume 3 Landscape Character Assessment, including likely drivers of change, landscape effects, descriptions of landscape types and architypes, objectives and policies and land-use compatibility of LCAs. The LDP 2022-2028 Chapter 6.4 Landscape and Visual Amenity includes a table and map describing LCAs.

To establish the landscape sensitivity to wind farm development for this LVIA, the following policy documents were considered (listed in detail in *Appendix 14-1: LVIA Methodology*, Section 1.7.1 Identifying Landscape Receptors):

- TCDP 2022-2028 Volume 3 forming the *Landscape Character Assessment & Schedule of Routes and Views* for Co. Tipperary,
- TCDP 2022-2028 Volume 2 forming the *Renewable Energy Strategy* for Co. Tipperary,
- LDP 2022-2028 Chapter 6.4 *Landscape and Visual Amenity*, forming the designation of Landscape Assessment and Landscape Character Areas for Co. Limerick,
- LDP 2022-2028 Table 6.1 *Rural Landscape Characters Areas* which describes LCAs under policy objectives (called “Specific Objectives”) relating to wind energy development.

In the case of Co. Tipperary LCAs, multiple informative tables in the TCDP 2022-2028 Volume 3 were considered, which contain details on drivers of change including wind energy, general sensitivity ranges of classification, dominant sensitivity classifications, LCA descriptions, LCA policy objectives and guidelines, and the compatibility of LCAs to land-use types including wind farms. The TCDP 2022-2028 Volume 2 was consulted for the map of wind energy strategy to determine overlying strategy zones within the LCAs of the LCA Study Area.

In the case of Co. Limerick LCAs, the LDP 2022-2028 Ch.6.4 was consulted, which contains Table 6.1 both defining and describing the LCAs and listing multiple policy objectives for each character area, including at least one objective related specifically to wind energy development for each specific LCA, thereby indicating the LCA’s capacity for and/or suitability to wind energy development.



Map Legend

- County Boundaries
- LCA Study Area - 15km for assessment of effects on designated LCAs
- EIA Site Boundary
- Proposed Turbine Locations

Co. Tipperary Landscape Character Areas

- T-LCA2 - Thurles Hinterland
- T-LCA4 - River Suir Central Plain
- T-LCA5 - Templemore Plains
- T-LCA6 - West Tipperary farmland mosaic
- T-LCA17a - Hollyford Hills Mountain Mosaic
- T-LCA17b - Upperchurch - Kilcommon
- T-LCA18 - Silvermines - Rearcross

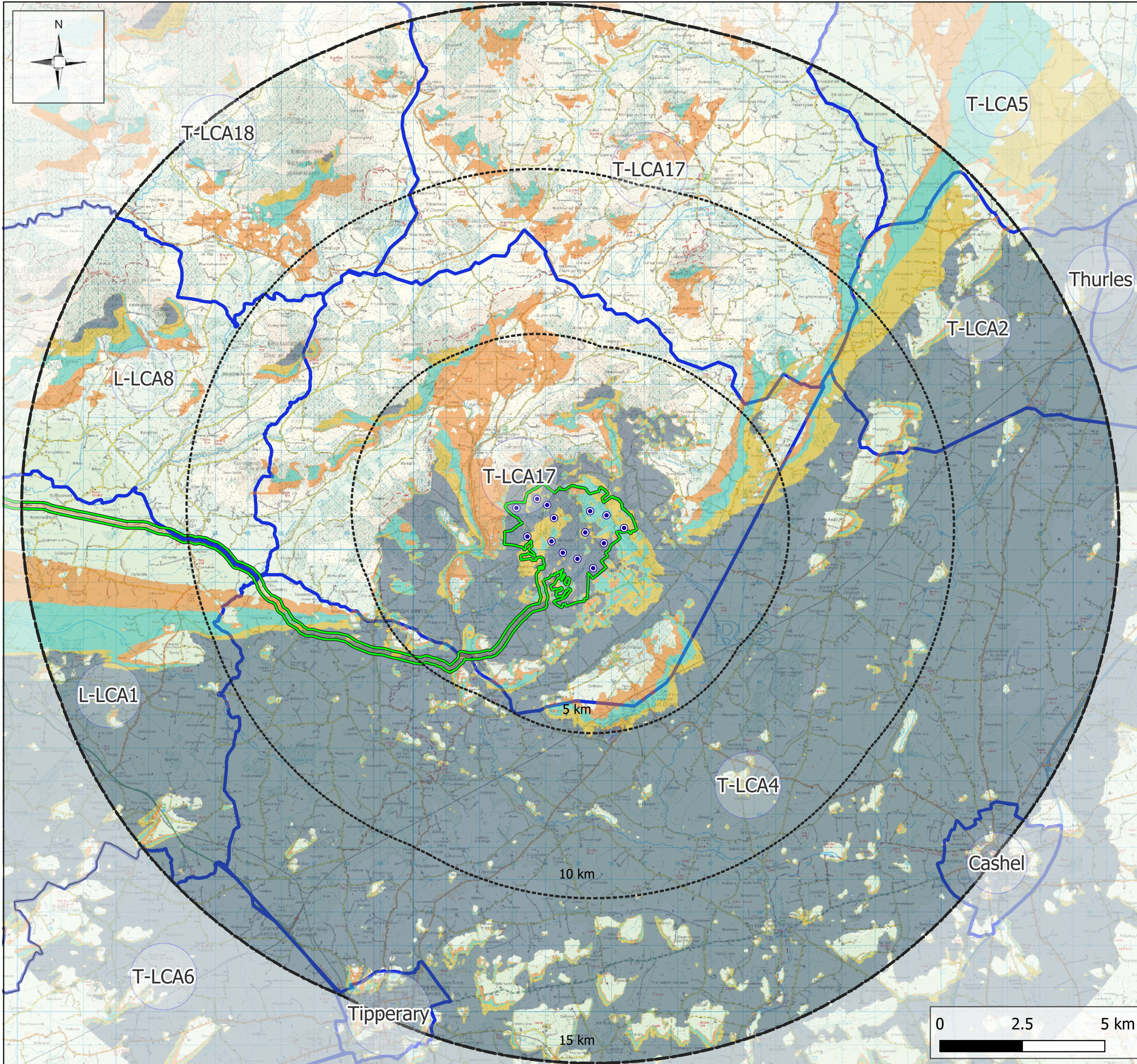
Co. Limerick Landscape Character Areas

- L-LCA1 - Agricultural Lowlands
- L-LCA8 - Slieve Felim Uplands

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Figure 14-6				
Drawing Title				
Map of Designated LCAs				
Project Title				
Carrow Wind Farm				
Scale	Project No.	Date	Drawn By	Checked By
1:112,500	231102	04.02.2026	JC	RS





Map Legend

- County Boundaries
- LCA Study Area - 15km for assessment of effects on designated LCAs
- EIAR Site Boundary
- Proposed Turbine Layout
- Landscape Character Areas

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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Figure 14-7

Map of Designated LCAs & ZTV

Project Title

Carrow Wind Farm

Scale	Project No.	Date	Drawn By	Checked By
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14.4.2.2 LCAs containing the Proposed Project

All 14 no. proposed turbines and the entire Proposed Wind Farm site of the Proposed Project, as well as approximately 4.9km of the Proposed Underground Grid Connection Route, are located in the Co. Tipperary designated LCA:

- T-LCA-17a Hollyford Hills Mountain Mosaic.

Defined in TCDP 2022-2028 Volume 3, Table 4.1 (p.29) as: *“A foothills zone of moorland, forestry and marginal pasture. The Cahernahallia and Multeen River valleys, are both visual units in which a distinct sense of enclosure is perceived. These are considered sub-areas of the LCA.”*

Approximately 7.4km of the proposed underground grid connection is located in Co. Tipperary designated LCA:

- T-LCA-4 River Suir Central Plain.

Defined in TCDP 2022-2028 Volume 3, Table 4.1 (p.29) as: *“This area is also known as part of the ‘Golden Vale’. It is the most extensive and coherent landscape area in the county. It forms the large central area of the county where it is associated with the River Suir and also extends west along the tributaries of the Multeen, Thonouge and Tar and eastwards along the Anner. It is characterised by its rich and productive agricultural lands and rolling landscape. It also incorporates the large towns of the County and many settlements and villages. The M8 Motorway transverses the central plain in a neat east – west divide.”*

Approximately 12.7km of the proposed underground grid connection is located in Co. Limerick designated LCA:

- L-LCA-1 Agricultural Lowlands.

Defined in LDP 2022-2028 Chapter 6.4, Table 6.1 (p.185) as: *“This is the largest of the Landscape Character Areas in Limerick and comprises almost the entire central plain. This landscape is a farming landscape and is defined by a series of regular field boundaries, often allowed to grow to maturity. This well-developed hedgerow system is one of its main characteristics. In terms of topography, the landscape is generally rather flat with some locally prominent hills and ridges. The pastoral nature of the landscape is reinforced by the presence of farmyards.”*

14.4.2.3 LCA Preliminary Analysis

Table 14-6 Designated LCAs Scoped in for Assessment in the LVIA (Appendix 14-2)

LCA No.	LCA Name	Rationale for Scoping In
L-LCA-1	Agricultural Lowlands	Contains 12.7km of the proposed underground grid connection. LCA-1 has mixed theoretical visibility of the proposed turbines, ranging from None to Full.
T-LCA-2	Thurles Hinterland	Full theoretical visibility of the proposed turbines throughout most of the land area of the LCA within the study area.
T-LCA-4	River Suir Central Plain	Contains 7.4km of the proposed underground grid connection. LCA-4 comprises the lowland valley region south of the Proposed Wind Farm site and has nearly Full theoretical visibility throughout.

LCA No.	LCA Name	Rationale for Scoping In
T-LCA-17a	Hollyford Hills Mountain Mosaic	Contains all 14 no. proposed turbines and 4.9km of the proposed underground grid connection. LCA-17a has mixed theoretical visibility throughout, ranging from None to Full.

The above LCAs were scoped in for the assessment of landscape character on designated LCAs, regarding the 15km LCA Study Area. The tables of *Appendix 14-2: LCA Assessment Tables* present the detailed assessment of the above LCAs. The tables of *Appendix 14-2* report the following:

- Relevant landscape key characteristics and distinctive features,
- The capacity of LCAs to accommodate wind energy development,
- The sensitivity of LCAs to wind energy development,
- The visibility of the Proposed Project form within LCAs and any viewpoints located within the LCA boundary,
- The magnitude of change and significance of landscape effects,
- Any mitigating factors which influenced the residual landscape effect rating.

The following table below lists all LCAs within the 15km LCA Study Area which were scoped out of assessment following the Landscape Baseline exercise. The rationale for scoping designated LCAs out of assessment is given.

Table 14-7 Rationale for Designated LCAs Scoped Out

LCA No.	LCA Name	Rationale for Scoping Out of Assessment
L-LCA-8	Slieve Felim Uplands	LCA-8 is greater than 5km from the Proposed Wind Farm site and has primarily no theoretical visibility of the proposed turbines.
T-LCA-5	Templemore Plains	Only a very small portion of LCA-5 is within the study area and this area has primarily no theoretical visibility of the proposed turbines.
T-LCA-6	West Co. Tipperary Farmland Mosaic	Only a very small portion of LCA-6 is within the study area and this area contains no sensitive landscape or visual receptors.
T-LCA-17b	Upperchurch/ Kilcommon	LCA-17b is greater than 5km from the Proposed Wind Farm site and has primarily no theoretical visibility of the proposed turbines.
T-LCA-18	Silvermines/ Rearcross	LCA-18 is greater than 5km from the Site and has primarily no theoretical visibility of the proposed turbines.

14.4.3 Landscape Character of the Proposed Wind Farm Site

Topography

The topography of the Proposed Wind Farm site is mapped below in Figure 14-9. The elevation in metres above ordnance datum (AOD) ranges from 163m AOD to 376m AOD, with the highest peaks located in the north of the site, where Knockbane peak leads into the foothills of the Slieve Felim

Mountains. The topography is primarily characterised by Knockbane peak in the centre-north of the site, surrounded by sloping marginal uplands to the west, south, and east, with the proposed turbines sited on the mid-elevated slopes. The mountainous nature of the topography includes rugged terrain forming relatively small spatial enclosures.

In the west and east of the site, the proposed turbines are positioned around and within small enclosures of upland terrain. The remaining proposed turbines to the south are positioned on foothills sloping downwards towards the open valley plain of the River Suir valley.

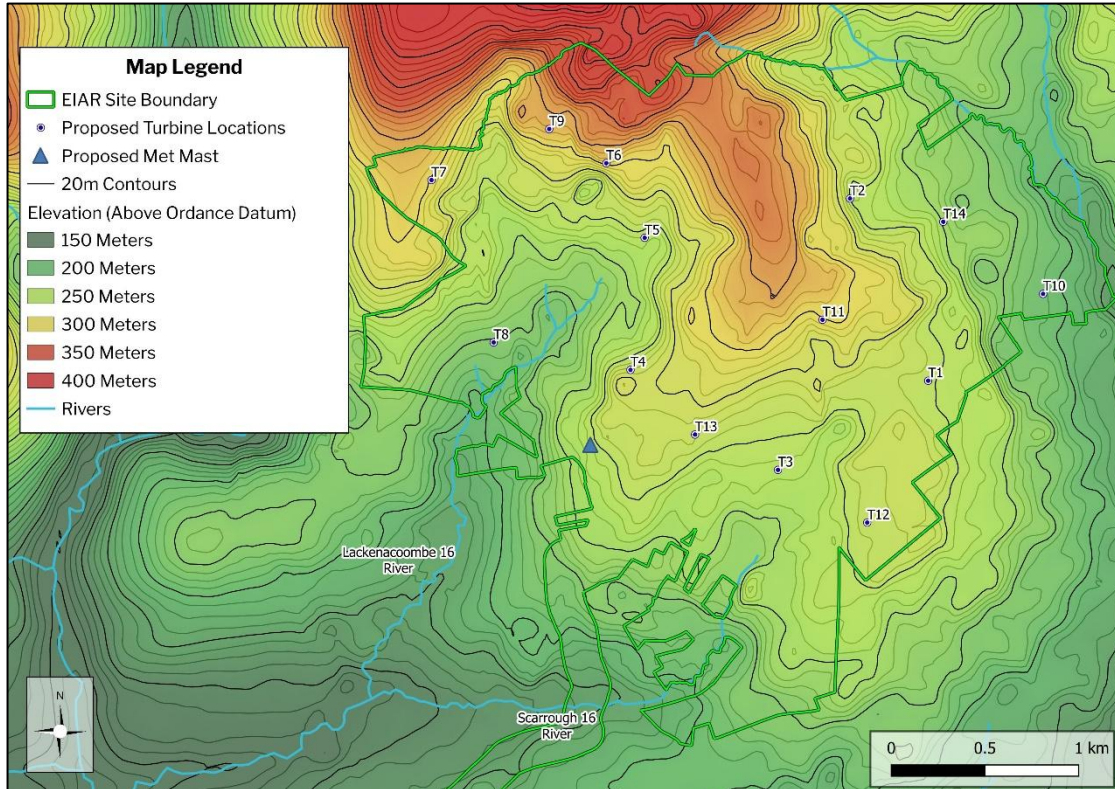


Figure 14-9 Topography map of the Proposed Wind Farm site

Landcover and Land Use

The landcover at the Proposed Wind Farm site is predominantly a working landscape of pastoral land and commercial forestry. Current land-use on the Proposed Wind Farm site comprises commercial forestry, agricultural pastoral land, mixed forest and transitional woodland-shrub; see Figure 14-10 below.

The agricultural fields are steeply and gently sloping, bordered by mature boundary vegetation. The commercial forestry tracts and woodland patches span across the marginal upland terrain, as seen in Plate 14-4 and Plate 14-5 below. Commercial forestry comprises a large area of the Proposed Wind Farm site, and Knockbane peak is immediately north of the site, see drone imagery in Plate 14-6 proposed turbines and Plate 14-7 below. The majority of proposed turbines are located within forestry tracts on the site.

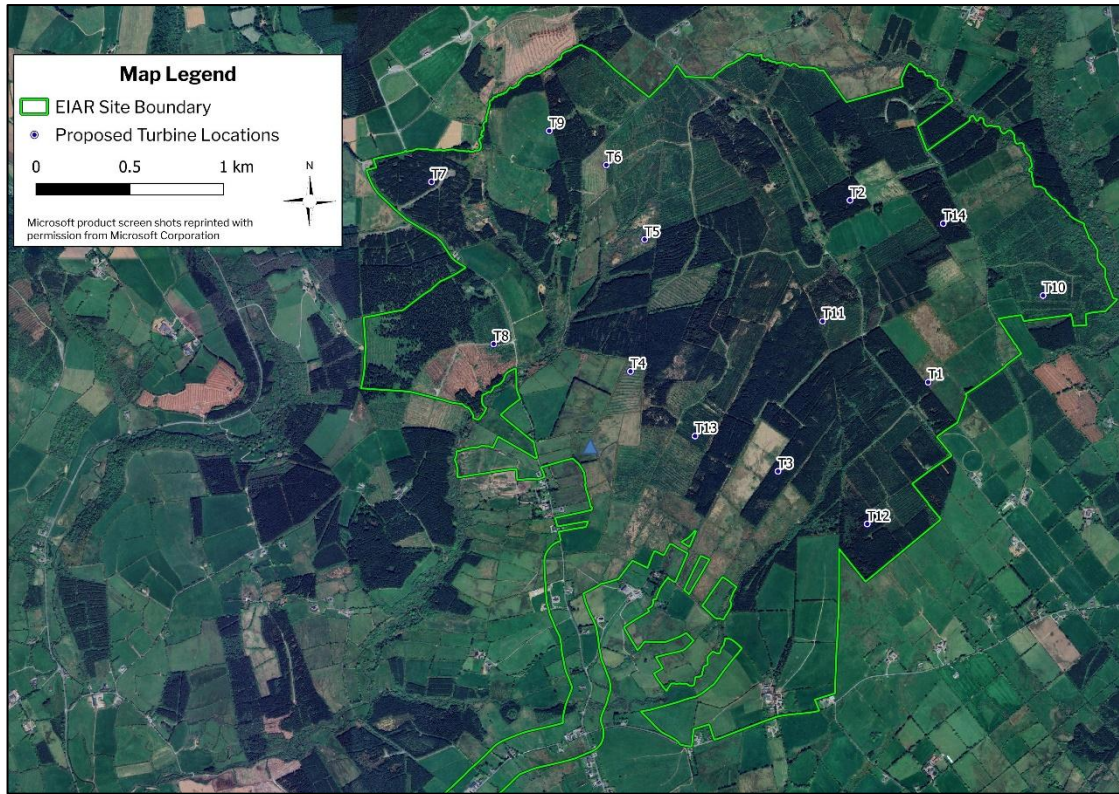


Figure 14-10 Aerial view showing landcover of the Proposed Wind Farm site



Plate 14-4 Proposed Wind Farm site showing a mix of agricultural fields and forestry



Plate 14-5 Proposed Wind Farm site showing agricultural fields bordered by mature vegetation

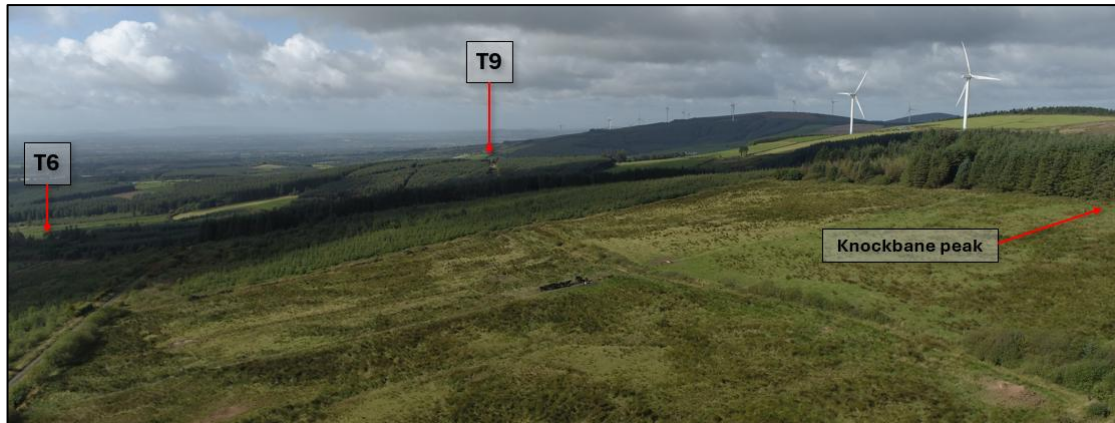


Plate 14-6 Drone imagery of the Proposed Wind Farm site to the west, with approximate Proposed Turbine locations

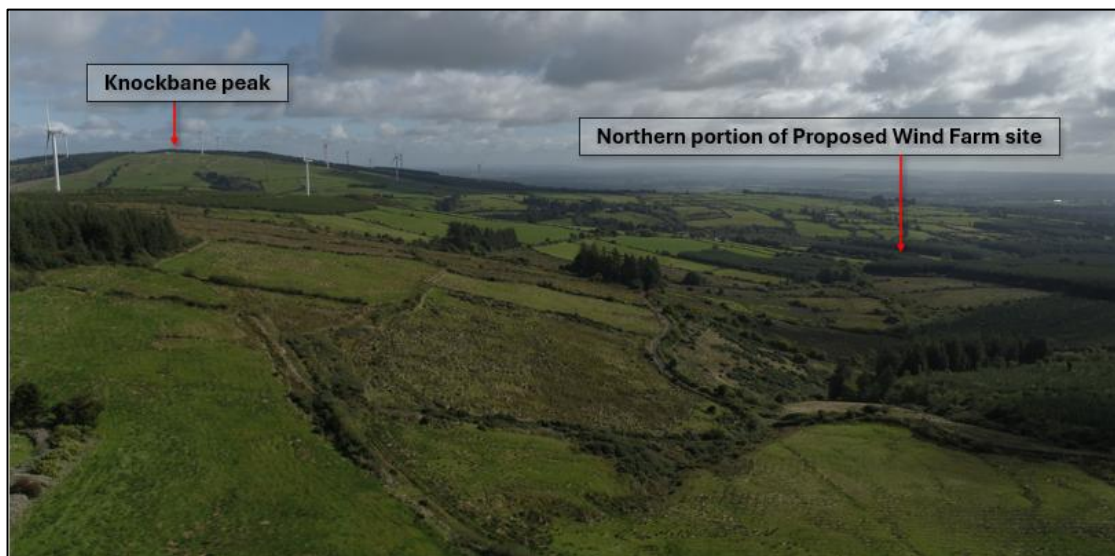


Plate 14-7 Drone imagery of the Proposed Wind Farm site looking east and south of Knockbane peak

Onsite 110kV Substation and Battery Energy Storage System (BESS)

The proposed on-site 110kV substation is part of the Proposed Grid Connection Route but sits within the boundary of the Proposed Wind Farm site. The proposed substation is located approximately 436m east of the L1154 local road, southeast of proposed turbine T13. A battery-based energy storage system (BESS) will adjoin the 110kV onsite substation and is located adjacent to the substation compound. The BESS primarily consists of steel containers assembled in rows within the BESS compound at the site. The proposed substation and BESS are to be set within agricultural pastoral land that is bordered on all sides by field boundary vegetation. The landscape character of this part of the Proposed Wind farm site is degraded by human activity; see discussions on landscape and visual effects with regard to the proposed substation and BESS in Section 14.7 Likely Significant Landscape and Visual Effects.

14.4.4 Landscape Sensitivity of the Proposed Wind Farm site

Table 14-8 below lists seven indicators appraised collectively to establish landscape value and susceptibility to change, which were then considered in forming the overall landscape Sensitivity classification of the landscape of the Proposed Wind Farm site. The overall Sensitivity is assigned as “Very High”, “High”, “Medium” or “Low”, following criteria outlined in the full detailed methodology of *Appendix 14-1: LVIA Methodology* (Section 1.7.2 Landscape Sensitivity: Value & Susceptibility to Change).

Table 14-8 Indicators of Landscape Value and Susceptibility to Change for the Wind Farm Site

Indicator	Evaluation
Landscape Designations	<p>The proposed turbines are located in a “Secondary Amenity Area” of Co. Tipperary (TCDP 2022-2028), see policy objectives in Section 14.4.1 above.</p> <p>The Proposed Wind Farm site is located within LCA-17a Hollyford Hills Mountain Mosaic, classed with “High” compatibility to “Windfarm” land-use, one of only two LCAs in the county with this rating to windfarm land-use (TCDP 2022-2028 Volume 3, Table 6.2, p.50).</p> <p>The designated landscape sensitivity in Co. Tipperary for LCA-17a is defined as “<i>Medium Sensitivity so Change or Development is generally acceptable as it may beneficially alter, enhance or reinforce landscape character and value (e.g. the landscape is somewhat degraded, undergoing change or the precedent for such and similar development is set and the landscape is capable of absorbing considerable change without detriment)</i>” while also stating that “<i>the nature of the varying topography is such that there is a capacity to accommodate development without undue deterioration in the scenic quality</i>” (TCDP 2022-2028 Volume 3, Appendix 1, p.68).</p> <p>In terms of wind energy zoning, the majority of the Proposed Wind Farm site is zoned as “Open to Consideration” (Co. Tipperary WES), defined as areas open to consideration for new wind energy development, and all proposed turbines are sited within this zone.</p>
Landscape Elements Quality / Condition	<p>The Proposed Wind Farm site comprises primarily agricultural grassland and commercial forestry, evident of a landscape subject to human alteration and modification. The condition of the landscape within the site is degraded in several locations due to forestry operations and agriculture.</p>
Scenic / Aesthetic Qualities	<p>The site has rural aesthetic qualities given the lack of development and mountainous upland setting. The site is located on the southern slope of Knockbane peak and features long-ranging views to the south over the River Suir valley.</p>
Rarity or Conservation Interests	<p>The EIAR has identified that one type of high-diversity wet grassland habitat is present within the Proposed Wind Farm site and occurs outside the development footprint, and this habitat is considered in the mitigation enhancement measures; a comprehensive assessment of conservation interests of the Proposed Project is provided in the EIAR Chapter 6 Biodiversity.</p>
Wildness / Naturalness	<p>The Proposed Wind Farm site is a mixture of agricultural land and commercial forestry and is therefore considered to be a landscape highly modified by human interference. The site is relatively undeveloped in terms of buildings and other infrastructure, therefore there is a degree of wildness considering the setback from human settlement, although it is notable that other existing wind farm infrastructure is located directly north of the site.</p>
Recreational Value	<p>The Proposed Wind Farm site comprises a mix of privately owned land which is not used for public recreational activities, and patchwork areas of open forest with no public walking trails or recreational features.</p>
Cultural Meaning / Associations	<p>No sites of popular cultural meaning or association are within the Proposed Wind Farm site. No direct effects on archaeological, architectural or cultural</p>

Indicator	Evaluation
	heritage resources are noted for the Operational Phase. A full assessment of potential cultural heritage impacts is reported in Chapter 13 Cultural Heritage.

In consideration of the factors detailed in the table above, the landscape value of the Proposed Wind Farm site is deemed low; discussed as follows. The site is predominantly located within a modified working landscape with no unique or distinctive qualities of county, regional or national renown. There are no scenic amenity or landscape designations pertaining to the Proposed Wind Farm site and there is none to low recreational value considering that it is a mix of privately owned land and patchwork open forest with no recreational features.

Working landscapes such as agricultural land and forestry are commonly considered as primarily unpopulated landscape types which can effectively accommodate wind energy development. Considering this, along with the high compatibility of LCA-17a to windfarm land-use and medium sensitivity with general acceptability of change/development (TCDP 2022-2028 Volume 3 Appendix 1), the susceptibility of the Proposed Wind Farm site to the proposed change is considered low. On balance, the landscape sensitivity of the Proposed Wind Farm site is deemed “Low.”

14.4.5 Guidance for Siting and Design in the Wind Energy Development Guidelines

According to definitions of landscape character types in the WEDGs (DoEHLG 2006 Guidelines, Draft 2019 Guidelines), the landscape type of “Transitional Marginal Landscape” is best suited to describe the Proposed Wind Farm site.

Key characteristics (DoEHLG 2006 Guidelines, p.59; Draft 2019 Guidelines, p.110):

- *“**Transitional Marginal Landscape:** Comprises something of both mountain moorland and farmland, thus involving a mix of small fields, tight hedgerows and shelterbelts;*
- *May include relatively rugged and rocky terrain, and thus a reasonable degree of spatial enclosure;*
- *Higher ground tends to be wet and boggy. Lower areas are usually cultivated and managed as fields;*
- *Houses and farmsteads are usually fairly common; and*
- *This landscape type bridges the organised and intensively managed farmland and the more naturalistic moorland.”*

The siting and design guidance for wind energy developments within Transitional Marginal Landscapes are recommended as follows in the WEDGs Landscape (DoEHLG 2006 Guidelines, p.59; Draft 2019 Guidelines, p.110):

- *“**Location:** As wind energy developments, for reasons of commercial viability, will typically be located on ridges and peaks, a clear visual separation will be achieved from the complexity of lower ground. However, wind energy developments might also be located at lower levels in extensive areas of this landscape type, where they will be perceived against a relatively complex backdrop. In these situations, it is important to minimise visual confusion such as the crossing by blade sets of skylines, buildings, utility lines and varied landcover.*
- ***Spatial Extent:** Wind energy developments in these landscapes should be relatively small in terms of spatial extent. It is important that they do not dominate but achieve a balance with their surrounds, especially considering that small fields and houses are prevalent.*
- ***Spacing:** All options are possible, depending on the actual landscape characteristics. However, irregular spacing is likely to be most appropriate, given the*

- complexity of landform and land cover typical of these landscapes, and the absence of extensive swaths of fields of regular and rectilinear pattern.*
- **Layout:** *The likely location of wind energy developments on ridges suggests a linear or staggered linear layout whereas on broader hilltops they could be linear or clustered. Grid layouts are less likely to succeed aesthetically unless there is an open continuity of similar landcover.*
 - **Height:** *In small-scaled enclosed areas, short turbines are preferred in order to avoid their spatial dominance and to ensure visual balance. However, where the upper ground is relatively open and visually extensive, taller turbines may be more appropriate. In terms of perceived height, the profile can be even or uneven, depending on the profile and visual complexity of the terrain involved. The more rugged and undulating, the greater the acceptability of an uneven profile provided it does not result in significant visual confusion and conflict.*
 - **Cumulative Effect:** *This would have to be evaluated on a case-by-case basis, but great caution should be exercised. The spatial enclosure often found in transitional marginal landscapes is likely to preclude the possibility of seeing another wind energy development. However, should two or more wind energy developments be visible within a confined setting a critically adverse effect might result, depending on turbine height and wind energy development extent and proximity.”*

Overall, the proposed turbines are 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 Landscapes.

In terms of location, the proposed turbines are all sited on or near elevated peaks and are clearly separated visually. In terms of spatial extent, the proposed turbines are sited within a relatively small spatial extent comprising the southern slopes of Knockbane peak. The proposed turbines appear visually coherent as one cluster and are sited primarily within tracts of commercial forestry, thereby achieving aesthetic visual balance with the surrounding mixed landcover. In terms of spacing, proposed turbines are sited at unevenly spaced locations in a clustered layout. In terms of layout, the proposed turbines are arranged in a staggered/clustered layout that, when viewed from more distant locations within the LVIA Study Area, are seen on the hilltops as a linear layout. In terms of height, the proposed turbines are relatively tall (blade-tip height of 185m) and are thereby appropriately viewed from a distance on the open uplands of Knockbane peak where the landscape transitions from lowland valley to marginal upland. In terms of cumulative effect, the Proposed Project is considered with respect to its proximity to multiple existing wind farms among the same wider marginal upland setting of the foothills of Slieve Felim Mountains; see full details of the cumulative context in Section 14.6 below.

14.4.6 Wider Landscape Setting

14.4.6.1 Landscape Character of the LVIA Study Area

In the wider LVIA Study Area, the landscape character is primarily defined by upland mountainous terrain of the Silvermine Mountains and broader Slieve Felim Mountain Range to the west and north, and broad agricultural river valleys to the east, south and southwest, primarily forming the River Suir valley and the Dead River/Mulkear River valley.

The key landscape characteristics in the north include highly scenic uplands with industrial mining legacy, as well as complex terrain of rounded hills, enclosed steep sided valleys and linear uplands with sparse population and remote character. The key landscape sensitivities of long-ranging scenic views from high peaks in the north are not impacted by the Proposed Project, as the ZTV map shows primarily no potential visibility from these areas.

The key landscape characteristics of the valley lowlands include flat and gently undulating agricultural plains, wide rolling vistas with large fertile fields and dense hedgerow boundaries, strong settlement

networks with regional and national roads and areas of pastoral farmland with well-developed hedgerows and locally prominent hills and ridges. The ZTV mapping shows that lowland areas in the east, south and southwest of the LVIA Study Area have primarily full theoretical visibility of the proposed turbines, as the turbines are located on the south-facing aspect of Knockbane peak. Potential effects on these the key landscape characteristics listed here are reported in Section 14.7 Likely Significant Landscape and Visual Effects.

14.4.6.2 Rock of Cashel Historic/Archaeological Landscape

The Rock of Cashel, a nationally renowned historical site with very high historical, cultural and archaeological value, is located within the LVIA Study Area at approximately 14.7km from the proposed turbines and has full theoretical visibility according to ZTV mapping. From an LVIA perspective, the historic landscape amenity of this site includes its value as a specific destination for visitors to come and experience views of the landscape, both views from the historic site itself and views towards the Rock of Cashel within its wider landscape setting.

The Rock of Cashel is part of Ireland's Royal Sites of Ireland and is therefore included on Ireland's tentative list as a potential UNESCO Heritage Site. The following context is provided to provide clarity on the status of a site on the tentative list and the appropriate and proportionate level of impact assessment which can or cannot be conducted for sites on the UNESCO tentative list. The following documents provide guidance for the impact assessment of wind energy developments on UNESCO world heritage (collectively termed, UNESCO Guidance):

- *Guidance and Toolkit for Impact Assessments in a World Heritage Context* (UNESCO, 2022), hereafter referred to as "UNESCO Toolkit Guidance."
- *Guidance for Wind Energy Projects in a World Heritage Context* (UNESCO, 2022), hereafter referred to as "UNESCO Wind Guidance."

The UNESCO Toolkit Guidance is specifically designed to assess impacts on properties that are already inscribed on the UNESCO World Heritage List or those with formally adopted Statements of Outstanding Universal Value (SOUV). World Heritage properties are inscribed on the World Heritage List for their exceptional cultural and/or natural values for all of humanity. This importance is expressed through a measure called the Outstanding Universal Value (OUV) of a site. The OUV is endorsed by the World Heritage Committee in the SOUV, usually at the time of inscription. The OUV is established at the time of inscription and can only be changed by a new nomination process with approval by the World Heritage Committee.

The Rock of Cashel, as one of six "Royal Sites of Ireland," is currently proposed for nomination for UNESCO World Heritage status. A nominated tentative property, such as the Rock of Cashel, does not have an officially recognised OUV by the World Heritage Committee. The UNESCO Guidance has been developed to assess potential impacts on properties that:

- Have been formally inscribed on the World Heritage List,
- Have an adopted Statement of OUV,
- Are already subject to the requirements of the World Heritage Convention.

The UNESCO Guidance for impact assessment comprises an approach tailored to protect sites whose OUV is recognised and binding. In contrast, tentative sites are not yet inscribed, meaning they do not have formal protection under the Operational Guidelines for the Implementation of the World Heritage Convention. Tentative sites do not have a formally adopted OUV, meaning there is no agreed framework against which to assess the impact of a development. The tentative list status means a country has proposed a site for potential future nomination, but it has no legal or procedural standing under the World Heritage Convention. Assessing the Proposed Project in accordance with the UNESCO Guidance is not applicable in the case of the Rock of Cashel; however, the assessment process can be informed by both UNESCO Guidance documents.

Currently, there is no definitive statement of what constitutes OUV for the Rock of Cashel; therefore, complete alignment with the UNESCO guidance is not currently possible. However, there are suggested frameworks and technical tools within the guidance which have been considered and adopted in the assessments of this chapter to ensure a robust and proportionate assessment in the absence any defined OUV.

The UNESCO Toolkit Guidance quotes EIA as being the appropriate mechanism for conducting impact assessments. The key distinction between the UNESCO Toolkit Guidance and EIA is related to the requirement to assess impacts on OUV of a site. As part of evaluating potential impacts on World Heritage Sites, it is important to define the type of change that will occur and if this change is reversible, temporary or permanent. In the context of the Proposed Project, it is only the proposed turbines which have the potential to impact the Rock of Cashel (located approx. 14.7km from the nearest proposed turbine T12). The effects are therefore reversible as the proposed turbines will be decommissioned and removed at the end of the proposed 35-year planning permission. While there is a possibility that the proposed turbines could be replaced at the end of the planning period, this is currently uncertain as it would be subject to a new planning application and assessment within a future receiving environment.

“Note 5” of the UNESCO Wind Guidance relates to Visual Impact Assessment. The methodology, tools and process for visual impact assessment in Note 5 are strongly aligned with the methodology of this LVIA which follows best practice guidelines for the LVIA of wind energy developments in Ireland. The main difference arises in the concept of assessing OUV, which is not possible in this case. Landscape and visual effects, including cumulative effects, on the Rock of Cashel are reported in this LVIA in the following sections:

- 14.7.3.2.3 Visual Effects on Rock of Cashel,
- 14.7.4.1.2 Sub-heading – Cumulative Effects on Rock of Cashel.