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12 LANDSCAPE AND VISUAL

12.1 INTRODUCTION

This chapter reports on the results of assessment of any likely significant effects on the landscape as a result of Bord na Móna's peat extraction and ancillary activities at the Derryhinch, Drumman, Derryarkin, Toar and Ballybeg Bogs (the 'Application Site') during the Peat Extraction Phase, Current Phase and the Remedial Phase. The assessments in this chapter will determine the landscape and visual effects that have occurred (or are likely to occur) during the three different phases as described in Chapter 4, including:

- Peat Extraction Phase: Peat extraction activities and all ancillary works at the Application Site from July 1988 to the cessation of peat extraction in June 2020 (July 1988 – June 2020).
- Current Phase: the management of the Application Site since June 2020 to Present day.
- Remedial Phase: the activities intended to be carried out at the Application Site into the future.

Although closely related, landscape and visual impacts are assessed separately, and each is described below.

Landscape assessment relates to changes to the physical environment, brought about by a proposed development, which may alter its character. It involves a detailed analysis of the individual elements and characteristics of a landscape that go together to make up the overall character of that area. By understanding the aspects that contribute to this character it is possible to make judgements in relation to its quality (integrity) and to identify key sensitivities. This, in turn, provides a basis for evaluating the ability of the landscape to accommodate the type and scale of change associated with the proposed project, and for determining whether such change would result in unacceptable adverse effects on landscape character.

Visual Impact Assessment relates to changes in the composition of views as a result of changes to the landscape, how those changes are perceived, and the effects on visual amenity. Unlike landscape impacts, which are resource-based, visual impacts are population-based, as they concern the experiences of people viewing the landscape.

A description of the mitigation measures proposed to avoid, prevent, reduce or if possible, offset any identified significant adverse landscape and visual effects on the environment are outlined. Where appropriate, monitoring arrangements are also described.

Due to the retrospective nature of the assessment, this chapter will focus on existing or previously implemented measures used in order to mitigate the likely significant effects of peat extraction and ancillary works. Any residual effects remaining following the implementation of these mitigation measures are also identified and assessed.

12.1.1 Statement of Authority

This Landscape and Visual Assessment chapter was prepared by Richard Barker (MLA, PG Dip Forestry, BA Env, MILI), Principal Landscape Architect at Macro Works Ltd of Brookfield House, Blackrock; a consultancy firm specialising in Landscape and Visual Assessment and associated maps and graphics. Relevant experience includes a vast range of infrastructural, industrial and

commercial projects since 1999. The experience of the author also specifically includes the remedial assessment of historic peat extraction at wind farm sites in Mayo and Longford.

12.1.2 Development Description

This chapter of the remedial EIAR has been prepared to assess the landscape and visual impacts of peat extraction and ancillary activities carried out by Bord na Móna on lands at the Application Site since July 1988, as part of a Substitute Consent planning application. The Application Site consists of five cutaway bogs; Derryhinch; Drumman; Derryarkin; Ballybeg; and Toar, as outlined in Chapter 1 Figure 1-1.

The peat extraction and ancillary activities undertaken at the Application Site which comprise the development for which Substitute Consent is being sought and the Project which this remedial EIAR is prepared, consist of the following:

- Industrial scale peat extraction (milled peat);
- Use and maintenance of pre-existing surface water drainage infrastructure (drains, silt ponds, pumps) at the Application Site to facilitate peat extraction activity from 1988 to present day;
- Use and maintenance of pre-existing railway infrastructure to facilitate peat extraction from 1988 to present day;
- Provision of 2 no. vehicular bridges, 2 no. rail bridges and 2 no. gated access points;
- Control Measures associated with the above, inclusive of the IPC Licence measures (Ref. P0501-01) which commenced from 2000 onwards to the present day; and,
- All associated site development and ancillary works.

A full description of the development is provided in Chapter 4.

12.1.3 METHODOLOGY

The preparation of this Landscape and Visual Impact Assessment involved:

- A desktop study and review of relevant landscape and visual characterisation/designations in the Offaly, Westmeath and Meath historic and current County Development Plan;
- Fieldwork undertaken over 14 years for various projects associated with and in the vicinity of the Derrygreenagh Bog Group and nearby Rhode Power station;
- Retrospective assessment of the significance of the landscape impact from peat extraction activities as a function of landscape sensitivity weighed against the magnitude of the landscape impact; and
- Retrospective assessment of the significance of the visual impacts from peat extraction and ancillary works as a function of visual receptor sensitivity weighed against the magnitude of the visual impact.

12.1.4 Guidance and Legislative Review

This chapter has been prepared having regard to the following guidance documents and relevant policy:

- Institute of Environmental Management and Assessment (IEMA) and landscape Institute (UK) 'Guidelines for Landscape and Visual Impact Assessment' Third Edition (GLVIA3) (2013);
- Environmental Protection Agency (EPA) (2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIA Reports);
- Environmental Protection Agency (EPA) (2015) Advice Notes for Preparing Environmental Impact Statements (EIS); and
- Environmental Protection Agency (EPA) (draft) Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports.

12.1.5 Desk Review

A desk study was undertaken in order to collate and review background information of the development during the assessment. The information obtained is referenced in Table 12.1.

Table 12.1: Data Sources

Source	Data	County Development Plan
Offaly County Council	Offaly County Development Plan	1967, 1987, 1995 (Draft), 2003-2009, 2009-2015, 2014-2020, 2021-2027
Westmeath County Council	Westmeath County Development Plan	1986, 1994, 2002 - 2008, 2008 - 2014, 2014 - 2020, 2021-2027
Meath County Council	Meath County Development Plan	1994, 2000 (Draft), 2007-2013, 2013-2019, 2021-2027
Bord na Móna	Peat Extraction area maps	1988, 1995, 2004, 2019 and 2020

12.1.6 Field Survey

Fieldwork was not specifically undertaken in respect of this retrospective landscape and visual assessment but has been undertaken by the author within and around the Derrygreenagh Bog Group for other surrounding projects over the past 14 years. This includes, but is not limited to;

- 2012-2014 Yellow River Wind Farm (ACP Reference: PL19.PA0032);
- 2020 Rhode Solar Farm (Offaly CC Planning Ref: PL2/16/246);
- 2021 Castlelost Flexgen, 27MWe Reserve Gas-Fired Generator to boost and back up the power system and includes 5no. Open Cycle Gas Turbine (OCGT) Modules (Westmeath CC Planning Ref: PL2/21/515);
- 2024 Rhode Long Duration Energy Storage (LDES) (Offaly CC Planning Ref: PL2/20/238).

The fieldwork above involved the capturing of photography for representative viewpoint photomontages from publicly accessible roads and amenity areas within a range of study areas from 5 km to 20 km depending on the project scale and height. There was also a proportional focus on the central study area, which encompasses Derrygreenagh Bog Group. The fieldwork

also informed project-specific landscape character assessment for those developments for which the fieldwork was undertaken.

12.1.7 Impact Assessment Methodology

Landscape Impact Assessment Criteria

In accordance with GLVIA3, when assessing the potential impacts on the landscape resulting from a proposed development, the following criteria are considered:

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

The sensitivity of the landscape to change is the degree to which a particular setting can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. Landscape Value and Sensitivity is classified using the following criteria set out in Table 12-2, which is derived from a combination of non-prescriptive relevant guidance (GVLIA3) and industry best practice.

Table 12.2: Landscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (e.g. World Heritage Site), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level, where the principal management objectives are likely to be considered conservation of the existing character.
Medium	Areas where the landscape character exhibits some capacity and scope for development. Examples of which are landscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the landscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated landscapes that may also have some elements or features of recognisable quality, where management objectives include, enhancement, repair and restoration.



Negligible	Areas of landscape character that include derelict sites and degradation where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration.
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The magnitude of a landscape impact is a product of the scale, extent or degree of change that has been experienced as a result of the development. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the immediate setting that may have an effect on the landscape character (see Table 12.3).

Table 12.3: Magnitude of Landscape Impacts

Sensitivity	Description
Very High	Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality.
High	Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality.
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements.
Negligible	Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable.
Positive	Changes that restore a degraded landscape or reinforce characteristic landscape elements.

The significance of a landscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The significance of landscape effects is arrived at using the following Significance of effect matrix set out in Table 12.4, which is based on the principles of GLVIA3 and best practice.

Table 12.4: Significance of Effect Matrix

	Sensitivity of Receptor				
Scale/Magnitude	<i>Very High</i>	<i>High</i>	<i>Medium</i>	<i>Low</i>	<i>Negligible</i>
<i>Very High</i>	Profound	Profound-substantial	Substantial	Moderate	Slight
<i>High</i>	Profound-substantial	Substantial	Substantial-moderate	Moderate-slight	Slight-imperceptible
<i>Medium</i>	Substantial	Substantial-moderate	Moderate	Slight	Imperceptible
<i>Low</i>	Moderate	Moderate-slight	Slight	Slight-imperceptible	Imperceptible
<i>Negligible</i>	Slight	Slight-imperceptible	Imperceptible	Imperceptible	Imperceptible

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

Visual Impact Assessment Criteria

As with the landscape effects, the visual effects of the project will be assessed as a function of receptor sensitivity and the magnitude of the impact. The significance of visual effects is determined through consideration of the sensitivity of the visual receptor in conjunction with the magnitude of change arising from the development.

Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors is anthropocentric and relates to the experience of the viewer. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape. A list of the factors considered by the assessor in estimating the level of sensitivity for a particular visual receptor is outlined below to establish visual receptor sensitivity at each viewshed reference point (VRP).

Susceptibility of Receptors

In accordance with GLVIA3 visual receptors most susceptible to changes in views and visual amenity include:

- "Residents at home;

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

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

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

Values Typically Associated with Views

Several factors are considered in determining the value associated with a view, and, by extension, the sensitivity of the visual receptor. These include:

- **Recognised scenic value of the view** (County Development Plan designations, guidebooks, touring maps, postcards etc). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the case of County Developments Plans, for example, a public consultation process is required;
- **Views from within highly sensitive landscape or heritage areas.** These are likely to be in the form of Architectural Conservation Areas, which are incorporated within the Development Plan and therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;
- **Primary views from residential receptors.** Even within a dynamic city context view from residential properties are an important consideration in respect of residential amenity;
- **Intensity of use, popularity.** This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at a national or regional scale;
- **Viewer connection with the landscape.** This considers whether or not receptors are likely to be highly attuned to views of the landscape i.e. commuters hurriedly driving on busy roads versus tourists focussed on the character and detail of the landscape;
- **Provision of vast, elevated panoramic views.** This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;
- **Sense of remoteness and/or tranquillity.** Receptors taking in a remote and tranquil scene, which is likely to be fairly static, are likely to be more receptive to changes in the view than those taking in the view of a busy street scene, for example;

- **Degree of perceived naturalness.** Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by distinctly manmade features;
- **Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a cathedral or castle;
- **Historical, cultural and / or spiritual significance.** Such attributes may be evident or sensed by receptors at certain viewing locations, which may attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;
- **Rarity or uniqueness of the view.** This might include the noteworthy representativeness of a certain landscape type and considers whether the receptor could take in similar views anywhere in the broader region or the country;
- **Integrity of the landscape character.** This looks at the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;
- **Sense of place.** This considers whether there is special sense of wholeness and harmony at the viewing location;
- **Sense of awe.** This considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations which are deemed to satisfy many of the above criteria are likely to be of higher sensitivity. No relative importance is inferred by the order of listing. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

12.1.8 Assumptions and Limitations

The main limitation with any remedial Landscape Visual Impact Assessment (rLVIA) including this one is gaining a clear understanding of the nature and character of the landscape and visual receptors at the baseline year and some professional interpretation is required. This is aided by historical maps, photography, descriptions and documents, but will never replace being able to visit the contemporary landscape to consider the current baseline.

12.2 RECEIVING ENVIRONMENT (BASELINE YEAR 1988)

The landscape description below relates the landscape condition as it existed in the baseline year of 1988. This is the scenario against which changes to the existing landscape context will be assessed in terms of direct physical impacts on landform and land cover and also impacts on landscape character.

The visual baseline identifies locations where people engaged in particular activities or residents in particular settings were likely to have been afforded views of the peat extraction and ancillary works which may have had their visual amenity impacted.

A description of the landscape context of the Application Site and wider study area is provided below covering landform and drainage, vegetation and land use, centres of population and houses, transport routes and public amenities and facilities. Many of the landscape elements

identified also relate to visual receptors i.e. places and transport routes from which viewers can potentially see the project.

12.2.1 Study Area

Given the flat and low-lying nature of the site, visibility of the peat extraction areas and associated activities would have been most apparent from aspects of the public realm (predominantly roads) and private residences within close proximity (generally less than 1 km) to the extraction areas. Mid-distance visibility of the site within a vast and productive midlands context would also have been afforded from elevated ground at Croghan Hill to the southwest of the Application Site (approximately 2 km west of Ballybeg Bog) and low ridges within Westmeath beyond 3 km to the northwest of the Application Site. However, the potential for significant effects to arise within broad distant views is limited due to distance and a diverse context of productive land uses. On balance of these factors, the Study Area for this rLVIA extends to a 5 km buffer around the Application Site.

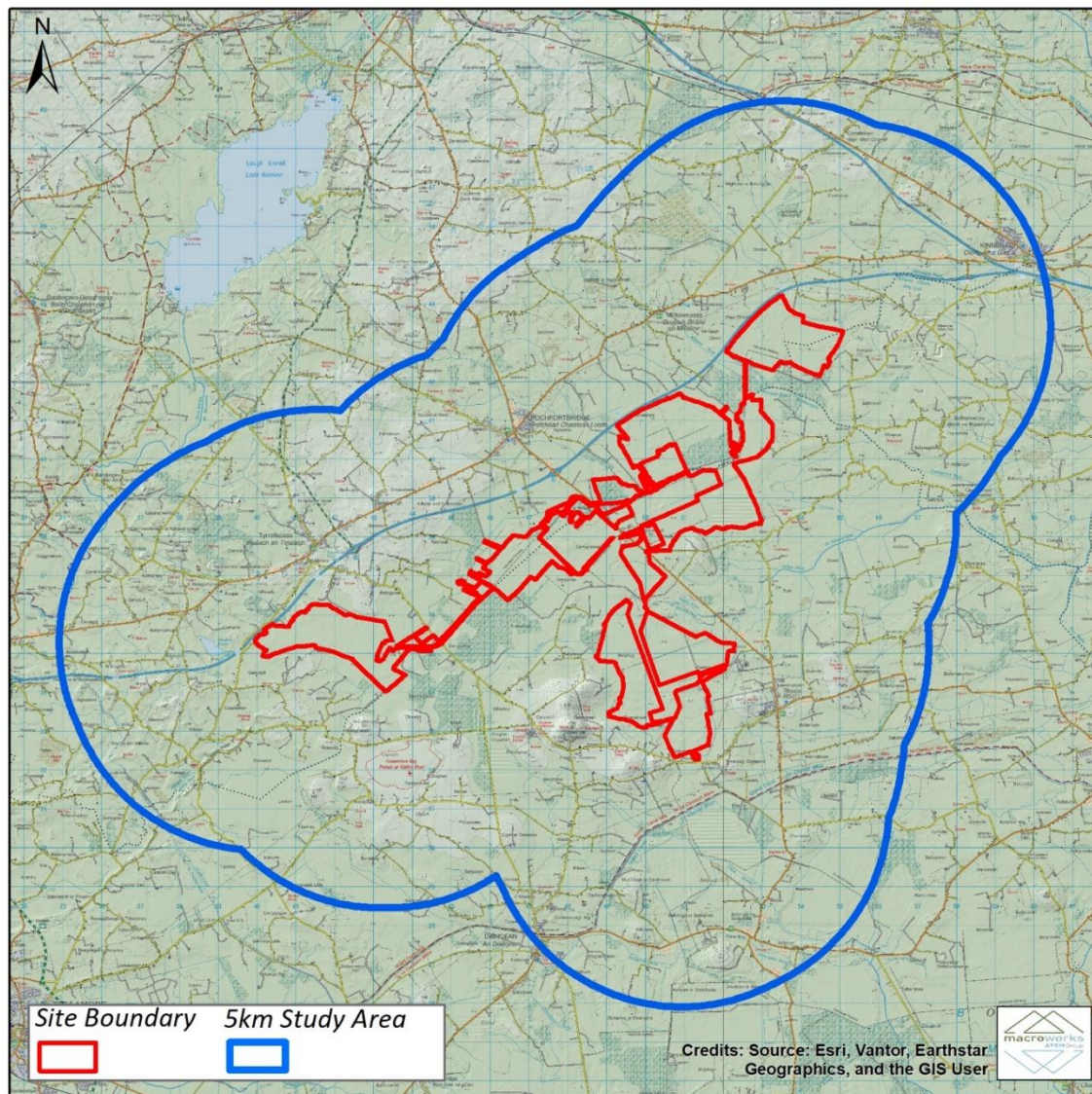


Figure 12-1: Study Area – 5km radius

12.2.2 Baseline Year (1988) Landform and Drainage

The Application Site in 1988 consisted of mainly flat, cutaway peatland extending across a series of almost contiguous bogs, which stretch around 17 km in an elongated band in a northeast – southwest orientation. Consequently, both the Application Site and the wider surrounding area were characterised by a broad, low lying plain with limited variation in topography, with few notable watercourses.

Drainage works and vegetation clearance at the Application Site began in 1950 to facilitate industrial peat extraction. Industrial scale peat extraction was carried out across the five bogs from 1958 until their respective cessation dates, which occurred at different times across the bogs. Ballybeg Bog was the final bog to be subject to industrial peat extraction within the Application Site, which ceased in 2020. Consequently, peat extraction would have been ongoing across all of the bogs in 1988, the baseline year, except for Derryarkin Bog, which ceased extraction between 1988 and 1991.

To the south of the site, the Grand Canal (which finished construction in 1804) is located approximately 1.2 km from the southern end of Ballybeg Bog, although it is separated from the site by a low ridge around the village of Rhode. The most prominent landform feature within the study area is Croghan Hill, an ancient volcanic formation situated approximately 1.2 km to the west of Ballybeg Bog.

The landform and drainage of the study area have not materially changed from the baseline year of 1988.

12.2.3 Baseline Year (1988) Vegetation and Surrounding Land Use

The predominant land use of the Application Site in 1988 was industrial scale peat extraction for the purposes of energy generation. Historically, peat was supplied from the Application Site and wider Derrygreenagh Bog Group to power Rhode Power Station, an 80MW power station located to the east of Ballybeg Bog which finished construction in 1963 and was decommissioned in 2003.

Peat was also supplied to Croghan Briquette Factory, which was constructed approximately 5 km from the Application Site in 1960 and consisted of a large-scale industrial facility designed to process milled peat into solid fuel briquettes. Croghan Briquette Factory was closed in 2000 and demolished in 2021.

Milled peat was transferred from the stockpiles into railway wagons by a loading machine or excavator and transported by rail to Rhode Power Station and Croghan Briquette Factory exclusively from 1960 and 1961, up to 2003 and 2000 respectively, when these developments ceased operations.

Other surrounding land uses during the baseline year of 1988 included agricultural farmland defined by native hedgerow and treelines field boundaries north, east, south and west of the Application Site, and this remains the case today.

While the M6 motorway runs along the north of the Application Site in an east-west direction, the motorway section near the Application Site did not finish construction until 2006, thus was not present during the baseline year in 1988. Today, the M6 motorway corridor occupies a notable portion of the landscape within the study area though the cut and fill balance is minimal

as it runs largely at grade through the Application Site. The relevant section of the M6 motorway did not replace the original N6 national route which still runs to the north of the motorway but has been downgraded to a regional road.

The peat bogs in this area are frequently interspersed with slightly elevated islands of free draining soils that are used for agriculture, whilst the transitional bog margins tend to be contained in peatland scrub or occasional commercial conifer plantations. Beyond the peatland site and its transitional margins of forestry and scrub, agricultural farming is the predominant land use consisting of a matrix of fields and hedgerow boundaries. This is the same scenario now as it was at the baseline year of 1988.



Figure 12-2: *View From Croghan Hill eastwards across the site*

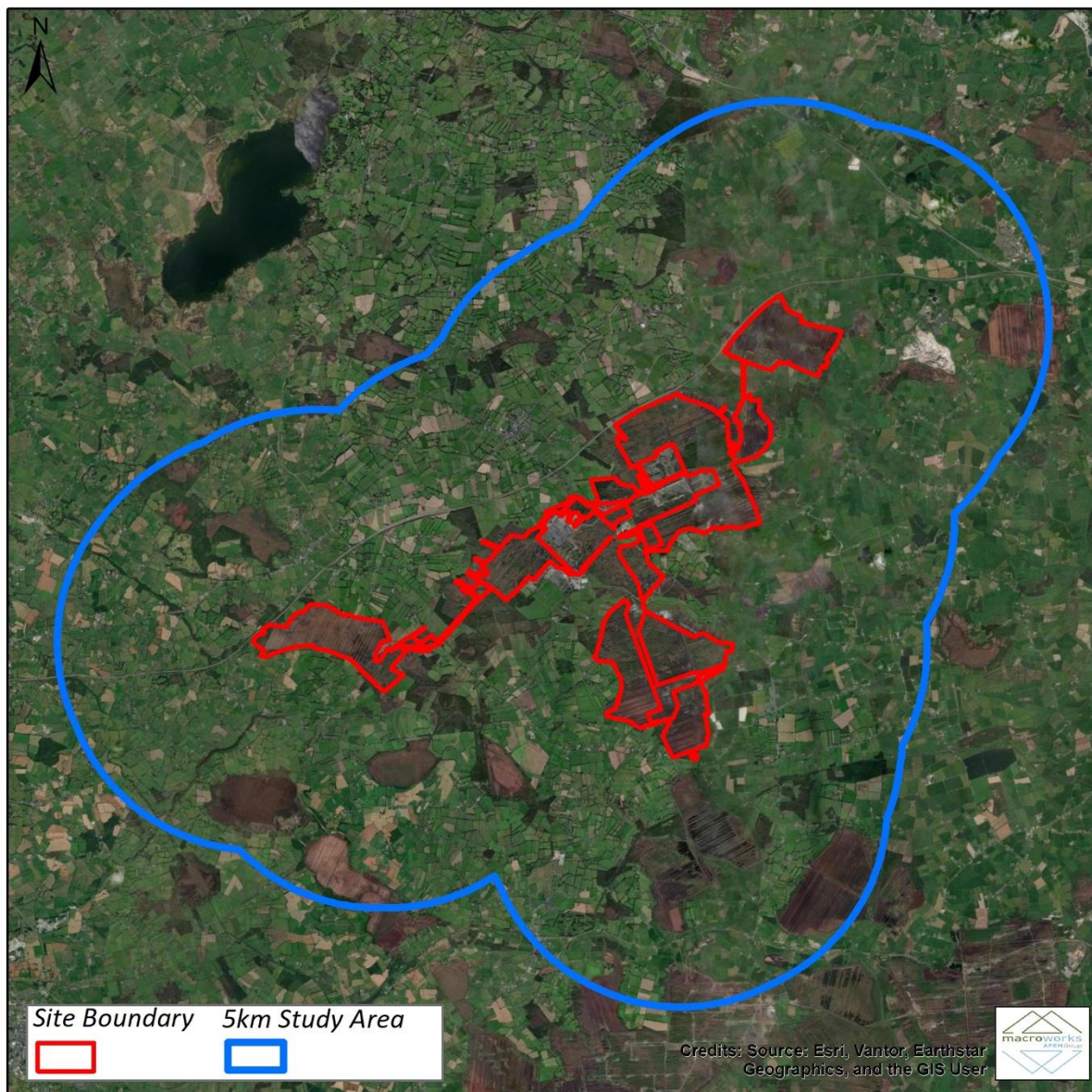


Figure 12-3: *Satellite imagery demonstrating mix of land use / land cover within the study area*

12.2.4 Baseline Year (1988) Centres of Population and Houses

The most populous settlement in relation to the Application Site as of 1988, on the basis of its size and proximity, was (and still is at present day) is Rhode, Co. Offaly, which lies approximately 2 km southeast of Ballybeg Bog. The settlement of Rochfortbridge, County Westmeath is approximately 3 km north of Derryarkin Bog, Milltownpass, County Westmeath is approximately 2 km northwest of Derryhinch Bog and Tyrellpass is located approximately 1.5km north of Toar Bog. These were the nearest key settlements within the study area in 1988 and remain so today.

Beyond these settlements, the nearest towns to the Application Site include Kinnegad, County Westmeath, located approximately 5km north east of Derryhinch Bog; Kilbeggan, County Westmeath, located approximately 6km west of Toar Bog; Edenderry, County Offaly,

approximately 10km east of Ballybeg Bog; and Tullamore, which is the largest town in the area, situated approximately 11km south west of Toar Bog.

There has been a minor increase in the extent of these settlements and towns between the baseline year and the present day and there is also a higher density of rural dwellings within the surrounding hinterland than there was in 1988.

12.2.5 Transport Routes

As the M6 Motorway finished construction in 2006, the motorway was not present during the baseline year of 1988 and the land was characterised as peatland and agricultural fields.

Today, the principal transport route contained within the study area is the M6 motorway between Dublin and Galway, which passes adjacent to the north of the Derryarkin, Drumman Derryhinch and Toar Bogs. Passing over the M6 and linking between Rochfortbridge and Rhode is the R400 regional road. This road runs immediately between the Derryarkin and Drumman Bogs. In the baseline year of 1988, the former Galway Dublin Road (N6) was the highest order road within the study area. This still exists today but has been downgraded to a regional road (R446) and runs between Rochfortbridge and Milltownpass around 2 km to the northwest and parallel to the M6, which almost defines the edge of the site.

12.2.6 Baseline Year (1988) Recreation, Tourism and Heritage Amenities

In terms of tourism heritage and amenity areas, the main attraction near to the Application Site is Croghan Hill which currently has a publicly accessible walking track to the top from the village of Croghan. Though local use on St Patricks Day has long been a tradition, public access was not formally facilitated until 2018 with the aid of Offaly County Council.

The nearest recreational facilities near the Application Site include Rhode GAA sport pitch, which is located less than 1km east of Ballybeg Bog, and St Mary's Rochfortbridge GAA pitch, which is located approximately 2.5km north west of Drumman Bog, both of which were founded prior to the baseline period of 1988.

12.2.7 County Development Plan Landscape and Visual Planning Policies

The Application Site lies within the counties of Offaly, Westmeath and Meath therefore an assessment of three counties Development Plans in relation to landscape and visual planning policies has been provided.

As the current County Development Plans (CDP) represent the most comprehensive and refined iteration, informed by previous versions, the planning policy review provides a chronological assessment commencing with the adopted CDPs and works retrospectively through superseded development plans to the 1988 baseline year.

*Offaly County Development Plan (Iterations since 1988)***Current Offaly County Development Plan (2021-2027)****Landscape Designations**

The current Offaly County Development Plan does not include a Landscape Character Assessment, but rather a series of overlays that divides the County into Low, Medium, High sensitivity classifications. This is derived from the Areas of High Amenity (Waterways and Wetlands, Upland Areas, Peatlands, Eskers) in addition to statutory national or European designations which overlap. The former peat extraction development within the subject bogs has considerable overlap with the Medium Sensitivity Landscape overlay, as this sensitivity is generally defined by the presence of Peatlands identified on the Green Infrastructure Map (Figure 4.13 of the CDP) bog landscapes – with the exclusion of those Peatlands within the high amenity classification, which are designated High Sensitivity and have Conservation designations. This is surrounded by Low Sensitivity farming and rural areas, as well as the High Sensitivity site of Croghan Hill and Grand Canal Corridor. It should be noted that this is consistent with the previous for Offaly County Development Plan (2014 – 2020) unchanged in terms of designation and sensitivity ratings.

Moderate Sensitivity Landscapes are described within Chapter 4 of the Offaly County Development Plan in the following manner;

Moderate sensitivity 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.

Characteristics:

Cutaway bogs cover a large part of the landscape of Offaly and in their entirety, are approximately 42,000 hectares. Generally, there are a number of land uses suitable for cutaway bog, not included in High Sensitivity Areas, which include wilderness, grassland, forestry and recreation. Some cutaway bog landscapes are more robust and may be considered for other uses.

Sensitivities:

- *The development of Lough Boora (albeit designated as high sensitivity) acts as a prototype in the creation of parkland character.*
- *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.*

The Council recognises the need for a land use framework plan for the future development and utilisation of large areas of cutaway bog within Offaly.

Acceptability of Development for consideration: *Some form of development subject to appropriateness/conditions.*

Need for Landscaping and Appropriate Design: *Very High.*

There are two groups of 'Peatlands' within Chapter 4 of the CDP, one which refers to the high sensitivity sites with conservations designations, and the other more extensive collection, which



maps Peatlands as part of the Green Infrastructure map. The relevant Biodiversity and Landscape Policies relating to Peatlands, includes;

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.*

BLP-15 *It is Council policy to work with adjacent local authorities and relevant stakeholders in promoting a National Park designation for the peatlands in the midlands and a 'Regional Peatway' connecting natural and cultural attractions.*

BLP-16 *It is Council policy to support the provision of outdoor pursuits, walking and cycling routes through the county's peatlands and network of industrial railways linking the River Shannon Blueway, Royal Canal, Grand Canal and Barrow Blueway across the midlands as outlined in the 'Major Cycling Destination in the Midlands of Ireland –Feasibility Study 2016', which is a priority of the 'Outdoor Recreation Plan State Lands and Waters' (2017).*

(BLP-17 Refers specifically to those sites with Special Area of Conservation Status – which the site is not)

BLP-18 *It is Council policy to support collaboration between Offaly County Council, Regional Transition Team and relevant stakeholders of a partnership approach to integrated peatland management for a just transition that incorporates the management, rehabilitation and restoration / re-wetting of significant tracts of peatlands in conjunction with appropriate developed after uses.*

Green Infrastructure Strategy

BLP-27 *It is Council policy to recognise the economic, social, environmental and physical value of green infrastructure.*

BLP-28 *It is Council policy to protect existing green infrastructure within the county, to provide additional green infrastructure where possible and to encourage green infrastructure to be spatially connected to facilitate the extension or establishment of ecological corridors.*

BLP-29 *It is Council policy to seek to increase investment in green infrastructure provision and maintenance by accessing relevant EU funding mechanisms and national funding opportunities.*

BLP-30 *It is Council policy to integrate the provision of green infrastructure with infrastructure provision and replacement, including walking and cycling routes, as appropriate, while protecting natural heritage.*

BLP-31 *It is Council policy to support the use of green infrastructure for carbon sequestration to combat climate change.*

Areas of High Amenity (Relevant to Croghan Hill)

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 Further, it is policy to facilitate the sustainable extension and expansion of existing visitor, tourist related or other rural enterprises within the Areas of High Amenity, where such development is*

appropriate and where it can be demonstrated that it gives 'added value' to the extending activity and to the immediate area which is the subject of the 'Area of High Amenity' designation.

Landscape

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-39 *It is Council policy to seek to ensure that local landscape features, including historic features and buildings, hedgerow, shelter belts and stone walls, are retained, protected and enhanced where appropriate, so as to preserve the local landscape and character of an area, whilst providing for future development.*

BLP-40 *It is Council policy to ensure that consideration of landscape sensitivity is an important factor in determining development uses.*

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.*

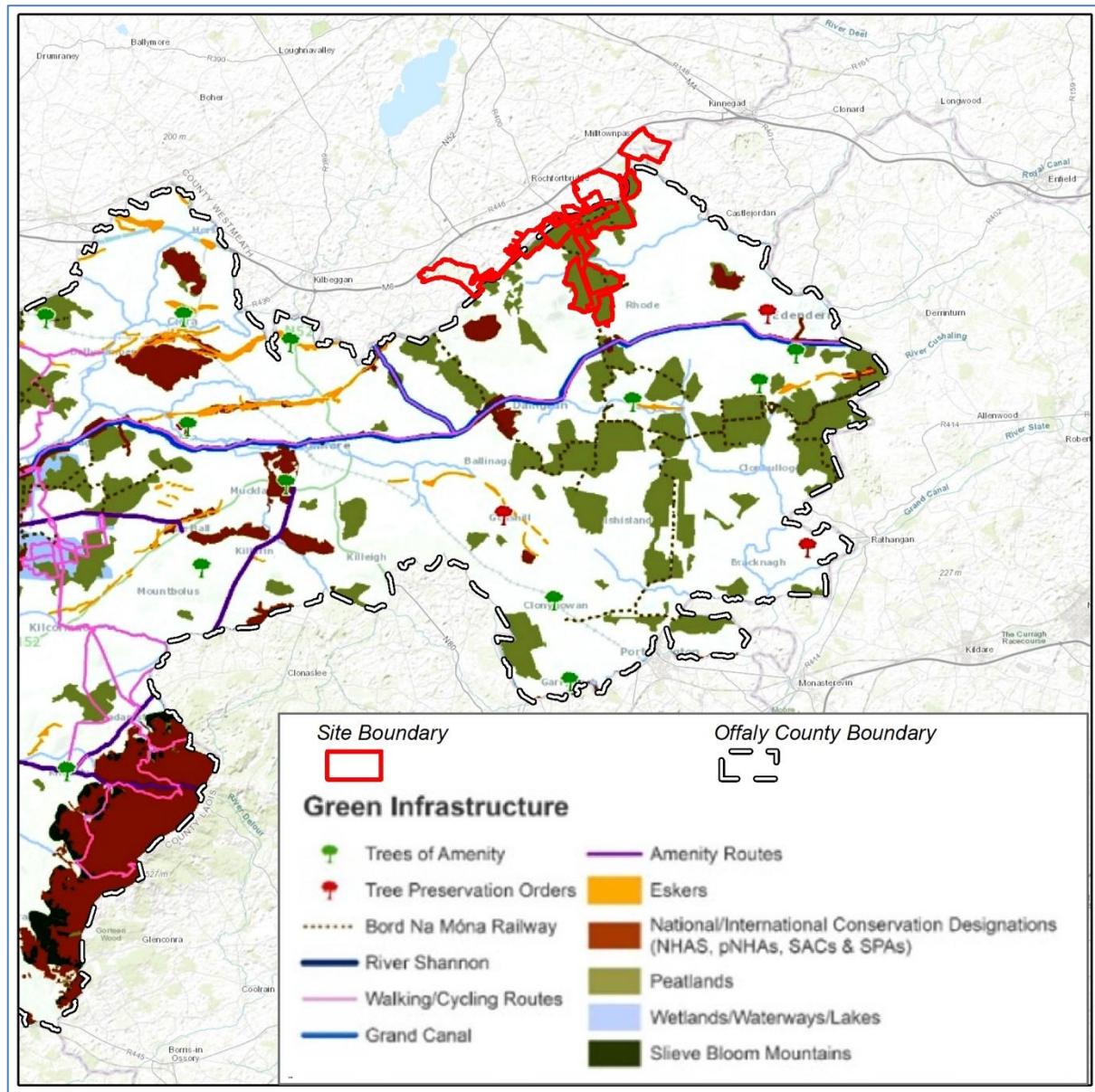


Figure 12-4: Offaly CDP Green Infrastructure Strategy (Fig 4.13)

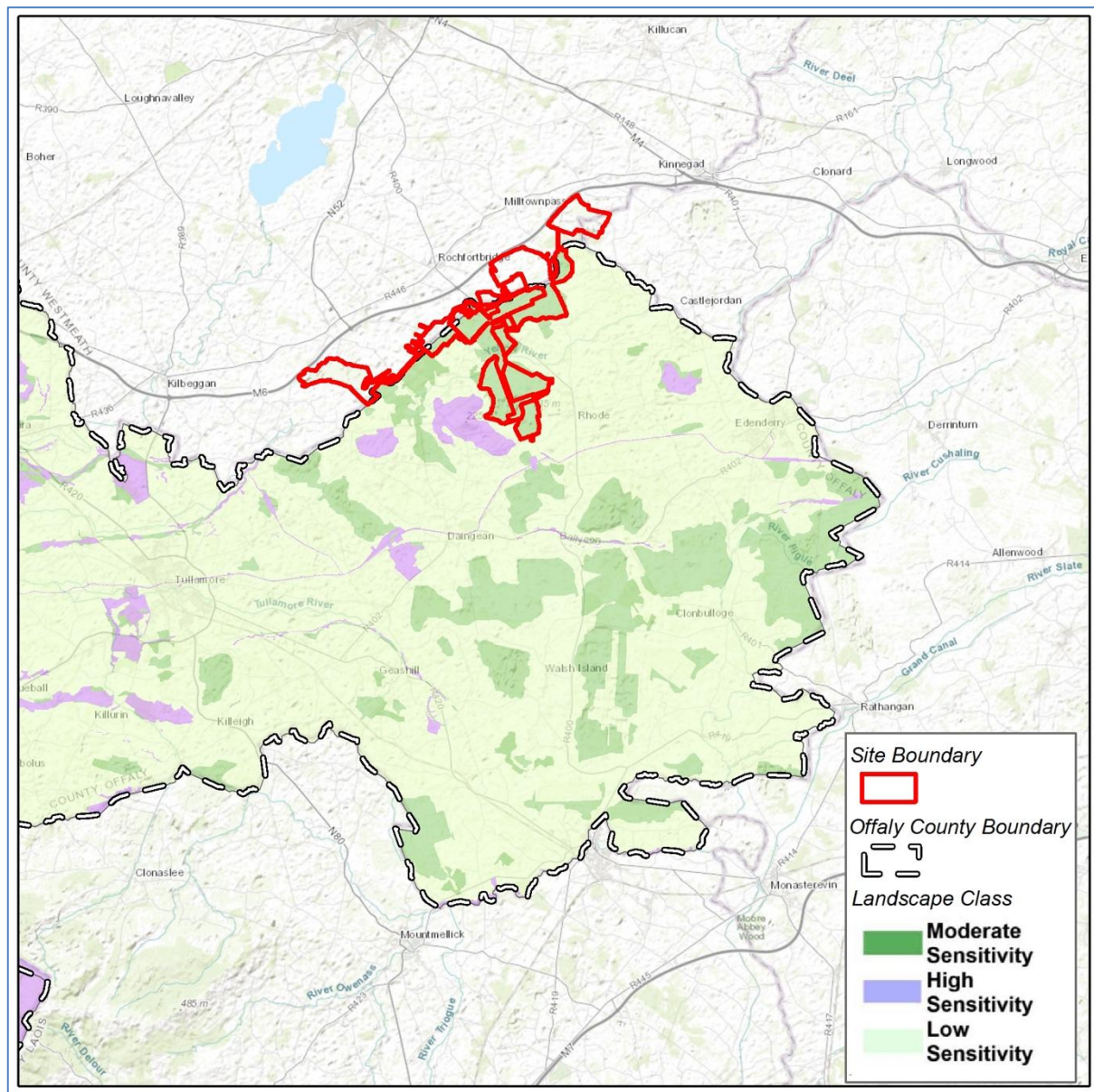


Figure 12-5: Offaly CDP Landscape Sensitivity Classifications (Fig 4.22)

Scenic Designations

The Protected Views Map from the current Offaly County Development Plan identifies that there are three 'Scenic Views' and one 'Amenity Route' within the 5km radius study area. These include;

V7 Road No. L-01018 in the townlands of Cannakill and Croghan Demesne. To Slieve Bloom Mountains

V8 Townlands of Barnan, Kilduff, Old Croghan, Croghan Demesne, Down. Views towards Croghan Hill and bog lands.

V9 Townlands of Grovesend and Coole. South to bog lands

Amenity Route: Grand Canal/Grand Canal Way

Offaly County Development Plan (2014-2020)

Whilst policies and objectives relating to Green Infrastructure, Landscape Sensitivity and Visual Amenity change in terms of referencing and slightly in terms text between this CDP and the current CDP, the principals of these objectives remain unchanged and there is nothing materially different relating to the peatlands within the Derrygreenagh Bog Group.

Offaly County Development Plan (2009-2015)

The 2009-2015 iteration of the Offaly CDP does not include a Landscape Character Assessment, but it does specifically reference Croghan Hill as a landscape feature of High sensitivity. Scenic Viewpoint locations are the same as those in later iterations.

Section 10.2 references the approach to managing Peatlands and this is intended as a balance between employment, tourism, amenity, education and research. Reference is also made to potential to accommodate wind farms and bioenergy developments. Importantly, the policy context in terms of managing peatlands is not any more restrictive/ protective than later CDP iterations.

Offaly County Development Plan (2003-2009)

As with later iterations, the 2003-2009 iteration of the Offaly CDP does not include a Landscape Character Assessment, but it does specifically reference Croghan Hill as a landscape feature of High sensitivity. Scenic Viewpoint locations are the same as those in later iterations.

Section 2.6 references the approach to managing Boglands (both intact and cutaway) and sets the tone of balanced consideration of post extraction use of the county's peatland areas for multiple amenity and ecological uses. Indeed, it references the now highly successful Lough Boora Parklands rehabilitation project as a pilot scheme to be realised. It also acknowledges that an integrated plan is required to manage *"...further areas of cutaway bog, which will arise over the next 30 years and turf/peat production comes to an end in the county's industrial boglands"*. Again, the policy context in terms of managing peatlands is not any more restrictive/ protective than later CDP iterations.

Offaly County Development Plan (1995) (Draft)

As with later iterations, the 1995 iteration of the Offaly CDP does not include a Landscape Character Assessment, but it does specifically reference Croghan Hill as a landscape feature of High sensitivity. It is unclear whether Scenic Viewpoint locations are included in this iteration of the CDP.

Section 2.6 relates to Boglands and is very similar in context to that same section in the following iteration of the CDP, albeit it is setting the foundation for studies into the post peat extraction use of cutaway peatland areas for tourism and conservation initiatives. The same acknowledgement of a likely 30 years of future peat extraction is also provided. The policy context in terms of managing peatlands is not any more restrictive/ protective than later CDP iterations.

Offaly County Development Plan (1967)

In terms of boglands, the 1967 plan appears to be focussed more on facilitating productive land use and rural employment than balanced planning objectives relating to ecology, tourism and amenity. Like later versions of the Offaly CDP, Section 7.6 references an optimistic outlook for peat extraction for the next 30 years a note of caution is provided. This encourages the consideration of alternative uses for cutaway bogland including agriculture and forestry. The policy context in terms of managing peatlands is not any more restrictive/ protective than later CDP iterations.

Westmeath County Development Plan (2021 – 2027)

Landscape Designations

The current Westmeath County Development Plan includes a Landscape Character Assessment that divides the County into 11 geographically distinct Landscape Character Areas (LCAs). The Application Site is contained within ‘*LCA10 – Lough Ennell and South Eastern Corridor*’. It should be noted that the Landscape Character Assessment for County Westmeath has been brought through from the previous iteration of the County Development Plan (2014 – 2020) unchanged. Indeed, it appears that the same Westmeath Landscape Character Assessment is the first produced for the County and was also included in the 2008 – 2014.

Landscape Area 10 – Lough Ennell and Southeastern Corridor is described within Chapter 13 of the Westmeath County Development Plan in the following manner;

“This Character Area comprises pasture land of mixed productivity. Lough Ennell is situated to the western side of this Landscape Character Area (LCA) and is designated as an Area of High Amenity, SPA and SAC. A number of preserved views are listed from the R446 between Tyrrellspass and Rochfortbridge. The area around Lough Ennell and particularly to the south of the lake is characterised by scrub land with a mixture of marsh, bog and poor pasture land. There is also a large tract of bog to the east of Rochfortbridge and Milltownpass along the county boundary. The bog areas in this LCA are mainly exploited but some have been left intact. This area has a large number of old demesnes, which are easily recognisable in the landscape with the existence of fine mature hardwood trees and estate walls in some cases.

Settlements within this landscape have developed mainly along the main road network. These include Kinnegad, Milltownpass, Rochfortbridge, and Tyrrellspass along the former N6. Recreational areas have been developed on the shores of Lough Ennell including Ladestown, Lilliput and Tudenham. The M6 traverses the southern part of the LCA. The N52 By-Pass has also added to the transport corridor around Mullingar.”

County Policy Objectives for Landscape Character include;

CPO 13.1 Support the implementation of the National Landscape Strategy.

CPO 13.2 Protect the distinctiveness, value and sensitivity of County Westmeath’s landscapes and lakelands by recognising their capacity to sustainably integrate development.

CPO 13.3 Support and implement objectives contained in any Regional Landscape Character Assessment.

CPO 13.4 Conserve and enhance the high nature conservation value of the Landscape Character Areas in order to create/protect ecologically resilient and varied landscapes.

CPO 13.5 Identify and integrate new green and blue infrastructure networks within the existing landscape character areas in the interests of biodiversity and climate change and in recognition of the tourism potential of these assets.

CPO 13.6 Require that development is sensitively designed, so as to minimise its visual impact on the landscape, nature conservation, archaeology and groundwater quality.

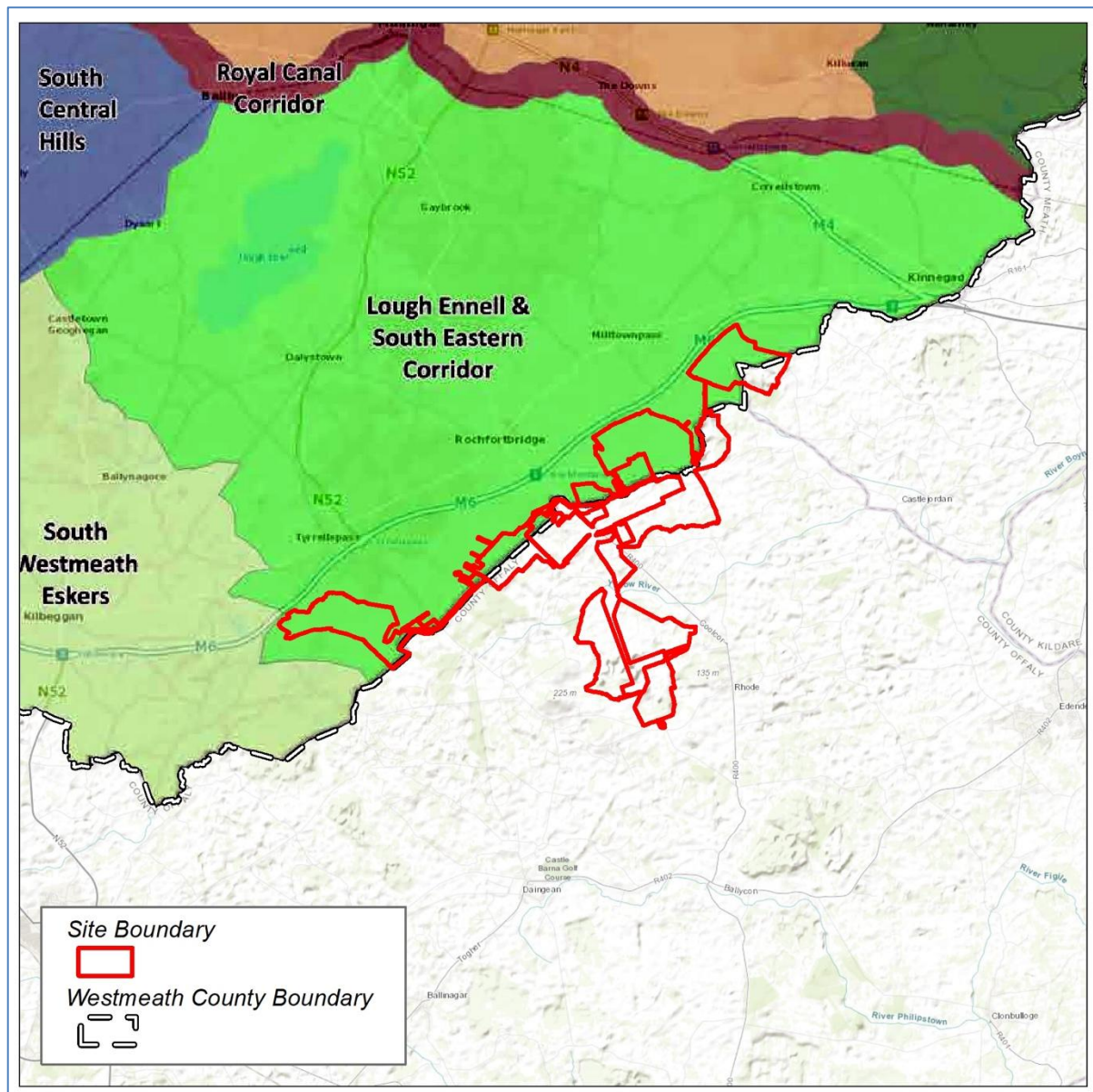


Figure 12-7: *Westmeath CDP Landscape Character Area*

Scenic Designations

The Protected Views Map from the Westmeath County Development Plan identifies that there are two 'Protected Views' and one section of the Mullingar Cycle Route Loop 1 within the 5km radius study area. The two scenic routes are;

V13 - Panoramic views from Garrane Hill on the Regional road R-446. This is a panoramic view of the surrounding landscape from the highest point on the R446 road when looking down the roads to the NE and SW. County Significance.

V14 - Views of Sculpture along the M6. The foreground focus of this view is the roadside sculpture by the motorway. Another important feature is the flatness of the open landscape off to the southwest (mostly bog) which allows for a distant horizon view that draw attention to dramatic skies. Croghan Hill can be seen in the distance on a clear day and is an important feature of the view. This view should be considered to begin at 653385,744319 where the

roadside trees stop, and end at 648377,740294 where a patch of forestry cuts off the view along the M6. County Significance.

V14 is adjacent to the north-western boundary of Derryhinch, and in the direction identified by the CDP. VP13 is approximately 2 km west of the northern boundary of Drummin and is a panoramic which encompasses the Site. The identified cycle loop is at the periphery of the study area to the northwest. These views are consistent with the previous iteration of the County Development Plan.

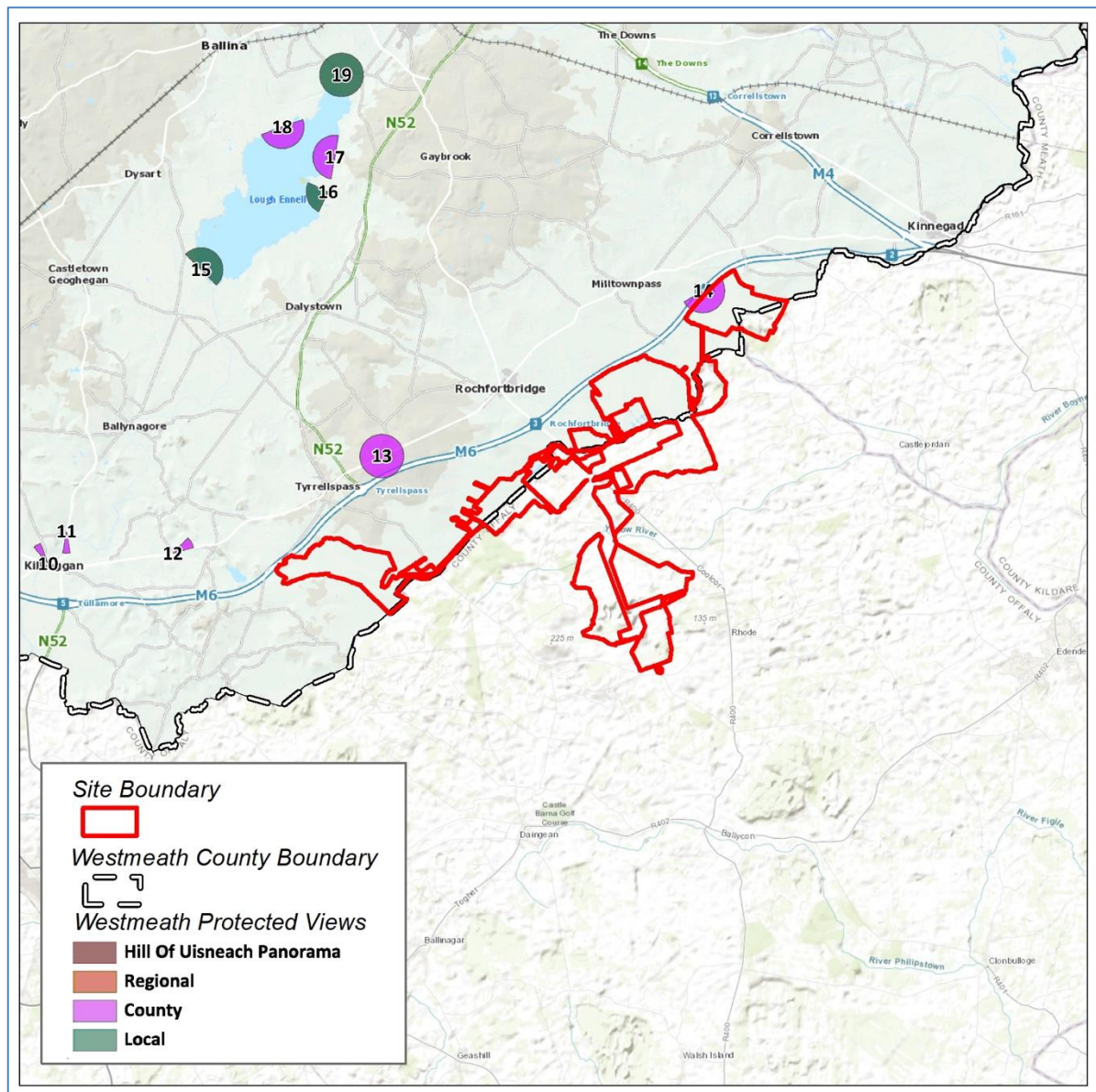


Figure 12-8: *Westmeath CDP Scenic Views*

Westmeath County Development Plan (2014-2020)

The 2014-2020 iteration of the Westmeath CDP includes the same Landscape Character Assessment for the county as the current CDP. The future of cutaway peatland is discussed in the following general policy terms;

“P-LLM7 - To explore with the relevant agencies the future potential of cut away peatlands, including opportunities for habitat creation or amenity and recreation areas such as community woodlands or parklands.”

Scenic View designations are the same as for the current CDP.

Based on the above. The policy context in terms of managing peatlands is not any more restrictive/ protective than the current CDP.

Westmeath County Development Plan (2008-2014)

The 2008-2014 iteration of the Westmeath CDP includes the same Landscape Character Assessment for the county as later iterations. For the subject LCA – Lough Ennell & SE Corridor the future of cutaway peatland is discussed in the following policy terms;

“P-EH76 - Within the next 20–30 years, large areas of peatland will be exhausted and provide tracts of land that have potential for agriculture, habitat and amenity. The Council in consultation with relevant agencies will explore future potential of cut away peatlands that may offer opportunities for habitat creation or amenity and recreation areas such as community woodlands or parklands.”

Scenic View designations are the same as for later CDP iterations.

Based on the above. The policy context in terms of managing peatlands is not any more restrictive/ protective than later CDP iterations.

Westmeath County Development Plan (Iterations between 1986 and 2008)

Earlier iterations of the Westmeath CDP may not have included a Landscape Character Assessment for the county as later iterations did. Reference to Peatland management was a balance between acknowledging that *“boglands are a major natural resource being raw material for power generation and peat production and also constituting an important amenity resource”* and stating that it is policy of the council to encourage continued development in these areas. There is reference to the preservation of *“Scraw and Gariskil Bogs which are rated of international importance”*, but this does not apply to the Application Site.

The policy context in terms of managing peatlands is not any more restrictive/ protective than later CDP iterations.

Meath County Development Plan (2021 – 2027)**Landscape Designations**

The current Meath County Development Plan includes a Landscape Character Assessment that divides the County into 20 geographically distinct Landscape Character Areas (LCAs), and four types. The Application Site is contained within ‘LCA15 –South West Lowlands’, and ‘Lowland Landscapes Type’. This area is also identified as having ‘High’ Value, ‘High’ sensitivity, and ‘regional’ Value. It should be noted that the Landscape Character Assessment for County Meath has been brought through from the previous iteration of the County Development Plan (2013 – 2019) unchanged.

Landscape Area 15 – South West Lowlands is described within Appendix 05 of the Meath County Development Plan in the following manner;

“The area is characterised by rolling hills interspersed with beech copses and well-wooded hedgerows dividing rough pasture. The main transport routes are the N4 from Enfield to Kinnegad and the Royal Canal (a tourist route). This is one of the more remote areas of Meath with only the village of Clonard servicing a large area. Pasture farmland is dominant although there is rough pasture in the upland areas interspersed with a mix of woodland plantations, small copses and scrubby woodland more prevalent in the south west. Fields are small to medium sized and enclosed with well-wooded hedgerows.”

There are no scenic designations as per 'Map 8.6 Scenic Views and Prospects' within the study area.

The following policies apply to peatlands:

It is the policy of the Council:

HER POL 45 *To ensure that peatland areas which are designated (or proposed for designation) as NHAs, SACs or SPAs are conserved for their ecological, climate regulation, archaeological, cultural and educational significance.*

It is an objective of the Council:

HER OBJ 39 *To work in partnership with relevant stakeholders on a suitable peatland site(s) to demonstrate best practice in sustainable peatland conservation, management and restoration techniques and to promote their heritage and educational value subject to Ecological Impact Assessment and Appropriate Assessment Screening, as appropriate, having regard to local and residential amenities*

It is a policy of the Council:

HER POL 52 *To protect and enhance the quality, character, and distinctiveness of the landscapes of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards of siting and design.*

HER POL 53 *To discourage proposals necessitating the removal of extensive amount of trees, hedgerows and historic walls or other distinctive boundary treatments.*

It is an objective of the Council:

HER OBJ 49 *To ensure that the management of development will have regard to the value of the landscape, its character, importance, sensitivity and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations.*

HER OBJ 50 *To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.*

HER OBJ 51 *To review and update (if required), in the context of a regional approach to landscape assessment, the County Landscape Character Assessment following publication of statutory guidelines for Planning Authorities on local Landscape Character Assessments, as outlined in the National Landscape Strategy 2015-2025*

Meath County Development Plan (2013-2019)

The 2013-2019 iteration of the Meath CDP includes the same Landscape Character Assessment and the same designated scenic views as the current CDP. The policies around peatland management specifically, and landscape management generally, use different numerical referencing, but are very similar to the current iteration of the CDP. Like the CDPs of surrounding counties, these objectives seek a balance between the management of peatlands and their conservation for ecological, amenity and research interests.

Meath County Development Plan (2007-2013)

The Meath County Development Plan from 2007-2013 was reviewed for policies relating to landscape protection, peatland management and visual amenity.

The 2007-2013 CDP contains a series of generic landscape protection objectives that are not deemed particularly relevant to the Proposed Development. However, Policy HER POL 15 dealing with habitats and species outside of non-designated site includes reference to bogs;

HER POL 15 - *To conserve, protect and enhance where possible wildlife habitats such as rivers, streams, canals, lakes, and associated wetlands including reed-beds and swamps, ponds, springs, bogs, fens, trees, woodlands and scrub, hedgerows and other boundary types such as stone walls and ditches which occur outside of designated areas providing a network of habitats and corridors essential for wildlife to flourish.*

There are specific policies relating to various landscape features and habitat types, but none specifically relating to peatlands.

The Landscape Character Assessment for the County is referenced as Appendix IV and the subject site is partially contained in LCA15 Southwest Lowlands as described in detail in the above section dealing with the 2013 – 2019 Meath County Development Plan.

The following Landscape Policies are relevant;

HER POL 84 - *To ensure that development, particularly in sensitive landscapes, adheres to tailored design guidelines. Sensitive landscapes include demesne villages and LCAs identified as being sensitive.*

HER POL 85 - *To provide adequate protection of views and vistas that contribute to the appreciation of landscape character.*

HER POL 86 - *To maintain scenic vistas and panoramic views from key vantage points and towards key landmarks and features within the landscape.*

HER POL 87 - *To maintain the visual integrity of sensitive and exceptional landscape value areas.*

HER POL 88 - *To encourage the continued sustainable development of rural communities without compromising the physical, environmental, natural and heritage resources of the county.*

HER POL 89 - *To protect and enhance the visual qualities of rural areas through the sensitive design of necessary development*

Meath County Development Plan (2001-2007)

The Meath County Development Plan from 2001-2007 was reviewed for policies relating to landscape protection, peatland management and visual amenity.

The 2001-2007 CDP contains a series of generic landscape protection objectives that are not deemed particularly relevant to the Proposed Development. However, a 'Landscape Classification' is provided in Section 3.6 – Rural Development, Conservation and Environmental Protection Objectives. The Landscape Classification is intended to “offer a clearer picture to developers and others as to the sensitivity of various categories of development in areas with

differing abilities to absorb development". The Proposed Development is located in Visual Quality Group 'VQ10 – Bogland Areas' which are described in the following manner;

"These areas by virtue of their insular visual qualities are not sensitive to development such as masts, wind energy complexes and cut away bog uses such as major afforestation."

Designated scenic views and prospects would not appear to differ from later iterations of the Meath CDP and the associated objective states;

"Where development is envisaged adjacent to such features, the planning authority will pay close regard to the potential effect on the amenity value of these items with an overriding objective of their protection."

The policy context in terms of managing peatlands is not any more restrictive/ protective than later CDP iterations, indeed, probably less so.

Meath County Development Plan (Draft) 2000

The Meath Draft County Development from 2000 include a brief section on landscape protection which is not particularly relevant to the subject site and is pre-emptive of the Landscape Character Assessment for the county, which was subsequent to this iteration of the County Development Plan. It states;

"Areas of high amenity in Meath include the Boyne and Blackwater valley areas, Slieve na Calliagh and Lough Sheelin, shoreline, Hill of Tara and Skyrne Hill and a range of views and prospects throughout the county."

Objectives for these areas will include;

- *Protection of such areas from visually damaging development or proposals that would cumulatively erode landscape quality.*
- *Promotion of areas for appropriate development, primarily leisure tourism or recreational based development.*
- *Reviewing the extent of area currently designated as being of high amenity. This will specifically address the division of the county into Landscape Character Groups and identification of sensitivities within each area."*

Meath County Development Plan between 1988 and 2000

Meath County Development Plans between 1988 and 2000 were not available for review, except for the Draft Meath County Development Plan (2000) which is assessed above.

12.3 ASSESSMENT OF SIGNIFICANT EFFECTS - LANDSCAPE AND VISUAL

This assessment will consider landscape and visual effects that occurred during peat extraction and ancillary activities between the 1988 baseline year and the present day. It will also consider rehabilitation plans that will generate effects in the future. The assessment will therefore be divided into Peat Extraction Phase (July 1988 to June 2020), Current Phase (June 2020 to Present Day) and Remedial Phase (Present Day to the Future).



12.3.1 Do-Nothing Scenario

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 proposed project not be carried out. In the context of this remedial EIAR and the temporal scope the peat extraction activities under consideration have occurred since the baseline assessment year of 1988. As outlined in Chapter 4, peat extraction activities commenced in 1958.

However, in order to address the requirements of the EIA Directive, the 'Do-Nothing Scenario' is assessed on the basis that the peat extraction and ancillary activities ceased at the Application Site in 1988 and did not continue beyond that point. In the Do-Nothing Scenario, it is assumed that following the cessation of peat extraction and associated works, that the bog lands were allowed to naturally revegetate, with scrub and bog woodland more widespread across the site as is evident from areas of the Application Site which have been out of extraction for long periods of time.

Accordingly, there would not have been peat extraction machinery active at the Application Site and there would have been no industrial scale peat extraction for energy use beyond 1988.

12.3.2 Landscape and Visual Sensitivity (Baseline Year 1988)

In the case of the baseline year of 1988, the key consideration with regard to the sensitivity of both the receiving landscape and also surrounding visual receptors, is that industrial scale peat extraction had already been ongoing for several decades and much of the modification of the site's terrain profile had already occurred. Consequently, the landscape character was already strongly influenced by prior peat extraction and ancillary activities. The same is true of the visual setting experienced by those people that lived in the area and moved around the local roads. For this reason, the landscape sensitivity to further characteristic change is deemed to be **Low**, as is the visual receptor sensitivity.

12.3.3 Peat Extraction Phase (July 1988 to June 2020) Landscape and Visual Effects

Peat Extraction Activities

Peat extraction activities within the Application Site had already been underway for approximately three decades by the temporal baseline date of 1988 and even prior to this the bog needed to be drained to reduce the water table and improve the load bearing strength of the peat to facilitate extraction machinery. Drainage works at the Application Site commenced in 1950, this entails the construction of drainage channels through the production area. These drainage channels connected to internal, or headland piped outfalls which discharged into the main catchment stream or river system.

The Application Site was used historically for the production of milled peat for energy generation and production of peat briquettes. Peat extraction began at the Application Site in 1958. Peat from the Application Site supplied Croghan Briquette Factory and the Rhode Power Station. Rhode Power Station was completed in two separate developments, Station A commissioned in 1960 and Station B in 1963 and closed in 2003. Croghan Briquette Factory was operational between 1961 to 2000 and Edenderry Power Station which was constructed in

2001, still remains operational to date. Derrygreenagh works railways and railway bridges were constructed in the early 1950s. Bord na Móna bridges carrying public roads over peat railways are of reinforced-concrete and most carry date plaques embedded in their parapets. The earliest recorded plaque dates from 1954 and is on a skew bridge carrying the Rochfortbridge-Rhode Road, to the immediate south of the Derrygreenagh Works (Hamond, 2005)¹.

‘Milled Peat Production’ consisted of the milling, harrowing, ridging and extraction of peat using tractors and tractor scale machinery. At the 1988 baseline year, milled peat production would have approached its peak with extraction taking place during dry conditions in summer months.

Landscape Effects

There was a broad-scale and comprehensive physical landscape impact on the bog itself from the extraction operations. In combination with the extraction activities and associated transport infrastructure, this would have contributed to an industrialisation of the previously naturalistic bog landscape, but most of this had already occurred prior to 1988. For this reason, the landscape impacts of the production phase from 1988 to cessation in 2020 are considered to be of a Medium magnitude in terms of the criteria set out in Table 12.3. When combined with the Low landscape sensitivity judgement from section 12.3.2, the overall significance of effect is deemed to be Moderate-slight, which is not deemed to be a significant effect in EIA terms.

Visual Effects

In terms of visual impacts, in 1988 peat extraction activities would have been at peak production during the summer months and a considerable portion of the bog had been cutaway or drained and prepared for extraction. Visual impacts would have related to movement of workers and machinery, transport and transport infrastructure, as well as accommodation and welfare facilities. Dust plumes are also likely to have been associated with peat extraction areas. From most receptor locations, it is likely that the full extent of the cutaway peatland was not visible, so effects would have been more localised to the nearest fringes of the bog. Nonetheless, from some locations, such as sections of the R400 regional road that passes between the Drumman and Derryarkin bogs from Rochfortbridge to Rhode, there would have been notable visual impacts. Likewise, from the R446 that runs between the Kinnegad and Tyrellpass and from the local road that runs along the southern edge of the latter. However, given this busy baseline scenario and the fact that industrial scale peat extraction operations were a long established feature of summer months, it is not likely that significant visual impacts occurred between 1988 and the cessation of extraction activities in 2020.

In many ways, the peat extraction works at the Application Site serve to highlight the difference between landscape and visual impacts. The landscape impact, which considers the landscape as a resource in its own right was large scale, direct and physical and resulted in a distinct change to the landscape fabric and character. However, when such effects are not so apparent or viewed in the context of a vast bog basin from limited and discrete receptor locations, the visual impact significance is not directly comparable to the landscape impact.

For the reasons outlined above, the magnitude of visual effects is not considered to have been greater than **Low**. When combined with the Low visual receptor sensitivity judgement from

¹ Hamond (2005) Bridges of Offaly County: An Industrial Heritage Review

section 12.3.2, the overall significance of effect is deemed to be Slight, which is not deemed to be a significant effect in EIA terms.

12.3.4 Current Phase (June 2020 to Present Day)

Decommissioning works of peat extraction and ancillary activities at the Application Site commenced following the cessation of peat extraction activities from June 2020. This was required as part of the IPC Licence and agreed with the EPA.

The types of decommissioning measures that have most relevance to the landscape and visual setting mainly relate to clearing the site of structures and paraphernalia associated with peat extraction including;

- Clean-up of remaining or unconsolidated waste or materials located on bogs, yards, buildings and offices.
- Cleaning of silt ponds
- Removal of peat stockpiles
- Removal of buildings, fuel tanks, septic tanks, pumps and compounds

These interventions comprise minor physical clean-up works within the baseline context of cutaway peatlands. They will result in positive landscape and visual effects through the removal of historic infrastructure and waste materials. The works will also deliver ecological benefits, which contribute to the landscape character and visual amenity.

The resulting effects are assessed as being of a **Low** magnitude and **Positive** quality, giving rise to a **Slight Positive** significance.

12.3.5 Remedial Phase – (Present Day to the Future)

Draft Cutaway Bog Decommissioning and Rehabilitation Plans have been prepared for Derryhinch, Derryarkin, Drumman, Ballybeg and Toar Bogs, which set out a coordinated programme of remedial interventions designed to achieve hydrological restoration and natural colonisation (see Table 4.7 of Chapter 4 – Project Description). The common principal measures comprise drain blocking, modification of outfalls, water level management and phased reduction of infrastructure. These measures represent a transition from a post-industrial and engineered peat extraction landscape within the Application Site, to more naturalistic wetland, scrub and woodland mosaics.

The dominant intervention is drain-blocking and water level control. This will reduce linear drainage patterns and increase surface water expression, resulting in a more naturalised terrain and reduced engineered character. In terms of revegetation, natural regeneration will lead to the development of fen, reedbeds, scrub and woodland. This will reduce exposed peat and introduce visual diversity, texture and seasonal variation. Different interventions across peat depths will create a varied landscape comprising wetlands, scrub and dry areas and contribute to a mosaic landscape structure. This, in turn, will enhance habitat complexity and visual interest.

Existing uses such as forestry, quarrying and infrastructure will be retained in parts of the sites. This will result in a mixed landscape character where rehabilitated areas contrast with retained land uses.



In terms of timeframes, within the Short-term (0–2 years) there will be some localised disturbance during the remedial works. The low order negative effects associated with these works will also be of a Short-term duration (in accordance with EPA duration definitions). Once the works to facilitate natural regeneration are complete, the Medium-term (2–10 years) will see a notable increase in vegetation establishment and reduction in cutaway peatland. In the Long-term (>10 years) the remedial works will result in stable, semi-natural landscapes with improved visual quality/amenity and coherence.

The rehabilitation works will ultimately result in Positive effects from the restoration of natural landform patterns, reduction of visually intrusive features, and increased landscape diversity. Some residual visual contrasts will remain due to retained uses. The rehabilitation strategy will transform the bogs within the Application Site from degraded, industrial landscapes into dynamic semi-natural landscapes with biodiversity and amenity value as well as landscape and visual value. The long-term outcome will be a coherent and visually improved landscape consistent with peatland restoration objectives. For these reasons, the magnitude of medium- and long-term landscape and visual impact is deemed to be Medium resulting in a Moderate-slight and Positive significance of effect.

12.3.6 Risk of Major Accidents and Natural Disasters

No major accidents or natural disasters have occurred at or surrounding the Application Site during the assessment period from 1988 to present day. Therefore, there was no potential for significant landscape or visual impacts.

The risk of major accidents and natural disasters with the potential for significant effects on the landscape environment during Current and Remedial Phases at the Application Site is considered Low.

12.3.7 Cumulative and Indirect Effects

The cumulative effects associated with projects that have been built and operational from 1988 to the present day, together with the potential future use of the lands at the Application Site, have been assessed. Projects and developments identified for consideration in the cumulative effects assessment for each the Peat Extraction, Current and Remedial Phases are outlined in Section 2.9.2 of Chapter 2 (Remedial EIA Methodology) of this remedial EIAR.

Peat Extraction Phase (1988 – 2020)

In terms of cumulative and indirect impacts, the key development that was present from 1988 Rhode Power Station (constructed prior to 1988 and operational from 1960 to 2003). The power station functioned to convert the extracted peat into electrical energy and is located within approximately 340 m from the Application Site, with established internal rail and road transport links. As such, there is a strong functional, spatial and thematic relationship between these uses.

Whilst this adds to the scale and intensity of development within the study area as a consequence of peat extraction, the relationship between these uses is clear and complementary. Furthermore, both activities have historically provided employment within the area, forming an established part of the socio-economic context.



Many people in this area earned a living from one of both of these uses and subsistence of the local community is an important aspect of landscape value for many rural communities around Ireland. That is, there can be an acceptance from a thriving and productivity community even where that comes about as a result of the exploitation of the natural peatland and decreased visual amenity from the substantial power station/s rising prominently at the edge of Rhode.

There are a number of quarries and sand and gravel pits within the area surrounding the Derrygreenagh Bog Group. Like peat extraction activities, quarrying is an extractive industry that generates considerable movement of machinery on site and HGVs using the surrounding road network. Quarrying activity in this generally flat area would not have been overtly visible due the pits being generally below surrounding ground levels and availing of similar vegetation screening to peat extraction activities. Together the two forms of extractive activity would have contributed to a working rural landscape character but also contributing to landscape values relating to utility of rural land and contribution to the rural economy.

Overall, it is considered that there are notable cumulative and indirect impacts between peat extraction within the Application Site, the associated power station/s at Rhode, local quarries / sand and gravel pits. However, these land uses are dispersed across a broad area and there is a strong and legible association between them that offsets the sense of accumulation of substantial scale rural/industrial development. Consequently, cumulative and indirect impacts are considered not significant.

Current Phase 2020 - Present

There have been a considerable number of large-scale energy and utility developments proposed and permitted within the study area since 2020. Some of these take advantage of the established grid facilities that converge on the study area due to its history of peat extraction for energy production. They also take advantage of the east-central location within the country from a strategic distribution perspective as well as the robust post-industrial landscape character emanating from the cutaway peatlands of the site. In-combination, these developments will serve to generate an emerging landscape character that blends traditional rural activities with new energy and utility facilities in something of a strategic hub. However, other than potentially facilitating such development, the historic peat extraction activities will not strongly contribute to sense of an energy / utility landscape but instead provide the post-industrial backdrop to it.

The Yellow River Wind Farm runs in an east-west direction hugging peatland fringe farmland. However, other than a minor sense of increased built development within the countryside, there is little in the way of a perceptual landscape and visual link to the peat extraction within the Application Site.

For the reasons outlined above, Current Phase cumulative effects are considered to be not significant.

Remedial Phase

As detailed in Chapter 2 BnM intends to develop a wind and solar energy project across Derryarkin, Drumman, Derryhinch and Ballybeg Bog, currently known as Derrygreenagh Wind and Solar project. If realised, this would contribute to the emerging energy / utility hub



landscape character of the study area that will occur as permitted and proposed cumulative projects, detailed in the Current Phase, are constructed.

A third party intends to develop infrastructure at lands within the Application Site, consistent with the Government's Large Energy User Action Plan (LEAP), and which will be subject to separate planning and regulatory consent as appropriate.

As with the cumulative effects assessed for the Current Phase, the historic peat extraction activities may have contributed an appropriate landscape setting (and residual infrastructure) for the scale and nature of energy and infrastructure development, but it does not make a strong contribution to that emerging landscape character. Instead, it provides the post-industrial backdrop to it and one which will diminish in its industrial character as remedial measures establish.

For the reasons outlined above, Remedial Phase cumulative effects are considered to be not significant.

12.4 MITIGATION AND MONITORING MEASURES

There are no specific landscape and visual mitigation measures proposed and therefore, there is no requirement for ongoing monitoring from a landscape and visual perspective either.

12.5 RESIDUAL EFFECTS

As there are no specific mitigation measures required in relation to landscape and visual effects, residual effects are no different to those already described in section 12.4.



12.6 REFERENCES

Offaly County Development Plan (1967, 1995, 2003-2009, 2009-2015, 2014-2020, 2021-2027)

Westmeath County Development Plan (1986, 1994, 2002, 2008, 2021-2027)

Meath County Development Plan (2013-2019, 2021-2027)

