

# 11 LANDSCAPE

## 11.1 INTRODUCTION

- 1 This chapter describes and analyses the existing landscape character along the route of the proposed development in the Meath Study Area (MSA) and provides an evaluation of the potential for landscape and visual impacts arising from the proposed development in that study area.
- 2 Accordingly, this chapter of the Environmental Impact Statement (EIS) identifies and describes the landscape impacts which are predicted to occur in the MSA.
- 3 A description of the proposed development is set out in Chapter 6, **Volume 3B** of the EIS. That chapter describes the full nature and extent of the proposed development, including elements of the overhead line (OHL) design and the towers. In addition, Chapter 6, **Volume 3B** of the EIS provides a factual description, on a section by section basis, of the entire line route. The proposed alignment is described in that chapter using townlands and tower numbers as a guideline. The principal construction works proposed as part of the development are set out in Chapter 7, **Volume 3B** of the EIS.
- 4 The alignment of the proposed development has been carefully considered so as to avoid and minimise, without being able to remove all, visual and landscape effects. Those effects that remain are the residual unavoidable effects that will occur if planning approval is granted in respect of the proposed development. Accordingly, this chapter does not purport to establish that there are no adverse effects on the appearance or character of the landscape along the alignment of the proposed electricity transmission development in the MSA.
- 5 A generalised appraisal has been conducted of the residual unavoidable effects of the proposed development on the landscape in the MSA, as is appropriate in relation to linear developments. For further details on the evaluation of visual impact on residential properties, refer to the *North-South 400 kV Interconnection Residential Visual Impact Assessment* included as **Appendix 11.2, Volume 3D Appendices**, of the EIS.
- 6 In summary, this chapter includes the following information:
  - Landscape and Visual Impact Assessment Methodology;
  - Description of the Characteristics of the Proposed Development;
  - Description of the Existing Environment;

- Description of Potential Landscape and Visual Impact;
- Description of Mitigation Measures;
- Description of Residual Landscape and Visual Impact;
- Description of Interrelationships between Environmental Factors; and
- Conclusions.

7 Given its subject matter, this chapter is supported by mapping contained in **Volume 3D Figures** of the EIS as follows:

- Figure 11.1 MSA Landscape Character Areas;
- Figure 11.2 MSA Landscape Character Types;
- Figures 11.3 - 11.7 MSA Landscape Constraints and Photomontage Locations; and
- Figures 11.8 - 11.12 MSA Zone of Theoretical Visibility and Photomontage Locations.

8 A set of full-scale photomontages and wireframes are also contained in **Volume 3D Figures** of the EIS.

9 Site assessments were carried out by two landscape architects as per best practice.

## 11.2 METHODOLOGY

### 11.2.1 Scope of the Evaluation

10 This section of the EIS has been prepared in accordance with relevant EU and Irish Legislation and guidance, including the requirements of Annex IV of the EIA Directive and in accordance with Schedule 6 of the *Planning and Development Regulations 2001* (as amended) and conforms to the relevant requirements as specified therein. The scope of the evaluation is based on a review of legislation, guidance documents, other EISs, feedback from public consultation, consultation with prescribed authorities, including An Bord Pleanála (the Board), and a consideration of the likelihood for significant impacts arising, having regard to the nature of the receiving environment and the nature and extent of the proposed development.

11 The scoping opinion received from the Board (see Appendix 1.3, **Volume 3B Appendices** of the EIS) identified the following issues as being relevant to this chapter of the EIS, each of which are dealt with in this chapter or elsewhere in the EIS as noted below:

- 
- Include full-scaled photomontages (these are included in **Volume 3D Figures** of the EIS);
  - Provide an overview of landscape character having regard to the Landscape Character Assessments which inform statutory development plans;
  - Identify the area of visual influence;
  - Assess impacts on landscape character and visual amenities having particular regard to designated landscapes, views of amenity value, including protected views, and the setting of main tourism assets;
  - Appraise potential impacts on the character and setting of sites of cultural and historic interest and on historic landscapes, including for example Bective Abbey, Donaghpatrick and Teltown;
  - Identify and appraise potential impacts on historic demesne landscapes;
  - Appraise potential for alternative routing or partial undergrounding in sensitive landscape areas (this is included in Chapter 4, **Volume 3B** of the EIS); and
  - Appraise cumulative visual and landscape impact with the 110 kV and 220 kV OHL network and other existing and permitted development (This is included in Chapter 10, **Volume 3B** of the EIS).
- 12 Scoping submissions were also received from Meath County Council, Cavan County Council, Fáilte Ireland, An Taisce and the Department of the Environment, (Northern Ireland) and have been taken into account in this appraisal.
- 13 An outline of an OHL route selection methodology, including mitigation by avoidance, is described in detail in Chapter 5, **Volume 3B** of the EIS. The *Final Re-Evaluation Report* (April 2013) (see Appendix 1.1, **Volume 3B Appendices** of the EIS), also provides full details of how the preferred route corridor and indicative line route was selected, including reference to the potential for landscape and visual impacts.
- 14 The *Preferred Project Solution Report* (July 2013) (see Appendix 1.2, **Volume 3B Appendices** of the EIS), outlines the process of moving from an indicative line route, as identified in the *Final Re-evaluation Report* (April 2013), to a more detailed preferred line design.

### 11.2.2 Guidelines

15 The key guidelines used in this appraisal are the Environmental Protection Agency's (EPA) *Advice Notes on Current Practice in the preparation of EIS*, (September 2003) and the Landscape Institute and Institute of Environmental Management and Assessment's *Guidelines for Landscape and Visual Impact Assessment*, 3rd edition, (2013). A full reference list of guidelines and documents is contained in the **Bibliography** in this volume of the EIS and Table 11.1, **Appendix 11.1, Volume 3D Appendices** of the EIS.

### 11.2.3 Evaluation Area for the EIS

16 The size of the evaluation area is based on conclusions from the *Final Re-Evaluation Report* (April 2013) and a professional judgement on the nature of visibility over long distances. The approach to identifying the size of the study area for the purposes of this EIS is as follows:

- 5km either side of alignment for general evaluation; and
- Extension to 10km either side of the alignment for designated panoramic scenic views that are at a higher elevation than the alignment.

### 11.2.4 Desktop Study and Site Survey

17 A desktop study was initially carried out to identify the landscape sensitivities within the MSA as described in the relevant county development plans and county landscape character assessments.

18 Data available from the Irish Trails Office, Discover Ireland, Fáilte Ireland and the historic garden survey as described in the National Inventory of Architectural Heritage (NIAH) was taken into account, providing information about tourist attractions and various driving, walking and cycling routes.

19 Site visits to public locations were carried out to confirm the nature and extent of the key desktop identified landscape constraints and to ascertain the general characteristics of the landscape through which the proposed line route passes. Site visits also determined the most appropriate locations for photographs on which to base photomontages.

20 As part of the consultation process, Meath County Council requested photomontages from specific locations.

### 11.2.5 Definitions of Terms Used in this Chapter

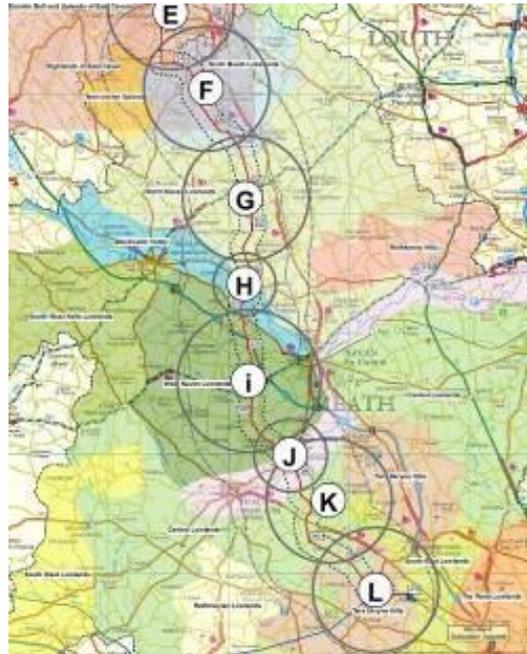
- 21 Landscape effects are defined as the result of physical changes to the fabric of the landscape resulting from new development. Such physical changes may include the addition, alteration or removal of structures or vegetation. Landscape effects can be temporary and include those caused by temporary access routes, construction areas and construction traffic. Landscape effects may be positive (beneficial), negative (adverse) or neutral (no overall change or a balance of positive and negative effects). Landscape effects were evaluated on the basis of:
- The capacity of the existing landscape to absorb the proposed development;
  - Effects on landscape character and physical features;
  - Proximity of sensitive viewpoints (e.g. scenic routes) and visual receptors; and
  - The heights and locations of the typical structures in relation to existing landscape scale.
- 22 Visual effects are closely related to landscape effects, but concern changes in views. Visual assessment concerns people's perception and response to visual amenity. Effects may result from new elements located in the landscape that cause visual intrusion (i.e. interference with or interruption of the view). Visual effects may be positive (beneficial), negative (adverse) or neutral (no overall change or a balance of positive and negative effects). Visual effects were evaluated taking account of:
- The sensitivity of the receiving environment;
  - The visual contrast between the existing environment and the proposed development; and
  - The extent of the areas over which these effects will be discernible.
- 23 A full set of definitions and criteria for assessment (including landscape value, capacity, sensitivity, magnitude of change and significance of effects) is contained in Tables 11.2-11.10, **Appendix 11.1, Volume 3D Appendices** of the EIS.
- 24 For the purposes of this evaluation, landscape and visual effects resulting from the introduction of an overhead electricity transmission line will normally be considered to be of an adverse nature. The sensitivity of the landscape, the magnitude of change proposed and resulting significance of effects will be evaluated in this chapter.

### 11.2.6 Landscape Units

25 For the purposes of this appraisal, and for ease of description, the study area is divided into landscape units as illustrated in **Figure 11.1**.

26 These units are based on landscape character areas described in the *Meath County Landscape Character Assessment (2007)*, and the *Cavan County Development Plan 2014-2020*.

27 Landscape character changes gradually over the geography of the study area, and therefore the landscape units are a guide to general landscape character in any particular area.



**Figure 11.1: Landscape Units**

**Table 11.1: Cross-Referencing Between Towers, Landscape Units, Photomontages and Figures**

Towers	Landscape Character Area	Landscape Unit	Photomontages	Figure
Tower 212 to 239	Highlands of East Cavan (In Cavan)	E <sup>46</sup>	41, 42	11.3
Tower 240 to 272	North Meath Lakelands	F	43, 44, 45, 46	11.3 11.4
Tower 273 to 302	North Navan Lowlands	G	47, 48, 49, 50	11.4 11.5
Tower 303 to 312	Blackwater Valley	H	51, 52, 53, 54, 55, 56, 57, 58, 59	11.5
Tower 313 to 351	West Navan Lowlands	I	60, 61, 62	11.5 11.6
Tower 352 to 363	Boyne Valley	J	63, 64, 65, 66, 67, 69, 71	11.6
Tower 364 to 395	Central Lowlands	K	70, 72, 73	11.6 11.7
Tower 396 to 402	Tara Skryne Hills	L	68, 74, 75, 76, 77	11.7
none	South East Lowlands	M	none	11.7

<sup>46</sup> Note that Landscape Units A-E relating to the Cavan-Monaghan Study Area (CMSA) of the overall proposed development are addressed in **Chapter 11, Volume 3C** of this EIS.

### 11.2.7 ZTV (Zone of Theoretical Visibility) Mapping

- 28 Mapping the extent of the area from which a development is likely to be visible has many names, which is symptomatic of its limitations. Originally known as a Visual Envelope Map (VEM), then as a Zone of Visual Influence (ZVI) and more recently as a Zone of Theoretical Visibility (ZTV), these changes in terminology reflect attempts to address frequent challenges occasioned by the mapping. Thus, as a theoretical methodology, ZTV prediction does not take into account the effects of seasons, lighting, weather conditions or visibility over distance. Moreover, a ZTV does not take into account the screening effects of vegetation or buildings and can omit topographical variations of up to 10m. Therefore, in reality, ZTV mapping's principal use is to identify viewing points for further analysis.
- 29 ZTV mapping has been prepared for this proposed development (Figures 11.8-11.12, **Volume 3D Figures** of the EIS). This was prepared using the latest version of KeyTERRA-FIRMA and AutoCAD software packages. This mapping indicates areas from where the proposed development is *theoretically* visible. It is important to note that the mapping does not indicate areas from which the proposed development will be *actually* visible. The ZTV mapping should therefore be used in conjunction with photomontages in order to ascertain the difference between *theoretical* and *actual* visibility.

### 11.2.8 Photomontage Locations

- 30 The Landscape Institute (UK) in its *Advice Note 01/11 Photography and Photomontage in Landscape and Visual Impact Assessment* published in 2011, on the subject states; "*The landscape professional should select a set of photographic viewpoints which are considered representative of the range of likely effects, viewing experience and viewpoints ensuring that none are under or over represented.*"
- 31 It is possible to prepare detailed and highly realistic images that illustrate the likely future appearance of a development from a specific viewing point. These are useful for examining the effects from a limited number of critical viewpoint positions. However, they contribute little to an appraisal of the effects on the overall landscape within which an almost infinite number of potential viewpoints exist. There is no meaningful way to illustrate every view within a landscape. Instead, a representative sample of 'worst case' views are provided. These include views from elevated areas, in very open landscape, where the alignment crosses higher ground, or at close distances. Many other locations within the study area will not experience any landscape or visual effects as a result of the proposed development.

- 32 Other photomontage locations are selected to illustrate the nature of visibility in the wider landscape. As the views are representative of viewing conditions that are encountered, some of them may show vegetation, buildings or topography partially screening the proposed development. Such conditions are normal and representative.
- 33 A significant limitation of visualisations is that the visual prominence of features in the landscape is significantly affected by lighting conditions and weather. Thus, for example, all views will appear different in various conditions of lighting, haze, weather and seasons. The views provided **Volume 3D Figures** of the EIS, and shown at a smaller scale in this chapter of the EIS, are representative but not comprehensive – because in addition to there being an almost infinite number of viewpoints, there are a very large set of combinations and permutations of lighting conditions that could conceivably occur for every view. The Landscape Institute (UK) Guidelines (2011) *in its Advice Note 01/11: Photography and Photomontage in Landscape and Visual Impact Assessment* published in 2011, on the subject states; “*they (photomontages) are subject to the same inherent limitations as photographs, for example only showing the scene as it would appear under the same conditions that prevailed when the original photograph was captured.*”
- 34 Therefore, at best, visualisations can represent a view from a particular location at a particular time in particular weather conditions. There is no such thing as a fixed or single impact on the appearance or character of the landscape.
- 35 Photomontages do not show the effects of temporary hedgerow removal at construction stage, as this will be reinstated. The more permanent localised trimming or removal of taller vegetation within falling distance of any part of any OHL support or conductor is also not indicated.
- 36 The most effective use of photomontages is to view them in the field, The Landscape Institute (UK) *in its Advice Note 01/11 Photography and Photomontage in Landscape and Visual Impact Assessment* published in 2011, states; “*It is essential to recognise that two-dimensional photographic images and photomontages alone cannot capture or reflect the complexity underlying the visual experience, and should therefore be considered an approximation of the three-dimensional visual experiences that an observer would receive in the field.*”
- 37 A full-scale set of photomontages, with technical details, are contained in **Volume 3D Figures** of the EIS. The detailed location and context of photomontage views are indicated on the mapping in Figures 11.3 – 11.7, **Volume 3D Figures** of the EIS. All photomontage locations are publically accessible.

**Table 11.2: Full Set of Photomontages**

Photomontage number	Direction of view
41 <sup>47</sup>	View east from picnic area beside local road L7567 near scenic view point (SV8) Lough an Leagh Gap
42	View east from local road L3533 in the townland of Drumbar (ED Enniskeen) east of Moyhill Bridge
43	View southwest from local road L68012 in the townland of Ervey
44	View northeast from R164 in the townland of Corrananagh
45	View west from car park at Whitewood Lough - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 257 and 268)</i>
45A	View north, northwest from Protected View and Prospect 18 located at the T-Junction of local roads L6806 / L28021 in the townland of Ardmaghbreague
46	View northeast from local road L7404 across the main entrance gate of Brittas Estate
47	View north, northeast in the vicinity of Protected View and Prospect 17 located at local road L7405 in the townland of Cruicetown
47A	View north, northeast from Motte at Cruicetown
48	View northeast from N52 approximately 1km west of Raffin Cross - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 279 and 283)</i>
48A	View south, southeast from N52 approximately 1km west of Raffin Cross - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 279 and 283) and the wind turbines of the proposed Emlagh Wind Farm</i>
48B	View east, southeast from local road L74116 in the vicinity of the townland of Drakerath / Clooney - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 279 and 283) and the wind turbines of the proposed Emlagh Wind Farm</i>
48C	View east in the vicinity of Protected View and Prospect 15 located at local road L2811 approximately 1.5km north of Carlanstown - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 279 and 283) and the wind turbines of the proposed Emlagh Wind Farm</i>
49	View southeast from local road L74112 (Cul de Sac) in the townland of St. Johns Rath - <i>Please note this photomontage includes wind turbines of the proposed Emlagh Wind Farm</i>
50	View northwest from local road L74115 in the townland of Red Island - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 291 and 295) and the wind turbines of the proposed Emlagh Wind Farm</i>

<sup>47</sup> Note that Photomontages 1-42 relating to the Cavan-Monaghan Study Area (CMSA) of the overall proposed development are addressed in **Chapter 11, Volume 3C** of this EIS

<b>50A</b>	View west, northwest from local road L74113 in the vicinity of the boundary of Mountainstown Demesne - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 291 and 295) and the wind turbines of the proposed Emlagh Wind Farm</i>
<b>51</b>	View west across cemetery from local road L7414 at Crasulthan Cross Roads (R163), when standing near the gates of the former Gibstown Demesne
<b>52</b>	View southwest from R163 west of Crasulthan Cross Roads.
<b>53</b>	View southeast from local road L34097 (Cul de Sac) across the townland of Teltown
<b>53A</b>	View southeast in the vicinity of Protected View and Prospect 80 located at the R147 looking across the River Blackwater valley - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 307 and 312)</i>
<b>54</b>	View east from hill at Peoples Park Lighthouse / Tower of Lloyd (Protected View and Prospect 13) located approximately 1.8km west of Kells - <i>Please note this photomontage includes wind turbines of the proposed Emlagh Wind Farm</i>
<b>55</b>	View northeast from R147 (Boyne Valley Driving Route) opposite Fuel Station across the Blackwater Valley - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 307 and 312)</i>
<b>56</b>	View northwest from local road L7413 at Donaghpatrick Bridge - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 307 and 312)</i>
<b>57</b>	View west from the south-western boundary of Donaghpatrick Church and graveyard - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 307 and 312)</i>
<b>58</b>	View southwest from local road L3409 near the T-Junction with local road L34091 in the townland of Donaghpatrick - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 307 and 312)</i>
<b>59</b>	View southeast across the Blackwater Valley from Teltown Church - <i>Please note this photomontage includes bird flight diverters attached to both earthwires (Section between Towers 307 and 312)</i>
<b>60</b>	View southwest from the bridge on local road L8009 crossing M3 motorway in the townland of Ardbraccan
<b>61</b>	View east from local road L4024 overlooking graveyard at Dunderry – <i>Please note that names on grave stones have been blurred in order to preserve the anonymity of the grave</i>
<b>62</b>	View from local road L4008 east of Dunderry in the townland of Philpotstown
<b>63</b>	View northeast from R161 at the gates of the Meath GAA centre
<b>64</b>	View south, southeast from the upper landing of the steps at Bective Abbey across the Boyne Valley
<b>65</b>	View west, southwest from the upper landing of the steps at Bective Abbey across the Boyne Valley - <i>Please note this photomontage includes aviation marker spheres attached to one earthwire (Section between Towers 355 and 357)</i>
<b>66</b>	View southwest across the River Boyne from local road L4010 (Boyne Valley Driving Route) at Bective Bridge (Protected View and Prospect 86) - <i>Please note this photomontage includes aviation marker spheres attached to one earthwire (Section between Towers 355 and 357)</i>

67	View southwest from local road L2203 (Boyne Valley Driving Route) approximately 500m southwest of Bective
67A	View northeast from local road L2203 (Boyne Valley Driving Route) across the townland of Trubley in the direction of Bective Abbey - <i>Please note this photomontage includes aviation marker spheres attached to one earthwire (Section between Towers 355 and 357)</i>
68	View west, southwest from the Hill of Tara (Protected View and Prospect 44) at the Lia Fáil
69	View east, southeast from local road L22051 across the townland of Creroge
70	View east from local road L2205 across the townland of Crumpstown or Marshallstown
71	View east from the top of Trim Castle
72	View northeast from local road L6202 in the townland of Foxtown
73	View southeast from local road L2207 in the townland of Derrypatrick
74	View southwest from R125 at entrance gate of Culmullin Parish Church at T-Junction with local road L6206
75	View east, northeast from R125 at a farm gate across the townland of Bogganstown
76	View northeast from R125 in the townland of Leonardstown
77	View northeast from R156 across the townland of Leonardstown approximately 500m southeast of the Mullagh Cross Roads

### 11.3 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

38 It is proposed to introduce large structures into the rural landscape along the length of the line route. These structures are similar in design to other existing high voltage electricity infrastructure in Ireland. The towers and associated infrastructure have the potential to impact on landscape character and visual amenity, particularly where the following factors occur:

- A large number of towers are visible from a single viewing point;
- The OHL crosses or is in close proximity to a scenic route;
- The OHL crosses a national or regional road;
- The OHL is visible along a wide expanse of open countryside of a dominantly natural character;
- The OHL crosses a skyline ridge;
- The OHL is in close proximity to a river or lake at a point where there is visibility from public roads; or

- The OHL crosses a visually conspicuous upland area.

## 11.4 EXISTING ENVIRONMENT

### 11.4.1 Landscape Context and Character

39 The study area for this appraisal forms part of the fertile agricultural lowlands of County Meath, drained by the rivers Boyne and Blackwater and long inhabited and altered by man. It includes the southernmost part of the extensive drumlin belt which stretches east-west across the island of Ireland and some very flat areas which tend to be more sparsely populated and, have in some areas, been planted with commercial forestry. The long history of human habitation and agriculture is reflected in a range of visible built heritage features and landscapes as well as widespread rural housing development, farm and commercial buildings, sports fields, a dense road and hedgerow network and existing utilities infrastructure. Main roads, including the M3, N2, R162, and R147 tend to travel in a north-west – south-east direction. The N51, N52 and R161 also form part of the transport network linking the main towns of Navan, Trim and Kells. An important feature of this generally low-lying landscape is the intervisibility between the small hills and the significance of this intervisibility over the millennia.

#### 11.4.1.1 Meath Landscape Character Assessment (MLCA)

40 The MLCA was completed in 2007. The MLCA includes descriptions of the physical elements and visual characteristics of the landscape and classifies particular sections of the County in terms of *value, sensitivity, importance* and *capacity*. The *Meath County Development Plan* (CDP) (Section 8.4.3), states however, that it is only possible to accurately define Landscape Capacity on a case by case basis because it will vary according to the type and form of development, its location in relation to the Landscape Character Area (LCA) and its visibility from locations within the LCA.

41 The county level assessment carried out by Meath County Council therefore provides guidance to the more project-specific landscape assessment set out in this chapter. A *Draft National Landscape Strategy for Ireland 2014-2024* was issued by the Department of Arts, Heritage and the Gaeltacht for consultation in July 2014. The implementation of the current draft strategy would include a new National Landscape Character Map and new statutory guidelines on local Landscape Character Assessment.

42 Tables summarising the relevant general recommendations of the MLCA are contained in Tables 11.11 and 11.12, **Appendix 11.1, Volume 3D Appendices** of the EIS.

43 The location of the proposed development in relation to Landscape Character Areas and Landscape Character Types as set out in the MLCA is indicated in Figures 11.1 and 11.2, **Volume 3D Figures** of the EIS.

#### 11.4.2 Landscape Value

44 The criteria for the assessment of landscape value in this EIS are set out in Table 11.2, **Appendix 11.1, Volume 3D Appendices** of the EIS. The factors that feed into a determination of landscape value are set out below as well as in **Section 11.4.3**, which describes the landscape value of each landscape unit.

45 The MLCA has recognised particular parts of the landscape as being of significant value – particularly the Boyne and Blackwater River valleys and an area termed the Tara Skryne Hills, as well as drumlin tops and the setting of heritage features. The proposed line route crosses both rivers and part of the extended elevated landform south of Tara and Skryne Hills. The Meath and Cavan CDPs, past and present, have recognised views worthy of protection as well as landmarks, walking routes and potential tourism areas. Other recreation routes are also promoted by the Irish Trails Office and Fáilte Ireland and a series of historic designed landscapes have been recorded by the NIAH.

##### 11.4.2.1 Meath County Development Plan 2013-2019

46 There are several policies and objectives contained in the Meath CDP which focus on County's landscape, the most relevant are listed below.

- Strategic Policy LC SP 1, which aims to *“Protect the landscape character, quality and local distinctiveness of County Meath in accordance with relevant government policy and guidelines and the recommendations included in Meath Landscape Character Assessment (2007).”*
- Objective LC OBJ 1 *“To seek to ensure the preservation of the uniqueness of all landscape character types, and to maintain the visual integrity of areas of exceptional value and high sensitivity.”*

47 The Meath CDP also proposes a *Draft Landscape Conservation Area* for the Hill of Tara, the extent of which is indicated in Figure 11.6, **Volume 3D Figures** of the EIS.

##### 11.4.2.2 Designated Landscape Routes and Features

48 The following section identifies relevant designated viewpoints, routes and features within the study area for this appraisal. Their locations are shown in Figures 11.3-11.7, **Volume 3D Figures** of the EIS.

### 11.4.2.3 Protected Views and Prospects

- 49 A set of protected views and prospects have been recognised in the Meath CDP. It is an objective of Meath County Council, in LC OBJ 5 “*To preserve the views and prospects and the amenity of places and features of natural beauty or interest listed from development that would interfere with the character and visual amenity of the landscape.*”
- 50 These are views within County Meath that are expansive, iconic or panoramic and tend to demonstrate a key feature or valuable element of the landscape. The list of ‘Protected Views and Prospects’ includes an allocation of significance - *local, regional or national*. The locations of protected views and prospects in relation to the line route are listed in Table 11.13, **Appendix 11.1, Volume 3D Appendices** of the EIS and shown in Figures 11.3-11.7, **Volume 3D Figures of the EIS**.
- 51 The closest protected views to the line route are VP19, *Whitewood Lough* (0.5km), VP86, *Bective Bridge* (0.9km), VP16 and VP17 in *Cruicetown* (1.1km and 1km respectively) and VP 21 at *Aghaloaghan* (1km). VP19, VP86 and VP21 are considered to be of local significance and VP17 is considered to be of regional significance.

### 11.4.2.4 Landmarks

- 52 Landmarks, as defined in the MLCA, are listed in Table 11.14, **Appendix 11.1, Volume 3D Appendices** of the EIS. These tend to be significant structures in the landscape or trees on the skyline and locations are indicated in Figures 11.3-11.7, **Volume 3D Figures** of the EIS.
- 53 The closest designated landmarks to the line route are a Beech copse at a distance of approximately 0.8km and Bective Abbey at a distance of 0.9km.

### 11.4.2.5 Tourist Driving Routes

- 54 Relevant Driving Routes, which are defined in the MLCA and more recently as part of the Fáilte Ireland Boyne Valley Driving Route (2013), are listed in Tables 11.15 and 11.16, **Appendix 11.1, Volume 3D Appendices** of the EIS. Their locations are shown in Figures 11.3-11.7, **Volume 3D Figures** of the EIS.
- 55 The closest designated driving routes to the line route are those along the county roads connecting Jordanstown, Tara, Bective and Trim, the R147 between Kells and Navan, the R161 from Trim to the Hill of Tara and the Fáilte Ireland Boyne Valley Driving Route.

#### 11.4.2.6 Existing and Proposed Key Waymarked Paths and Cycle Routes

- 56 Waymarked Paths and Cycle Routes are indicated on mapping in the MLCA. Signed routes are also indicated on the Irish Trails Office website [www.irishtrails.ie](http://www.irishtrails.ie). These routes are listed in Tables 11.17 and 11.18, **Appendix 11.1, Volume 3D Appendices** of the EIS and shown on Figures 11.3-11.7, **Volume 3D Figures** of the EIS.
- 57 The alignment crosses an on-road cycle route linking Tara and Trim, the on-road Táin Trial cycle route and a proposed walking route along the river Blackwater.
- 58 The route of the disused Navan to Kingscourt railway has the potential to be used as a Greenway for both walkers and cyclists. This route passes closest to the proposed development at Kilmessan, a distance of 2km.

#### 11.4.2.7 Potential Tourism Areas

- 59 Refer to Figures 11.3-11.7, **Volume 3D Figures** of the EIS for locations of sites of '*Major Tourist Attractions, Secondary Tourist Attractions and Areas/Features with potential to be developed as a Tourist Attraction*' as listed in the MLCA.
- 60 The alignment passes through an '*Area with potential to be developed as a Tourist Attraction*' at Donaghpatrick as listed in Map 18 of the MLCA.

#### 11.4.2.8 Cavan County Development Plan 2014-2020

- 61 The *Cavan County Development Plan 2014-2020* (the Cavan CDP) has undertaken a Categorisation of Cavan's landscape. It is not intended as a Landscape Character Assessment but the identified categories may form part of a future landscape character assessment. The categories have been chosen due to their physical characteristics and geomorphological features which make them distinctive in the county. The categories subdivide Cavan's landscapes into 5 Character Areas. The line route passes through Area 5 - *East Cavan Highlands*.
- 62 Significant landscape features recognised by the Cavan CDP are listed in Table 11.19, **Appendix 11.1, Volume 3D Appendices** of the EIS, and their locations are shown on Figure 11.3, **Volume 3D Figures** of the EIS.
- 63 The closest to the line route are Lough an Leagh Gap at approximately 1.5km and Dun a Rí Forest Park at 2.8km distance.

#### 11.4.2.9 Historic Designed Landscapes

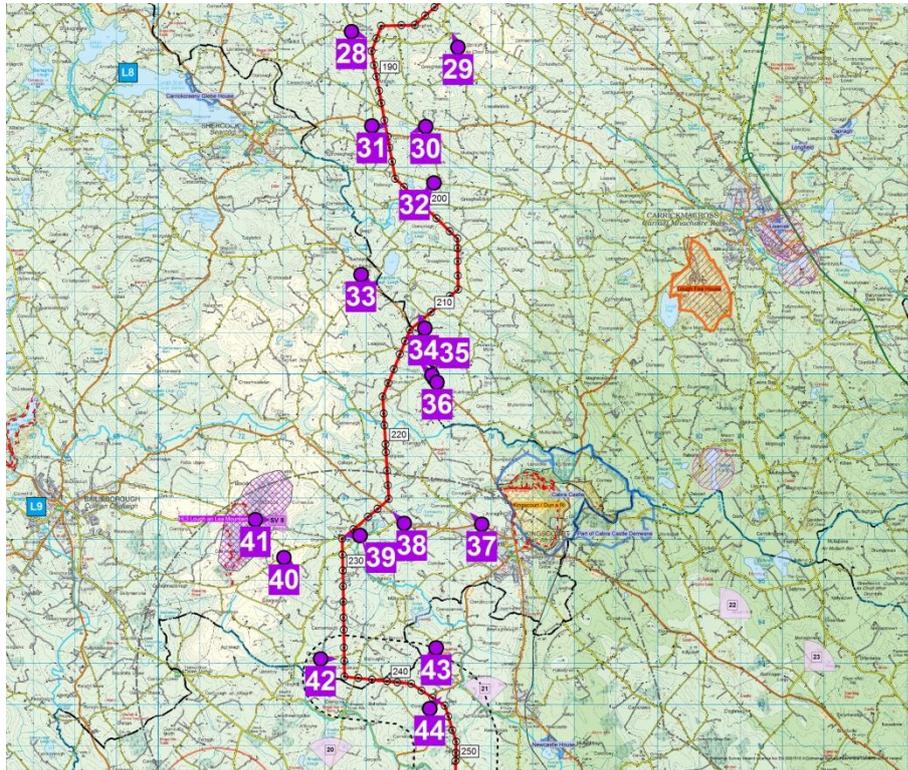
64 A number of Historic Designed Landscapes listed within the NIAH and described as having “*main features substantially present*”, fall within 1km of the proposed line route; Brittas, Mountainstown, Philpotstown, Galtrim, Ardbraccan, Churchtown, Whitewood, Dowdstown and Culmullin. The line route crosses through Brittas Estate, Philpotstown and Mountainstown. These historic designed landscapes and others within the study area are set out in Table 11.20, **Appendix 11.1, Volume 3D Appendices** of the EIS along with their description of condition. Their locations are shown on Figures 11.3-11.7, **Volume 3D Figures** of the EIS.

#### 11.4.2.10 Special Areas of Conservation and Natural Heritage Areas

65 While Special Areas of Conservation (SAC) and Natural Heritage Area (NHA) designations relate to ecological importance, their amenity potential is a factor in warranting evaluation in terms of visual and landscape effects (refer also to **Chapter 6** in this volume of the EIS). Table 11.21, **Appendix 11.1, Volume 3D Appendices** of the EIS lists the Ecological Designations within 5km of the proposed line route. Their locations are shown on Figures 11.3-11.6, **Volume 3D Figures** of the EIS. The alignment crosses the River Boyne and River Blackwater cSACs.

### 11.4.3 Detailed Description of the Landscape Units

#### 11.4.3.1 Detailed Description of Landscape Unit E – Highlands of East Cavan



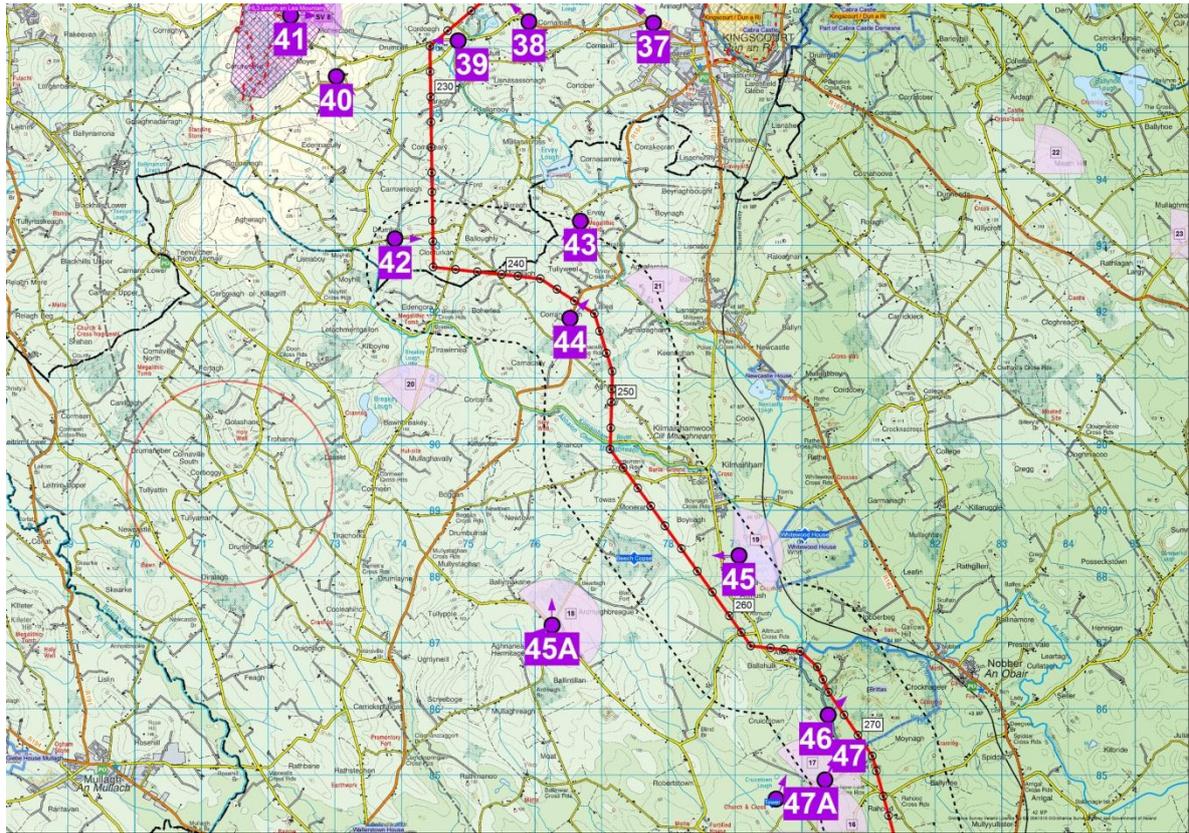
**View 41** from Lough an Leagh Gap picnic area



**View 42** from the L3533 at Drumbar

<b>Description</b>		
<p>This unit includes two distinct landscape types - the low lying drumlins of the most eastern part of Cavan and the uplands of Lough an Leagh Mountain. Views tend to be enclosed within the drumlin landscape, but elevated positions provide panoramic views. Both the lowlands and the mountain are man-altered and contain agricultural patterns, a network of roads, houses and telecommunications and electricity infrastructure.</p>		
<b>Value – Moderate / High</b>	<b>Capacity – Moderate</b>	<b>Sensitivity – High / Moderate</b>
<p>A protected viewpoint, SV8, is located at Lough an Leagh Gap which is also designated as a <i>High Landscape Value Area</i>. There is a picnic area beside the local road and a looped walking route leaves from here and passes the existing telecommunications towers on the mountain. The panoramic view from the top of the mountain takes in three windfarms to the west, stands of forestry and the man-altered landscape of the lowlands.</p> <p>Dun a Rí Forest Park is located to the east of Kingscourt 2.5km from the line route.</p>	<p>This part of County Cavan has moderate capacity to absorb the landscape and visual effects of a transmission line.</p> <p>The drumlins are more spaced out than ones further north in Cavan and have less steep slopes. This results in larger areas of visual enclosure. On the other hand there are areas of taller vegetation in this unit which produce a corresponding increase in visual screening by mature vegetation.</p>	<p>Views from the most elevated parts of the landscape unit at Lough an Leagh Mountain are most sensitive, although current views include a vast sweep of a changing rural landscape incorporating existing power and telecommunications infrastructure.</p> <p>The lower lying areas are of moderate sensitivity considering the enclosure provided by vegetation and topography. The higher parts of drumlins, are however, more sensitive.</p>

### 11.4.3.2 Detailed Description of Unit F – North Meath Lakelands



**View 43** from the L68012 at Ervey showing the existing 220 kV transmission line



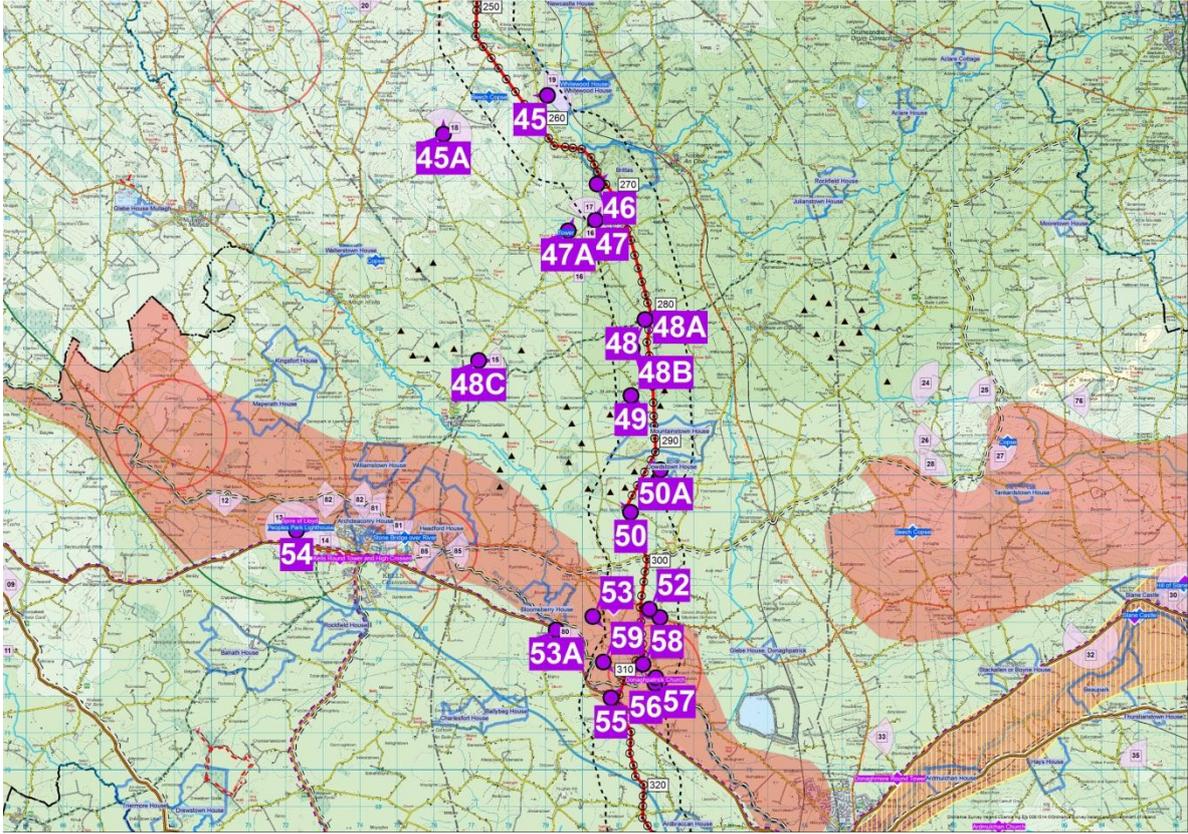
**View 44** from the R164 at Corrananagh



**View 47** from the L7405 at Cruicetown

<b>Description</b>		
<p>This unit contains a long inhabited, man-altered landscape which includes Nobber and Kilmainhamwood and low undulating agricultural lands, the Kilmainhamwood river valley, Whitewood lake, Brittas Estate, an existing 220 kV overhead line and increasing amounts of drumlins as one moves north.</p>		
<b>Value - Moderate</b>	<b>Capacity – Low / Moderate</b>	<b>Sensitivity - Moderate</b>
<p>There are a number of protected viewpoints within the study area: VP19 at approximately 0.9km from the line route, VP21 and VP17 at 1km, VP18 at 2.3km and VP20 at 2.3km.</p> <p>A <i>Beech copse</i> west of Whitewood Lough and an <i>Estate House</i> (Whitewood) immediately east of the Lough are designated as landmarks in the MLCA.</p>	<p>The MLCA states that this landscape unit has low potential capacity to accommodate a transmission line or towers because drumlin tops are highly visible and panoramic views to the wider landscape are an important characteristic that would be adversely affected by such development. There is higher capacity for absorbing a transmission line if sited at the lower lying areas within the landscape.</p>	<p>The North Meath Lakelands Landscape Unit is assigned a low sensitivity in the MLCA. However, considering the value of the area in the immediate vicinity of the line route, the landscape is considered to be of moderate sensitivity.</p> <p>Accessible views from the tops of drumlins can be sensitive as these offer wide panoramas of the surrounding landscape. The lower lying parts of the landscape tend to be more enclosed.</p> <p>The line route crosses the R164 in a perpendicular manner at Lislea.</p>

### 11.4.3.2.1 Detailed Description of Landscape Unit G – North Navan Lowlands



**View 48** from the N52, approximately 1km west of Raffin Cross



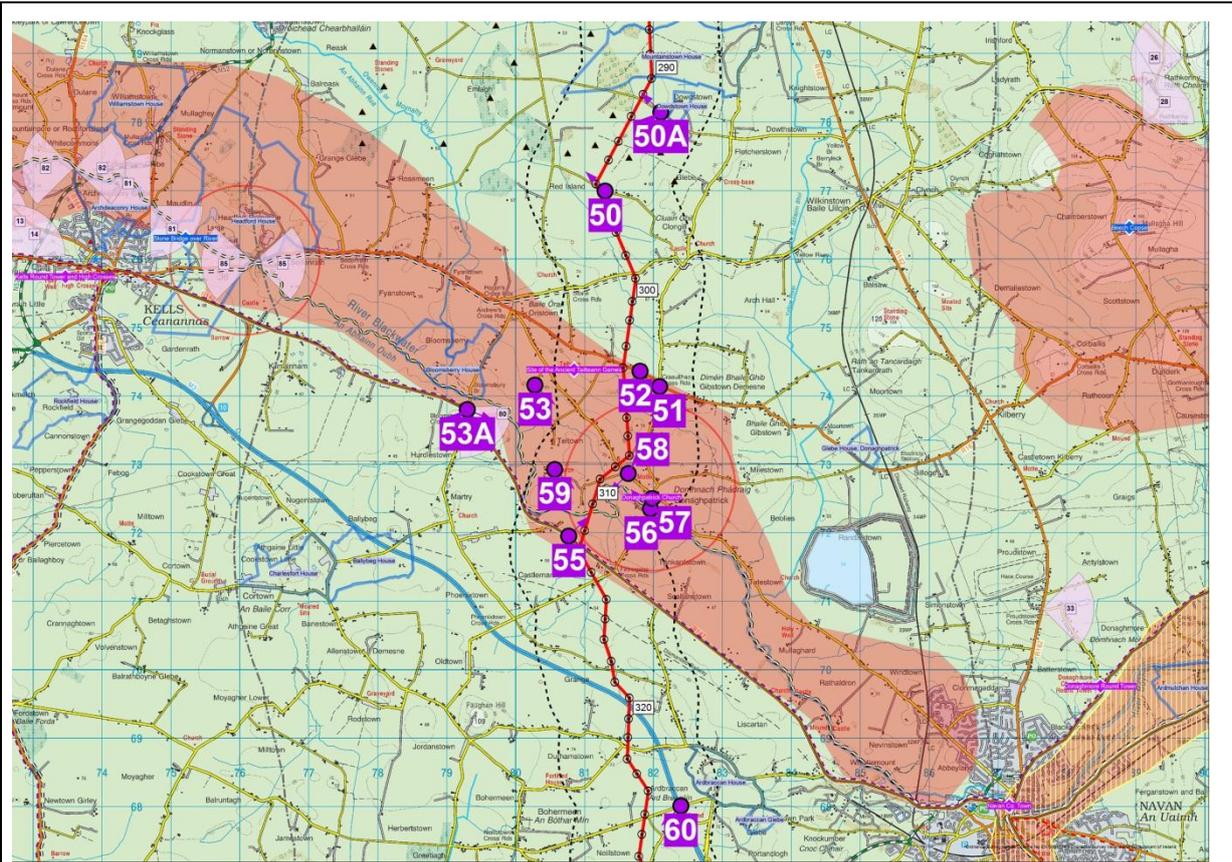
**View 49** from the L74112 at St. Johns Rath



**View 50** from the L74115 at Red Island

<b>Description</b>		
<p>This unit includes some of the more flat and remote parts of Meath. Hedgerows tend to be lower than normal. There are some small hills in the northern part of this unit, but the line route mainly passes through a man-altered flat landscape with areas of bog, large fields, forestry, houses and roads.</p>		
<b>Value - Moderate</b>	<b>Capacity - Moderate</b>	<b>Sensitivity – Moderate</b>
<p>A walking and cycling route runs along the road between Kells and Wilkinstown (Táin Trail), the line route would pass over this road.</p> <p>Protected viewpoint VP15 is at a distance of approximately 4.7km and VP16 is at a distance of approximately 1.1km from the alignment.</p>	<p>The MLCA states that the potential capacity of North Navan Farmland to absorb a transmission line ranges from low to high depending on specific location. The existence of areas of hedgerow and woodland provides screening opportunities along the proposed alignment. The landscape capacity along the alignment is therefore moderate.</p>	<p>North Navan Farmland is assigned a moderate sensitivity in the MLCA. The landscape is open and flat in areas with scope for wide visibility of structures. There is however screening potential provided by the areas of forestry and hedgerows where they are in place.</p> <p>The line route passes over the N52 in a perpendicular manner in an open part of the landscape.</p>

**11.4.3.3 Detailed Description of Landscape Unit H – Blackwater Valley**



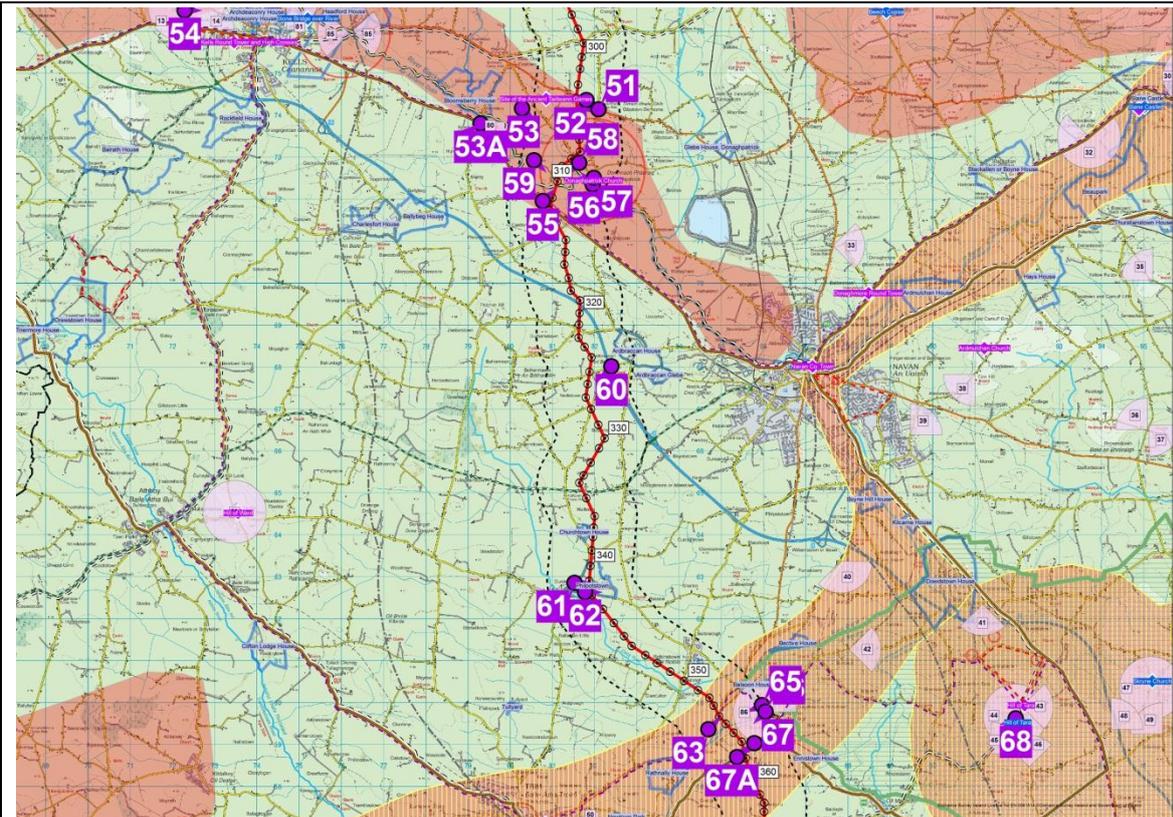
**View 55** along the R147 (Boyne Valley Driving Route) opposite the fuel station looking across the Blackwater Valley



**View 56** from the L7413 at Donaghpatrik Bridge

<b>Description</b>		
The man-altered river valley landscape is generally flat with land falling gradually towards the river and a large number of visible heritage features in the form of churches, stone bridges and earthworks as well as modern rural structures such as roads, houses, schools and utilities. The important archaeological landscape of Teltown is located between Donaghpatrick, Gibstown and Oristown. The roads are usually bordered by hedgerows, but where there are gaps, views out over gently rolling or flat agricultural lands are possible.		
<b>Value - High</b>	<b>Capacity – Low / Moderate</b>	<b>Sensitivity – Moderate / High</b>
<p>The Blackwater Valley is classified in the MLCA as being of very high value and regional importance. It is also described as being an area of potential Tourist Attraction. This particular section of the Blackwater is of high significance given its relationship with the cultural heritage associated with Donaghpatrick and Teltown / Tailteann.</p> <p>The R147 is part of the Boyne Valley Driving Route.</p> <p>There is a scenic viewpoint east of Kells (VP85), which lies just outside the 5km study area at Headford Bridge. VP80 is located 2.5km to the west of the line route at Bloomsbury cross.</p> <p>The site of the ancient Tailteann Games, listed as an attraction along the Boyne Valley Driving Route is located approximately 600m to the west of the line route.</p> <p>A walkway and cycle way is proposed along the River Blackwater.</p>	<p>The MLCA states that the Blackwater Valley has moderate capacity to absorb the landscape and visual effects of a transmission line provided that the potential loss of boundary walls and planting and damage to historic features and their setting is minimised.</p> <p>This capacity arises from the screening potential provided by hedges and trees and the more robust character of the landscape as one moves away from the river. The immediate setting of heritage features would be more sensitive to new development, particularly in very flat and open parts of the landscape.</p> <p>An existing 110 kV transmission line crosses the valley in an east west direction.</p>	<p>The Blackwater Valley is assigned a high sensitivity in the MLCA. This is appropriate in relation the immediate crossing of the river, but the influence of the river on landscape character diminishes beyond approximately 500m.</p> <p>The line route crosses the river west of Donaghpatrick and the setting of heritage structures is sensitive.</p> <p>The line route crosses the R147 approximately 600m north-west of Finnegan's cross roads and the R163 approximately 580m west of Crasulthan crossroads.</p> <p>The farmland is quite open with large fields and these areas are sensitive to new development, but there remains a good hedgerow network in many places with some stands of mature trees.</p>

### 11.4.3.4 Detailed Description of Landscape Unit I – West Navan Lowlands



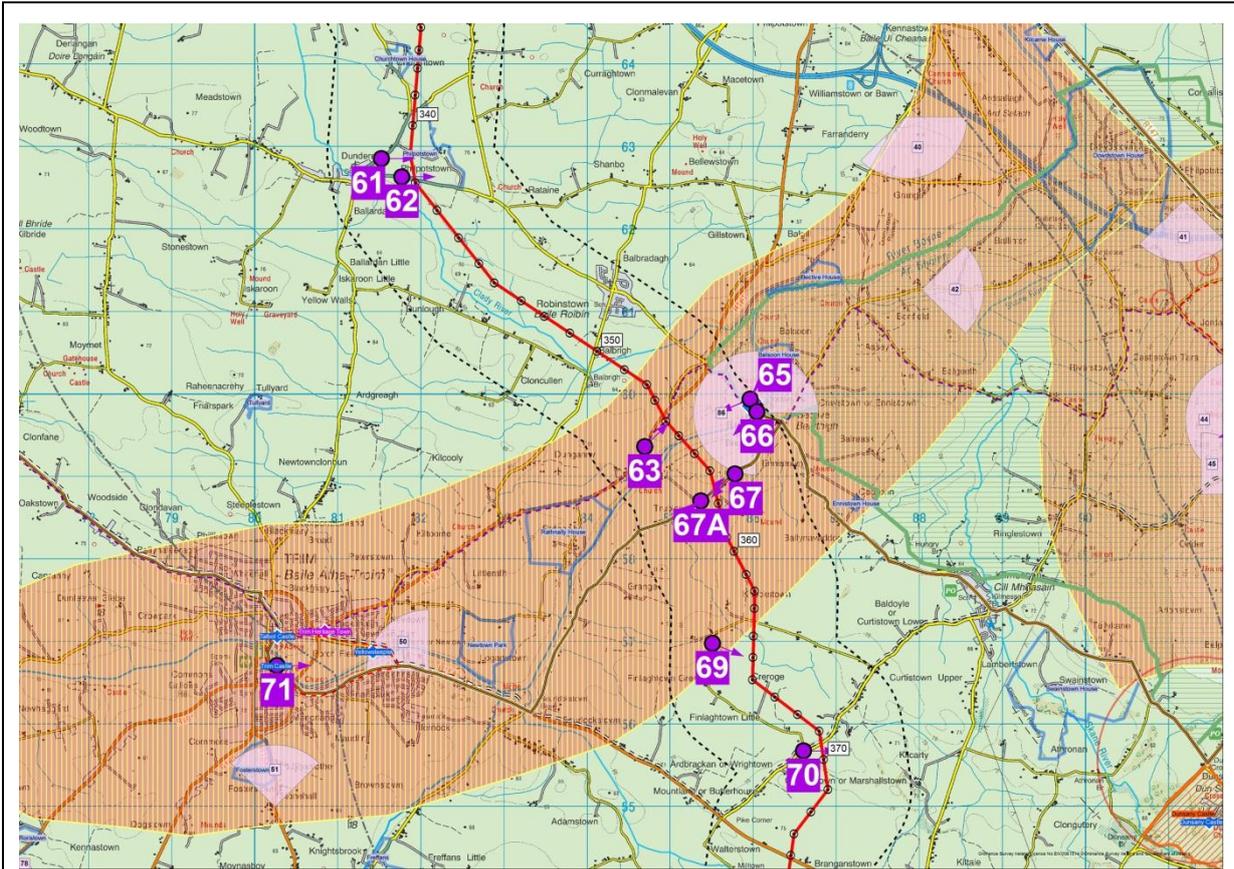
**View 60** from the L8009 overpass of the M3



**View 62** from the L4008 east of Dunderry

<b>Description</b>		
<p>The man-altered landscape consists of flat lowland farmland with a network of hedgerows and roads, including the M3 and the N51 and rural housing along many parts of the local road network. Vegetation tends to be high along roads and in hedgerows. The settlements of Dunderry and Robinstown are located approximately 400m from the line route. This unit also contains the River Claudy.</p>		
<b>Value – Moderate</b>	<b>Capacity - Moderate</b>	<b>Sensitivity – Moderate</b>
<p>This landscape unit is described in the MLCA as having moderate value and local importance.</p> <p>This area would be distantly visible from the viewpoint on the Hill of Tara at a distance of more than 6km.</p> <p>Ardraccan House and demesne is located approximately 0.6km from the line route.</p>	<p>The MLCA states that within the parts of this landscape unit that have a strong landscape structure, the potential capacity to accommodate a transmission line would be moderate provided such development was not located in visually prominent areas.</p>	<p>The MLCA defines the sensitivity of this area as moderate.</p> <p>Although the topography is flat, the extensive hedgerow network and roadside houses restrict views into the wider landscape in many areas.</p> <p>In locations where vegetation is low or the viewpoint is even slightly elevated it is possible to experience a relatively wide viewshed.</p> <p>The environs of settlements are sensitive as well as the setting of the River Claudy.</p>

**11.4.3.5 Detailed Description of Landscape Unit J – Boyne Valley**



**View 63** along the R161 north of the Boyne



**View 64** from Bective Abbey steps



**View 66** from Bective Bridge

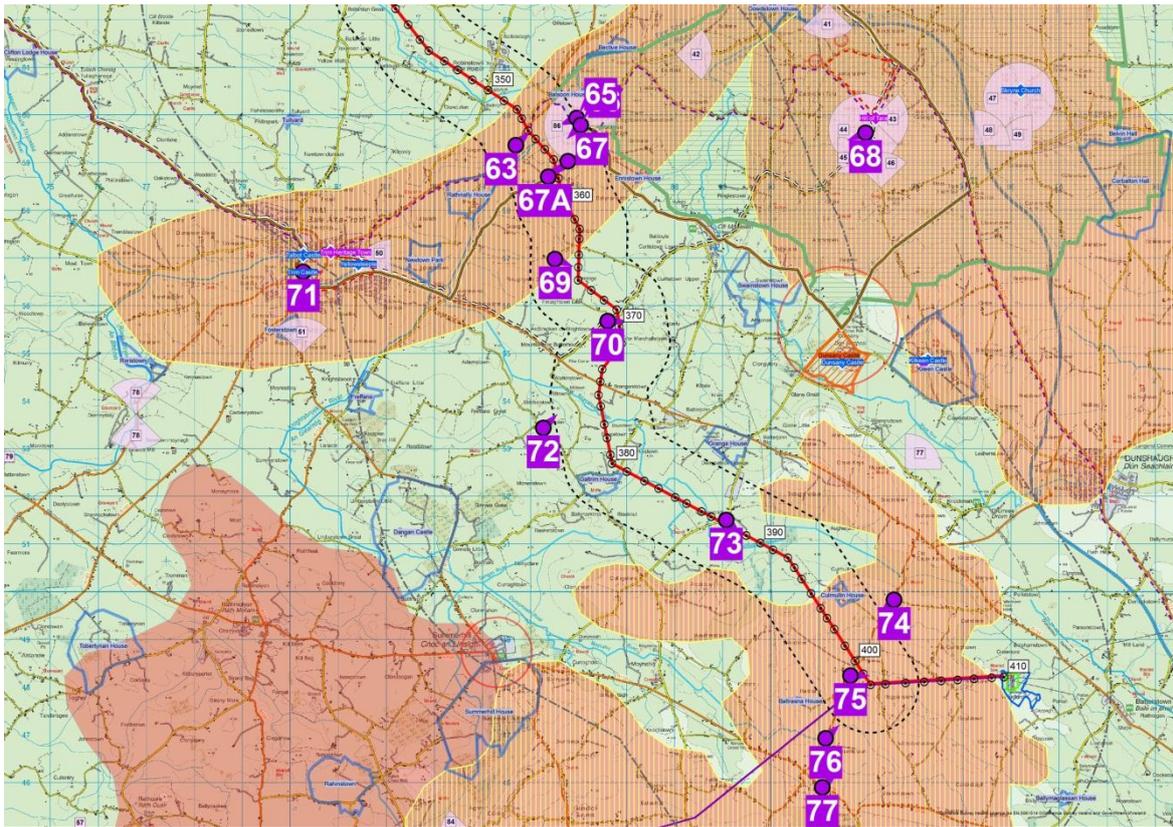


**View 67** from the L2203 (Boyne Valley Driving Route)

<b>Description</b>		
The River Boyne is both an important landscape feature and a part of the landscape with strong cultural associations. Its direct influence on landscape character is limited to the environs of the watercourse, and beyond this the landscape character becomes more influenced by roads, housing and other infrastructure. The relationship between Bective Abbey and the river is important.		
<b>Value – Moderate / High</b>	<b>Capacity – Low / Moderate</b>	<b>Sensitivity – Moderate / High</b>
<p>The most significant aspect of this part of the Boyne Valley is the immediate vicinity of the river and the setting of Bective Abbey.</p> <p>The influence of the river itself on landscape character extends to a narrow strip of approximately 400m either side of the watercourse. Beyond this other factors have a greater influence on landscape character, such as roads, housing and the hedgerow network.</p> <p>The Boyne Valley is classified in the MLCA as being of Exceptional Value and International Importance. This landscape character area includes the Internationally recognised Brú na Bóinne complex, but the entire river has strong cultural significance.</p> <p>The views out from the bridge at Bective and from Bective Abbey are important and the protected view from the bridge (VP86) is designated as being of local significance by the Meath CDP.</p> <p>The Fáilte Ireland Boyne Driving Route runs along a local road just south of the river Boyne. The R161 is also a designated driving route. Both routes are crossed by the alignment. The river is not openly visible from these routes in this location.</p>	<p>The MLCA states that the Boyne Valley area has a low capacity to absorb a development such as a transmission line due to potential visual prominence within the valley and in relation to the setting of the river corridor.</p> <p>This is the case when the line would be seen in the context of the river valley or in views from Bective Abbey. Further away from the river there is more capacity for absorbing the visual impact of towers but the relatively flat nature of the landscape would result in high visibility of tall structures, particularly to the south of the river.</p>	<p>The Boyne Valley is classified in the MLCA as being of high sensitivity, and this is the case for the areas immediately adjacent to the River Boyne. However, as one moves away from the immediate river valley into more built up landscape, sensitivity reduces. The river itself is publicly most visible from the bridge crossing and from within the grounds of Bective Abbey.</p> <p>The landscape sensitivity is therefore categorised as high in the vicinity of the river valley and Bective Abbey and moderate in other parts of the character area, particularly in the vicinity of the R161.</p> <p>The landscape generally comprises a mix of large pasture / arable fields with a strong network of hedgerows which provide screening. However, immediately to the south of the river is a particularly open flat landscape with few or low hedgerows and a cluster of large farm buildings. Open and flat landscapes are more sensitive to new development.</p> <p>The MLCA describes Bective as “a substantial ruin in an attractive landscape setting”. There are panoramic views out from the front</p>

<p>There are three designated landmarks in Trim; Talbot Castle, Trim Castle and the Yellow Steeple.</p> <p>A <i>Landscape Conservation Area</i> has been proposed for the area surrounding the Hill of Tara including Bective. A draft outline has been drawn up but has not been adopted.</p>		<p>steps of Bective Abbey across the landscape to the south and west. When in the Abbey complex, the main landscape focus is towards the river to the east.</p> <p>This part of the landscape falls within the panoramic views from the Hill of Tara, but at a distance of over 6km.</p>
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### 11.4.3.6 Detailed Description of Landscape Unit K – Central Lowlands



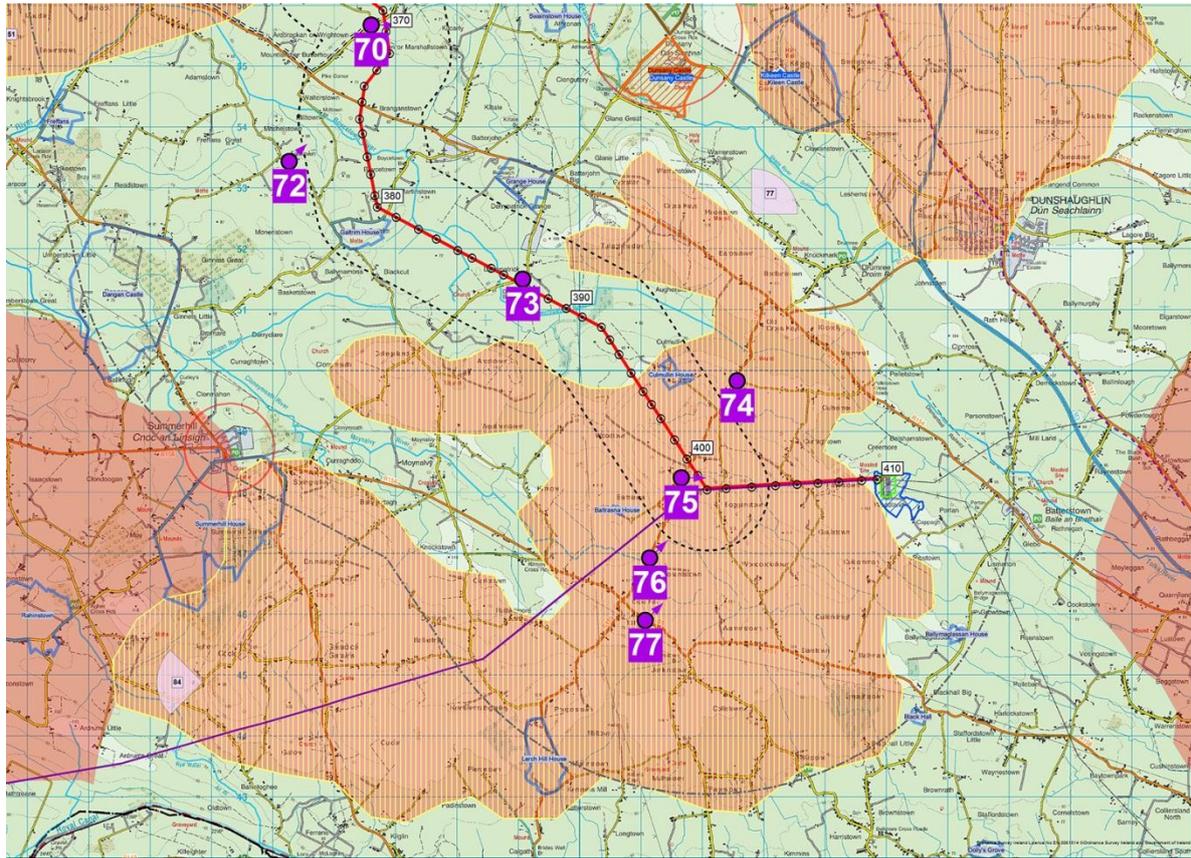
**View 69** from the L22051 at Creroge



**View 73** from the L2207 at Derrypatrick

<b>Description</b>		
<p>The man-altered landscape in this unit is flat or gently undulating with medium to large sized fields and a number of small rivers. The land rises to a plateau around Collegeland and Arodstown where open panoramic views over an inhabited and farmed landscape are possible. An existing 220 kV OHL passes through this unit in a north south direction.</p>		
<b>Value - Moderate</b>	<b>Capacity - Moderate</b>	<b>Sensitivity – Moderate</b>
<p>Scenic Viewpoint VP77, at a distance of over 3km, looks away from the line route from the south-east of Warrenstown college towards Kileen Castle / Skane Valley.</p> <p>The MLCA shows a walking and cycle route travelling on roads from Trim to Kilmessan and on to Tara. The proposed development would cross this on-road walking and cycling route perpendicularly at Crumpstown.</p> <p>Further to the north-east, the viewshed from the Hill of Tara takes in the line route location but at a distance of over 6km.</p>	<p>This area has moderate capacity to absorb the landscape and visual effects of a transmission line due to the variety of land uses and a robust landscape structure. This is effective particularly where hedgerows prevent views into the wider landscape.</p> <p>The MLCA recommends that the visual quality of the landscape be maintained by avoiding development that would adversely affect short-range views between elevated areas and that particular regard should be paid to the retention of high quality landscapes on the tops of hills which are intervisible with the Hills of Tara and Skryne.</p>	<p>The Central Lowlands are classified in the MLCA as being of moderate sensitivity. This is considered appropriate for the areas in the immediate vicinity of the line route.</p> <p>The relatively flat nature of the landscape results in open visibility from some minor roads and means that wide views of the surrounding landscape are possible from even slightly elevated areas. Many of the roads are lined with hedgerows which limit views into the landscape.</p> <p>There are allotments at the townland of Finlaghstown which would experience open visibility of the line route.</p> <p>The line route crosses the R154 at Branganstown.</p>

### 11.4.3.7 Detailed Description of Landscape Unit L–Tara Skryne Hills



**View 75** from the R125 at Bogganstown showing existing (double circuit) 400 kV electricity line



**View 76** from the R125 at Leonardstown showing existing (single circuit) 400 kV electricity line

<b>Description</b>		
<p>The landscape in this unit forms part of the cluster of low flat hills that includes the Hill of Tara. The flat nature of the surrounding landscape means that panoramic views are possible even from slightly elevated areas. The landscape is man-altered and made up of medium to large scale fields within a network of roads including three regional roads and hedgerows which generally limit views into the landscape. The R156 passes through this unit but is not crossed by the line route. The line route crosses the R125. There is an existing 220 kV and 400 kV electricity line in this landscape unit.</p>		
<b>Value – Moderate</b>	<b>Capacity - Moderate</b>	<b>Sensitivity – Moderate</b>
<p>The Tara Skryne Area is classified in the MLCA as being of Exceptional value and National importance and is classed as having International importance in the Meath CDP.</p> <p>Exceptional value is defined in the MLCA as applying to “<i>areas which are of outstanding value by nature of their dramatic scenic quality, unspoilt beauty, and conservation interests, historic, cultural or other associations that influence landscape value.</i>” While this description is applicable to the publicly accessible summit of the Hill of Tara, it is considered that a value classification of Moderate is more applicable to the parts of the landscape unit that contains the line route.</p>	<p>While the sensitivity of this landscape unit to a transmission line is considered low in the MLCA, it is considered that there is greater capacity to absorb such proposals in the lower lying areas. The landscape capacity for this location is therefore considered moderate, as many potential views of the landscape are enclosed by roadside hedgerows. However, where views are possible, these would take in wide panoramas.</p>	<p>Although the Tara Skryne Area is classified in the MLCA as being of high sensitivity, the proposed location of the line route is quite different in character and use to the publicly accessible hills to the north-east.</p> <p>High sensitivity is defined in the MLCA as applying to “<i>a vulnerable landscape likely to be fragile and susceptible to change. Frequency and sensitivity of users is likely to be high. The introduction of change is likely to significantly alter the character to the extent that it would be difficult or impossible to restore.</i>” While this is applicable to the publicly accessible areas associated with the Hills of Tara and Skryne, the areas through which the line route passes are of moderate sensitivity. This sensitivity arises due to the elevated nature of the landscape and the openness of some views. Many views are contained by hedgerows.</p>

#### 11.4.4 Summary – Landscape Value

66 Criteria for the determination of landscape value are set out in Table 11.2, **Appendix 11.1, Volume 3D Appendices** of the EIS. Landscape Value is determined by landscape quality / condition, scenic quality, rarity, representativeness, conservation interests, recreation value, perceptual aspects and associations. The units of highest landscape value are E (Highlands of East Cavan), H (Blackwater Valley) and J (Boyne Valley). The landscape features of most value within each landscape unit as defined in this EIS have been described in **Section 11.4.3**.

#### 11.4.5 Summary – Landscape Capacity

67 Criteria for the determination of Landscape Capacity are set out in Table 11.3, **Appendix 11.1, Volume 3D Appendices** of the EIS.

68 The MLCA defines capacity as *“the ability that the landscape has to absorb specific types of development.”*

69 The *Final Re-Evaluation Report* (April 2013) evaluated the general capacity of the landscape in a wider context in order to avoid the areas of least capacity to absorb a transmission line. The preferred line route that emerged from this study and that is the subject of this evaluation, traverses areas which generally have higher landscape capacity to absorb the transmission line within County Meath. The capacity for visual absorption of a transmission line is strongest in Sections E, G, H, I and K where capacity is defined as moderate. This is because of the dense network of hedgerows that screen views of the proposed developmental and a robust landscape character which is capable of accommodating change. Parts of Sections J (Boyne Valley), H (Blackwater Valley) and F (North Meath Lakelands) have lower capacity to accommodate a transmission line. In Sections J and H, this is due to the crossings of the Boyne and Blackwater Valleys and in section F due to the crossing of the upper parts of drumlins.

#### 11.4.6 Summary – Sensitivity of the Landscape

70 The criteria for the determination of landscape and visual sensitivity are contained in Tables 11.4 and 11.5, **Appendix 11.1, Volume 3D Appendices** of the EIS.

71 The MLCA defines sensitivity of a landscape as its *“overall resilience to sustain its character in the face of change and its ability to recuperate from loss or damage to its components”*. Sensitivity is evaluated using criteria ranging from Low to High and is based on the interaction of individual components such as landform, amount of evident historical features (time depth) and distribution of views. A highly sensitive landscape is likely to be vulnerable, fragile and

susceptible to change whereas a landscape with low sensitivity is likely to be more robust and tolerant of change.

- 72 The agricultural landscape of Meath and East Cavan is generally robust and has undergone continuous change including road and house building and introduction of utilities infrastructure while sustaining its underlying character and evident time depth. The scale of the proposed development, however, has the potential to cause significant alteration to the landscape character of areas in the near vicinity of the alignment – most noticeably at distances of up to 600-800m from the alignment. The most sensitive landscape features are located in Sections J (Boyne Valley) and H (Blackwater Valley) and the uplands of Section E (East Cavan Highlands) while F, G, I, K and L are of moderate landscape sensitivity
- 73 The highest visual sensitivity occurs where the changed landscape is an important element in the view. This generally occurs in views from residential properties, areas of settlement and viewpoints within valued or sensitive landscapes.
- 74 In general, the higher parts of the landscape (ridgelines and drumlins) are more sensitive to change than the lower lying areas and the parts of the landscape that are very flat with low vegetation are more sensitive to the inclusion of towers than the parts with a well-established hedgerow network and undulating land form.

**Table 11.3: Summary of Landscape Value, Landscape Capacity and Sensitivity**

Landscape Unit		Towers	Landscape Value	Landscape Capacity to absorb the proposed development	Landscape Sensitivity to the proposed development
E	Highlands of East Cavan	Tower 212 to 239 incl.	Moderate / High	Moderate	Moderate / High
F	North Meath Lakelands	Tower 240 to 272 incl.	Moderate	Low / Moderate	Moderate
G	North Navan Lowlands	Tower 273 to 302 incl.	Moderate	Moderate	Moderate
H	Blackwater Valley	Tower 303 to 312 incl.	High	Low / Moderate	Moderate / High
I	West Navan Lowlands	Tower 313 to 351 incl.	Moderate	Moderate	Moderate

Landscape Unit		Towers	Landscape Value	Landscape Capacity to absorb the proposed development	Landscape Sensitivity to the proposed development
J	Boyne Valley	Tower 352 to 363 incl.	Moderate / High	Low / Moderate	Moderate / High
K	Central Lowlands	Tower 364 to 395 incl.	Moderate	Moderate	Moderate
L	Tara Skryne Hills	Tower 396 to 402 incl.	Moderate	Moderate	Moderate

## 11.5 POTENTIAL IMPACTS

### 11.5.1 Do Nothing

75 In this scenario there will be no changes to the landscape, it will continue to change and evolve as a result of other factors.

### 11.5.2 Construction Phase

76 Chapter 7 of **Volume 3B** of the EIS details the approach to construction and the timescales involved in the various stages.

77 The potential landscape and visual effects arising at construction stage will occur due to removal of vegetation visible construction machinery, construction access routes, guarding positions (where the conductor is to be strung over roads and rivers and existing distribution lines) and increases in vehicular movements along roads. The visual effects of the construction of the towers will be temporary and locally significant. Construction is undertaken on a long linear site with isolated areas of activity which are limited in size. The landscape and visual impact of traffic movements will have a more widespread effect.

78 The nature of temporary access routes is described in detail in Chapter 7, **Volume 3B** of the EIS. This will result in localised and generally temporary landscape changes to the surface of fields and removal of hedgerow and tree vegetation but have little effect on the wider landscape.

79 The highest physical landscape effects will occur at construction stage. The removal of vegetation is described in **Section 11.5.4.9** of this chapter and in detail in **Chapter 6** and the potential effects on soil are described in detail in **Chapter 7** (all in this volume of the EIS). The

removal of vegetation and in particular of mature trees where required will have locally significant physical landscape effects. Trees adjacent to the towers or conductors with the potential to fall on the conductors will be cut back to ensure safety clearances. The nature of long term impact will depend on the success of vegetation reinstatement. Potential landscape impacts of compaction of soil include failure of vegetation reinstatement and long term ruts.

### 11.5.2.1 Changes to existing 110kV Overhead Line Infrastructure

#### Between Towers 307 and 308

80 Existing 110kV polesets with heights above ground level of 14.7 m and 15.7 m will be replaced by lower polesets both with a height of 13.7 m above ground level. During construction, excavations of approximately 2.3m depth and approximately 0.5m width will be made at each pole.

81 The receiving landscape character in this location is sensitive due to the proximity to a number of heritage features and the Blackwater valley, and the potential for cumulative impact arising from existing and proposed electricity infrastructure has been identified in the EIS. There will be short term visual impacts locally during the construction period arising from excavation and the movements of people, materials and machinery. The poleset to the south of the local road is visible due to a gap in the roadside vegetation, but the one to the north is screened by existing roadside and garden vegetation. After the construction period the reduction in height of the polesets will have a very slightly, and generally imperceptible, positive impact on landscape character locally.

### 11.5.3 Operational Phase

#### 11.5.3.1 Introduction

82 This section describes the potential landscape and visual effects of the proposed development in the MSA. As set out in the previous section of this chapter, the landscape within the study area is generally robust and has proven to be capable of undergoing change without altering its underlying landscape character. The previous section has also identified the more sensitive locations and features within the study area, which would suggest that the highest landscape and visual effects will occur where:

- Towers are viewed in close proximity with no intervening screening;
- Towers are located on top of drumlins;
- Towers are located close to rivers; and
- Towers are located close to scenic or in panoramic viewpoints.

- 83 This section uses photomontages as a tool to assist in the description of potential effects. In order to provide an overview of the nature of visibility at various distances, **Section 11.5.3** contains a selection of representative photomontages. These illustrate the nature of visibility in typical landscapes crossed by the alignment. The nature of visibility is shown at distances of up to 500m, 500m-1km, 1-1.5km and beyond 1.5km. The effects in scenic viewpoints within 2km of the alignment are also shown.
- 84 **Section 11.5.3** follows with a detailed description of the landscape and visual effects within each landscape unit supported by a series of reduced scale photomontages for illustrative purposes.
- 85 A full-scale set of photomontages are contained in **Volume 3D Figures** of the EIS, and the detailed location and context of photomontage views are indicated on the mapping in Figures 11.3 – 11.7, **Volume 3D Figures** of the EIS. All photomontages locations are publically accessible.

#### 11.5.3.2 Key Representative Photomontages

- 86 The area through which the proposed line route passes is widely inhabited, with many houses and farms located along a dense road and hedge network. Hedgerows and landform provide screening of electricity lines in many areas within the 5km study area. Due to the inhabited character of the landscape, visual receptors are spread throughout the study area. However, it is not possible or warranted to assess or represent visually all potential viewpoints and therefore this section sets out the nature of visibility at various distances; up to 500m, 500m-1km, 1-1.5km and beyond 1.5km as well as the effects on scenic viewpoints within 2km of the alignment. These represent the most open and 'worst case" views of the proposed development at these types of distances.
- 87 Many of these views are only possible from extremely localised viewing points, but they are provided to offer an indication of the maximum potential effect. There will generally be less effect on the appearance and character of the landscape when seen from other areas within the study area.
- 88 The photomontages presented in this section are at a reduced scale and for illustrative purposes. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS and their locations are shown on Figures 11.3-11.7, **Volume 3D Figures** of the EIS. The best way to use the photomontages as a tool is to view them in the field, in the location where the photograph was taken.

### 11.5.3.3 Viewing Distances of Up to 500m

- 89 The following reduced scale photomontages represent a range of ‘worst case’ open viewing experiences within 500m of the proposed development. For full-scale versions of these photomontages and accompanying wireframes and technical details, refer to **Volume 3D Figures** of the EIS.
- 90 Towers are dominant in close views where there is no intervening vegetation or topography, where there are gaps or lower than average roadside vegetation. Even at close distance, vegetation and topography can reduce the visibility or visible extent of towers from specific viewing locations. The nature of visibility changes when the towers are viewed against the sky or the land. In general terms, the visual impact is greatest when the transmission line is seen silhouetted against the sky and least when seen against a dark, visually complex background – such as trees or vegetated hills.



**Photomontage 55** from a gap in the hedgerow along the R147, (Boyne Valley Driving Route) at a distance of 246m. This represents the difference in visibility of towers when seen against the land or sky and the effects within a shallow river valley.



**Photomontage 58** from an open section of the L3409 west of Donaghpatrick, at a distance of 222m and looking across the Blackwater valley landscape. A tower is located behind the trees in this viewpoint. This represents the screening effects of trees in close proximity to the viewer even in winter and the effects when a number of towers are openly visible from a single viewing point, in this case five towers partly visible.



**Photomontage 62** from an open section of the L4008 east of Dunderry, at a distance of 179m. This represents a worst case impact where a tower is located immediately adjacent to a road.



**Photomontage 63** from an open section of the R161, at a distance of 407m. This represents an open view where three towers are partially visible against the skyline in a flat river valley landscape in the context of a regional road.



**Photomontage 67** from the L2203 (Boyne Valley Driving Route) at a distance of 401m. This represents a view in particularly flat part of the landscape with relatively low roadside hedgerows.



**Photomontage 73** from the L2207, at a distance of 136m. This represents an open view at close distance where there is a gap in the roadside vegetation.

### 11.5.3.4 Viewing Distances of 500m-1km

- 91 The following reduced photomontages represent a range of 'worst case' open viewing experiences between 500m and 1km from the proposed development. For full-scale versions of these photomontages and accompanying wireframes and technical details, refer to **Volume 3D Figures** of the EIS.
- 92 Towers are still noticeable in the context of a wider landscape. The screening effects of vegetation, buildings and topography become more apparent. The towers are more conspicuous if sited on higher ground, or of the viewing point is elevated.



**Photomontage 45** from the car park at Whitewood Lough, at a distance of 658m. This represents an open view where two towers are partly visible crossing a ridgeline from a public amenity site. A further two towers are screened by vegetation.



**Photomontage 47** from the L7405 (vicinity of Scenic Viewpoint 17) in the townland of Cruicetown, at a distance of 782m. This represents an open view from a higher part of a drumlin landscape where four towers are visible against land and partially sky-lined.



**Photomontage 49** from the L74112 at St. John's Rath, at a distance of 636m. This represents an open view where four towers are partly visible in the context of vegetation, farm buildings and against the skyline in a very flat landscape. A further two towers are screened by vegetation (please note this photomontage includes wind turbines of the proposed Emlagh Wind Farm).



**Photomontage 51** from the L7414 at Crasulthan Cross Roads, Gibstown, at a distance of 514m. This represents an open view where one tower is partly visible and one screened by vegetation from a crossroads in a flat landscape in the context of vegetation, a graveyard, football pitch and against the skyline.



**Photomontage 56** from the L7413 at Donaghpatrick Bridge, at a distance of 800m. This represents an open view where two towers on relatively higher ground are partly visible from a sensitive location in the context of vegetation and against the skyline. A number of towers travelling into the distance are screened by vegetation and topography.



**Photomontage 60** from the L8009, an overpass of the M3, at a distance of 529m. This represents an open view where two towers are partly visible from an elevated location in the landscape in the context of vegetation and against the skyline.

#### 11.5.3.5 Viewing Distances of 1-1.5km

93 The following reduced scale photomontages represent a range of ‘worst case’ open viewing experiences at 1-1.5km from the proposed development. For full-scale versions of these photomontages and accompanying wireframes and technical details, refer to **Volume 3D Figures** of the EIS.

94 It becomes difficult to discern the towers in the landscape and in most cases the towers are not visible at this distance. Towers are still distantly visible if seen traversing higher ground or over very flat ground where there is a gap in intervening vegetation.



**Photomontage 72** from the L6202 at Foxtown townland at a distance of 1.34km. This represents an open view where eight towers are partly visible across a flat landscape with large fields in the context of vegetation and against the skyline. A further six towers are screened by vegetation.



**Photomontage 74** from the R125 at the gates of Culmullin Parish Church, at a distance of 1.39km. This represents an open view through a gap in the roadside vegetation where two towers are partly visible across a flat landscape.

#### 11.5.3.6 Viewing Distances Greater than 1.5km

- 95 The following reduced scale photomontages represent a range of 'worst case' open viewing experiences greater than 1.5km from the proposed development.
- 96 It is not normally possible to distinguish the towers from the surrounding landscape at this distance unless they are seen against the sky in clear weather conditions.



**Photomontage 68** from the Hill of Tara (Scenic Viewpoint 44) at a distance of 6.29km. This represents an open view where thirty three towers are theoretically visible from a sensitive elevated viewpoint across a flat landscape in the context of an existing 220 kV transmission line, houses and vegetation against a backdrop of land.



**Photomontage 77** from the R156 south-east of Mullagh Cross Roads, at a distance of 2.38km. This represents an open view where two proposed towers are visible on higher ground across a flat landscape in the context of existing 400 kV and 220 kV transmission lines, vegetation and against the sky. A further two proposed towers are screened by vegetation.

### 11.5.3.7 Recognised Scenic Viewpoints within 2km of the Line Route



**Photomontage 47 (panoramic)** from Protected View and Prospect 17 located on the L7405 in the townland of Cruicetown at a distance of 782m. Four towers are visible, mainly against a background of hills, but the tops of two towers are visible on the skyline. The parts of towers seen against land are difficult to discern at this distance.



**Photomontage 66 (panoramic)** looking southwest across the River Boyne from Protected View and Prospect 86 at Bective Bridge at a distance of 905m. One tower is visible when looking across the water – a further six are screened by vegetation.

### 11.5.4 Description of Potential Landscape and Visual Effects on Landscape Units

97 The following section provides a description of the likely effects on the appearance and character of each of the parts of the landscape that have been identified as 'Landscape Units' - areas of approximately similar character in the previous sections.

98 The potential landscape and visual effects within each landscape unit are described along with potential effects on identified sensitive landscape features or visual receptors. This information is summarised in a table, to assist readers in obtaining a comprehensive overview of all landscape and visual effects arising from this development. These impacts are then illustrated in the following section by referring to reduced scale photomontages. Full scale photomontages

and wireframes are contained in **Volume 3D Figures** of the EIS. The best way to use the photomontages as a tool is to view them in the field, in the location where the photograph was taken.

**11.5.4.1 Landscape Unit E – Description of Potential Landscape and Visual Effects**

Landscape Unit E – Highlands of East Cavan		
		
<b>Potential landscape and visual effects</b>	<p>This unit includes the environs of Lough an Leagh Mountain. The line route passes to the east of an area of designated landscape sensitivity in the Cavan CDP. The rest of the unit is generally low lying or undulating with high vegetation in many areas.</p>	<p><b>POTENTIAL LANDSCAPE EFFECTS</b></p> <ul style="list-style-type: none"> <li>• There will be changes to landscape character in the immediate vicinity of the proposed development (up to 600-800m from unscreened structures), but little alteration to the character of the wider landscape.</li> <li>• There will be no significant landscape effects on Lough an Leagh Mountain due to the distance from the alignment.</li> </ul> <p><b>POTENTIAL VISUAL EFFECTS</b></p> <ul style="list-style-type: none"> <li>• The transmission line will be partially visible from houses and roads up to 1-1.5km from the line where there is no intervening vegetation or topography and from relatively elevated areas such as Cornmagh. Visual effects reduce with distance, with the most significant effects occurring up to 600-800m from unscreened structures. The towers would be difficult to discern at distances beyond 800m.</li> </ul>
<b>Settlements</b>	<p>There are individual houses throughout the countryside and along roads.</p>	<p>Houses up to 1-1.5km from the line route, with no or little intervening screening vegetation will have potential visibility of the proposed development. The most significant effects would be experienced in views up to 600-800m from the line route, where there is no or little intervening vegetation. The nature of visibility over distance is shown in <b>Section 11.5.3</b>. The towers would be difficult to discern at distances beyond 800m.</p>

<b>Scenic Viewpoints</b>	SV8 at Lough an Leagh Mountain	There will be no significant effects on this viewpoint due to the distance from the proposed development.
<b>Key Landscape Features</b>	Dun a Rí Forest Park Lough an Leagh Mountain	There will be no effects on these identified key landscape features due to the distance from the proposed development.
<b>Walking Routes</b>	Lough an Leagh Dun a Rí Forest Park Castle Walk, Bailieborough	There will be no significant effects on these identified walking routes due to the distance from the proposed development.

**Photomontage 41 looking east from Lough an Leigh Gap amenity site, 2.15km to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This view is recognised as significant in the Cavan CDP. It is a picnic area with an information board and the start of a walk to the highpoint of the mountain. It is a rare elevated panoramic view in this area. The towers visible are located in County Cavan.

**Landscape effects** - There is no discernible effect on the elevated character of this landscape or on the expansive sense of visibility.

**Visual effects** - The transmission line would not be discernible at this distance of 2.15km, or from the location higher up the mountain, particularly as the towers are seen against the backdrop of land, further reducing their visibility.

- 99 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit E – Highlands of East Cavan. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

#### Photomontage 42 from the L3533 in Drumbar, 629m to the closest tower

##### Existing view



##### Proposed view including transmission line



##### Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows the transmission line at close distance crossing a local road in an area of low drumlins. The towers visible are in County Cavan, but represent similar views in the drumlin landscape of County Meath.

**Landscape effects –** While a tower is visible breaking the skyline, there is no significant effect on drumlin character or the experience of a rural road bordered by continuous hedgerow.

**Visual effects -** The transmission line would be visible in the context of a network of hedgerows and a landscape containing an existing power line. The vegetation and topography limits significant visual effects to unscreened areas within the immediate vicinity of towers (up to 400m), with visual effects decreasing rapidly with distance.

**11.5.4.2 Landscape Unit F – Description of Potential Landscape and Visual Effects**

**Landscape Unit F – North Meath Lakelands**



**Potential landscape and visual effects**

This unit includes Nobber and Kilmainhamwood and contains a steep river valley, Whitewood Lough, Brittas Estate and increasing amounts of drumlins as one moves north. There is an existing 220 kV line running through this landscape unit.

**POTENTIAL LANDSCAPE EFFECTS**

- There will be changes to landscape character in the immediate vicinity of the line (up to 600-800m from unscreened structures), but little alteration to the character of the wider landscape.
- Towers 254 – 257 cross a ridgeline adjacent to a more low lying area with increased landscape effects on the open skyline of the ridgeline.
- The line route through Brittas Estate will require the removal of areas of mature woodland and there would be significant localised physical landscape impact (see also **Chapters 6 and 14** of this volume of the EIS).
- The line route will cross Kilmainhamwood River Valley, but the enclosed nature of the valley limits the extent of effect on landscape character.
- There are potential cumulative landscape effects arising from the interaction with the proposed Emlagh Wind farm. These are described in Chapter 10, **Volume 3B** of the EIS.

**POTENTIAL VISUAL EFFECTS**

- The transmission line will be partially visible from houses and roads up to 1-1.5km from the line where there is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring up to 600-800m from unscreened structures. The towers would be difficult to discern at distances beyond 800m
- Towers are more visible over wider distances when on higher ground, so there would be intermittent and distant (1km) views of the towers from parts of Kilmainhamwood Village. The visual effects in this location would not be significant. The line route does come closer to the road and

		<p>houses south of Kilmainhamwood and in unscreened locations, significance of visual effects will increase with proximity.</p> <ul style="list-style-type: none"> <li>• There are potential cumulative visual effects arising from the interaction with the proposed Emlagh Wind farm. These are described in Chapter 10, <b>Volume 3B</b> of the EIS.</li> </ul>
<b>Settlements</b>	<p>Nobber, Kilmainhamwood and individual houses throughout the countryside and along roads.</p>	<ul style="list-style-type: none"> <li>• There would be no significant visual effects on either settlement due to the distance from the development and the screening effects of vegetation and topography.</li> <li>• Houses up to 1-1.5km from the line route, with no or little intervening screening vegetation will have potential visibility of the proposed development. The most significant effects would be experienced in views up to 600-800m from the line route, where there is no or little intervening vegetation. The nature of visibility over distance is shown in <b>Section 11.5.3</b>, the towers would be difficult to discern at distances beyond 800m.</li> </ul>
<b>Protected Views and Prospects</b>	<p>VP16 county road to north of Moydorrugh</p> <p>VP17 county road between Mullagheven Cross Roads and Gorrays Cross Roads</p> <p>VP18 county road between Mullystaghan and Robertstown</p> <p>VP19 car park at Whitewood Lough</p> <p>VP20 county road between Cormeen and Breaky Bridge</p> <p>VP21 county road between Miltown Cross Roads and Ervey Cross Roads</p> <p>VP22 county road between Corratober Bridge and Rathlagan</p> <p>VP23 county road between R165 and</p>	<ul style="list-style-type: none"> <li>• A number of towers will be visible from the vicinity of VP 17 which is described as “<i>expansive views to distant locations to north and to views of Carlingford, Mourne Mountains to the north-east. Highly varied topography. Woodland in lowlands</i>” and is of regional importance. The nature of visibility of the proposed development is shown in Photomontage 47. This photomontage shows that, while four towers are partially visible and two are visible on the skyline, this is within the context of a complex rural landscape with screening provided by topography and vegetation. The expansive view available from this particular location will not be significantly affected by the proposed development.</li> <li>• The line route will be visible from the location of VP19 at Whitewood Lough, but in the opposite direction to the protected view which looks towards the lake and Whitewood House, see Photomontage 45 <b>Volume 3D</b> Figures of the EIS.</li> <li>• There will be no effects on any other of these recognised viewpoints due to the distance from the proposed development and the screening effects of vegetation and topography see Photomontage 45A, <b>Volume 3D</b> Figures of the EIS.</li> </ul>

	Mullaghmore	
<b>Key Landscape Features</b>	Estate House, Beech Copse	<ul style="list-style-type: none"> <li>There would be no significant effects on the physical character or setting either of these recognised landscape features due to the distance between them and the proposed development. The alignment will be visible from the Estate House at Whitewood in the context of an inhabited rural landscape.</li> </ul>
<b>Historic Designed Landscapes with main features substantially present</b>	Brittas Estate, Whitewood House	<ul style="list-style-type: none"> <li>Towers 266 - 270 pass through Brittas Estate which is a recognised Historic Designed Landscape with “<i>main features substantially present</i>”. The line route avoids the central designed features of the demesne and passes through areas of mature and newly planted woodland. Approximately 1.1ha of mature woodland may be required to be removed to allow for a maximum 74m wide corridor. The landscape effects will be significant, as Brittas Estate is a relatively intact example of a designed landscape of the period. The line route runs parallel to the public road in this location, while the road is generally heavily vegetated, intermittent views into the estate are possible. The conductors would be visible crossing the entrance road as shown in Photomontage 46 and towers would be partially visible from the local road adjoining the estate in locations where boundary vegetation is thin. Most of the estate boundary with the public road is well vegetated. An on-site appraisal of the visual effects within the estate was not possible. The visual effects are therefore localised but significant. (See also <b>Chapters 6</b> and <b>14</b> of this volume of the EIS).</li> </ul> <div data-bbox="775 1473 1433 1908" data-label="Image"> </div>

100 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit F – North Meath Lakelands. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

### Photomontage 43 from L68012 at Ervey, 1.06km to the closest tower

#### Existing view



#### Proposed view including transmission line



#### Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows a view from an elevated position as it crosses the higher parts of a drumlin landscape. This is one of the few opportunities for viewing the proposed line in conjunction with the existing 220 kV line. Most potential views such as this are screened by roadside vegetation or topography.

**Landscape effects –** The addition of a second powerline into this landscape intensifies the existing landscape character of a farmed drumlin landscape which contains high voltage powerlines.

**Visual effects -** The transmission line would be visible in the context of a network of hedgerows, drumlins and a landscape containing an existing power lines. The vegetation and topography limits significant visual effects to unscreened areas within the immediate vicinity of towers (up to 800m) and from more elevated locations such as this one, where longer distance views are possible.

**Photomontage 44 from R164 at Corrananagh, 271m to the closest tower****Existing view****Proposed view including transmission line****Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography

**Reason for selection:** This photomontage shows the transmission line at close distance crossing a local road in an area of low drumlins.

**Landscape effects** - The proximity to the tower and the tower's location close to the road results in an alteration to the character of the landscape up to 600-800m of the proposal. This effect is significant in terms of the introduction of a new scale of structure into the landscape in this specific location. There is an existing 220 kV powerline in the wider landscape and so in a wider context the proposal represents an intensification of an established landscape character.

**Visual effects** - The transmission line would be visible in the context of a network of hedgerows and low hills. The vegetation and topography limits significant visual effects to areas in the immediate vicinity of towers (up to 600-800m), with visual effects decreasing rapidly with distance.

**Photomontage 45 from Whitewood Lough car park, 658m to the closest tower****Existing view****Proposed view including transmission line****Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography

**Reason for selection:** This photomontage shows the transmission line crossing a ridgeline in an area of low drumlins.

**Landscape effects** – There is a change to the open character of the ridgeline as a tower is seen against the skyline. The existing trees visible on the ridgeline are similar in scale and therefore from this location, the landscape effects are lower than if the ridgeline was completely open.

**Visual effects** – Part of the transmission line would be conspicuously visible against the skyline of a low ridge from a public car park at Whitewood Lough. There is a protected view in this location looking in the opposite direction over the lake and towards Whitewood House. The protected view is not affected.

**11.5.4.3 Landscape Unit G – Description of Potential Landscape and Visual Effects**

**Landscape Unit G – North Navan Lowlands**



**Potential landscape and visual effects**

There are some small hills in the northern part of this unit, but the line route mainly passes through a man-altered flat landscape with areas of bog, large fields, forestry, houses and roads. The bog areas are remote and sparsely occupied, forming a contrast to the wider, more densely populated landscape of Meath. Note that the image above shows the proposed Emlagh Wind Farm.

**POTENTIAL LANDSCAPE EFFECTS**

- There will be changes to landscape character in the immediate vicinity of the line (up to 600-800m from unscreened structures), but little alteration to the character of the wider landscape.
- The currently remote and empty character of the flat bog areas west of Wilkinstown will change with the introduction of large electricity infrastructure.
- There are potential cumulative landscape effects arising from the interaction with the proposed Emlagh Wind farm. These are described in Chapter 10, **Volume 3B** of the EIS.

**POTENTIAL VISUAL EFFECTS**

- The electricity line will be partially visible from houses and roads up to 1-1.5km from the line where there is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring up to 600-800m from unscreened structures. The towers would be difficult to discern at distances beyond 800m. Longer distance views are more likely in the flat parts of the landscape.
- The transmission line will be openly visible at the crossing point of the N52, however, the crossing is perpendicular so the driver would briefly experience visibility of towers.
- There are potential cumulative visual effects arising

		from the interaction with the proposed Emlagh Wind farm. These are described in Chapter 10, <b>Volume 3B</b> of the EIS.
<b>Settlements</b>	Carlanstown, Wilkinstown and individual houses throughout the countryside and along roads.	<ul style="list-style-type: none"> <li>There would be no significant visual effects on Carlanstown or Wilkinstown due to the distance from the proposed development.</li> </ul> <p>Houses up to 1-1.5km from the line route, with no or little intervening screening vegetation will have potential visibility of the proposed development. The most significant effects would be experienced in views up to 600-800m from the line route, where there is no or little intervening vegetation. The nature of visibility over distance is shown in <b>Section 11.5.3</b>. The towers would be difficult to discern at distances beyond 800m.</p>
<b>Protected Views and Prospects</b>	VP15 County road between Carlanstown and Ardlonan VP16 County road to north of Moydorragh	There will be no effects on these recognised scenic viewpoints due to the distance from the development and screening effect of vegetation.
<b>Key Landscape Features</b>	Bog, areas of woodland	The remote character of the bog areas will change with the introduction of large and openly visible towers into the landscape.
<b>Driving, Cycling &amp; Walking Routes</b>	The Táin Trail – long distance on-road cycle route	While the transmission line would be briefly visible crossing this route east of Oristown, considering the variation of landscape character along the route and the screening vegetation at the crossing point, there would be no significant effects on the character of the cycling route.
<b>Historic Designed Landscapes with main features substantially present</b>	Mountainstown House, Dowdstown	The line route crosses through Mountainstown Estate but through a part that is currently under pasture and commercial forestry. While it was not possible to assess the visual effects within the estate, it is unlikely that there are significant effects on the core designed parts of the historic landscape in the vicinity of the house. Mature trees in the vicinity of the line route, will be lopped, trimmed or removed to allow required clearance (refer to <b>Chapters 6 and 14</b> of this volume of the EIS for further details)

101 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit G – North Navan Lowlands. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

**Photomontage 48 from the N52, west of Raffin Cross, with little screening along the road, 194m to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows the crossing of the N52 at close distance, where there is no roadside screening.

**Landscape effects** - The crossing is perpendicular so the driver would briefly experience visibility of towers which would not be uncharacteristic when seen in the context of a busy road.

**Visual effects** - The transmission line would be openly visible as this part of the landscape contains large fields and a flat or gently undulating topography. The vegetation and topography limits significant visual effects to unshielded areas within the immediate vicinity of towers (up to 600-800m), with visual effects decreasing rapidly with distance.

**Photomontage 49 from the L74112, a generally flat landscape with large fields at St. John's Rath, 636m to the closest tower(please note this photomontage includes wind turbines of the proposed Emlagh Wind Farm).**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows an open view of the transmission line, at a distance of approximately 600m, crossing an open flat landscape with large fields.

**Landscape effects** – The transmission line forms part of a changing rural landscape. Landscape effects in a flat landscape are greatest up to 600-800m from unscreened towers. At this distance of 636m, the trees and structures start to absorb the proposal into a broader rural landscape character.

**Visual effects** – Due to the flat nature of the landscape, the gap in the hedge and the large field, the upper parts of the transmission line would be visible. Such views would be discernible intermittently in this landscape although the relative remoteness of this area results in low levels of visual receptors.

**Photomontage 50 from the L74115, over a flat open landscape at Red Island, 172m to the closest tower(please note this photomontage includes wind turbines of the proposed Emlagh Wind Farm)**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows a very open view at close distance where a tower is located immediately adjacent to a road in a flat landscape with low roadside hedgerows.

**Landscape effects** – This relatively unpopulated landscape west of Wilkinstown would experience a change to the remote and empty landscape character arising from the introduction of a new scale of structure to the landscape. The underlying flat characteristics of the topography or locally distinctive nature of the vegetation will not change.

**Visual effects** - The transmission line would be openly visible in a flat landscape with relatively few other structures in view. Visibility will therefore be possible over longer than normal distances. However this is balanced by the fact that there are few visual receptors in this relatively uninhabited landscape.

**11.5.4.4 Landscape Unit H – Description of Potential Landscape and Visual Effects**

**Landscape Unit H – Blackwater Valley**



**Potential landscape and visual effects**

This is a man-altered river valley landscape which is generally flat with land falling gradually towards the river and a large number of visible heritage features in the form of churches, stone bridges, earthworks and demesne landscapes. The important archaeological landscape of Teltown is located between Donaghpatrick, Gibstown and Oristown. The farmland is quite open with large fields, but there is a strong hedgerow network in many places. An existing 110 kV transmission line crosses the valley in an east west direction.

**POTENTIAL LANDSCAPE EFFECTS**

- There will be changes to landscape character in the immediate vicinity of the line (up to 600-800m from unscreened structures), but little alteration to the character of the wider landscape.
- There will be changes to the character of the Blackwater River Valley up to 600-800m of the crossing point, particularly where the landscape is open. Tree cover provides screening within parts of the valley.
- The transmission line will be visible in conjunction with and from some specific views of above ground heritage structures and the transmission line will pass through the Teltown archaeological landscape which has been identified as an area of potential tourism interest (see also **Chapters 4 and 14** of this volume of the EIS).
- There are potential cumulative landscape effects arising from the interaction with the proposed Emlagh Wind farm. These are described in Chapter 10, **Volume 3B** of the EIS.

**POTENTIAL VISUAL EFFECTS**

- The transmission line will be partially visible from houses and roads up to 1-1.5km from the line where there is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring up to 600-

		<p>800m from unscreened structures. The towers would be difficult to discern at distances beyond 800m. Longer distance views are more likely in the flat open parts of the landscape.</p> <ul style="list-style-type: none"> <li>• The transmission line will be openly and briefly visible at the crossing points of the R147, which is part of the Boyne Valley Driving Route and R163.</li> <li>• There are potential cumulative visual effects arising from the interaction with the proposed Emlagh Wind farm. These are described in Chapter 10, <b>Volume 3B</b> of the EIS.</li> </ul>
<p><b>Settlements</b></p>	<p>Donaghpatrick and Gibstown and individual houses throughout the countryside and along roads.</p>	<ul style="list-style-type: none"> <li>• The transmission line will not be visible from the centre of Donaghpatrick due to the concentration of trees and buildings.</li> <li>• Photomontage 57 shows the view from Donaghpatrick church and graveyard where open views are possible.</li> <li>• The transmission line would be visible from parts of Gibstown where there are open views westwards (see Photomontage 51).</li> <li>• Houses up to 1-1.5km from the line route, with no or little intervening screening vegetation will have potential visibility of the proposed development. The most significant effects would be experienced in views up to 600-800m from the line route, where there is no or little intervening vegetation. The nature of visibility over distance is shown in <b>Section 11.5.3</b>. The towers would be difficult to discern at distances beyond 800m.</li> </ul>
<p><b>Protected Views and Prospects</b></p>	<p>VP80 Bloomsbury Bridge VP85 Headford Bridge</p>	<p>There would be no significant effect on the open scenic view VP80 (shown below) or VP85 due to the distance from the development, see Photomontage 53A, <b>Volume 3D Figures</b> of the EIS.</p> 

<p><b>Key Landscape Features</b></p>	<p>People's Park Lighthouse, heritage structures, Blackwater Valley</p>	<ul style="list-style-type: none"> <li>• The line route will not be visible from the People's Park Lighthouse at Kells.</li> <li>• The transmission line will be visible in conjunction with some specific views of above ground heritage structures and the transmission line will pass through the Teltown archaeological landscape (see also <b>Chapter 14</b> of this volume of this EIS).</li> <li>• There will be changes to the character of the Blackwater River Valley up to 600-800m of the crossing point, particularly where the landscape is open. Tree cover provides screening within parts of the valley.</li> </ul>
<p><b>Driving, Cycling &amp; Walking Routes</b></p>	<p>The R147 between Kells and Navan (driving route)</p> <p>Boyne Valley Driving Route (Fáilte Ireland 2013)</p> <p>Proposed route along the river Blackwater from Navan to Kells (Walking / Cycling route)</p>	<ul style="list-style-type: none"> <li>• The line route crosses the R147 which forms part of the Boyne Valley Driving Route. The transmission line will be openly visible at the crossing point of the R147 for a short distance in the context of a man-altered landscape (see Photomontage 55).</li> <li>• The line route crosses the proposed walking route along the Blackwater River. Tree cover would provide screening along parts of this walk, although any removal of mature trees in the vicinity of the line route would result in significant physical landscape effects.</li> </ul>

102 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit H – Blackwater Valley. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

### Photomontage 52 from the R163 west of Crasulthan Cross Roads, 252m to the closest tower

#### Existing view



#### Proposed view including transmission line



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows the crossing of the R163 between Oristown and Gibstown at close distance, where there are low hedgerows.

**Landscape effects** - The crossing is perpendicular so the driver would briefly experience visibility of towers which while dominant in close proximity, would not be uncharacteristic when seen in the context of a busy road and existing powerlines.

**Visual effects** - The transmission line would be openly visible as this part of the landscape contains large fields and in some areas, low hedgerows. The tower is located immediately adjacent to the road and is therefore very conspicuous at close distance. Vegetation in the wider landscape limits significant visual effects to unscreened areas within the immediate vicinity of towers (up to 600-800m). Visual effects decrease rapidly with distance.

### Photomontage 53 from the L34097 across the townland of Teltown, 1.31km to the closest tower

#### Existing view



#### Proposed view including transmission line



#### Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage is a typical open view of the transmission line within the Blackwater Valley and Teltown archaeological landscape at a distance of just over 1km, crossing an open flat landscape with large fields.

**Landscape effects –** The transmission line forms part of a rural landscape. Landscape effects in a flat landscape are greatest up to 600-800m of unscreened structures. At this distance of 1.31km, while the towers are partially visible, the proposal is absorbed into a broader rural landscape character.

**Visual effects –** Due to the flat nature of the landscape, the gap in the hedge and the large field, the upper parts of the transmission line would be very distantly visible. Such views would be possible intermittently in this landscape although at this distance they would not be discernible.

### Photomontage 55 from the R147 across the Blackwater Valley, 246m to the closest tower

#### Existing view



#### Proposed view including transmission line



#### Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows the transmission line at close distance crossing the R147 where there is no roadside screening. This road is part of the Boyne Valley Driving Route.

**Landscape effects** - The crossing is perpendicular so the driver would briefly experience visibility of towers which would not be uncharacteristic when seen in the context of a busy road. While the land falls away northwards towards the River Blackwater, the immediate environs of this road do not have a discernible river valley character.

**Visual effects** - The transmission line would be openly visible as this part of the landscape contains large fields and a flat or gently undulating topography. The vegetation and topography limits significant visual effects to unscreened areas within the immediate vicinity of towers (up to 600-800m). Visual effects would decrease rapidly with distance.

**Photomontage 56 from the L7413 at Donaghpatrick Bridge, 800m to the closest tower****Existing view****Proposed view including transmission line****Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography

**Reason for selection:** This photomontage shows the view from a sensitive viewpoint on Donaghpatrick Bridge looking towards Donaghpatrick Church across the Blackwater River Valley.

**Landscape effects** – The proposed development is a new structure in this landscape which is defined by the sloping Blackwater Valley, the heritage buildings of Donaghpatrick and mature trees. The majority of the line is screened by vegetation, but a small part is visible on the skyline. The proposal would represent a small change to the landscape character in this location due to its visibility on the skyline. Visibility of the tower would be dependent on weather conditions from this particular location.

**Visual effects** – One tower is partially visible above the treeline on the horizon of the river valley. The viewing location is sensitive and takes in a broader view of an agricultural landscape with houses, roads and heritage buildings. While potentially visible, the tower would not necessarily be immediately discernible to a viewer in this location.

**Photomontage 59 from Teltown Church, 670m to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography**



**Reason for selection:** This photomontage shows the view from Teltown church in the Blackwater Valley.

**Landscape effects –** The setting of this heritage structure is very open towards the river. The landscape is flat with some taller vegetation in the distance. The proposed powerline will introduce a new tall element into this landscape which is currently absent of visible built features on the horizon. This will adversely affect the open character of the valley landscape in this location, although the distance to the proposed development and the large scale of the landscape means that the scale of the proposed towers does not dominate the landscape character.

**Visual effects –** Eight towers are partially visible from this location over the tops of vegetation in the distance. They are visible against the skyline in a viewpoint with no other built structures in view. The visibility of towers against the sky would mean that visibility would depend on weather conditions.

**11.5.4.5 Landscape Unit I – Description of Potential Landscape and Visual Effects**

**Landscape Unit I – West Navan Lowlands**



**Potential landscape and visual effects**

The man-altered landscape consists of flat lowland farmland with a network of hedgerows and contains the M3 and the N51.

**POTENTIAL LANDSCAPE EFFECTS**

- There will be changes to landscape character in the immediate vicinity of the line (up to 600-800m of unscreened structures), but little alteration to the character of the wider landscape.
- The transmission travels through the Claudy River Valley which will have a landscape effect on the scale and character of this landscape feature.
- Locations within approximately 800m of the line that include expansive unscreened open views over the landscape will experience change to the open character of the horizon line.
- There are potential cumulative landscape effects arising from the interaction with the proposed Emlagh Wind farm. These are described in **Chapter 10, Volume 3B** of the EIS.

**POTENTIAL VISUAL EFFECTS**

- The transmission line will be partially visible from houses and roads up to 1-1.5km of the line where there

		<p>is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring with 600-800m of unscreened structures. The towers would be difficult to discern at distances beyond 800m. Longer distance views are more likely in the flat open parts of the landscape or where elevated views are possible.</p> <ul style="list-style-type: none"> <li>• There are potential cumulative visual effects arising from the interaction with the proposed Emlagh Wind farm. These are described in <b>Chapter 10, Volume 3B</b> of the EIS.</li> </ul>
<b>Settlements</b>	<p>Dunderry and Robinstown and individual houses throughout the countryside and along roads.</p>	<ul style="list-style-type: none"> <li>• There would be partial views of the transmission line at close distance (up to 500m) from parts of Dunderry and Robinstown where there is no intervening screening. There would also be views of the line from the parts of the road connecting these settlements that have open views to the south and where the line crosses the road just east of Dunderry.</li> <li>• In the wider landscape, houses up to 1-1.5km from the line route, with no or little intervening screening vegetation will have potential visibility of the proposed development. The most significant effects would be experienced in views up to 600-800m from the line route, where there is no or little intervening vegetation. The nature of visibility over distance is shown in <b>Section 11.5.3</b>. The towers would be difficult to discern at distances beyond 800m. Longer distance views are more likely in the flat open parts of the landscape or where elevated views are possible.</li> </ul>
<b>Protected Views and Prospects</b>	<p>VP52 Hill of Ward.</p>	<ul style="list-style-type: none"> <li>• This scenic view will not be significantly affected due to the distance to the proposed development.</li> </ul>

103 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit I – West Navan Lowlands. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

**Photomontage 60 showing the view from an M3 overpass and the effect of viewing towers from a high point in the landscape, 529m to the closest tower****Existing view****Proposed view including transmission line**

**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This is a typical view from an elevated position at a distance of approximately 500m.

**Landscape effects** – The transmission line forms part of a changing rural landscape which has recently included the construction of the M3. The landscape effects arise from the scale of the towers in relation to the existing landscape character of mature trees and hedgerows. This elevated position is unusual in the general low-lying context of the landscape.

**Visual effects** – Due to the elevated nature of the viewpoint, the upper parts of the towers are visible against the sky, the lower parts are screened. Due to the speed of the viewer in this location, the towers will be conspicuous on the skyline, but only briefly visible.

### Photomontage 62 showing the line route crossing the L4008 east of Dunderry, 179m to the closest tower

#### Existing view



#### Proposed view including transmission line



#### Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows the transmission line at close distance crossing the local road between Dunderry and Robinstown.

**Landscape effects** - The proximity of the tower means that the tower is dominant and the localised landscape character in the immediate vicinity of this viewpoint will change. The landscape effect primarily arises from the scale of the proposed development and its proximity to a public road.

**Visual effects** – A tower will be openly visible as it is located immediately adjacent to the road and is therefore very conspicuous at close distance. Vegetation in the wider landscape limits significant visual effects to unscreened areas within the immediate vicinity of towers (up to 600-800m). Visual effects decrease rapidly with distance.

**11.5.4.6 Landscape Unit J – Description of Potential Landscape and Visual Effects**

**Landscape Unit J – Boyne Valley**



**Potential landscape and visual effects**

The river valley landscape generally comprises a mix of large pasture / arable fields with a strong network of hedgerows which provide screening. However, there is a particularly open flat landscape with few or low hedgerows and a cluster of large farm buildings immediately to the south of the river.

The landscape of the Boyne Valley is sensitive to change. However, as one moves away from the immediate river valley into more built up landscape, sensitivity reduces.

**POTENTIAL LANDSCAPE EFFECTS**

- There will be significant changes to landscape character in the immediate vicinity of the line (up to 600-800m of unscreened structures), but little alteration to the character of the wider landscape.
- The most significant landscape effects will occur in the immediate vicinity of the river crossing where influence of the river on landscape character is strongest. The transmission line will increase the amount of modern development in the valley landscape which currently includes roads, houses, smaller powerlines and farm buildings.
- Specific heritage and landscape features contribute to landscape character in this area, the most notable being Bective Abbey and Bective Bridge. There will be no significant effects on the ability of these features to continue to contribute to the character of this rural landscape. (see also **Chapter 14** of this volume of this EIS).

**POTENTIAL VISUAL EFFECTS**

- The transmission line will be partially visible from houses and roads up to 1-1.5km from the line where there is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring with 600-800m of unscreened structures. The towers would generally be difficult to discern at distances beyond 800m.

		<ul style="list-style-type: none"> <li>• However, the sensitive and protected viewpoint on Bective Bridge includes a view of Tower 357 seen at a distance of 905m looking along the river. This view is possible because of the lack of hedgerows in the area immediately south of the river and the fact that the eye is drawn along the route of the river. Other potentially visible towers are partially or fully screened by intervening vegetation (see Protected Views and Prospects below for more detail).</li> <li>• Other longer distance views are more likely where the line crosses relatively higher ground or where the viewpoint is elevated such as from the steps of Bective Abbey. Photomontages 64 and 65 show the most open views possible from this location, an elevated position on the entrance steps looking over an inhabited landscape. When inside Bective Abbey, views are either enclosed or orientated towards the river and away from the line route. (see also <b>Chapter 14</b> of this volume of the EIS)</li> <li>• Both Bective Abbey and Bective Bridge fall within the <i>Draft Hill of Tara Landscape Conservation Area</i>.</li> <li>• See also <b>Section 11.5.3.11</b> which describes the impact of aviation markers in this location.</li> </ul>
<b>Settlements</b>	Bective and individual houses throughout the countryside and along roads.	<ul style="list-style-type: none"> <li>• There will be no significant effects on this settlement due to screening effects of buildings and vegetation.</li> <li>• In the wider landscape, the transmission line will be partially visible from houses and roads up to 1-1.5km of the line where there is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring with 600-800m of unscreened structures. The towers would be difficult to discern at distances beyond 800m. Longer distance views are more likely in the flat open parts of the landscape or where elevated views are possible.</li> </ul>
<b>Protected Views and Prospects</b>	VP86 Bective Bridge	<ul style="list-style-type: none"> <li>• The Meath CDP describes this view as <i>locally significant</i> and defines it as a “view looking northward from Bective Bridge towards Bective Abbey and along river Boyne in both directions.”</li> <li>• The protected view northward from the bridge towards Bective Abbey will not be affected by the proposed development.</li> <li>• The protected view south from the bridge includes a view</li> </ul>

		<p>of Tower 357 seen at a distance of 905m looking along the river. This view is possible because of the lack of hedgerows in the area immediately south of the river. Other potentially visible towers are partially or fully screened by intervening vegetation as seen in Photomontage 66.</p>
<b>Key Landscape Features</b>	Talbot Castle, Trim Castle, Yellowsteeple	<ul style="list-style-type: none"> <li>• There will be no effects on either of these sites due to the distance from the proposed development.</li> </ul>
<b>Driving, Cycling &amp; Walking Routes</b>	Boyne Valley Driving Route	<ul style="list-style-type: none"> <li>• The Boyne Valley Driving Route was developed by Fáilte Ireland and links Boyne Valley sites such as the site of the ancient Tailteann Games, Donaghpatrick Church, Bective Abbey, the Hill of Tara and Trim Heritage Town. The landscape where the proposed development crosses the drive is particularly flat and open with low hedgerows. The proposed development will represent a new large scale element in a rural landscape which contains houses and existing utilities infrastructure.</li> <li>• Due to the particularly open nature of the landscape in this location, the crossing of the proposed development will be openly visible and dominant in views for a section of this road. The line crosses in a perpendicular manner and therefore the most significant visual effects are limited to a short section. The line crossing does not interfere with specifically significant views from the Boyne Valley Driving Route see Photomontage 67A, <b>Volume 3D Figures</b>, of the EIS.</li> </ul>

104 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit J – Boyne Valley. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

**Photomontage 63 from the R161, 407m to the closest tower****Existing view****Proposed view including transmission line****Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography

**Reason for selection:** This photomontage shows the crossing point of the R147 at close distance.

**Landscape effects** – The transmission line forms part of a rural landscape which contains other infrastructure including roads, lights and a sports facility. Although located within 300m of the River Boyne, there is no river valley landscape character evident along this road.

**Visual effects** – Due to the open nature of the viewpoint, the closest tower to the road is conspicuous. The other towers are partially or fully screened by vegetation in the wider landscape. Due to the speed of the viewer in this location, the towers will be conspicuous on the skyline, but only briefly visible.

**Photomontage 64 from steps at Bective Abbey, 1.33km to the closest tower****Existing view****Proposed view including transmission line****Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography

**Reason for selection:** This view is available from the top of the steps at Bective Abbey. It is the most open view available within the Abbey site.

**Landscape effects** – The towers will be visible on the skyline, but the scale of the towers is in keeping with the scale of the landscape in this location. Nonetheless, the particular heritage character in this location will be slightly affected by the inclusion of the proposed development. It should be noted that this elevated experience of the landscape is limited to one specific location within the Abbey complex and that the important landscape relationship between the Abbey and the River Boyne is not affected.

**Visual effects** – Towers are partially visible on the skyline, which introduces a modern man-made element to distant views in the context of a landscape which from this viewing angle is predominantly of a heritage character. The visibility of the towers would be dependent on weather conditions at this distance.

**Photomontage 65 from steps at Bective Abbey, 948m to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This view is available from the top of the steps at Bective Abbey.

**Landscape effects** – The transmission line forms part of a changing rural landscape. While the scale of the towers is in keeping with the landscape character, the adverse landscape effects arise from location of the towers on the skyline. This elevated experience of the landscape is limited to one specific location within the Abbey complex. The important landscape relationship between the Abbey and the river Boyne is not affected.

**Visual effects** – Towers are partially visible on the skyline, which introduces a modern man-made element to distant views in the context of a landscape which contains houses, roads and existing powerlines. The visibility of the towers would be dependent on weather conditions at this distance.

### Photomontage 66 from the L4010 (Boyne Valley Driving Route) at Bective Bridge (Scenic Viewpoint 86) looking across the River Boyne, 905m to the closest tower

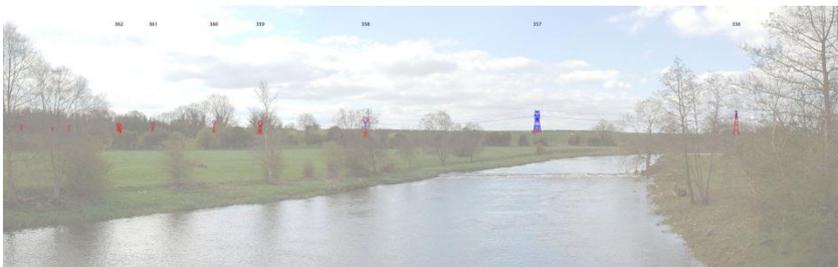
#### Existing view



#### Proposed view including transmission line



#### Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows the most open view of the proposed development from Bective Bridge which is a protected viewpoint and located within a sensitive river landscape.

**Landscape effects –** The proposal changes the landscape character of the immediate vicinity of the river crossing and affects the landscape character where the towers are visible in conjunction with the river. The transmission line will increase the amount of development in the valley landscape which currently includes roads, houses, powerlines and farm buildings. The narrow extent of the influence of the river landscape character and mature vegetation means that landscape effects in this location are localised. Landscape effects are higher on the southern bank which is more open than the northern bank.

**Visual effects –** The visibility of Tower 357 from this location has an effect on the view south from the scenic viewpoint, which is absent of structures. Tower 358 is also potentially visible from other locations on the bridge. At this distance, visibility would be dependent on weather conditions. The view in the other direction towards Bective Abbey is not affected. The photomontage shows how much of the transmission line is screened by existing vegetation and the potential for screening the towers that are visible from this location.

**Photomontage 67 from the L2203 (Boyne Valley Driving Route), approximately 500m south-west of Bective, 401m to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows a view from a part of the Boyne Valley Driving Route just south of the River Boyne. See also Photomontage 67A **Volume 3D Figures** of the EIS which shows a more open viewpoint looking north east from this road.

**Landscape effects** – The Boyne Valley Driving Route was developed by Fáilte Ireland and links Boyne Valley sites such as the site of the ancient Tailteann Games, Donaghpatrick Church, Bective Abbey, the Hill of Tara and Trim Heritage Town. It does not include open views of the Boyne River in this location, although glimpsed views are possible. The landscape is particularly flat and open in this location with low hedgerows and the proposed development will represent a new large scale element in a rural landscape which contains houses and existing utilities infrastructure.

**Visual effects** – Due to the particularly open nature of the landscape in this location, the crossing of the proposed development will be openly visible and dominant in views for a section of this road. The line crosses in a perpendicular manner and therefore the most significant visual effects are limited to a section of approximately 1m with intermittent views possible for a further approximate 1km. The line crossing does not interfere with specifically significant views from the Boyne Valley Driving Route.

**11.5.4.7 Landscape Unit K – Description of potential landscape and visual effects**

**Landscape Unit K – Central Lowlands**



<p><b>Potential landscape and visual effects</b></p>	<p>This is a flat or gently undulating landscape with medium to large sized fields and a number of small rivers. The land rises to a plateau around Collageland and Arodstown where open panoramic views over an inhabited and farmed landscape are possible.</p> <p>The relatively flat nature of the landscape results in open visibility from some minor roads and means that wide views of the surrounding landscape are possible from even slightly elevated areas. However, many of the roads are lined with hedgerows which limit views into the landscape.</p>	<p><b>POTENTIAL LANDSCAPE EFFECTS</b></p> <ul style="list-style-type: none"> <li>• There will be changes to landscape character in the immediate vicinity of the line (up to 600-800m from unscreened structures), but little alteration to the character of the wider landscape.</li> <li>• Locations within approximately 800m of the line that include expansive unscreened open views over the landscape will experience change to the open character of the horizon line.</li> </ul> <p><b>POTENTIAL VISUAL EFFECTS</b></p> <ul style="list-style-type: none"> <li>• The transmission line will be partially visible from houses and roads up to 1-1.5km of the line where there is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring within 600-800m of unscreened structures. The towers would be difficult to discern at distances beyond 800m. Longer distance views are more likely in the flat open parts of the landscape or where elevated views are possible.</li> <li>• The transmission line will cross the R154 at Branganstown, a tower will be located adjacent to the road and will be briefly but openly visible to drivers.</li> <li>• The towers would be distantly visible from elevated locations at Collageland and Arodstown within the context of an occupied landscape.</li> </ul>
<p><b>Settlements</b></p>	<p>Kilmessan and individual houses throughout the countryside and along roads</p>	<ul style="list-style-type: none"> <li>• There will be no significant effects on Kilmessan village due to the distance from the proposed development.</li> </ul>

		<ul style="list-style-type: none"><li>• In the wider landscape, houses up to 1-1.5km from the line route, with no or little intervening screening vegetation will have potential visibility of the proposed development. The most significant effects would be experienced in views up to 600-800m from the line route, where there is no or little intervening vegetation. The nature of visibility over distance is shown in <b>Section 11.5.3</b>. The towers would be difficult to discern at distances beyond 800m. Longer distance views are more likely in the flat open parts of the landscape or where elevated views are possible.</li></ul>
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- 105 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit K – Central Lowlands. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

### Photomontage 69 from the L22051 in the townland of Creroge, 503m to the closest tower

#### Existing view



#### Proposed view including transmission line



#### Wireframe – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This is a typical open view of the proposed development at a distance of approximately 500m where there is a gap in the hedge in a flat landscape.

**Landscape effects** – A transmission line in a flat landscape is likely to break the skyline where there are open views. This affects the open character of this type of agricultural landscape. However even in a flat landscape, the strong hedgerow network means that effects are localised.

**Visual effects** – Due to the open nature of the viewpoint, the upper parts of the towers are visible against the sky, the lower parts are less visible as they are seen against vegetation. The visual effects will be significant at distances up to 600-800m where open views are possible.

**Photomontage 72 from the L6202 in Foxtown, 1.34km to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows an open view from an elevated position in a flat landscape with hedgerows at a distance of over 1km.

**Landscape effects** – The transmission line is absorbed into the wider landscape and has no significant effect on landscape character.

**Visual effects** – While distantly visible, the proposal would not be normally discernible to a viewer due to the effects of distance and the screening effects of an agricultural landscape.

**Photomontage 73 from the L2207 at Derrypatrick, 136m to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This shows a very close open view, in a location where there is a gap in the roadside hedgerow with a tower viewed against the sky.

**Landscape effects** – This is an example of a significant localised landscape effect in an open agricultural landscape setting. The tower is dominant due to its proximity and lack of screening. However, transmission lines are not uncharacteristic when seen in the context of a rural landscape.

**Visual effects** – Due to the proximity and openness of this view, the tower is visually dominant.

**11.5.4.8 Landscape Unit L – Description of potential landscape and visual effects**

**Landscape Unit L – Tara Skryne Hills**



**Potential landscape and visual effects**

The landscape in this unit forms part of the cluster of low flat hills that includes the Hill of Tara. The flat nature of the surrounding landscape means that panoramic views are possible even from slightly elevated areas. The landscape is man-altered and made up of large fields within a network of roads and hedgerows. There is an existing 220 kV and 400 kV transmission line in this landscape unit.

**POTENTIAL LANDSCAPE EFFECTS**

- There will be changes to landscape character in the immediate vicinity of the line (up to 600-800m of unscreened structures), but little alteration to the character of the wider landscape.
- There will be cumulative landscape effects in the townland of Bogganstown where the proposed line connects with the existing 400 kV line. These are concentrated within a slightly elevated area between the R125 and the local road at Bogganstown. The established character of a farmed landscape containing electricity infrastructure will intensify.

**POTENTIAL VISUAL EFFECTS**

- The transmission line will be partially visible from houses and roads up to 1-1.5km of the line where there is no intervening vegetation or topography. Visual effects reduce with distance, with the most significant effects occurring with 600-800m of unscreened structures. The towers would be generally difficult to discern at distances beyond 800m but longer distance views are possible, as some towers are located on relatively elevated land.
- The transmission line will be visible at close distance in conjunction with the existing 400 kV line in viewpoints along the R125.

		<ul style="list-style-type: none"> <li>• Open views of the location where the proposed line meets with the existing 400 kV OHL are possible from the R156, but at a distance of 2km, the line is barely perceptible and seen in the context of existing power lines.</li> </ul>
<b>Settlements</b>	Individual houses throughout the countryside and along roads.	Houses up to 1-1.5km from the line route, with no or little intervening screening vegetation will have potential visibility of the proposed development. The most significant effects would be experienced in views up to 600-800m from the line route, where there is no or little intervening vegetation. The nature of visibility over distance is shown in <b>Section 11.5.3</b> . The towers would generally be difficult to discern at distances beyond 800m but longer distance views are possible, as some towers are located on relatively elevated land. Longer distance views are more likely in the flat unscreened parts of the landscape or where elevated views are possible.

106 The following photomontages show the potential landscape and visual effects of the proposed transmission line within Landscape Unit L – Tara Skryne Hills. Full scale photomontages and wireframes are contained in **Volume 3D Figures** of the EIS.

**Photomontage 75 from the R125 in the townland of Bogganstown showing the proposed transmission line in conjunction with existing 400 kV line, 271m to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows an open view of the location where the proposed transmission line connects with the existing 400 kV OHL.

**Landscape effects** – The transmission line intensifies the existing landscape character which is determined by agricultural pattern, rural housing, roads and powerlines.

**Visual effects** – Due to their location on elevated land, the towers will be visible over a slightly wider area than usual in the wider Meath landscape. They will be seen in conjunction with the existing towers resulting in cumulative and locally significant visual effects.

**Photomontage 76 from the R125 in the townland of Leonardstown showing the proposed transmission line in conjunction with the existing 400 kV line, 1.73km to the closest tower**

**Existing view**



**Proposed view including transmission line**



**Wireframe** – blue shows what is in view, red shows what is screened by intervening vegetation or topography



**Reason for selection:** This photomontage shows an open view of the proposed development in conjunction with the existing 400 kV OHL.

**Landscape effects:** The proposed development intensifies the existing landscape character in this location which is determined by agricultural pattern, rural housing, roads and powerlines.

**Visual effects:** The existing 400 kV OHL is visible in the field adjacent to the road in view. A very small part of the proposed development is potentially visible over vegetation in the distance, but the transmission line would be mostly screened by vegetation and topography.

#### 11.5.4.9 Potential Physical Landscape Effects

107 The main physical landscape effects arise from the need for the removal of vegetation. The degree of tree lopping, trimming and removal will depend on a number of factors including tower height, closeness of hedgerow and towers and the lowest point of the conductor sag and topography. Areas where the line route passes through woodland will require the removal of an up to 74m swathe of trees. This will have the most impact within the Brittas Estate, but also at other less significant and intermittent locations along the route (described in detail in **Chapter 6** of this volume of the EIS).

108 While a maximum working area of 30m x 30m around each tower may require removal of hedgerow vegetation at construction, this will be reinstated, and therefore adverse impacts would be temporary. Other hedgerows along the line route will be permanently lopped or trimmed in order to accommodate required safety clearances. Hedgerows with a height of up to 6m are unlikely to be lopped, although the height will depend on the conductor sag. On reinstatement of vegetation the continuity of any affected hedgerow or tree lines will be restored but the linear open corridors through woodland will remain. It is considered that tree cutting will not be required at riparian areas of the River Boyne and Blackwater crossings.

#### 11.5.4.10 Potential Impact of a new 400 kV circuit on Towers 402-410

109 There would be localised landscape and visual effects at construction stage. This would arise from the temporary and localised visibility of access routes, construction machinery and vehicles. Following construction there would be no significant landscape or visual effects.

#### 11.5.4.11 Potential Impact of Works to Woodland Substation

110 There would be localised landscape and visual effects at construction stage. This would arise from the temporary and localised visibility of access routes, construction machinery and vehicles. Following construction there would be no significant landscape or visual effects, as the localised landscape character is currently determined by the existing substation.

#### 11.5.4.12 Potential Impact of Swan Flight Diverters

111 **Chapter 6** of this volume of the EIS contains information on the location, extent and type of swan flight diverters required along the route. These have been illustrated on photomontages at varying viewing distances (see Photomontages 45, 48, 50, 55, 56, 58 and 61).

112 Swan flight diverters will be located:

- Between Towers 307 to 312 at the River Blackwater crossing point;
- West of the Yellow River foraging area between Towers 291 to 295 through a flat bog landscape;
- Between Towers 279 to 283 west of Clooney Lough at the crossing point of the N52; and
- Between Towers 257 to 268 near Cruicetown / Whitewood Lough on higher ground west of the lake and partly within Brittas Estate.

113 The requirement for swan flight diverters often corresponds with areas of landscape sensitivity and these five locations are sensitive due to their proximity to rivers and lakes, location on higher or flat parts of the landscape, location at open road crossings and part location within Brittas Estate. The swan flight diverters will be visible on the earth wires at close proximity to the proposed development. However the type of bird flight diverter selected for use is visually subtle and is not perceptible at distances greater than approximately 500m. Therefore, considering the relevant scale of the proposed development, the addition of swan flight diverters is not considered to result in significant landscape or visual effects. The slightly higher visual impact resulting from the swan flight diverters is balanced with the benefits to landscape character arising from bird protection.

#### **11.5.4.13 Potential Impact of Aviation Markers**

114 The fitting of aviation marker spheres is recommended in the vicinity of Trim Airfield between Towers 355 and 357.

115 These spheres are alternatively white and orange, spherical with a diameter of 60cm and located at distances of 30m fitted to the earth wire.

116 This location corresponds with one of the most sensitive locations identified along the alignment of the proposed development where towers are visible from Bective Bridge looking along the River Boyne. The area to the south of the river is unusually flat and open and forms part of the Boyne Valley Driving Route.

117 By their very nature, the marker spheres are intended to be highly visible, although their spacing at 30m is wider than for swan flight diverters. The inclusion of marker spheres in this location will render the proposed development slightly more visible at close distances by increasing the perception of the conductors. It will increase the localised adverse effects on

landscape character in a landscape recognised as being significant in the MLCA by emphasising the visibility of the transmission line.

- 118 However, while distantly visible, the markers would not be generally perceptible in key viewpoints in this location - from the bridge crossing of the River Boyne at Bective or in views from Bective Abbey.

#### 11.5.5 Decommissioning Phase

- 119 The proposed development will become a permanent part of the transmission infrastructure. The expected lifespan of the development is in the region of 50 to 80 years. This will be achieved by routine maintenance and replacement of hardware as required. There are no plans for the decommissioning of the OHL. In the event that part of, or the entire proposed infrastructure is to be decommissioned, all towers, equipment and material to be decommissioned will be removed off site and the land reinstated. Impacts would be expected to be less than during the construction phase and would be of short term duration.

### 11.6 MITIGATION MEASURES

- 120 In landscape terms, the best mitigation measure is avoidance of potential impact by a route selection process that avoids higher ground, minimises changes in direction, visibility on skylines and proximity to waterbodies and that avoids or minimises excessive proximity or dominance on sensitive visual receptors – such as scenic routes, residences, tourism and leisure amenities and facilities. This has been carried out over the course of constraints evaluation and route selection and is described in *The Final Re-Evaluation Report* (April 2013) (see Appendix 1.1, **Volume 3B** of the EIS) and *The Preferred Project Solution Report* (July 2013) (see Appendix 1.2, **Volume 3B** of the EIS).
- 121 The Route Selection stage resulted in the avoidance of the parts of the landscape most extensively sensitive to an overhead powerline. The most sensitive locations along the proposed alignment and the most significant landscape and visual impacts of an OHL have been identified and described.
- 122 Where it has not been possible to avoid adverse effects on identified specific viewpoints, micro-mitigation is possible through the retention, enhancement or replanting of trees and hedgerows in key locations. This is specifically relevant in relation to the Boyne and Blackwater river crossings and Brittas Estate, but is also relevant for all areas along alignment.

123 The mitigation measures described in **Chapter 6** of this volume EIS will serve to minimise physical landscape effects. The key mitigation measures as described in detail in the Flora and Fauna section in relation to landscape effects are; using existing access routes and gaps in hedgerows, reinstatement of hedgerows and ground vegetation (with similar or better quality planting), protection of retained vegetation, sensitive vegetation pruning methods and monitoring of vegetation establishment. Hedgerows will be maintained to ensure no vegetation is tall enough to potentially interfere with the conductors. Trees will be pollarded to retain tree lines and minimise physical landscape effects. On-going monitoring will be carried out during construction and inspection and if necessary, replacement, of reinstated planting will be carried out over a 24 month period.

124 The mitigation measures in **Chapter 4** of this volume of the EIS will serve to minimise effects on soil and subsequent vegetation establishment. The key mitigation measures in relation to physical landscape effects are; correct removal, storage and reinstatement of subsoil and topsoil, avoidance of soil compaction, removal and disposal of soil where not required for reinstatement.

## 11.7 RESIDUAL IMPACTS

125 As the key mitigation measures when planning a transmission line occur at route selection and line design stage, the residual unavoidable effects are those that have been described in detail in **Section 11.5** of this volume of the EIS.

126 A summary of the significance of residual effects is given in Table 11.22, **Appendix 11.1, Volume 3D Appendices** of the EIS.

127 As visibility of towers is highly influenced by intervening vegetation and buildings, the localised nature of this residual impact may slightly reduce or increase over time as vegetation grows, hedgerows are enhanced or removed and buildings are built.

## 11.8 INTERRELATIONSHIPS BETWEEN ENVIRONMENTAL FACTORS

128 Other potential impacts related to landscape are described in **Volume 3C (CMSA)** of the EIS. The following chapters of this volume of the EIS are also relevant to the potential for effects on landscape in the CMSA; **Chapter 4** Human Beings – Tourism and Amenity, **Chapter 6** - Flora and Fauna, **Chapter 7** - Soils, Geology and Hydrogeology, **Chapter 9** - Air – Noise and Vibration and **Chapter 14**- Cultural Heritage

129 Interrelationships between ecological impacts and landscape occur where the removal or trimming of wooded features (including woodlands, hedgerows and treelines) may have adverse effects on both ecology and landscape. The impacts on such wooded features has

been minimised by, where possible, locating towers away from hedgerows and other wooded areas. The use of swan flight diverters will slightly increase the visual impact of the alignment at close distances where these have been installed.

- 130 Soil compaction caused by construction or maintenance can have an adverse effect on localised landscape character and vegetation establishment.
- 131 The potential impacts on the setting of recognised individual cultural heritage sites are appraised in **Chapter 14** of this volume of the EIS. This chapter appraises potential impact in the context of the broad cultural heritage contained within the landscape, which includes the patterns of human impact over the millennia. This human impact includes agriculture, drainage, transport, utilities and housing.
- 132 Aviation markers increase the discernibility of the OHL conductor at close distances.
- 133 The OHL will be visible from some short sections (approximately 2km in total) of the Boyne Valley Driving Route, from Bective Bridge and within the Blackwater Valley. This may be perceived as reducing the attractiveness of these areas for tourism and amenity purposes, although the adverse effects are localised.
- 134 Noise that may occur in close proximity to the line can have an adverse effect on landscape character.

## 11.9 CONCLUSIONS

- 135 The study area for this appraisal forms part of the fertile agricultural lowlands of County Meath, drained by the rivers Boyne and Blackwater and long inhabited and altered by man. The long history of human habitation is reflected in a range of visible built heritage features and landscapes as well as widespread rural housing development, farm and commercial buildings, a dense road and hedgerow network and existing utilities infrastructure.
- 136 The MLCA has recognised particular parts of the landscape as being of significant value – particularly the Boyne and Blackwater rivers and an area termed the Tara Skryne Hills. The proposed line route crosses both rivers and part of the extended elevated landform south of Tara and Skryne Hills. This chapter has also identified other sensitive areas and features including settlements, scenic views, recreation, heritage and tourist routes and historic designed landscapes and the uplands of East Cavan. The inhabited rural locations in close proximity to the alignment and road crossings are also sensitive to the changes to landscape character that occur with the construction of a 400 kV transmission line.

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- 137 The agricultural landscape of Meath and East Cavan is generally robust and has undergone continuous change including road and house building and introduction of utilities infrastructure while sustaining its underlying character and evident time depth. The scale of the proposed development will, however, result in significant alteration to the landscape character of areas in the near vicinity of the alignment – most noticeably at distances of up to 600-800m from the alignment.
- 138 Towers and associated infrastructure are dominant in close views (up to 500m) where there is no intervening vegetation or topography, where there are gaps or lower than average roadside vegetation or if they are located on higher ground.
- 139 At distances of 500m to 1km, towers are still noticeable in the context of a wider landscape. The screening capabilities of vegetation, buildings and topography however, become more effective. The towers are more conspicuous at these distances if sited on higher ground, if the viewing point is elevated or if the proposed development is seen against the sky.
- 140 Beyond 1km, it becomes difficult to discern the towers in the landscape and in most cases the towers are not visible at this distance. Towers are still however, distantly visible if seen traversing higher ground or over very flat ground where there is a gap in intervening vegetation.
- 141 Over the full length of the proposed development, the residual unavoidable impacts will include adverse effects on landscape character and on unscreened views within 600-800m of the alignment. Some areas that are particularly flat or elevated in relation to the line will experience significant effects at distances up to 1km. These effects will be particularly noticeable where the transmission line crosses roads where hedgerows are low.
- 142 Specific identified sensitive locations along the alignment which will experience residual unavoidable impact include; the Boyne River Valley at Bective, the Blackwater River Valley at Teltown and Brittas Estate.