

12.

LANDSCAPE AND VISUAL IMPACT

12.1

Introduction

This chapter of the rEIAR addresses the landscape and visual effects of the peat extraction and ancillary activities that took place at the Application Site which is the subject of this Substitute Consent Application submitted to An Coimisiún Pleanála (hereafter referred to as ‘ACP’), in accordance with Section 177E (Application for Substitute Consent) of the Planning and Development Act 2000 (as amended) and under Part 19 of the Planning and Development Regulations, 2001 (as amended).

As reported in Chapter 4 Description of the Development, the assessments in this rEIAR address the environmental impacts of peat extraction and ancillary activities occurring at the Application Site. The assessments in this chapter will determine the landscape and visual effects that occurred (or are likely to occur) during three differing timeframes termed ‘phases’ (as described in Chapter 4 Description of the Development):

- **Peat Extraction Phase:** The significance of landscape and visual effects that occurred at the Application Site from July 1988 to the cessation of peat extraction in June of 2020 (July 1988 – June 2020). The Peat Extraction Phase is described in detail in Sections 4.4 to Section 4.8 in Chapter 4 Description of the Development;
- **Current Phase:** The significance of landscape and visual effects that occurred at the Application Site since the termination of peat extraction in June 2020 to present day. The Current Phase is described in detail in Section 4.9 of Chapter 4 Description of the Development;
- **Remedial Phase:** The significance of landscape and visual effects that are likely to occur during future plans for the Application Site. The Remedial Phase is described in detail in Section 4.10 of Chapter 4 Description of the Development.

The emphasis in this chapter is on the (likely) significant direct and indirect landscape and visual effects during each of the Project phases reported above, as well as the potential for cumulative landscape and visual effects. This chapter includes the following:

- **Introduction** – Includes a description of the Application Site, its location and essential aspects of the peat extraction and ancillary activities during various phases requiring the most consideration from a Landscape and Visual Impact Assessment (LVIA) perspective.
- **Methodology and Assessment Criteria** – An outline of the methodology and guidance used to conduct the LVIA.
- **Landscape Baseline and Landscape Evolution** - Establishment of the conditions and character of the landscape at the Application Site and its wider landscape setting in 1988 and throughout both the Peat Extraction Phase and Current Phase. This includes a review of the landscape policy context and landscape designations pertinent to the Application Site from 1988 to present day.
- **Visibility Appraisal** – An appraisal of likely visibility of the Application Site from prominent visual receptors in proximity to the Application Site from sensitive visual receptors in the wider landscape.
- **Cumulative Baseline** – Identification and description of other sites of peat extraction in the wider landscape where the cumulative or in combination landscape and visual effects may potentially exist.
- **Landscape and Visual Effects** - A determination of the significance of landscape and visual effects during the three differing phases (Peat Extraction Phase; Current Phase; Remedial Phase), including an assessment of likely cumulative and in-combination effects. Assessment of effects is informed by site visits, review of historic satellite imagery and photography.

Statement of Authority

MKO has developed extensive expertise and experience over the last 20 years in the LVIA of large-scale infrastructure developments for Environmental Impact Assessment Reports (EIAR). The MKO Landscape and Visual team have produced LVIA across a diverse range of project types, including: renewable energy and grid infrastructure; residential developments; transport infrastructure; extraction infrastructure; and a range of other projects requiring EIAR.

This chapter was written by Dija Mazonaite, assisted by Alan Roache, with guidance and direction from Jack Workman, and oversight from Michael Watson.

Jack Workman MSc., TMLI, is the Landscape & Visual Project Director at MKO and is chartered as a Technician Member of the British Landscape Institute. Jack is an environmental scientist and an LVIA specialist with an academic background in the field of Environmental Science and Geography. Jack's primary role at MKO is scoping and writing LVIA for EIARs with over 5 years' experience managing all aspects of LVIA for a broad range of commercial infrastructure developments. Jack holds a BSc. in Psychology, and an MSc. in Coastal and Marine Environments (Physical Processes, Policy & Practice). Jack is an active participant in the National Landscape Forum, presenting in 2023 and 2024 on the topic of LVIA, he also regularly delivers guest lectures for students on the topic of LVIA at top third level institutions in Ireland including University of Galway, Trinity College Dublin, University College Dublin and University College Cork. Jack holds a membership with the Chartered Institute of Water and Environmental Management and is also a member of the Landscape Research Group.

Dija Mazonaite is a Project Environmental Scientist and LVIA Specialist at MKO. Dija has a BSc (Hons) in Geography & Geosystems and was recognised as a University Scholar at the University of Galway. Dija's primary role at MKO is producing the LVIA chapter of EIA reports for large infrastructure developments. Since joining MKO, Dija has conducted and project managed all aspects of LVIA for a broad range of commercial infrastructure developments including wind and solar energy projects, grid infrastructure, extraction industry and Strategic Housing Developments. Dija's key strengths include proficiency in GIS tools such as ArcGIS and QGIS, conducting landscape and visual impact assessments and capturing image data through drone surveys and photomontages. Dija is an affiliate member with the Landscape Institute and is also a member with IEMA, with qualifications to fly drones in the A1/A3 subcategories.

Alan is an Environmental Scientist and LVIA Specialist with MKO. His primary role at MKO is producing the LVIA chapter of EIAR reports. Alan holds an MSc. in Environmental Leadership from University of Galway. Since joining MKO, Alan has worked widely on renewable energy infrastructure, commercial, recreational, and residential projects. Alan's key strengths include proficiency in GIS tools such as ArcGIS and QGIS, conducting landscape and visual impact assessments and capturing image data through drone surveys and photomontages.

Michael Watson is the Environment Division Director in MKO who has over 25 years' experience in the environmental sector. Following the completion of his master's degree in environmental resource management, Geography, from National University of Ireland, Maynooth he worked for the Geological Survey of Ireland and then a prominent private environmental consultancy prior to joining MKO in 2014. Michael's professional experience includes managing Environmental Impact Assessments and Landscape & Visual Impact Assessments on behalf of clients in the wind farm, waste management, commercial and industrial sectors nationally. Michael worked on the capture and development of photomontages as well as compiling the Landscape & Visual Impact Assessments for some of the first wind turbines being proposed in Ireland in the early 2000's and has been compiling and reviewing LVIA chapters for multiple wind farm projects each year since 2014. Michael is a key member of the MKO senior management team and as head of the Environment Division has responsibilities to mentor various grades of team members, foster a positive and promote continuous professional development for employees. Michael also has a Bachelor of Arts Degree in Geography and Economics from NUI Maynooth, is a Member of IEMA, a Chartered Environmentalist (CEnv).

12.1.2 Site Description

This rEIAR is prepared in support of an application for substitute consent for peat extraction and ancillary activities carried out by Bord na Móna at the Application Site since July 1988.

The Application Site comprises of Lemanaghan Bog which is located in County Offaly. The main section of the bog is located to the north of the R436 Ferbane to Ballycumber Road. The Application Site is located approximately 3.5 kilometres (km) northeast of Ferbane and approximately 2.5km southwest of the village of Ballycumber in Co. Offaly. Elevations within the Application Site range from 46m-60mOD (metres above Ordnance Datum). The site measures approximately 5.8km in length from north to south, and approximately 6.7km from east to west, at its widest point. The main access point to the Application Site is from the Regional Road R436 to the south of the Application Site. It is also accessed via the N62 to the west, the L7001 to the north and the L7002 local road passing through the north of the Application Site.

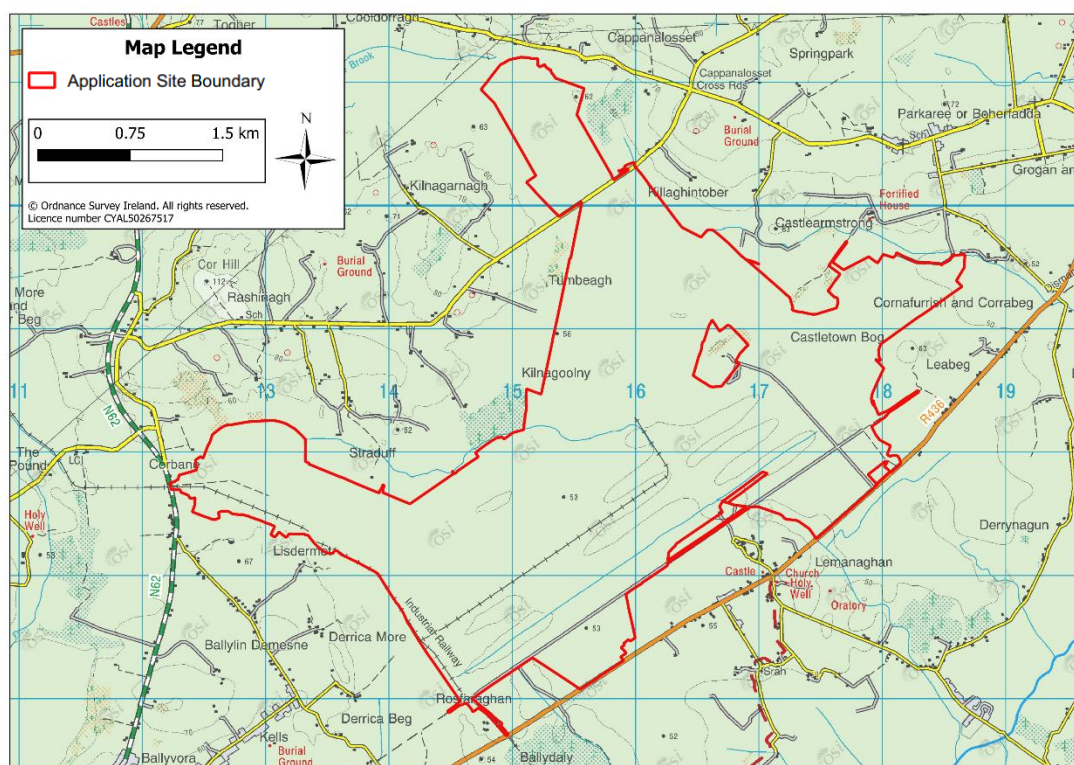


Figure 12-1 Location of Application Site

The following sections (Section 12.1.2.1, Section 12.1.2.2, Section 12.1.2.4 and Section 12.1.2.5) give an overview of the activities occurring at the Application Site throughout the various Project phases under assessment in this chapter. A comprehensive description of these phases and historic activities are reported in Chapter 4 Description of the Development of the rEIAR.

12.1.2.1 The Baseline Assessment Year (1988)

The Peat Extraction Phase includes all peat extraction and ancillary activities occurring at the Application Site between 1988 and 2020. Chapter 4 Description of the Development provides a timeline of peat extraction and ancillary activities throughout the Peat Extraction Phase. The baseline conditions of the landscape of the Application Site in the year of 1988 are illustrated in Figure 12-2 below, which shows the baseline status and extent of peat extraction and ancillary activities at the Application Site in 1988. Figure 12-2 shows areas ‘Subject to Peat Extraction’ (represented as pink cross hatching on the map), which were areas actively subject to peat extraction in 1988. Areas that had drainage installed but which weren’t subject to peat extraction in 1988 area mapped as ‘Drained - Not

Subject to Peat Extraction’ (represented as pink hatching on the map), and areas ‘Neither Drained nor Subject to Peat Extraction’ (represented with orange hatching on the map).

As illustrated by Figure 12-2, a majority of Lemanaghan Bog was subject to peat extraction in 1988. The area to the north of the bog, in the townland of Cooldorragh, had been drained in 1988, but not subject to peat extraction, this area is marked as ‘Drained-Not Subject to Peat Extraction’ in Figure 12-2 below. There are several small pockets within the bog which were ‘Neither Drained nor Subject to Peat Extraction’.

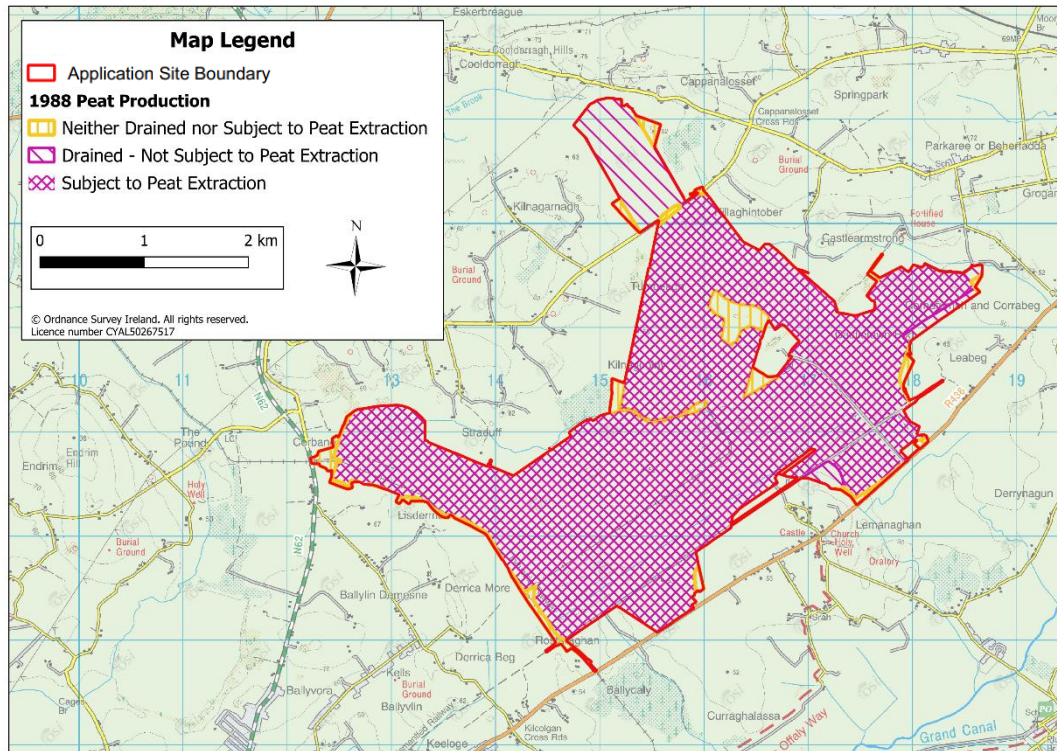


Figure 12-2 Peat Extraction Activities at Lemanaghan Bog in 1988 (Figure produced from extracts of Peat Extraction Activities maps provided by Bord na Mona, 2025)

12.1.2.2 Peat Extraction Phase (July 1988 – June 2020)

1988 - Peat Extraction Activities

As shown previously in Figure 12-2, most of Lemanaghan Bog was subject to Peat Extraction in 1988, and it would have been a landscape of cut-over peatland. The area to the north of the bog, in the townland of Cooldorragh, had been drained in 1988, was ‘Drained-Not Subject to Peat Extraction’.

1995 - Peat Extraction Activities

As seen in Figure 12-3 below, by 1995 the majority of the area to the north of the bog transitioned to an area ‘Subject to Peat Extraction’ from an area which was previously ‘Drained – Not Subject to Peat Extraction’ in 1988. As such, the majority of Lemanaghan Bog was Subject to Peat Extraction in 1995. The southern perimeter of the bog started to come out of production by 1995 and so is shown as ‘Drained – Not Subject to Peat Extraction’.

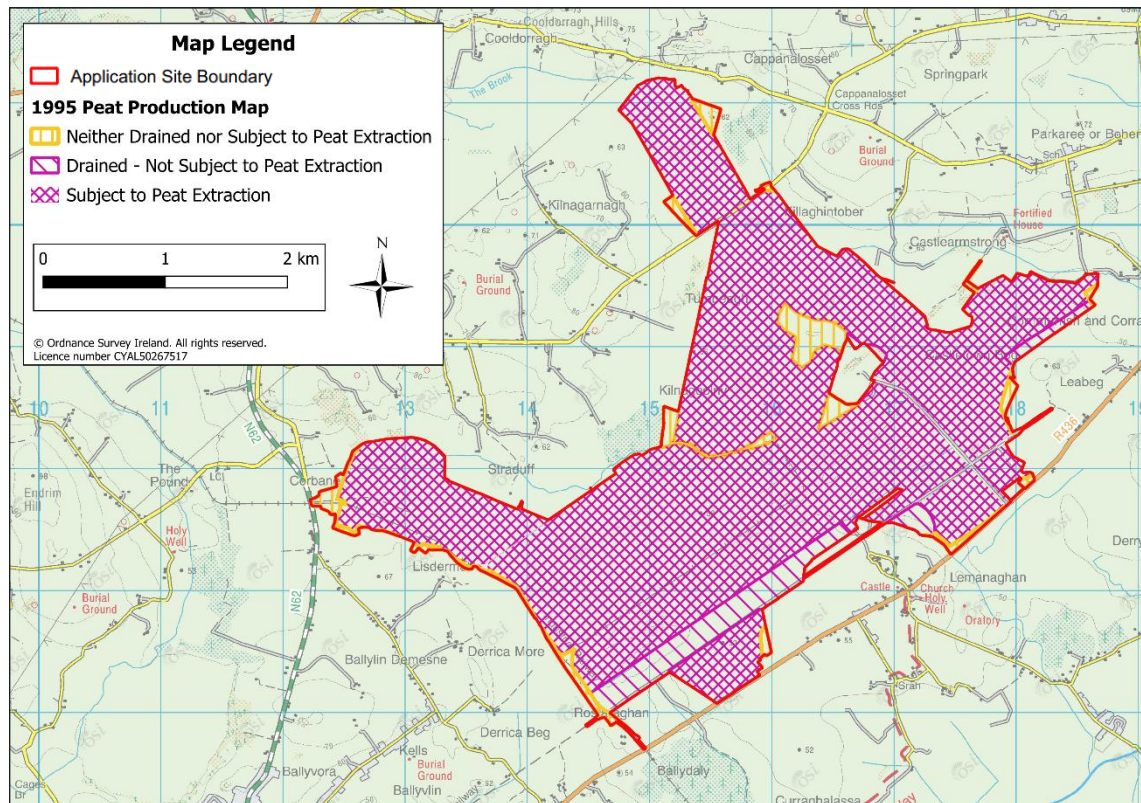


Figure 12-3 Peat Extraction Activities at Lemanaghan Bog in 1995 (Figure produced from extracts of Peat Extraction Activities maps provided by Bord na Mona, 2025)

2004 – Peat Extraction Activities

As shown in Figure 12-4, several large linear tracts of drainage were installed in the centre of Lemanaghan Bog and along the southern boundary. Drainage was also installed in an area in the western extent of the bog and in small area in the eastern extent of the bog. The majority of the remaining area of the bog was Subject to Peat Extraction in 2004.

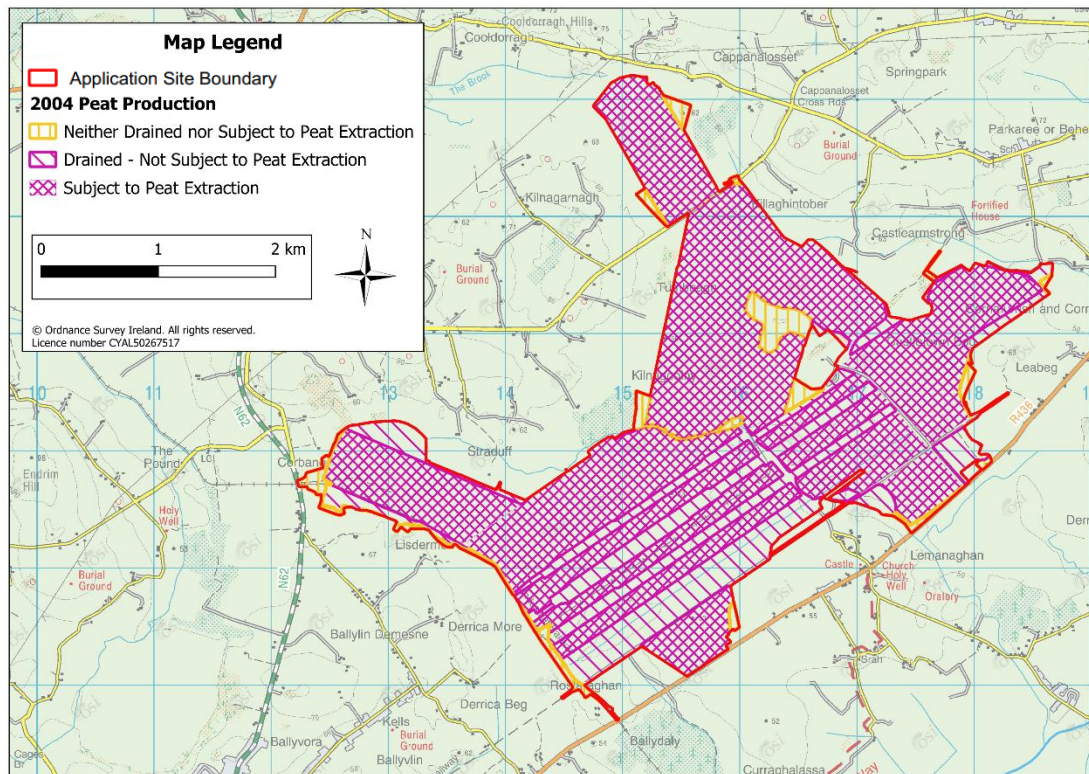


Figure 12-4 Peat Extraction Activities at Lemanaghan Bog in 2004 (Figure produced from extracts of Peat Extraction Activities maps provided by Bord na Mona, 2025)

2020 - Peat Extraction Activities

As shown in Figure 12-5, in 2020, large areas along the southern extent and centre of the bog have transitioned from areas ‘Subject to Peat Extraction’ to areas which have been drained and no longer subject to peat extraction.

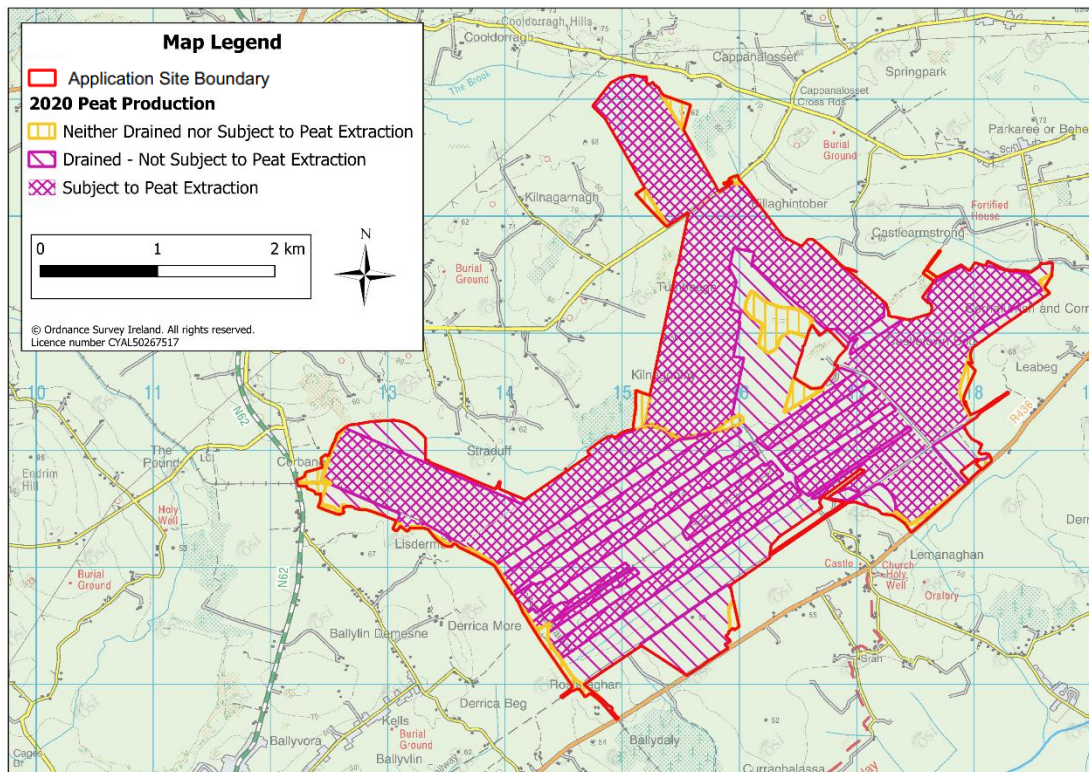


Figure 12-5 Peat Extraction Activities at Lemanaghan Bog in 2020 (Figure produced from extracts of Peat Extraction Activities maps provided by Bord na Mona, 2025)

12.1.2.3 Landscape & Visual Assessment of the Peat Extraction Phase

As described above and shown in the mapping figures, some areas of the Application Site remained ‘Subject to Peat Extraction’ until extraction ceased in June 2020. Peat extraction ceased in other areas of the Application Site prior to June 2020, as those areas became commercially unviable for continued peat extraction. A description of the changes in the landscape of the Application Site throughout the Peat Extraction Phase based upon a review of historic satellite imagery, in combination with the mapping figures above, is included in Section 12.3- Landscape Baseline & Landscape Evolution.

Best practice guidance for LVIA (GLVIA3, 2013) states that *“it is important to make sure that the project description provides all the information needed to identify its effects on particular aspects of the environment. For LVIA it is important to understand, from the project description, the essential aspects of the scheme that will potentially give rise to its effects on the landscape and visual amenity”*.

From a landscape and visual perspective, the essential aspects of activity and landscape change under assessment during the Peat Extraction Phase are the direct effects on the landscape, most notably:

- The stripping of natural vegetated ground cover;
- Change to the landform from the extraction of material from the ground for both peat extraction, as well as creation of drainage channels; and,
- Fragmentation of former areas of intact raised bog due to further establishment of drainage.

Other elements of the Peat Extraction Phase likely to have caused landscape and visual effects include:

- Alterations to the visual aesthetic of the Application Site as it changes from a mosaic of bog habitat to a visually homogenous landscape of bare cutaway peat;

- Minor modification of ancillary extraction infrastructure such as machine pass routes and peat stockpiles;
- Use of industrial extraction machinery and vehicles; and,
- Indirect effects resulting from the change in drainage regimes.

12.1.2.4 Current Phase (June 2020 – Present Day)

Peat extraction and ancillary activities at the Application Site ceased in June 2020. Since June 2020, the Application Site has been part of an on-going decommissioning programme in accordance with the IPC Licence conditions, although minor non-extractive activities have occurred on site, such as the following:

- Removal of peat stockpiles from the bog (completed at the end of 2025);
- Cleaning of silt ponds;
- Removal of buildings and compounds;
- Decommissioning of fuel tanks and associated facilities;
- Decommissioning and removal of bog pump sites; and
- Decommissioning or removal of septic tanks.

The potential Landscape and Visual impact associated with above works is inherently minor, particularly in comparison with activities occurring during the Peat Extraction Phase. Other change has occurred at the Application Site since 2020 as the landscape has started to revegetate since peat extraction ceased. A comprehensive description of the landscape of the Application Site in its current state is presented in Section 12.3 - Landscape Baseline & Landscape Evolution - Landscape Baseline & Landscape Evolution.

12.1.2.5 Remedial Phase

Bord na Móna Energy have produced a Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan for Lemanaghan Bog and it is the intention of the Applicant to rehabilitate the bogs in a phased approach under condition 10 of the IPC Licence. Please see Appendix 4-2 for details.

Decommissioning activities include removing/disposing/recovering, equipment, waste, etc from the Application Site. From a landscape and visual perspective, the essential aspect of this will be the removal of infrastructure such as equipment and facilities.

The Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan involves the re-wetting of parts of the cutover peatlands of the Application Site as appropriate with an aim of achieving environmental stabilisation and biodiversity colonisation. Re-wetted areas will require low level, intermittent groundworks for activities such as drain blocking. The Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan also includes targeted revegetation where appropriate. It is anticipated it will take up to 30 years for naturally functioning wetland and peatland ecosystems to fully re-establish.

12.1.2.6 Potential Future Use – Proposed Lemanaghan Wind Farm

As detailed in Section 4.10 in Chapter 4 Description of the Development, Lemanaghan DAC, a joint venture between SSE Renewables and Bord na Móna (BNM) (i.e the Applicant) are proposing a wind energy development consisting of 15 no. wind turbines with an overall blade tip height of 220m and associated works at the Lemanaghan Bog, known as Lemanaghan Wind Farm (<https://www.lemanaghanwindfarm.ie>). The proposed Lemanaghan Wind Farm will be located in the townlands of Cooldorragh, Kilnagarnagh, Cappanalosset, Tumbeagh, Killaghintoher, Castlearmstrong, Leabeg, Cornafurish and Corrabeg, Lemanaghan, Kilnagoolny, Straduff, Lisdermot, Derrica More, Rosfaraghan, Rashinagh, Cor Mor and Cor Beg, and Corbane, Co. Offaly.

The likely significant landscape and visual effects of the proposed Lemanaghan Wind Farm will be comprehensively assessed and reported within the EIAR accompanying the submitted planning application. The assessments in this chapter of this rEIAR are cognisant of the likely significant landscape and visual effects of the future proposed Lemanaghan Wind Farm in the context of potential for cumulative interactions between the works and activities required for implementation of the Remedial Phase and the likely effects resulting from the construction and operation of a wind farm at the Application Site.

12.2 Methodology & Assessment Criteria

This section broadly outlines the methodology used to undertake the landscape and visual impact assessment of the activities (outlined in the previous section under the three differing phases) including a description of the following:

- Guidance and Reference material used to conduct the LVIA;
- Methods for determining the Landscape Baseline and Landscape Evolution; and,
- Methods for Assessing Landscape & Visual Effects.

12.2.1 Guidance and Reference Materials

In 2000, the Department of the Environment and Local Government (DoEHLG) published ‘*Landscape and Landscape Assessment: Consultation Draft of Guidelines for Planning Authorities*’, which recommended that all local authorities adopt a standardised approach to landscape assessment for incorporation into development plans and consideration as part of the planning process. This document remains in Draft.

In 2002, Ireland signed and ratified the European Landscape Convention (ELC). This introduced a pan-European concept that centres on the quality of landscape protection, management and planning. The Department of Arts, Heritage and the Gaeltacht published a National Landscape Strategy for Ireland in 2015. The strategy aims to ensure compliance with the ELC and contains six main objectives, including undertaking a National Landscape Character Assessment and developing landscape policies.

Although the DoEHLG 2000 guidance remains in draft form, this section of the LVIA has been informed by the landscape assessment guidelines presented in the DoEHLG document as well as other guidelines, such as the following:

- Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) (The Landscape Institute/Institute of Environmental Management and Assessment, UK, 2013) - also referred to as GLVIA3 (LI & IEMA, 2013);
- ‘Notes and Clarifications on Aspects of GLVIA3: Landscape Institute Technical Guidance Note 2024-01’ (hereafter, LI TGN 24-01) published by the Landscape Institute (LI) (2024);
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA 2022);
- Offaly County Development Plan 2021–2027, Offaly County Development Plan 2003–2009 and partial versions of other plans (Offaly County Development Plan 2014–2020, Offaly County Development Plan 2009–2015, , Offaly County Development Plan 1995, Offaly County Development Plan 1987 and Offaly County Development Plan 1967), where accessible.

12.2.2 **Methods for Establishing the Landscape Baseline & Landscape Evolution**

In order to establish the landscape and visual conditions at the Application Site throughout the Project phases under assessment in this rEIAR, a desk study was undertaken which identified relevant landscape policy relating to the Application Site. This comprises a review of current and previous county development plans for County Offaly with regards to landscape character areas, designated landscapes, protected viewpoints and scenic routes.

It should be noted that several older County Development Plans were either not publicly available or only partial copies were available at the time of writing this chapter. As such, a review of these documents has not been included in this chapter. However, where relevant County Development Plans were accessible (i.e. OCDP 2003-2009 and OCDP 2021-2027), they have been reviewed and incorporated into the assessment to provide a comprehensive overview of the evolution of landscape designations over time.

A review of historic aerial imagery and mapping, Bord na Móna Annual Reports and all publicly available information on land use were also used to establish the baseline characteristics of the landscape of the Application Site and its evolution between 1988 and present day. Site visits for both the proposed Lemanaghan Wind Farm and the Project were conducted concurrently in the years 2021 to 2024 which determined the condition and characteristics of the Landscape in the Current Phase, as well as determining the likely visibility of the Application Site (and likely visibility of peat extraction and ancillary activities) from visual receptors in the wider landscape setting.

These investigations (i.e. review of policy, aerial imagery, mapping, reporting, site visit and visibility appraisal) informed the assessment of Landscape and Visual effects.

12.2.3 **Methods for Assessing Landscape & Visual Effects**

The LVIA methodology used in this chapter utilises clearly documented methods based on the GLVIA3 (LI & IEMA, 2013) Guidelines and Clarifications in LI TGN 24-01 (LI, 2024). Due to the nature of activities under assessment across differing timelines (Project phases), qualitative methods have been employed based upon the information gathered and presented in the Section 12.3 Landscape Baseline and Landscape Evolution. As part of the assessment, landscape and visual sensitivity is balanced with the magnitude of the change to assess the significance of landscape and visual effects. Residual landscape and visual effects are graded upon an ‘impact assessment classification of significance’ scale, as defined by the Environmental Protection Agency of Ireland (EPA, 2022).

12.2.3.1 **Assessing Landscape Effects**

The methodology uses qualitative methods in order to arrive at an assessment, which is based on the Landscape and Landscape Assessment (DoEHLG, 2000) Guidelines as well as the GLVIA3 (LI & IEMA, 2013) Guidelines and Clarifications in LI TGN 24-01 (LI, 2024).

Landscape effects can be described as changes which affect the landscape as a resource. This includes how activities affect the elements that make up the landscape, the aesthetic and perceptual aspects and its landscape character. Landscape effects also relate to changes in the structure of the landscape. Under the GLVIA3 (LI & IEMA, 2013) Guidelines and Clarifications in LI TGN 24-01 (LI, 2024), the assessment of likely significant effects on landscape receptors includes a judgement on both the sensitivity of the receptor as well as magnitude of the change.

Assessing Landscape Sensitivity

Landscape Sensitivity, which is described in the GLVIA3 (LI & IEMA, 2013) Guidelines and Clarifications in LI TGN 24-01 (LI, 2024), as a combination of the landscape's susceptibility to change as well as the value attached to the landscape. Susceptibility to change can be described as the ability of the landscape receptor (either the overall character, quality of the landscape or a particular landscape feature) to accommodate the development without undue consequences for the maintenance of the baseline (existing) landscape and/or the aims of landscape planning policies and strategies. Landscape value is the importance attributed to a specific landscape receptor or feature. Landscape value is determined through baseline assessments considering a combination of criteria such as designations and local characteristics.

For the purposes of this chapter and the assessment of landscape sensitivity, the following landscape sensitivity ratings are assigned to receptors based upon investigations determined by the investigations included in Section 12.3 Landscape Baseline and Landscape Evolution:

- Very High
- High
- Medium
- Low

Assessing Magnitude of Change in the Landscape

The magnitude of change occurring within a landscape is a combination of the visual presence - size and scale - of the change, the extent of the area to be affected, and the duration and reversibility of the effect. The magnitude of change for differing landscape receptors was assessed using the definitions outlined in Table 12-1 below.

Table 12-1 Magnitude of Landscape Change Assessment Criteria

Magnitude of Change	Description
Substantial	Where a landscape will experience the loss of key landscape features or the introduction of uncharacteristic additions over a large area. The changes to the landscape are prominent and large in scale. The level of change has an effect on the overall landscape character. The effects are likely long term and may be irreversible.
Moderate	A more limited loss of or change to landscape features over a medium extent which will result in some change to landscape features and aesthetics. Could include the addition of some new uncharacteristic features or elements that would lead to the potential for change in landscape character in a localised area or part of a landscape character area. Would include moderate effects on the overall landscape character that do not affect key characteristics. The effects could be long to medium term and/or partially reversible.
Slight	The loss of or change to landscape features of limited extent, or changes to landscape character in smaller areas. Changes would not affect key characteristics. The addition of any new features or elements to the landscape would only result in low-level changes to the overall aesthetics of the landscapes. Changes to the landscape are more evident at a local level and not over a wide geographical area. The effects could potentially be medium to short term and/or reversible.

Magnitude of Change	Description
Negligible	A change affecting smaller areas of landscape character including the loss of some landscape elements or the addition of features or elements which are either of low value or hardly noticeable. The effects could be short term and/or reversible.

Landscape Effects Assessment Matrix

The significance of landscape effects was arrived at by combining the magnitude and sensitivity classifications, using the assessment matrix in

Table 12- below, where landscape sensitivity is shown in the left-hand first column and magnitude of change is shown in the first row at the top of the table.

Table 12-2 Landscape effects significance assessment matrix

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

The determination of significance uses a seven-point scale, ranging from Major to Negligible. This seven-point scale is translated to the EPA (2022) impact assessment classifications of significance, as outlined in Table 12- in Section 12.2.3.2.

12.2.3.2 Assessing Visual Effects

Visual effects relate to changes in views and visual amenity of the surroundings of individuals or groups of people – termed ‘visual receptors’. These may result from changes in content and character of views as a result of changes to the landscape. The significance of the effect on visual amenity is a combination of the sensitivity of the receptor balanced with the magnitude of the change occurring within a view.

Visual Receptor Sensitivity

Visual sensitivity balances the sensitivity and susceptibility of the receptor (people or groups of people) as well as the amenity value of the view on offer at a particular location. Visual receptor sensitivity depends on the occupation or activity of the people, as well the extent to which the attention is focused on views and visual amenity, according to the GLVIA Guidelines (2013) and LI TGN 24-01 (2024) clarifications. Visual receptor sensitivity is assessed as either being Very High, High, Medium or Low, based on the definition of descriptions and examples set out in Table 12- below.

Table 12-3 Visual Receptor Sensitivity Assessment Criteria

Sensitivity of Visual Receptor(s)	Description
Very High	Included in this category are viewers that are primarily focused on views from this particular location, such as visitors to popular destinations identified for their outstanding views. Residents in close proximity who have primary views of a scenic quality in the direction of the Application Site.
High	Includes viewers at designated views or landscapes. Viewers such as residents in close proximity to the viewpoint who have primary views that will be in the direction of the Application Site that may not necessarily be of a particularly scenic quality; viewers at well-known heritage or popular tourist or recreational areas, viewers along scenic or tourist routes.
Medium	Includes viewers who may have some susceptibility to a change in view. Viewers such as residents in medium proximity but who do not have views focused in the direction of the Application Site or whose views are not of a particularly scenic quality; those from views which are not designated but may have local recreational uses or those travelling along routes or at view which are considered moderately scenic.
Low	Includes viewers engaged in activities where the focus is not on the landscape or view. These including those travelling along a busy route, viewers at work or engaged in sport not related to views or experience of the landscape.

Magnitude of Visual Change

The magnitude of the visual change considers a combination of scale of the change, the extent of the area to be affected and the duration and reversibility of the effect, determined by review of the activities conducted at the Application Site, desk studies, as well as the visibility appraisal conducted during the proposed Lemanaghan Wind Farm and Project site visits in the years 2021 to 2024. The magnitude of change is determined in accordance with the definitions and descriptions included in Table 12- below.

Table 12-4 Magnitude of Visual Change Assessment Criteria

Magnitude of Change	Description
Substantial	Substantial change, where activities (or proposals) result in large-scale, prominent or very prominent change, leading to substantial obstruction of existing view or complete change in character and composition of the baseline through removal of key elements or addition of uncharacteristic elements which may or may not be visually discordant. This includes instances where activities under assessment (e.g. Peat extraction and ancillary activities at the Application Site) are fully or almost fully visible over a wide extent, at close proximity to the viewer. This change could be long term or of a long duration.
Moderate	The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where activities under assessment (e.g. Peat extraction and ancillary activities at the Application Site) is partially visible over a moderate or medium extent, and which are not in close

Magnitude of Change	Description
	proximity to the Application Site. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Slight	The activities under assessment (e.g. Peat extraction and ancillary activities at the Application Site) would be partially visible or visible at sufficient distance to be perceptible and result in a low level of change in the view and its composition and a low degree of contrast. The character of the view may be altered but will remain similar to the baseline existing situation. This change could be short term or of a short duration.
Negligible	Any change would only be barely distinguishable from the status quo “do-nothing scenario” in the surroundings. The composition and character of the view would be substantially unaltered, approximating to little or no change.

Visual Effects Assessment

5 below shows the significance of visual effects, arrived at by combining the visual receptor sensitivity and the magnitude of change classifications. Visual receptor sensitivity is shown in the left-hand first column and magnitude of visual change is shown in the first row at the top of the table. This table is used as an indicative tool to assist in determining the significance of visual effects. The significance of visual effect is arrived at using a combination of the matrix shown in Table 12-

Table 12-5 Visual effects significance assessment matrix

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

The determination of significance uses a seven-point scale, ranging from Major to Negligible. This seven-point scale is translated to the EPA impact assessment classifications of significance (EPA, 2022), as outlined in Table 12- below.

Table 12-6 EPA Impact Assessment Significance Classification for Landscape and Visual Effects

Matrix Classification Significance	EPA Significance Classification	EPA (2022) Definition of Significance
Major	Profound	An effect which obliterates sensitive characteristics
Major/Moderate	Very significant	An effect, which by its character, magnitude, duration or intensity alters most of a sensitive aspect of the environment
Moderate	Significant	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.

Matrix Classification Significance	EPA Significance Classification	EPA (2022) Definition of Significance
Moderate/Minor	Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends
Minor	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
Minor/Negligible	Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Negligible	Imperceptible	An effect capable of measurement but without significant consequences

After determining the significance of the visual effect using the above visual effects assessment matrix, mitigating factors are taken into consideration to arrive at the final residual effect.

12.2.3.3 Determination of Residual Landscape and Visual Effects

After determining the ‘Significance’ of landscape and visual effects using the above assessment matrices (and significance graph in the case of visual effects), mitigating factors and measures are then taken into consideration to arrive at the final ‘Residual’ effect rating, translated to the EPA classification scheme. In some cases, mitigating factors merit a reduction in classification. In a landscape and visual assessment, a mitigating factor is a pre-existing characteristic of the site or its surroundings that naturally helps to reduce potential negative impacts, while a mitigation measure is a proactive action or design change taken to avoid, reduce, or offset these negative impacts. For example, existing natural screening from a hill is a mitigating factor, whereas planting new trees or choosing a different site layout is a mitigation measure.

The matrices and tables above are excellent tools to aid professional judgement in the determination of the significance of an effect. They are useful in that they provide a transparent, objective structure to the process of balancing ‘Sensitivity’ and ‘Magnitude of Change’.

Particularly for determining residual visual effects, the formulaic process created by the use of the above matrices (Table 12-5) does provide an indicative initial assessment, which can be seen clearly in the assessment of photomontages in viewpoint assessment tables in the LVIA.

However, over-reliance on the formulaic process, which is heavily influenced by the definitions of ‘Sensitivity’ and ‘Magnitude of Change’ contained in the matrices can lead to a failure of properly accounting for the full range of circumstances and factors at play in the determination of the final significance rating of a visual effect (see *sub-section 3.35* in ‘*Step 3: Judging the Overall Significance of the Effects*’ of the GLVIA3, LI & IEMA, 2013, p.41).

In actuality, a wide range of factors, mitigating or otherwise, can factor into the final determination, and it is not possible to capture the complexity involved in balancing all considerations within the necessarily limited definitions contained in the matrices. This then naturally results in circumstances whereby the process of the determination of significance using the formulaic method involved with the matrix shown above in Table 12-6 can result in misrepresentations of the overall significance of visual

effects. It is only by applying professional judgement and composing narrative descriptions of the effect, that such complexity can be integrated into the final determination of significance.

Therefore, the formulaic methods based upon the matrices presented above are combined with professional judgement in the determination of significance. This is shown by the ‘Visual Effects Significance Graph’ below in 6 (adapted from the EPA, 2022) which illustrates how the professional judgement of the competent expert is used to properly determine the significance of an effect taking all considerations into account.

Accordingly, in this LVIA, focus is placed upon the narrative description of effects (see *sub-section 3.36* of the GLVIA3, LI & IEMA, 2013, p.41) given the naturally subjective nature of the significance determination process, particularly in relation to visual effects, ensuring that the rationale for the overall judgement is clear (see *sub-sections 3.28 and 3.29* in ‘*Step 2: Combining the Judgments*’, GLVIA3, 2013, p.40). The comprehensive assessment of photomontages included the LVIA aims to provide a transparent and robust determination of residual visual effects utilising the graph in Figure 12-6 in combination with a clear and logical narrative.

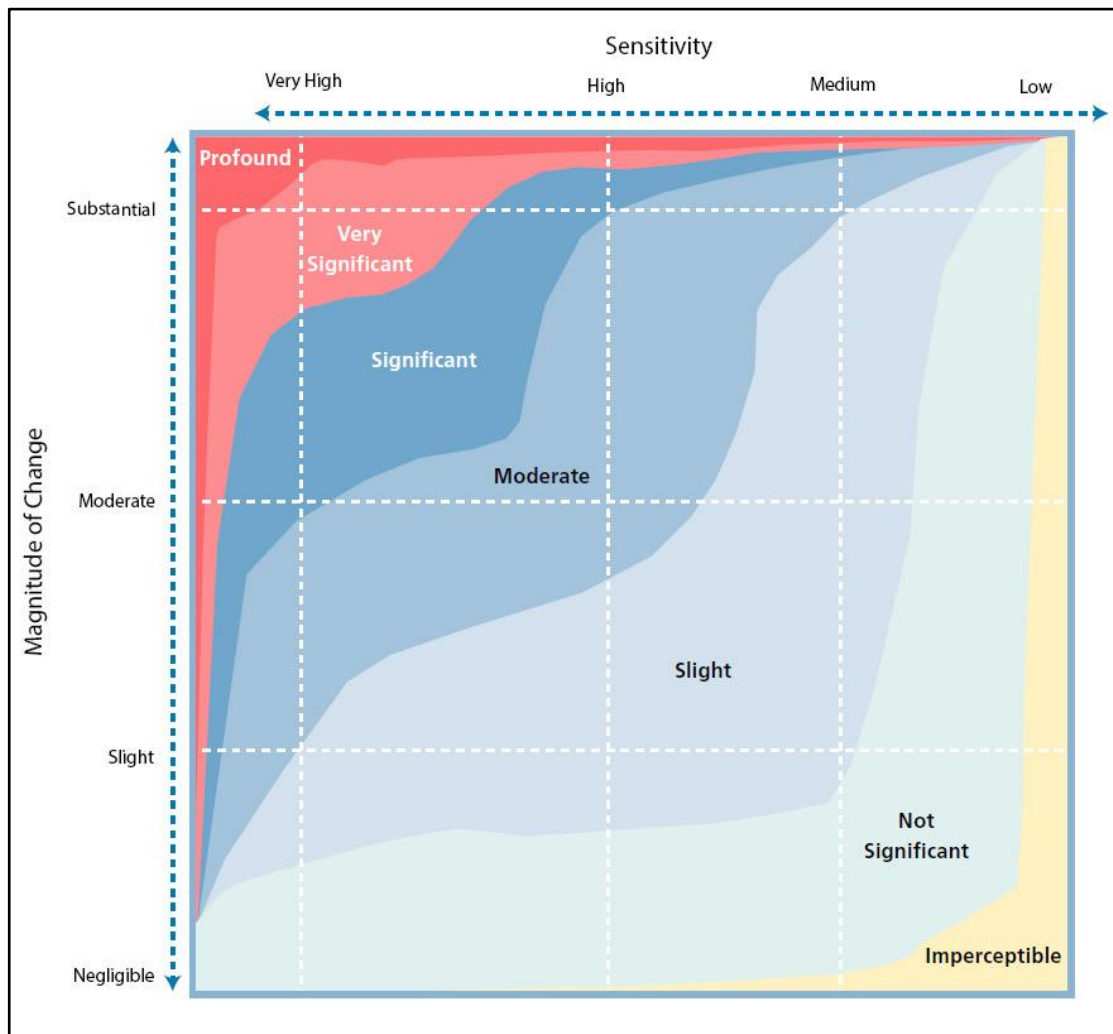


Figure 12-6: Visual Effects Significance Graph (EPA, 2022)

12.3

Landscape Baseline & Landscape Evolution

This section establishes the conditions and character of the landscape at the Application Site and its wider landscape setting in 1988 and throughout both the Peat Extraction Phase and Current Phase. This includes a review of the landscape policy context and landscape designations pertinent to the Application Site from 1988 to present day.

12.3.1

Pre-1988 Landscape Character (1950-1987)

The greatest landscape and visual effects arising from the areas ‘Subject to Peat Extraction’ had already occurred prior to the baseline of 1988, where initial Peat Extraction commenced in the year 1960. Vegetation clearance and drainage commenced at the Application Site in 1950 and railway infrastructure was also laid in the bog prior to the 1988 Baseline.

In this regard, it is deemed that by 1988, the ‘Subject to Peat Extraction’ areas of the Application Site were degraded and modified landscapes utilised for peat extraction, making them of low landscape value and of low landscape sensitivity.

Aerial imagery from 1973 confirms that by this period, drains were installed in the southern and central parts of the Application Site, as seen in Figure 12-7 below. As seen in Figure 12-8, this area in the southern section of the bog was already Subject to Peat Extraction in 1973.

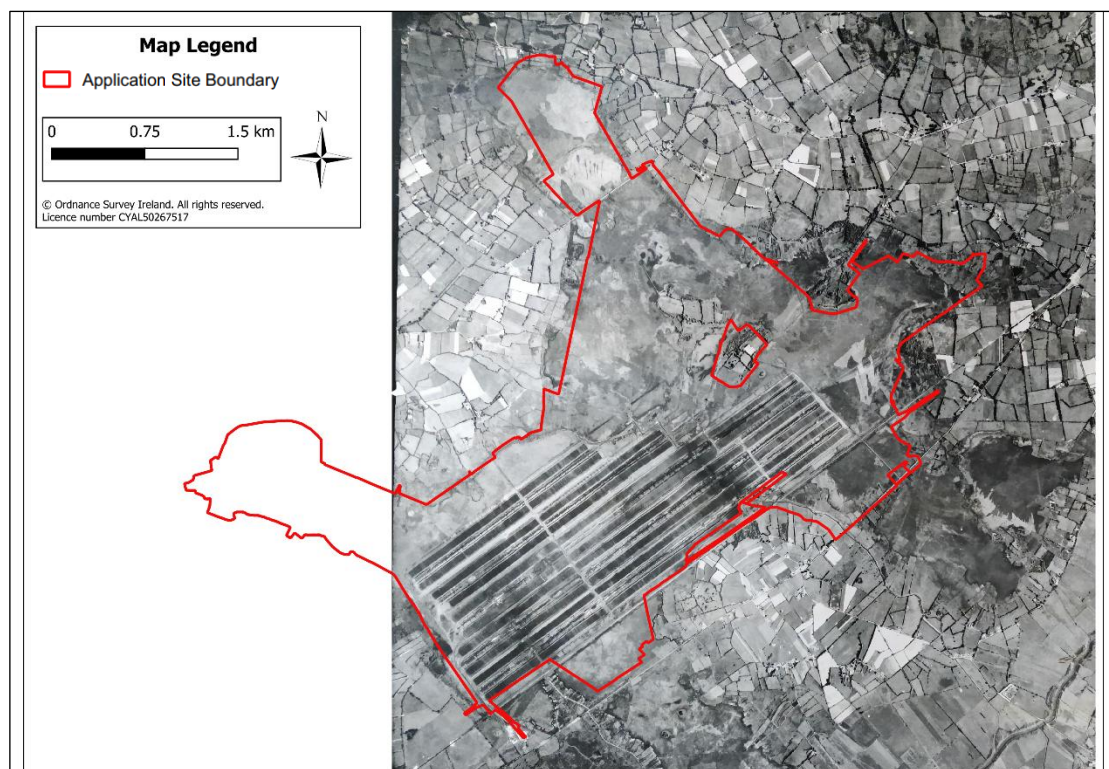


Figure 12-7 Aerial image of Lemanaghan Bog 1973 – Osi

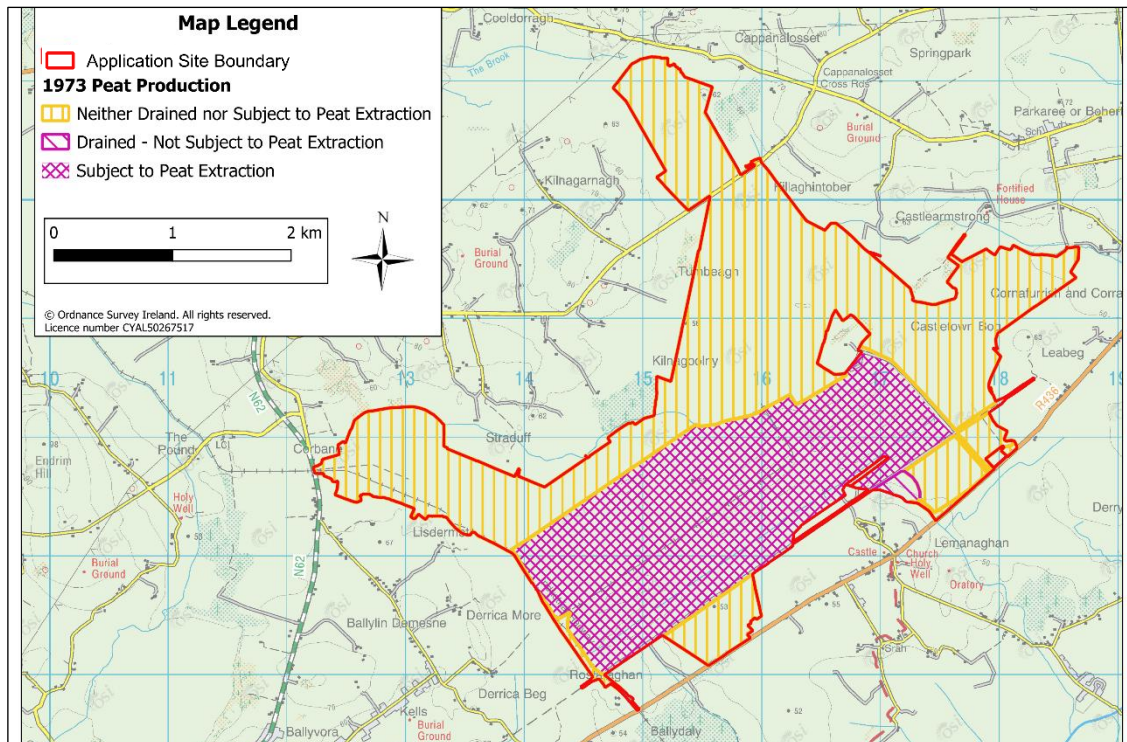


Figure 12-8 Peat Extraction Activities at Lemanaghan Bog in 1973 (Figure produced from extracts of Peat Extraction Activities maps provided by Bord na Mona, 2025)

Drainage ditches are deep, appearing as linear topographical grooves that cut across the landscape of the Application Site. Insertion of these drainage ditches, such as those within the Application Site (shown in Plate 12-1 below) would have slightly altered the physical characteristics of a landscape that would previously have been a raised bog. Altering the drainage regime via insertion of a drainage ditch would dry the topsoil and would ultimately have a knock-on effect on the assemblages of species existent within the peatland habitat, bringing about further minor and localised change in the appearance of the bog and a slight change (although potentially imperceptible) to the landscape character.



Plate 12-1 View of existing drainage ditch existent within the Application Site (present day)

Overall, the Application Site would have experienced a relatively abrupt change in land cover with the commencement of peat extraction in 1960. Bord na Móna records indicate that approximately 904,128 tonnes (sod until 1984 and milled thereafter, combined tonnes) were extracted from the Application Site for the period from 1960 to July 1988. Aerial imagery (seen in Figure 12-7 previously) indicates that

by July 1988, approximately 958 hectares of the Application Site were subject to milled peat extraction. Thus, the main landcover type at this time was cutover peat.

On balance, the landscape value and landscape sensitivity of these areas that are ‘Subject to Peat Extraction’ is deemed to be ‘Low’.

12.3.2 1988 Landscape Baseline – Landscape Character

A description of the baseline condition and extraction occurring at the Application Site in 1988 is included in Section 4.4 of Chapter 4 Description of the Development as well as an overview in Section 12.1.2.2. The following text establishes the landscape conditions of the Application Site in 1988 and the factors that contribute to the landscape character, landscape value and landscape sensitivity at that time. Figure 12-9 below shows aerial imagery of the Application Site in 1988.



Figure 12-9 Aerial imagery over Lemanaghan Bog captured in 1988.

In 1988, all of the ‘Subject to Peat Extraction’ areas of the Application Site included stripped and drained peatland where peat extraction was well-established. The groundcover of these ‘Subject to Peat Extraction’ areas comprised bare cutover peat and it is likely that the character of the landscape in these areas was similar to that shown below in Plate 12-2 below (captured during a site visit in 2024). As discussed in Section 4.3.1 of Chapter 4 Description of the Development and Chapter 7 Land, Soils and Geology, the topographical elevation of bare cutaway peat landscape was at a greater elevation in 1988 than it is currently. The material extracted throughout the Peat Extraction Phase (July 1988 – June 2020) has lowered the landform relative to the surrounding landscape and relative to the baseline profile in 1988. Pre-development topographies would have been higher (in the ranges of 54m-79mOD) than those observed today, with the remnant areas of high bog located around the perimeter of the Application Site resembling pre-development ground elevations more closely.



Plate 12-2 Drone image of the existing conditions within the Application Site

In a general sense, the Application Site in 1988 was a highly managed landscape utilised for industrial peat extraction, making them of low landscape value and of low landscape sensitivity. The character of landscape was heavily influenced by this industry. As well as the expansive areas of bare cutover peat, the Application Site included ancillary infrastructure and features to facilitate the land use such as railway infrastructure, internal machine passes/tracks, power lines, silt ponds and drains.

Aerial imagery and reports from 1988 indicate that the perimeter of the Application Site was likely bounded in some areas by mature vegetation such as hedgerows, woodland and pockets of forestry as it is today, as well as remnant uncut bog around the edges of the ‘Subject to Peat Extraction’ areas. The aerial imagery also indicates that the surrounding landscape setting in 1988 comprised of an agricultural landscape. In this regard, it is anticipated that the nature and extent of visual screening surrounding the Application Site (boundary vegetation) and nature of the visual receptors present in 1988 was very similar to that which exist today. An appraisal of the visibility of the Application Site from visual receptors in the surrounding is reported in Section 12.4 Visibility Appraisal.

12.3.3

Landscape Evolution – Landscape Character of the Application Site During the Peat Extraction Phase (July 1988 – June 2020)

As described above, the majority of the Application Site was a managed system in 1988 for peat extraction, of low landscape value and low landscape sensitivity. This continued throughout the Peat Extraction Phase until peat extraction ceased in June 2020. Therefore, all areas subject to Peat Extraction of the Application Site had no opportunity to revegetate, re-wet and mitigate landscape and visual impacts of peat extraction and ancillary activities over time. As detailed in Section 4.6.2 of Chapter 4 Description of the Development, the total volume of peat extracted from July 1988 to June 2020 is estimated to be 3,351,248 tonnes. The removal of this volume of material caused a substantial direct change on the landscape throughout the Peat Extraction Phase, as the physical landform was materially altered, gradually the surface of the landscape was reduced to a lower elevation year on year.

As detailed previously in Section 12.1.2.2, one of the greatest changes to the landscape occurred in the north of the Application Site between 1988 and 1995 where an area previously ‘Drained – Not Subject to Peat Extraction’ became ‘Subject to Peat Extraction’. The vegetated ground cover was stripped from these drained peatlands, and they became active peat extraction areas. The landscape in these areas then transitioned to a landscape of bare cutover peat as the natural ground cover was removed. Areas throughout the Application Site where peat extraction occurred continuously from 1988 to 2020 will have had limited change to the character or visual aesthetic of areas Subject to Peat Extraction at the Application Site from the 1988 baseline. As such, the Application Site remained a landscape of Low landscape value and Low landscape sensitivity.

Between 1995 and 2020, large areas of the Application Site underwent landscape change as they transitioned out of active peat extraction. These areas, previously categorised as ‘Subject to Peat Extraction’, remained drained, with existing drainage infrastructure retained. Over time, the cessation of extraction allowed these ‘Drained – Not Subject to Peat Extraction’ areas to gradually revegetate, altering the character of the bare cutover peatland landscape. The Application Site had a slightly higher landscape value than the bare cutaway peatland that was ‘Subject to Peat Extraction’. However, the Application Site could not have been considered a wetland or peatland habitat of high biodiversity value, and therefore, remained a landscape of Low landscape value and Low landscape sensitivity.

A selection of Aerial imagery of the Application Site captured in 1995 and 2004 are presented below. The imagery indicates the morphology of the Application Site throughout the operational lifecycle of these peatlands as managed, working landscapes for the commercial production of peat.

Aerial Imagery 1995 (Source – Bord na Mona, 2025)

The aerial imagery of the Application Site captured in 1995 is shown in Figure 12-10 below. The imagery shows that Lemanaghan Bog is located within an ordered working landscape with well-established extraction areas and drainage networks visible within the aerial. The aerial imagery from 1995 shows that the surface area of peat extraction includes almost all available areas of the peatlands within the Application Site.

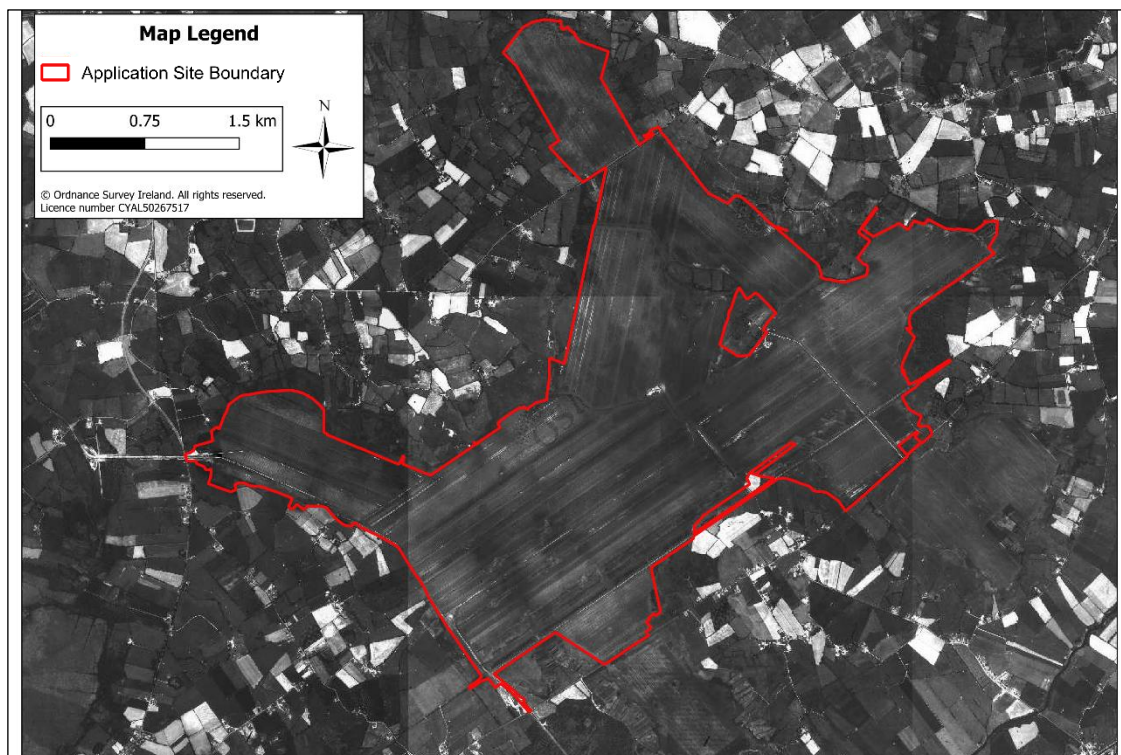


Figure 12-10 Aerial imagery over Lemanaghan Bog captured in 1995

Aerial Imagery 2004 (Source – Bord na Mona, 2025)

The aerial imagery of the Application Site captured in 2004 is shown in Figure 12-11 below. The areas of the Application Site shown in a light brown colour can be identified as ‘Subject to Peat Extraction’ areas during 2004 where the upper layers of peat are being extracted. Whereas areas ‘Drained-Not Subject to Peat Extraction’ in 2004 appear to be a lot darker where lower layers of peat have already been extracted. Green strips are visible within the imagery where vegetation colonisation is seen to appear along drainage features.

Higher resolution colour aerial imagery of the Application Site captured in 2004 is shown below. Due to differences in image quality, it is difficult to directly compare these images with the imagery captured in 1995. However, the imagery indicates that vegetation colonisation is evident across the boglands particularly along drainage corridors or areas where peat extraction has ceased.

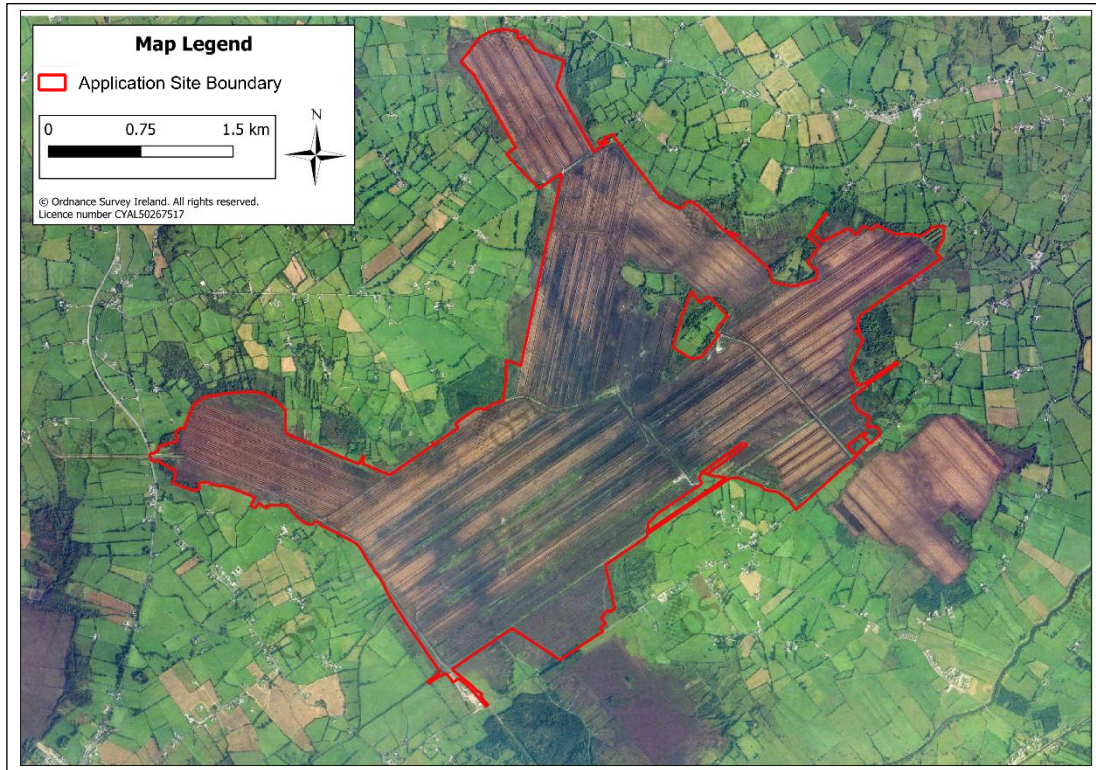


Figure 12-11 Aerial imagery over Lemanaghan Bog captured in 2004

12.3.4 Landscape Character of the Application Site - Current Phase (June 2020 – Present Day)

Site visits for the proposed Lemanaghan Wind Farm and the Project were conducted in the years 2021 to 2025 to ascertain the landscape character and condition of the Application Site in the Current Phase. Landscape character refers to the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how people perceive this. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement, and creates the particular sense of place found in different areas. Figure 12-12 below shows present-day aerial imagery of the Application Site.

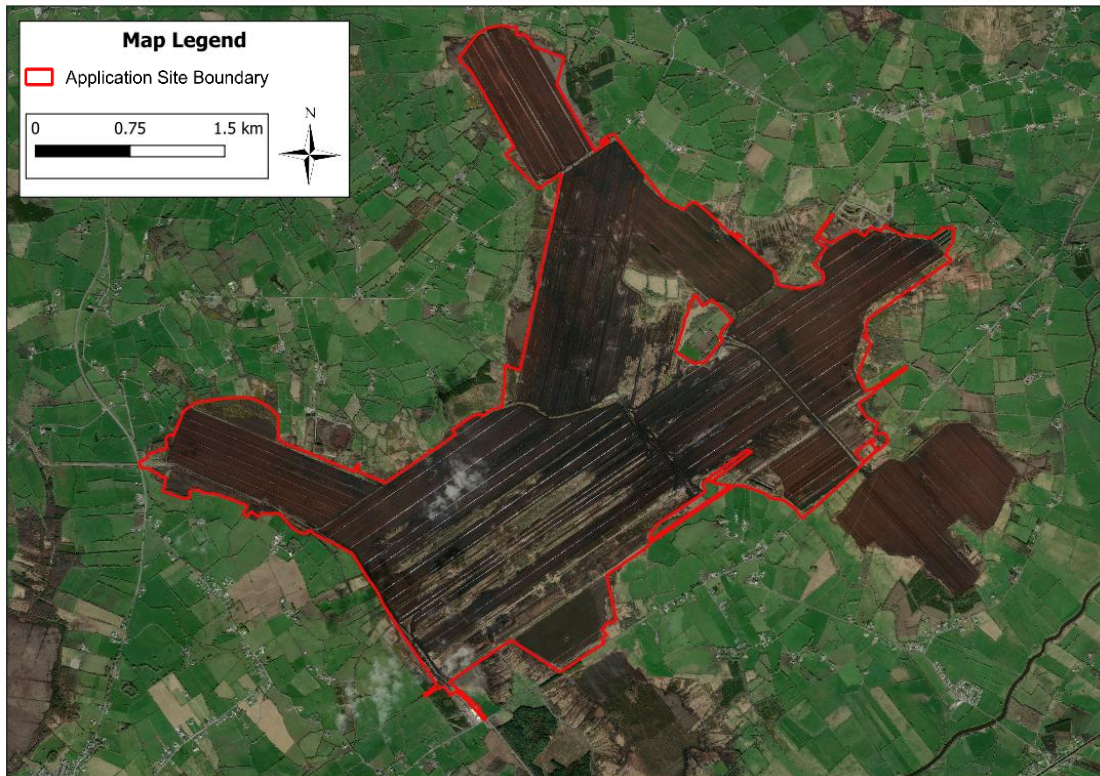


Figure 12-12 Aerial Imagery of the Current Phase of the Application Site (present day – Source: Bing 2025)

Due to peat extraction and ancillary activities, the topography and landform have been substantially altered and modified. In most areas of the site, the landform is very flat (see Plate 12-3 below) and is often at a lower elevation than the surrounding landscape beyond the Application Site due to the large quantity of material that was removed during the operational harvesting of peat.



Plate 12-3 View captured from the west of the Application Site overlooking the flat landscape of the Application Site (Present Day)

Landcover

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

Landcover within the Application Site comprises a mix of bare cutaway peat, re-vegetated peat, degraded bog, and scrub vegetation. Industrial features that facilitated peat extraction and ancillary activities are still evident throughout the Application Site. Industrial elements such as railways infrastructure contribute to the industrialised landcover and character of the landscape.

The images below show a variety of vegetation establishment that have occurred in areas of the site where peat extraction has ceased. A variety of ground cover types such as scrub vegetation commonly occur along corridors where infrastructure such as railway tracks (seen in Plate 12-4 below), drains and access roads exist, as well as along extraction plot boundaries where the peat banks form elevated berms.



Plate 12-4 Existing conditions at the Application Site, showing the railway track traversing a drained area of cutover bog

As shown in the images below, large areas of shrub and tree colonisation are prevalent throughout the Application Site in areas that went out of production before peat extraction was ceased in June 2020 at the Application Site.



Plate 12-5 Shrub and tree colonisation at the centre of the Application Site

Plate 12-6 below shows a view from the north of the Application Site. The landcover is comprised of degraded cutover peat with drainage ditches running in parallel lines. Tree colonisation is prevalent along the perimeter of the Application Site.



Plate 12-6 View from the north of the Application Site showing a degraded cutover peat landcover and a treeline on the perimeter of the Site

Plate 12-7 below shows a drone image towards the western extent of the Application Site. This image shows the boundary vegetation which exists the around the boundary of the Application Site. This vegetation serves to provide visual screening towards the Application Site.



Plate 12-7 Drone image showing a view facing east towards the western extent of the Application Site – imagery taken during frosty conditions in November 2025

Landscape Value and Sensitivity – Existing Conditions

As noted previously in Section 12.1.2.4, decommissioning activities are on-going and will continue into the Remedial Phase. Such non-extractive activities continue to influence the character of the landscape during the Current Phase and the Application Site is still to some degree a working landscape.

The site investigations for the proposed Lemanaghan Wind Farm, conducted on the site in the years 2021 to 2024 TONNESdetermined that re-vegetation is prevalent and has accelerated throughout the Application Site since peat extraction ceased in 2020. The Application Site has a slightly higher landscape value than the bare cutaway peatland that existed throughout the Application Site during the Peat Extraction Phase. However, it cannot currently be considered a wetland or peatland habitat of high biodiversity value and considering its degraded state it is still deemed to be a landscape of ‘Low’ landscape value and ‘Low’ landscape sensitivity.

12.3.5 Landscape Policy Context – Designated Landscape Character Areas, Scenic Routes and Views

In order to provide a comprehensive description of the historic and existing landscape conditions throughout the various Project phases, this section provides an overview of the landscape policy pertaining to the location of the Application Site within current and previous County Development Plans. Provision of the landscape policy context enables assessment of the likely impact of the activities under assessment at the Application Site on landscape policy and designated landscape and visual receptors.

The Application Site is located in County Offaly. Multiple mapping figures presented throughout this section demonstrate the large separation distances between the Application Site and sensitive landscape designations within County Offaly. Designations such as High Value Landscapes, scenic views and prospects and landscape sensitivity areas are identified in relevant County Offaly Development Plans below.

Offaly County Development Plans (OCDP)s dating from 2003-2009 and the most recent plan – OCDP 2021-2027 have been reviewed. Consideration was also given to the historic County Development Plans (CDP) detailed in Section 2.2.3 in Chapter 2 Background of this rEIAR. These historic CDPs were not considered material to the assessment of effects in this rEIAR as the landscape policy and designations within each CDP in more recent years is more articulate and defined and has evolved to be so over time. As the European Landscape Convention was only adopted in 2000 and ratified in Ireland in 2002, local landscape policy pre-dating 2002 is less defined.

As discussed previously, several older County Development Plans were either not publicly available or only partial copies were available at the time of writing this chapter. As such, a review of these documents has not been included in this chapter.

12.3.5.1 County Offaly Development Plans

Offaly County Development Plan (OCDP) 1987-1997

There are no records of landscape character areas or scenic routes or views for the OCDP 1987-1997.

It is also an objective of the OCDP 1987-1997 to protect and preserve the county’s areas of high amenity, which are outlined as the following:

- The River Shannon;
- The Grand Canal;
- Croghan Hill;

- Pallas Lake; and
- Clara Bog and Eskers.

These Areas of High Amenity to be protected and preserved by the Council are shown in Map No. 6 of the OCDP 1987-1997.

The OCDP 1987-1997 states the following in relating to policy to conserve and develop the area Areas of High Amenity;

"The overall policy of the Council towards the Areas of High Amenity will be to co-operate with other bodies in encouraging development of the amenity and recreational potential of the areas while at the same time ensuring conservation and the special control of development. The following "

In relation to Views and Prospects, the OCDP 1987-1997 states the following;

"There are a number of views and prospects in the County which are of special amenity value and which the council will protect"

The Views and Prospects to be protected by Development control are listed in Table 36 of the OCDP 1987-1997.

The landscape of the Application Site does not comprise any of the High Amenity Areas designated in the OCDP 2003-2009 that are listed above. There are no designated scenic views in the OCDP 2003-2009 located within the Application Site.

Offaly County Development Plan (OCDP) 2003-2009

There are no records of landscape character areas or scenic routes or views for the OCDP 2003-2009. Associated mapping was not available online.

The preservation of landscape character is an objective in the development plan, in which the OCDP states:

"The preservation of the character of the landscape where, and to the extent that, in the opinion of the planning authority, the proper planning and sustainable development of the area requires it, including the preservation of views and prospects and the amenities of places and features of natural beauty or interest"

The OCDP 2003-2009 includes an objective for amenity areas for *"the preservation, improvement and extension of amenities and recreational amenities"* with a provision for *"landscape protection; preservation of public rights of way, provision of public open space; provision of recreation space"*.

It is also an objective of the OCDP 2003-2009 to protect and preserve the County's primary areas of high amenity, namely:

- The Slieve Bloom Mountains;
- Clonmacnoise Heritage Zone;
- The River Shannon;
- Lough Boora Parklands;
- The Grand Canal;
- Croghan Hill;
- Raheenmore Bog;
- Pallas Lake; and

➤ Clara Bog and Eskers.

Section 2.6.1 of the OCDP 2003–2009 *“recognises the importance of raised bogland as a major natural and archaeological resource”*. It goes on to state that *“the development of the County’s peat resources will be promoted and facilitated”*.

Section 2.6.3 of the OCDP 2003-2009 relates to the protection and restoration of peatland landscapes such as the Application Site:

“The Council will seek the formulation of a comprehensive integrated land use plan for the future development and utilisation of the large areas of cutaway bog, which now exists in the county. In addition, the plan should cater for development of further areas of cutaway bog.”

The landscape of the Application Site does not comprise any of the High Amenity Areas designated in the OCDP 2003-2009 that are listed above. There are no designated scenic views in the OCDP 2003-2009 located within the Application Site.

Offaly County Development Plan (OCDP) 2021-2027

The current development plan for County Offaly is the OCDP 2021-2027. *Chapter 4: Biodiversity and Landscape* sets out policies on landscape. General landscape policy from the OCDP that is pertinent to the Application Site are reported below:

“BLP-38 - It is Council policy to protect and enhance the county’s landscape, by ensuring that development retains, protects and where necessary, enhances the appearance and character of the county’s existing landscape.

BLP-41 - It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals, located within or adjacent to sensitive landscapes. This assessment will provide details of proposed mitigation measures to address likely negative impacts.”

BLP-14 - It is Council policy to protect the county’s designated peatland areas and landscapes, including any historical walkways through bogs and to conserve their ecological, archaeological, and cultural heritage and to develop educational heritage.

Section 4.14.1 of the OCDP describes landscape sensitivity as *“the measure of its ability to accommodate change or intervention without suffering unacceptable effects to its character and values.”* The sensitivity of the landscapes of County Offaly varies and is thereby classified within the following sensitivity classes: Low, Moderate and High Sensitivity and are shown in Figure 4.22 of the OCDP - *Landscape Classification Areas in County Offaly*.

The entire Application Site is located within an area designated with Moderate Sensitivity, as shown in Figure 12-13 below (with the Application Site boundary shown in purple). Table 4-19 of the OCDP describes moderately sensitive areas as *“areas can accommodate development pressure but with limitations in the scale and magnitude. In this category of sensitivity, elements of the landscape can accept some changes while others are more vulnerable to change.”*

The OCDP continues to note the following sensitivities in relation to Moderate Sensitive Areas:

However, some of these cutaway bogs may be appropriate for other sensitively designed and located developments including renewable energy (wind farms, biomass crops) and/or industrial use.”

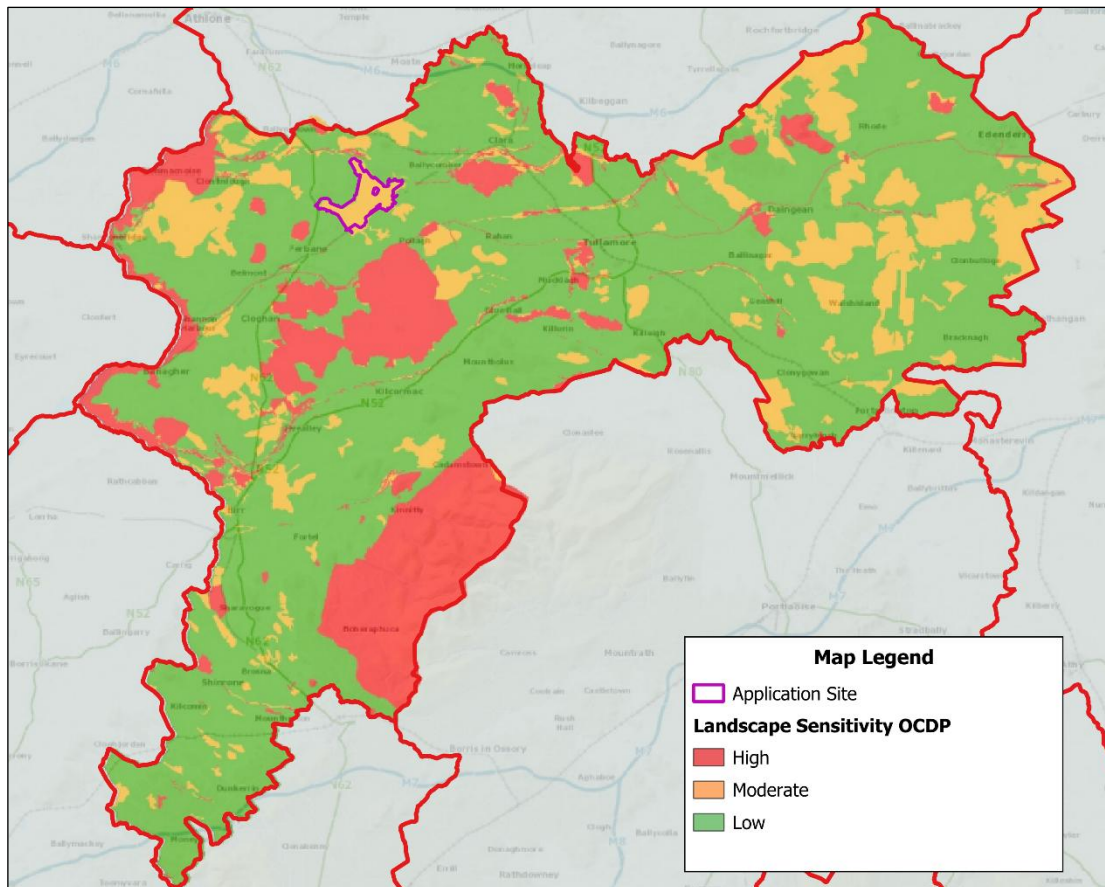


Figure 12-13 Landscape Sensitivity Designations in the OCDP 2021-2027

The OCDP defines ‘Areas of High Amenity’ (AHAs) as “*areas worthy of special protection / enhancement due to their uniqueness and scenic / amenity value.*” Table 4.17 in Section 4.13 in the OCDP designates 13 AHAs within the County; these are listed below. The OCDP states that “*it is a priority of the Council to protect and preserve the AHAs in Table 4.17.*”

- **Waterways and Wetlands:**
 1. River Shannon and Callows;
 2. Grand Canal;
 3. Lough Boora Discovery Park;
 4. Pallas Lake;
- **Upland Areas:**
 5. Slieve Bloom Mountains;
 6. Croghan Hill;
- **Peatlands:**
 7. Clara Bog;
 8. Raheenmore Bog;
- **Eskers:**
 9. Eiscir Riada;
 10. Clara Eskers;
 11. Other Eskers;
- **Archaeological and Historical:**
 12. Clonmacnoise Heritage Zone;
 13. Durrow Monastic Site and Demesne.

Section 4.16 and Section 4.17 of the OCDP sets out the county’s policy objectives for preservation and enhancement for AHAs:

“BLP-35 - It is Council policy to protect and preserve the county’s Areas of High Amenity namely the Slieve Bloom Mountains, Clonmacnoise Heritage Zone, Durrow High Cross, Abbey and surrounding area, the River Shannon, Lough Boora Discovery Park, Grand Canal, Croghan Hill, Raheenmore Bog, Pallas Lake, Clara Bog, Clara eskers, Eiscir Riada and other eskers. Notwithstanding the location of certain settlements, or parts of, for which there are settlement plans (Towns, Villages, Sráids), within the Areas of High Amenity, it is not the intention of this policy to hinder appropriate sustainable levels of development (as set out in the plans and subject to proper planning).

“BLO-22 It is an objective of the Council to ensure that new development, whether individually or cumulatively, does not impinge in any significant way on the character, integrity, and distinctiveness of or the scenic value of the Areas of High Amenity listed in Table 4.17. New development in Areas of High Amenity shall not be permitted if it:

- Causes unacceptable visual harm;
- introduces incongruous landscape elements; and
- Causes the disturbance or loss of (i) landscape elements that contribute to local distinctiveness; (ii) historic elements that contribute significantly to landscape character and quality such as field or road patterns; (iii) vegetation which is a characteristic of that landscape type and (iv) the visual condition of landscape elements.”

The designated AHAs are mapped in Figure 4.18 of the OCDP. The Application Site itself does not fall within any designated AHA.

Section 4.14.2 of the OCDP notes that there a “number of valuable views and prospects which offer a very attractive cross-sectional view and overall impression of differing landscapes”, to which the Council recognises the need to “protect the character of the county by protecting Key Scenic Views, Prospects and Key Amenity Routes within the county”. These Key Scenic Views, Prospects and Key Amenity Routes are listed in Table 4.21, Table 4.22 and in Figure 4.24 of the OCDP. Policies and objectives related to the Key Scenic Views and Key Amenity Routes in the OCDP are as follows:

“BLP-43 - It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals that are likely to significantly affect Key Scenic Views and Prospects as listed in Table 4.21 and Key Amenity Routes as listed in Table 4.22.

BLO-26 - It is an objective of the Council to protect Key Scenic Views and Key Prospects contained in Table 4.21, and Key Amenity Routes as listed in Table 4.22 from inappropriate development.

BLO-27 - It is an objective of the Council to ensure that Proposed Developments take into consideration their effects on views from Key Scenic Views and Prospects and Key Amenity Routes and are designed and located to minimise their impact on this views and prospects.”

12.3.6 Overview of Landscape Characterisation & Landscape Policy

The Application Site is currently a flat peatland landscape with a character heavily influenced by the industrial peat extraction practices historically conducted at the Application Site. The character of the wider landscape surrounding the site is typical of flat, lowland landscapes located in the midlands of Ireland. The peatlands are located within a rural agricultural landscape comprising fields of pasture, occasional forestry plantations and dispersed rural settlement. The Application Site is located approximately 3km northeast of Ferbane, 2.7km north of Pollagh and 2.5km west of Ballycumber.

The landscape surrounding the Application Site is a rural agricultural landscape. It is a working, settled landscape with clusters and linear arrays of residential receptors scattered along the surrounding agricultural field system, which dominates visually, providing a sense of order to the landscape. These agricultural fields are defined by field boundaries comprised of hedgerows and treelines, which generally restrict long-range visibility within a flat landscape, typical of the Irish midlands.

After agricultural land, raised bogs constitute a significant portion of the landcover in the wider area. Notably, Clara Bog, a nature reserve, lies approximately 4.1km to the east of the Application Site, while the bogs approximately 5.6km to the south form part of the Lough Boora Discovery Park. Additional bogs are found to the west and north. These areas have a cultural history of turf-cutting activities. Large tracts of commercial forestry are also prominent throughout the landscape, forming a notable element of its character.

The settlements of Ferbane and Ballycumber are the closest settlement clusters to the Application Site. These are connected to other settlements within the wider study area, such as Tullamore and Kilcormac, by major roads like the R436 Regional Road and the N62 National Road. The network of roads extending from these settlements forms linear patterns along these routes, with numerous individual residential houses scattered throughout the landscape.

The Application Site itself is located within an area designated with Moderate Sensitivity in the OCDP 2021-2027, and does not comprise any notable landscape features of national or county importance. This designation is based primarily on the area's capacity to accommodate development, as outlined in Table 4 -19 of the OCDP which states that moderately sensitive areas *"can accommodate development pressure but with limitations in the scale and magnitude. In this category of sensitivity, elements of the landscape can accept some changes while others are more vulnerable to change."* However, the Application Site itself is not currently located within any designated High Amenity Areas, and as demonstrated in the preceding sections of this LVIA, the Application Site is considered to be a highly modified, degraded landscape. As such, the Application Site is considered to be of **Low** Landscape Value and **Low** Landscape Sensitivity.

12.4

Visibility Appraisal

Due to the large surface area of the Application Site, the peatlands and peat extraction and ancillary activities will have been visible across an extensive portion of the local landscape. In most instances, the cutover peatlands are only visible from localised receptors in the immediate vicinity of the Application Site. The abundance of mature vegetation surrounding the perimeter and margins of the peatlands, as shown in Section 12.3.4 previously, screen the site from view within the wider landscape which is very flat in nature. Visibility of the Application Site was appraised during site visits in the years 2021 to 2024. Plate 12-8 below shows drone imagery of the present-day Application Site.



Plate 12-8 Drone image of the current conditions of the Application Site (present-day) – taken November 2024

12.4.1 Views to and from the Application Site

As shown by Plate 12-3 and Plate 12-7 in Section 12.3.4, there are long-ranging and unrestricted views across the open and flat peatland of the Application Site, particularly where ground cover comprises bare cutaway peat. Excepting entrance routes, the Application Site is predominantly surrounded by mature vegetation in the form of hedgerows and treelines, as shown in Plate 12-6 previously. The relatively dense woodland enclosing the Application Site acts as a physical barrier, restricting views (as well as buffering noise and dust) both into and out of the site.

During the route screening assessments conducted on 29th November 2023 and 20th of November 2024, the roads immediately surrounding the site were driven to assess visibility towards the Application Site. The Application Site and its surrounds are located within a rural landscape setting, characterised by agricultural fields delineated by field boundaries consisting of treelines and hedgerows. Views towards the site from the road network surrounding the site are shown in the images below.

Plate 12-9 below shows an open and unrestricted view from the L70075 located 1km west of the Application Site, over a flat landscape of agricultural fields. While there is limited roadside vegetation at this location, visibility of the Application Site is restricted by the intervening fields and the mature field boundary vegetation.



Plate 12-9 View towards the Application Site from the L70075 west of Lemanaghan Bog

Plate 12-10 below shows a view from the site entrance off the N62. Views into the Application Site are restricted by dense vegetation lining the site entrance. Views into the Application Site from other locations on the N62 close to the site entrance will be screened by dense vegetation.



Plate 12-10 View from the site entrance off the N62 towards the Application Site

Plate 12-11 below shows open views into the Application Site from the L7002 local road which cuts through the north of the Application Site. There are clear open views from this local road into the Application Site with very little roadside vegetation. However, this is not a heavily trafficked road and there are no residential receptors located on this section of the local road which goes through the Application Site.



Plate 12-11 Open views into the peatlands from the L7002 to the north of the Application Site

Plate 12-12 below is captured from the main entry point to the Application Site on the R436 to the south of the Application Site. There are open views on this regional road into the Application Site, however, there are no residential receptor locations on this section of the regional road with open views.



Plate 12-12 View from the main access point to the Application Site on the R436

Residential Receptors

The most sensitive visual receptors likely to have most visibility of the Application Site are local residents who live in close proximity to the Application Site. Site visits determined that visibility of the Application Site, from most residential receptors (to the west, south and east) was screened by well-established, mature boundary vegetation located both within the curtilage of local residents and along the site boundary and local field boundaries. This can be seen in Plate 12-13 below, where visibility towards the Application Site is screened by dense roadside and field boundary vegetation.



Plate 12-13 View towards the Application Site from the R436 to the south

Residential receptors located to the north of the Application Site, which are arranged in a linear pattern along the local road network are situated on elevated terrain relative to the Application Site. While roadside vegetation provides some degree of visual screening, the elevated position of the local road network permits some instances of open visibility towards the Application Site along these roads.

Plate 12-14 below shows a view from an elevated vantage point along the L7002 local road located north of the Application Site with views towards the Application Site. The low-lying shrub vegetation allows for open, unrestricted views of the Application Site. Plate 12-15 below shows open visibility of the Application Site from an elevated vantage point along the L7001 local road directly northeast of the Application Site.



Plate 12-14 View towards the Application Site from the L7002 to the north of Lemanaghan Bog



Plate 12-15 View towards the Application Site from the L7002 to the northeast of the site

While some residents along these local roads to the north experience instances of open, unrestricted views toward the Application Site, such views are limited. Site visits determined that in most instances, roadside vegetation is present along the majority of the local road network, effectively screening views toward the Application Site. This is evident in Plate 12-16 below which was captured approximately 50 metres east of the residential receptors shown in Plate 12-15 previously on the L7001.



Plate 12-16 Roadside screening existent on the L7001

12.4.2

Visibility from Designated Scenic Amenity

The peatlands within the Application Site are not the subject of any designated Key Scenic Views and Prospects or Key Amenity Routes in County Offaly. The closest designated scenic views are Key Scenic View 10 and Key Scenic View 3, located approximately 4.9km west and 7.9km northwest of the Application Site, respectively. Key Scenic View 10 is located on the L03004 local road and is the closest designated view in proximity to the Application Site. However, the focus of Key Scenic View 10 is

southwards, towards the Slieve Bloom Mountains, away from the Application Site. Key Scenic View 3 is located on the L07013 local road with views directed toward the Application Site. However, as shown in Plate 12-16 below, the Application Site is not visible from this viewpoint due to vegetative screening existent within the intervening landscape.



Plate 12-16 View from Key Scenic View 3 with the indicative extent of the Application Site

The lands of the Application Site are potentially visible from designated views which are elevated vantage points at a substantial distance away. For instance, the County Westmeath designated Protected View No. 9 at Knockastia Hill is a panoramic view of the landscape from an elevated location 15.5km northeast of the Application Site. A zoomed in view towards the Application Site from the designated scenic view at Knockastia Hill is shown in Plate 12-17 below. The location of the peatlands of the Application Site within the landscape is shown. In this instance, the peatlands of the Application Site comprise a very narrow, horizontal section of the distant landscape visible within the panoramic view. No areas of cutover bog are visible in Plate 12-17 and it is unlikely that the boglands would be discernible with the naked eye on even the clearest day. Due to the highly vegetated nature of the flat landscape surrounding the Application Site, it is not likely that the peat extraction areas (cutover bog and degraded peatlands) of the Application Site will be visible from any distant scenic amenity designations, even from elevated locations as shown in Plate 12-17.

Similarly, County Westmeath Protected View 36 from the Hill of Uisneach, is located approximately 7.3km further northeast of Knockastia, and approximately 22.5km from the Application Site. Views towards the Application Site will be of similar nature to those seen from Knockastia Hill as shown in Plate 12-17 below. It is very unlikely that there will be any visibility of the Application Site from the Hill of Uisneach due to the longer distance.

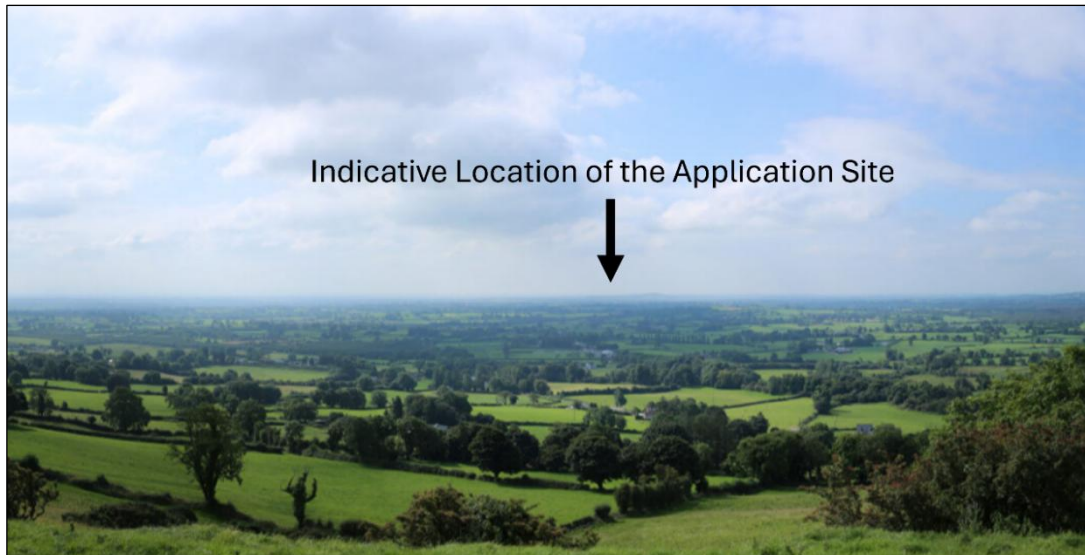


Plate 12-17 View from Westmeath Protected View 9 at Knockastia Hill, with the indicative location of the Application Site shown

12.4.3 Potential Changes in Visual Amenity - Peat Extraction Phase to Current Phase

As noted previously, review of aerial mapping data and site reports indicate that visibility into the Application Site would have been very similar throughout the Peat Extraction Phase as they currently are during the Current Phase.

Topographical Change

It is noted that the peat extraction and ancillary activities that occurred throughout the Peat Extraction Phase have gradually lowered the base elevation of the Application Site in comparison to the flat agricultural plains surrounding the site. Therefore, the peat extraction and ancillary activities in 1988 and during earlier stages of the Peat Extraction Phase may have been conducted at a higher elevation and may have been marginally more visible during that time. There are multiple other factors (e.g., character and nature of views into the site) influencing likely visibility during the Peat Extraction Phase that cannot be objectively assessed retrospectively. It is likely that the change in elevation of the Application Site is so marginal in this context and will have had a negligible influence on the likely significance of visual effects relating from views into the Application Site.

Changes to the Visual Aesthetic of the Site

The visual aesthetic of the Application Site has changed since cessation of peat extraction in June 2020. This is primarily attributed to the large areas of barren and bare cutover peat which have been allowed to revegetate, consequently changing the visual aesthetic to a landscape of a more natural and wild nature. Whilst decommissioning activities are still occurring in the Current Phase, the visual effects of ancillary activities, i.e. extensive operation of machinery, use of railway infrastructure and associated dust have been reduced since peat extraction ceased.

12.5 Assessment of Significant Landscape and Visual Effects

The assessment of landscape and visual effects arising at the Application Site throughout the various phases reported below was determined using the Methodology reported previously in this Chapter – Section 12.2.

12.5.1 ‘Do-Nothing’ Option

As outlined in the EPA Guidelines (May 2022), the description of ‘Do-Nothing Effects’ relates to the environment as it would be in the future should the Project not be carried out. Peat extraction and ancillary activities was underway at the Application Site prior to the required date for the transposition of the EIA Directive in 1988. If peat extraction and ancillary activities had ceased from 1988 onwards, then consequently there would have been no further peat extraction from the site and therefore no further impact on landscape.

For those lands which as of 1988 had been subject to the installation of drainage in preparation for peat extraction but not peat extraction itself, it is assumed in the ‘do-nothing’ scenario that drainage would have remained insitu. Maintenance works to keep established drainage channels clear would have ceased as of 1988 in the ‘do-nothing’ scenario. It is likely that these areas would have been subject to natural recolonisation of the bog surface.

However, consideration must be given to the following:

- The legislative mandate given to Bord na Móna in the form of the Turf Development Act 1946, as amended) to acquire and develop peatlands; and
- The uncertainty with respect to the planning status of the activity did not arise until 2019 and was not evident in 1988.

Therefore, this ‘Do-Nothing’ option was not the chosen option. Peat extraction and ancillary activities have occurred at the Application Site from July 1988 onwards. A decision to cease peat extraction at the Application Site was taken in 2020 and the Application Site needs to be considered in the context of regularising (without prejudice) the planning status of the lands to facilitate future development (subject to planning consent as required). The Application Site has and will continue to revegetate, and there will be a change from areas of cutover peatland to revegetated peatland. These are described in the individual chapters of the rEIAR.

As part of Bord na Móna’s statutory obligations under IPC Licence requirements, a Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan will continue to be implemented for the Application Site separate to, and independent of, the Substitute Consent application. The implementation of this plan is included in the impact assessment below.

12.5.2 Peat Extraction Phase – Landscape and Visual Effects

As established in Section 12.3.2 1988 Landscape Baseline – Landscape Character, the majority of the peatlands under assessment comprised of stripped, bare cutover peat. Where peat extraction and ancillary activities had been occurring prior to the 1988 baseline, the landscape was at that time considered to be degraded and of ‘Low’ sensitivity. Within the Application Site, the greatest landscape and visual effects had already occurred, and the only change to the baseline landscape conditions throughout the Peat Extraction Phase after 1988 was the continued peat extraction and ancillary activities.

Landscape Effects

In terms of direct landscape effects, the removal of peat from the Application Site throughout the Peat Extraction Phase changed the physical fabric of the landscape by removing material and altering the topographical profile of the landform year on year. The magnitude of this change in these areas is deemed to be ‘Moderate’, this is balanced with a ‘Low’ sensitivity, resulting in negative landscape effects of ‘Slight’ significance, and is Not Significant.

Whilst the majority of the Application Site was ‘Subject to Peat Extraction’, the area to the north of the Application Site was comprised of lands ‘Drained – Not Subject to Peat Extraction’ and three small

pockets of bog which were ‘Neither Drained nor Subject to Peat Extraction’. On balance, the landscape value and landscape sensitivity of this area to the north is deemed to be ‘Medium’.

In the years immediately following 1988 during the Peat Extraction Phase, the majority of peatland area to the north of the Application Site had vegetation cleared and industrial peat extraction commenced and continued until 2020. The majority of this area of the Application Site to the north transitioned from an area which comprised of lands ‘Drained – Not Subject to Peat Extraction’ and lands ‘Neither Drained nor Subject to Peat Extraction’ which became ‘Subject to Peat Extraction’. The loss of vegetated ground cover, extraction of peat and associated extraction activities would have caused a substantial magnitude of change to the landscape of these bog areas. Substantial change to the landscape balanced with ‘Medium’ sensitivity equates to ‘Significant’ negative, direct landscape effects, and is Significant.

In 2004, the areas to the centre and south of the Application Site transitioned from a landscape ‘Subject to Peat Extraction’ to a landscape ‘Drained - Not Subject to Peat Extraction’. These areas had returned to their natural state as revegetation occurred.

Control Measures and Mitigating Factors

Planting and retention of boundary vegetation surrounding the Application Site served to reduce visibility of operations during the Peat Extraction Phase. Once boundary vegetation had matured, this reduced and eliminated effects on the character of the wider landscape.

In 1988, prior to the peat extraction to the north of the Application Site, this area had already been drained and therefore, works had previously been carried out at this area of the bog. In addition, prior to peat extraction to the north of the Application Site, the majority of the Application Site had already been subject to peat extraction.

Residual Effects

With the implementation of the control measures, and as the changes would only be an addition to the existing trend of peat extraction in the area, it is considered that residual landscape effects were ‘Negative’, ‘Long-term’ and ‘Slight’ for the majority of the Application Site, and is Not Significant.

Visual Effects

The degree of visual change occurring on the areas already subjected to peat extraction would be ‘Negligible’. As established in the visibility appraisal in Section 12.4, there is very limited visibility into the Application Site from sensitive visual receptors or any designated scenic amenity receptors, with only some residential receptors having instances of open visibility into the Application Site. No Significant visual effects are determined to have occurred at the Application Site during the Peat Extraction Phase.

The visibility appraisal in Section 12.4 determined that views towards the Application Site from most locations are limited due to generally flat nature of the surrounding landscape, and visual screening occurring from mature vegetation along field boundaries and road sides existent within the agricultural landscape surrounding the Application Site.

There are some open views of the Application Site from the L7002 local road which cuts across the northern section of the bog and a small section of the R436 to the southeast of bog. These receptors are local road users considered to be of Low sensitivity. There are some residential receptors along this local road which are of ‘High’ sensitivity. The transition of the area to the north of the Application Site from lands ‘Drained – Not Subject to Peat Extraction’ to a cutover bog as well as visibility of regular peat extraction and ancillary activities would cause a ‘Moderate’ magnitude of change to views from occasional instances from the L7002 local road and residential receptors, amounting to a ‘Slight’ visual effect on local road users, which is Not Significant, and ‘Significant’ visual effects on residential

receptors, which is Significant. From the small portion of the R436 Regional Road, a Slight magnitude of change would have occurred where continued peat extraction would be visible. Visual effects from the regional road users were ‘Not Significant’ and ‘Moderate’ visual effects on residential receptors, which is Not Significant.

Control Measures and Mitigating Factors

Planting and retention of boundary vegetation surrounding the Application Site served to reduce visibility of operations during the Peat Extraction Phase. Once boundary vegetation had matured, this reduced and eliminated visual effects from large numbers of visual receptors surrounding the Application Site including residential receptors and local road users.

Residual Effects

With the implementation of the control measures, and as the changes would only be an addition to the existing trend of peat extraction in the area, it is considered that the overall residual visual effects were ‘Negative’, ‘Not Significant’ and ‘Long-term’, which is Not Significant.

Visual Effects on the Residential Receptors in the townland of Cooldorragh

Open visibility into the Application Site occurs from residential receptors at elevated vantage points within the townland of Cooldorragh, located to the north of the Application Site where there are clear and open views of the area where most landscape change occurred. These receptors are considered to be of High sensitivity, and the magnitude of change deemed to be Moderate as views of the landscape transitioned from ‘Drained – Not Subject to Peat Extraction’ to ‘Subject to Peat Extraction’. Overall, effects on this small number of residential receptors during the duration of the Peat Extraction Phase was ‘Significant’, although highly localised, which is Significant.

Control Measures and Mitigating Factors

Many of the residential properties in this area were built after the 1988 baseline. They are also well set back from the Application Site, with visibility partially restricted by roadside vegetation and localised landform undulations. The landscape change seen by the receptors would not obstruct or visually intrude upon their scenic amenity.

Residual Effects

In the few highly localised instances where the northern area of the bog was visible from a very small number of residential receptors in the townland of Cooldorragh, residual visual effects are considered to be ‘Negative’, ‘Long-term’ and ‘Moderate’, which is Not Significant. This part of the bog that has changed after the 1988 baseline, is consistent and contiguous with the development that had occurred throughout the wider landscape and elsewhere at the Application Site prior to the 1988 baseline. As such, this change was considered as part of emerging trends of peat extraction within the Application Site.

12.5.3 Current Phase – Landscape and Visual Effects

Cessation of peat extraction in June 2020 has enabled the landscape of the Application Site to continue to re-vegetate and to some degree mitigate landscape and visual effects over time. However, the landscape is still a degraded, bare – cutover peat site of low sensitivity, and it is not a functioning wetland. Revegetation has caused both a ‘Slight’ degree of change to the landscape and ‘Slight’ degree of change to the visual aesthetic of the Application Site and surrounding visual amenity. On-going decommissioning activities, cause a ‘Slight’ magnitude of change. Landscape and visual effects during the Current Phase are deemed to be ‘Neutral’, ‘Direct’, ‘Not Significant’ and ‘Short-term’, which is Not Significant.

Control Measures

Retention of boundary vegetation surrounding the Application Site serves to reduce visibility of decommissioning operations in the Application Site, reducing effects on the character of the wider landscape and effects on visual receptors in the surrounding area. Continued decommissioning activities, such as removal of man-made infrastructure will result in a positive impact as the bog is returned closer to its natural state.

Residual Effects

With the implementation of the control measures, it is considered that Residual Landscape and Visual effects are deemed to be 'Positive', 'Not Significant' and 'Short-term', which is Not Significant.

12.5.4 Remedial Phase – Likely Landscape and Visual Effects

The primary activity of the Remedial Phase is to re-wet cutover peatland in order to re-establish a naturally functioning wetland and peatland ecosystem. This will require low level, intermittent groundworks for activities such as drain blocking. However, the landscape is still a degraded, bare – cutover peat site of low sensitivity. The Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan and also includes targeted revegetation where appropriate, which will result in a 'Slight' degree of change to the landscape and 'Slight' degree of change to the visual aesthetic of the Application Site and surrounding visual amenity Continued decommissioning works of existing peat extraction infrastructure is also included for in the Remedial Phase.

It is likely that the works required to decommission peat extraction infrastructure and implement the Remedial Phase will cause 'Temporary', 'Negative' and 'Not Significant' landscape and visual effects, which is Not Significant.

As the bogland is re-wetted and the peatland ecosystem re-establishes as a result of works in the Remedial Phase there will be a positive change to the landscape of the Application Site. The visual aesthetic of the Application Site has changed since cessation of peat extraction in 2020. This is primarily attributed to the large areas of bare cutover peat which have been allowed to revegetate, consequently changing the visual aesthetic to a landscape of a more natural and wild nature. The intention of the Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan is to continue to encourage this process and ensure that it is successful. Provided the Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan is implemented, there will be a Slight, and positive, landscape and visual change when compared to the 1988 baseline. Even in the absence of these plans, the natural revegetation process on the bare cutover peat areas will contribute to a positive landscape and visual impact, albeit at a slower rate. This recolonisation of vegetation is expected to gradually improve the visual aesthetics and landscape quality of the Application Site. Landscape and visual effects are 'Positive', 'Long-term' and 'Not Significant', which is Not Significant.

Mitigation Measures

Retention of boundary vegetation surrounding the Application Site serves to reduce visibility of remedial measures occurring within the Application Site, reducing potential effects on the character of the wider landscape and effects on visual receptors in the surrounding area. Continued decommissioning activities, such as removal of man-made infrastructure will result in a positive impact as the bog is returned closer to its natural state.

Residual Effects

With the implementation of mitigation measures, residual landscape and visual effects are 'Positive', 'Long-term' and 'Not Significant', which is Not Significant.

12.6

Cumulative Landscape and Visual Assessments

In this section, landscape and visual impacts at the Application Site are assessed in combination with other similar peat extraction areas and industry in the wider landscape area, as well as the proposal to develop a wind farm project at the Application Site.

12.6.1

Cumulative Landscape and Visual Effects of Extraction Activity at the Application Site: 1950-1987 and Cumulative Interaction with the Peat Extraction Phase (1988-2020)

As discussed throughout this Chapter, the greatest landscape and visual effects at the Application Site occurred prior to the baseline in 1988, therefore before the Peat Extraction Phase. These landscape and visual effects occurred from 1950 when industrial peat extraction first started, up until 1988 which is the end of the period before the 1988 baseline and start of the Peat Extraction Phase which is under assessment in this rEIAR. This section discusses cumulative landscape and visual effects and interactions which would have occurred across the two time periods (1950–1988) versus the Peat Extraction Phase (1988-2020). The focus of the discussion below is the extent to which negative landscape and visual effects occurring in the Peat Extraction Phase contributed to effects caused prior to the 1988 baseline.

As reported previously in Section 12.5.2, the removal of peat throughout the Peat Extraction Phase changed the physical fabric of the landscape by removing material and altering the topographical profile of the landform year on year, resulting in negative direct landscape effects of ‘Slight’ significance for most of the Application Site. ‘Significant’ landscape effects occurred in an area to the north of the Application Site during the Peat Extraction Phase. Therefore, there is a cumulative direct landscape effect with peat extraction occurring in these areas prior to the 1988 baseline. With regards to landscape character, the majority of the Application Site was already subject to peat extraction prior to 1988 and the character of the landscape had already been substantially altered.

As reported previously in Section 12.5.2, the degree of visual change occurring to the majority of the Application Site that was already subjected to intensive peat extraction would be ‘Negligible’. Also as established in Section 12.5.2, there is very limited visibility into the Application Site from sensitive visual receptors or any scenic amenity designations. Therefore, no significant visual effects are determined to have occurred for the majority of visual receptors surrounding the Application Site during the Peat Extraction Phase. In this regard, there is very limited contribution to cumulative visual effects in combination with the extraction activity that occurred prior to the 1988 Baseline. Post 1988, peat extraction remained within the majority of the site and peat extraction commenced in the area to the north of the bog which had previously been an area of bog that was drained but not subject to peat extraction prior to 1988. With regards to landscape character, the northern area of the Application Site was ‘Drained but not Subject to Peat Extraction’ Pre-1988.

In combination with the peat extraction and ancillary activities occurring prior to the 1988 baseline, these peat extraction and ancillary activities in the north of the Application Site cumulatively extended the spatial extent of landscape effects which historically occurred across the Application Site where large scale change to the physical fabric and character of the landscape occurred. Therefore, the landscape effects of peat extraction and ancillary activities in the north of the Application Site have a contribution to cumulative effects occurring in combination with the landscape effects which occurred at the Application Site prior to the 1988 Baseline.

Highly localised residual Moderate visual effects occurred only for a small number of residential receptors, at an elevated vantage point within the townland of Cooldorragh to the north of the

Application Site. Cumulative effects would have occurred in combination with historic peat extraction activities from these residential receptors.

12.6.2

Peat Extraction Phase: Cumulative Interactions with other peat extraction and relevant industries in the wider landscape (Post-1988)

Other peatland landscapes within the midlands which have been subject to industrial scale peat extraction are existent in the wider landscape surrounding the Application Site. Peat extraction and ancillary activities at the Application Site has contributed to a cumulative impact on the wider landscape and its character. However, it is key to note that changes to landscape character as a result of peat extraction and ancillary activities during the Peat Extraction Phase has been minimal since the 1988 baseline. As reported previously, in this Chapter, the greatest landscape and visual effects happened prior to the 1988 baseline. There are 3 bogs in close proximity to the Application Site, including the Curraghalassa, Derrynagun and Bellair Bog, which do not form part of the Application Site. Bellair Bog is located approximately 0.72km to the north, Derrynagun Bog is located approximately 0.1km to the southeast, while Curraghalassa Bog is located to the south, adjacent to Lemanaghan Bog. Other bogs, and other cutover peatlands in the wider landscape are separated from the Application Site by a large set-back distance, as well as being buffered by further physical landscape features such as roads, agricultural land, woodland, waterbodies and settlements.

As flat features of the landscape, peatlands of the Application Site are visually separated from other sites of industrial peat extraction in the wider landscape. There may be very minor cumulative landscape and visual effects in terms of in combination visual effects when viewing expansive cutover bogs from elevated vantage points with panoramic views. However, it is unlikely that peatlands are easy to distinguish in the highly vegetated, flat landscape of the Irish midlands.

Sequential cumulative visual effects occur when a receptor will experience effects of multiple developments/projects by moving from one location to another. At a macro scale, effects during the Peat Extraction Phase have contributed to sequential cumulative visual effects where a visual receptor travels across the landscape and experiences views of multiple cutover peatland landscapes, including the Application Site.

The Application Site is located in a rural area surrounded by agricultural lands, forestry and woodlands. While there are some residential dwellings in the vicinity of the Application Site (please refer to Section 2.5 Cumulative Impact Assessment in Chapter 2 Background), these are immaterial from a cumulative landscape and visual effects perspective given the scale of the peat extraction activities and the duration of the Peat Extraction Phase under assessment. The landscape within which the Application Site is located is a working landscape consisting of agricultural fields, including pasture fields, field boundaries, and commercial forestry. The peat extraction and ancillary activities in combination with these activities has had a cumulative landscape and visual effect, but these are not deemed to be significant.

Summary of Cumulative Landscape Effects in the Peat Extraction Phase

In relation to the wider landscape character, the Application Site is surrounded and buffered by a working agricultural landscape, therefore, there is no physical landscape connectivity between the peatlands of the Application Site and any other peatlands in the wider landscape setting. Therefore, there is no potential for direct cumulative landscape effects to occur during the Peat Extraction Phase. With regards to cumulative effects on landscape character, it is clearly established in Section 12.5.2 and in the text above that there was limited change to the aesthetic of the majority of the landscape during the Peat Extraction Phase since the 1988 baseline.

As reported previously however, there was change to the landscape character in localised areas of the Application Site to the north. Considering the localised nature of these changes and landscape character and enclosure of these areas by above ground landscape features in the flat landscape, there is very limited potential for there to be cumulative effects on landscape character with other peatlands in the wider landscape setting.

Summary of Cumulative Visual Effects in the Peat Extraction Phase

As reported in Section 12.5.2, any visual effects that occurred in the Peat Extraction Phase are highly localised, with visibility into the Application Site from visual receptors being limited to a small number of residential receptors to the north of the Application Site. There is no visibility of the Application Site from any scenic amenity designations. The majority of visual change on the majority of these peatlands had occurred prior to the 1988 baseline. Therefore, excepting the area of the Application Site to the north, most of the peat extraction and ancillary activities at the Application Site has had no Significant residual visual effects during the Peat Extraction Phase and therefore does not have any contribution to negative cumulative visual effects with and modified elements of the wider landscape.

It was determined that peat extraction and ancillary activities in the north of the Application Site had 'residual 'Moderate' visual effects on the residential receptors in the townland of 'Cooldorragh' and . However, these effects have no contribution to cumulative visual effects with other peatlands and modified elements of the wider landscape setting.

12.6.3 Current Phase: Cumulative Interactions

As reported previously in Section 12.5.3, 'Positive', 'Not Significant' and 'Short-term' landscape and visual effects will likely occur in the Current Phase, therefore there is no potential for adverse cumulative landscape and visual effects with other peat extraction or developments in the wider area.

12.6.4 Remedial Phase: Cumulative Interactions with other Planned Development

As reported previously in Section 12.5.4, no negative landscape and visual effects are likely to occur in the Remedial Phase, therefore there is no potential for cumulative landscape and visual effects with other peat extraction or developments in the wider area. For the avoidance of doubt, potential landscape and visual effects in the Remedial Phase are considered and discussed below in combination with the proposed Lemanaghan Wind Farm.

12.6.4.1 Proposed Lemanaghan Wind Farm

As detailed in Section 4.10 in Chapter 4 Description of the Development, Lemanaghan DAC, a joint venture between SSE Renewables and Bord na Móna Powergen Ltd. a subsidiary of Bord na Móna plc. (i.e the Applicant) are proposing a wind energy development consisting of 15 turbines with an overall blade to tip height of 220m. A separate EIAR and accompanying NIS is being undertaken for the proposed Lemanaghan Wind Farm development, which will include the likely significant landscape and visual effects of the proposed wind farm, as well as a cumulative wind farm assessment.

Cumulative landscape and visual effects will likely occur between the proposed Lemanaghan Wind Farm development and the proposed implementation of the Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan as part of the Remedial Phase activities. As discussed previously, the Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan is a positive intervention from landscape and visual perspective. Should the wind farm be developed on this Application Site, the overall infrastructure footprint of the proposed Lemanaghan Wind Farm development will be approximately 3% of the total area of Lemanaghan Bog. Therefore, it is not likely

that it will significantly or materially alter the positive landscape and visual effects of the proposed Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan.

Conclusion

This chapter has addressed the significance of landscape and visual effects occurring at the Application Site since the 1988 baseline. A vast majority of the Application Site was already subject to peat extraction in 1988 and the greatest landscape and visual effects had already occurred prior to the 1988 baseline. No significant landscape effects occurred in these areas during the Peat Extraction Phase.

The greatest landscape and visual effects during the Peat Extraction Phase occurred at the north of the Application Site where the lands were cleared of vegetation, and industrial peat extraction occurred. ‘Significant’ landscape effects occurred here where a substantial change occurred within the landscape; these areas of drained peatlands of ‘Medium’ sensitivity transitioned to a landscape of bare cutover peat, which is of ‘low’ landscape sensitivity. Considering the visibility of these peat extraction and ancillary activities from residential receptors in the townland of Cooldorragh, to the north of the Application Site, Residual ‘Moderate’ visual effects occurred, these were highly localised and only occurred for a very small number of residential receptors.

Some areas of the Application Site have not been subject to peat extraction for considerable time and these areas show signs of revegetation. Peat extraction ceased at the Application Site in June 2020 which has further enabled the landscape of the entire Application Site to continue to re-vegetate. However, the landscape is still currently categorised as a degraded bare cutover peat site of low sensitivity.

On balance, landscape and visual effects during the Current Phase are deemed to be ‘Not Significant’ and no negative landscape and visual effects have occurred. The primary activity of the Remedial Phase is to rewet cutover peatland in order to re-establish a naturally functioning wetland and peatland ecosystem. With the full implementation of the Draft Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plan, there will be Not Significant, Positive, Long-term landscape and visual effects when compared to the 1988 baseline.