



## 14.0 LANDSCAPE AND VISUAL

### 14.1 Introduction

The Landscape and Visual Assessment (LVIA) describes the landscape context of the proposed development and assesses the likely landscape and visual impacts of the proposed development on the receiving environment. Although closely linked, landscape and visual impacts are assessed separately.

Landscape Impact Assessment (LIA) relates to assessing effects of a development on the landscape as a resource in its own right and is concerned with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.

Visual Impact Assessment (VIA) relates to assessing effects of a development on specific views and on the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements. Visual impacts may occur from; Visual Obstruction (blocking of a view, be it full, partial or intermittent) or; Visual Intrusion (interruption of a view without blocking).

This LVIA uses methodology as prescribed in the following guidance documents:

- 'Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)', EPA, 2003;
- 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports', EPA, May 2022;
- Guidelines for Landscape and Visual Impact Assessment (GLVIA), Third Edition, Landscape Institute and Institute of Environmental Management and Assessment (IEMA); 2013; and
- 'Photography and Photomontage in Landscape and Visual Impact Assessment', Landscape Institute Advice Note 01/2011.

### 14.2 Statement of Authority

This LVIA was prepared by Macro Works Ltd. Relevant experience includes landscape and visual assessments for a range of industrial, commercial and infrastructural developments. Experience extends to the assessment of over 150 wind energy developments, 120 solar energy developments, including Strategic Infrastructure Development (SID) projects and numerous quarries.

### 14.3 Assessment Methodology

Production of this Landscape and Visual Impact Assessment involved;

- A desktop study to establish an appropriate study area, relevant landscape and visual designations in the Meath County Development Plan as well as other sensitive visual receptors. This stage culminates in the selection of a set of potential viewpoints from which to study the effects of the proposed development;



- Fieldwork to establish the landscape character of the receiving environment and to confirm and refine the set of viewpoints to be used for the visual assessment stage;
- Assessment of the significance of the landscape impact of the proposed development as a function of landscape sensitivity weighed against the magnitude of the landscape impact; and
- Assessment of the significance of the visual impact of the proposed development as a function of visual receptor sensitivity weighed against the magnitude of the visual impact. This aspect of the assessment is supported by photomontages prepared in respect of the selected viewpoints.

### 14.3.1 Landscape Impact Assessment Criteria

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 landscape receptor (Landscape Character Area (LCA) or feature) can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. Landscape value and sensitivity are classified using the following criteria set out in Table 14.3.1.1.

**Table 14.3.1.1: Landscape Value and Sensitivity**

Sensitivity	Description
<b>Very High</b>	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 (World Heritage Site/National Park), where the principal management objectives are likely to be protection of the existing character.
<b>High</b>	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 (Area of Outstanding Natural Beauty), where the principal management objectives are likely to be considered conservation of the existing character.
<b>Medium</b>	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.
<b>Low</b>	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 landscape management objectives include, enhancement, repair and restoration.
<b>Negligible</b>	Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe 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 to realise a higher landscape value.



The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed 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 application site boundary that may have an effect on the landscape character of the area. Table 14.3.1.2 refers.

**Table 14.3.1.2: Magnitude of Landscape Impacts**

<b>Magnitude of Impact</b>	<b>Description</b>
<b>Very High</b>	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.
<b>High</b>	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.
<b>Medium</b>	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.
<b>Low</b>	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.
<b>Negligible</b>	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.

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 impacts is arrived at using the following matrix set out in Table 14.3.1.3.

**Table 14.3.1.3: Impact significance matrix**

	<b>Sensitivity of Receptor</b>				
<b>Scale/Magnitude</b>	<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: Judgements deemed 'substantial' and above are considered to be 'significant impacts' in EIA terms.*

### 14.3.2 Visual Impact Assessment Criteria

As with the landscape impact, the visual impact of the proposed development will be assessed as a function of sensitivity versus magnitude. In this instance the sensitivity of the visual receptor, weighed against the magnitude of the visual effect.

#### Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric basis. 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 and used in Table 14.8.2.1 below to establish visual receptor sensitivity at each VRP:

1. Susceptibility of Receptors - In accordance with the Institute of Environmental Management and Assessment ("IEMA") Guidelines for Landscape and Visual Assessment (3rd edition 2013) visual receptors most susceptible to changes in views and visual amenity are;

- *"Residents at home;*
- *People, whether residents or visitors, who are engaged in outdoor recreation, including use 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; and*
- *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; and*
  - *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".*
2. 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;
  3. Views from within highly sensitive landscape areas. Again, highly sensitive landscape designations are usually part of a county's Landscape Character Assessment, which is then incorporated within the County Development Plan and is therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;



4. Primary views from dwellings. A proposed development might be seen from anywhere within a particular residential property with varying degrees of sensitivity. Therefore, this category is reserved for those instances in which the design of dwellings or housing estates, has been influenced by the desire to take in a particular view. This might involve the use of a slope or the specific orientation of a house and/or its internal social rooms and exterior spaces;
5. 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 county or regional scale;
6. 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 national route versus hill walkers directly engaged with the landscape enjoying changing sequential views over it;
7. Provision of 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;
8. 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;
9. 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;
10. Presence of striking or noteworthy features. A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a promontory headland, lough or castle;
11. 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;
12. 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;
13. 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;
14. Sense of place. This considers whether there is special sense of wholeness and harmony at the viewing location; and
15. 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 in the Table 5.)



Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular

#### Visual Impact Magnitude

The magnitude of visual effects is determined on the basis of two factors; the visual presence (relative visual dominance) of the proposal and its effect on visual amenity. The magnitude of visual impacts is classified in Table 14.3.2.1.

**Table 14.3.2.1: Magnitude of Visual Impact**

<b>Magnitude of Impact</b>	<b>Description</b>
<b>Very High</b>	The proposal intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. A high degree of visual clutter or disharmony is also generated, strongly reducing the visual amenity of the scene.
<b>High</b>	The proposal intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene.
<b>Medium</b>	The proposal represents a moderate intrusion into the available vista, is a readily noticeable element and/or it may generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. Alternatively, it may represent a balance of higher and lower order estimates in relation to visual presence and visual amenity.
<b>Low</b>	The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene.
<b>Negligible</b>	The proposal would be barely discernible within the available vista and/or it would not detract from, and may even enhance, the visual amenity of the scene.

#### Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix and applies the same EPA definitions of significance as used earlier in respect of landscape impacts (Table 14.3.1.3 refers).

### **14.3.3 Quality and Timescale of Effects**

In addition to assessing the significance of landscape effects and visual effects, EPA Guidance for EIAs requires that the quality of the effects is also determined. This could be negative/adverse, neutral, or positive/beneficial. Landscape and Visual effects are also categorised according to their duration:

- Temporary – Lasting for one year or less;
- Short Term – Lasting one to seven years;
- Medium Term – Lasting seven to fifteen years;
- Long Term – Lasting fifteen years to sixty years; and
- Permanent – Lasting over sixty years.

### 14.3.4 Extent of Study Area

From similar studies it is anticipated that the proposed development is likely to be difficult to discern beyond approximately 3km and is not likely to give rise to significant landscape or visual impacts beyond approximately 2km. In the interests of a comprehensive appraisal, a 5km radius study area was selected in this instance (Figure 1 refers).

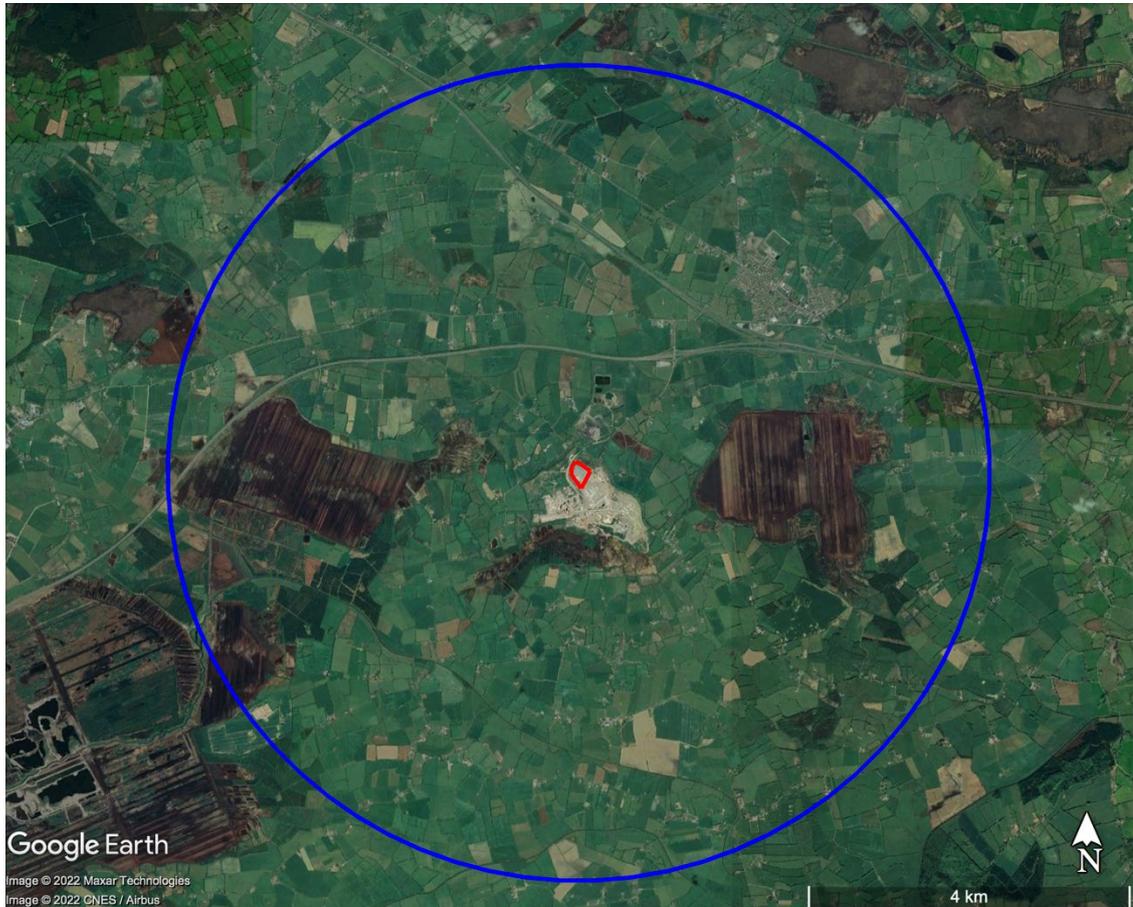


Figure 14.3.4.1: Study area map (Google Earth Pro)

## 14.4 Landscape And Visual Policy Context and Designations

### 14.4.1 Meath County Development Plan 2021-2027

A landscape character assessment was carried out in 2007 and has been included within Appendix A.05 Landscape Character Assessment of the current Meath County Development Plan 2021-2027, in which the county is divided into four main landscape character types. These are then sub-divided into a further 20 geographically distinct Landscape Character Areas (LCAs). The proposed development is located within a 'Lowland Area' Landscape Character Type (Figure 14.4.1.1 refers). However, in terms of more-localised scale LCAs, the site is situated within LCA 15 - 'South West Lowlands'. LCA 15 - 'South West Lowlands', is identified as having; 'High' Landscape Value; 'Moderate / Medium' Landscape Sensitivity (Figure 2 and Figure 3 refer), and; 'Regional' Landscape Importance. This LCA is described as:

*'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...Views within this area are generally limited by the complex topography and mature vegetation except at the tops of drumlins...'*

Map 4 of the Landscape Character Assessment (Figure 4 refers) indicates potential capacity for various development types. LCA 15, in which the site is located, has been identified as having a 'low' capacity for 'one off housing' and a 'medium', 'medium-high' or 'high' capacity for all types of development. These classifications highlight the robust nature of this LCA which can accommodate various forms of development, including alterations to existing industrial and extractive facilities.

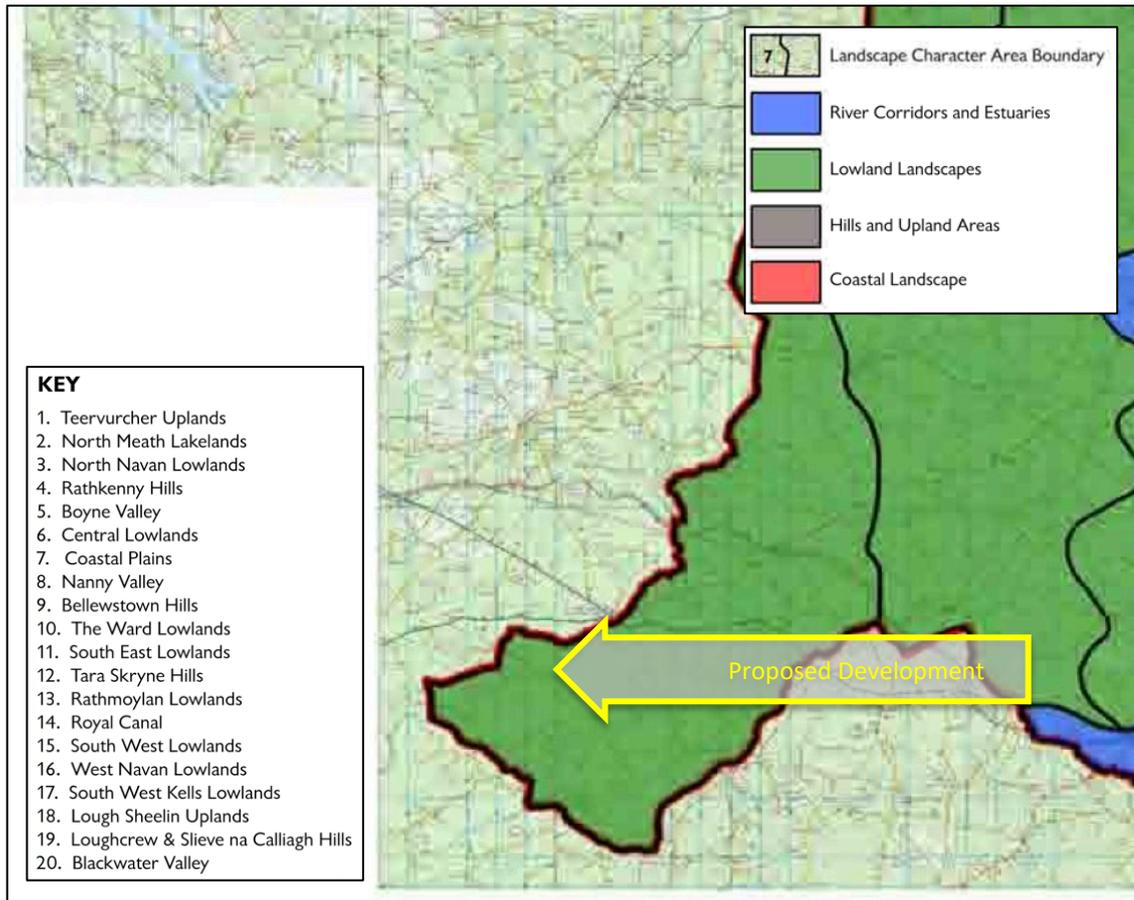
Eleven recommendations have also been outlined in the Meath Landscape Character Assessment regarding LCA 15 - 'South West Lowlands', but none relate to the type of development in question.

Four general objectives are provided in relation to landscape in 'Section 8.17 Landscape' of the Meath County Development Plan 2021-2027 and are included below:

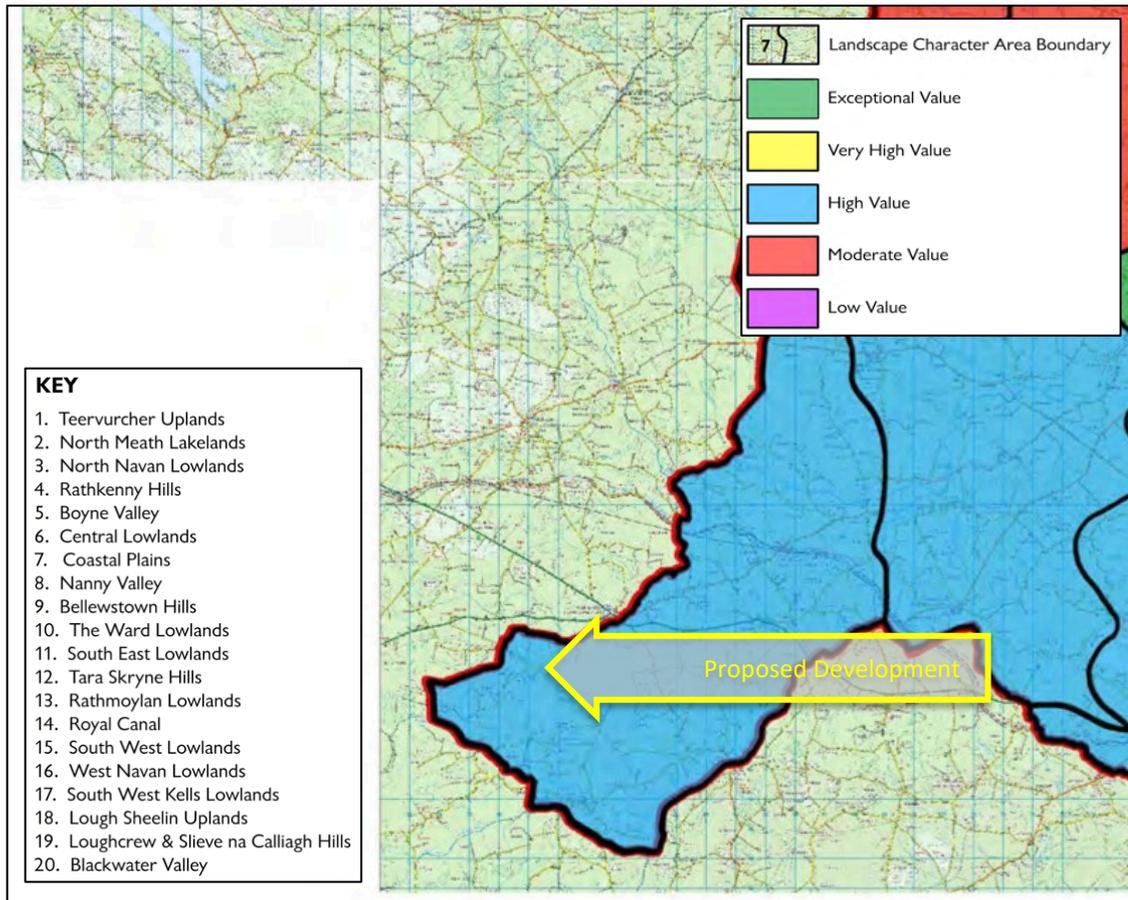
- *'HER OBJ 48 - To support the aims and objectives of the European Landscape Convention by implementing the relevant objectives and actions of the National Landscape Strategy 2015-2025 and any revisions thereof.*
- *HER OBJ 49 - To ensure that the management of development will have regard to the value 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.'*

Furthermore, there are two policies relating to landscape, one of which relates to the management of existing hedgerows which is of particular relevance to this proposed development as it has been designed to avoid impacting on existing hedgerows;

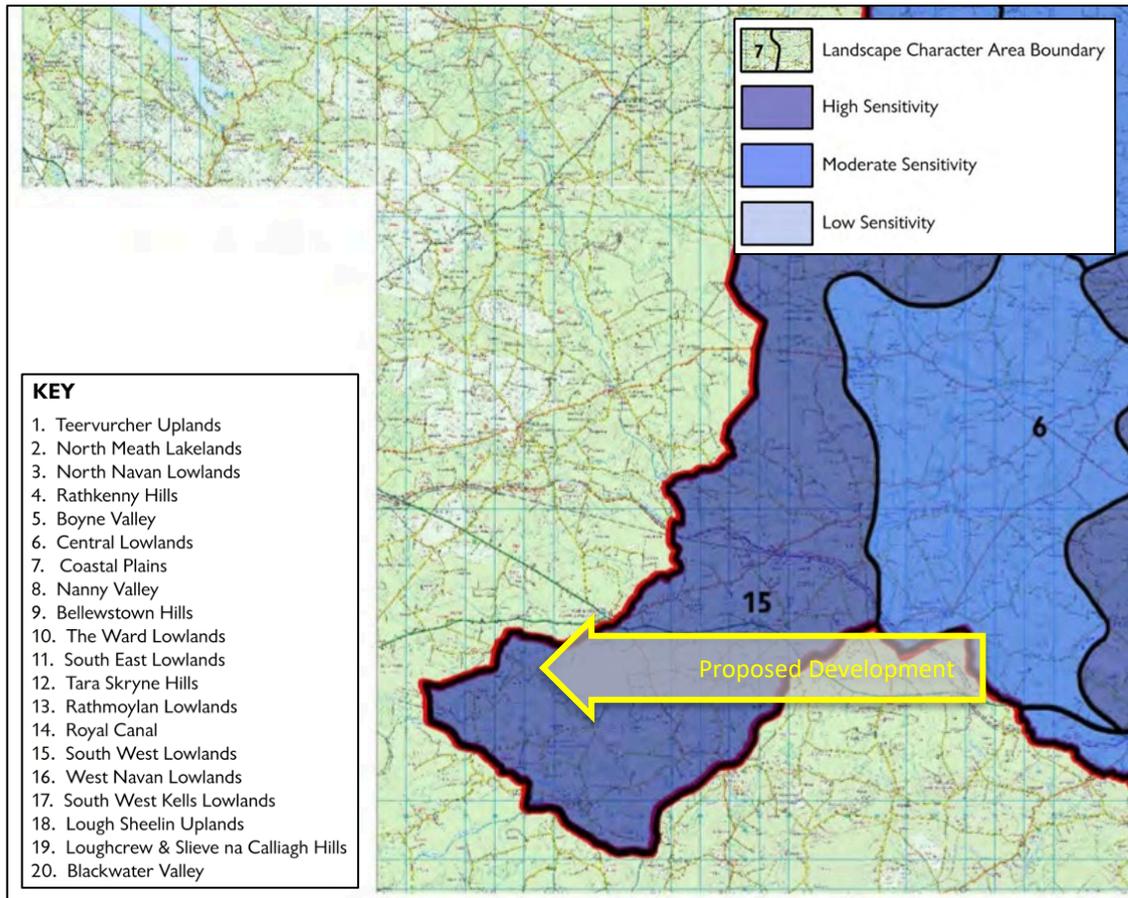
- *'HER POL 52 - To protect and enhance the quality, character, and distinctiveness of the landscapes of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards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



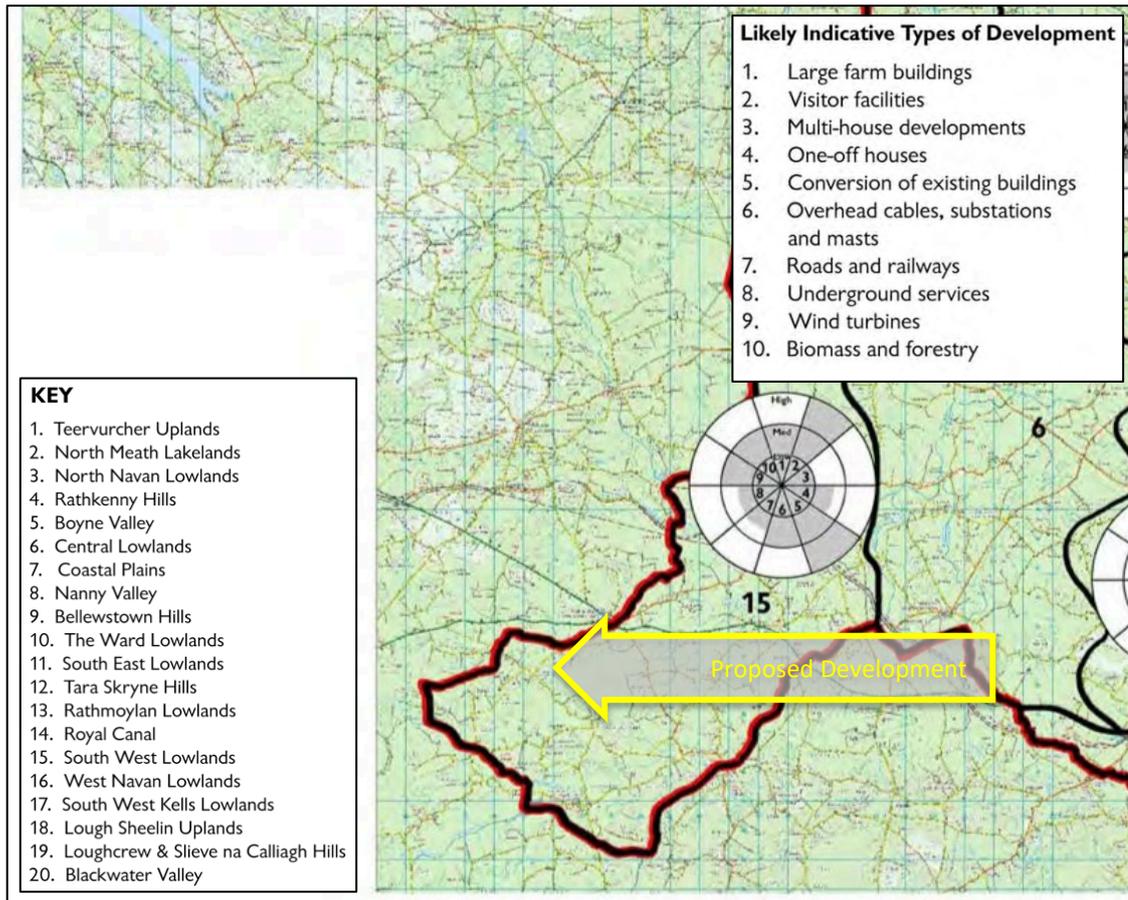
**Figure 14.4.1.1: Excerpt from Meath Landscape Character Assessment, map 1.0 showing approximate location of proposed development in relation to designated landscape character types and landscape character areas.**



**Figure 14.4.1.2: Excerpt from Meath Landscape Character Assessment, map 2.0 showing approximate location of proposed development in relation to landscape character areas and associated Value ratings.**



**Figure 14.4.1.3: Excerpt from Meath Landscape Character Assessment, map 3.0 showing approximate location of site in relation to areas of sensitivity.**



**Figure 14.4.1.4: Excerpt from Meath Landscape Character Assessment, map 4.0 showing the potential capacity for development within certain landscape character areas.**

#### 14.4.2 Views of Recognised Scenic Value

Views of recognised scenic value are primarily indicated within the current and draft Development Plans in the context of scenic views/routes designations, but they might also be indicated on touring maps, guidebooks, roadside rest stops or on post cards that represent the area.

##### County Meath

Designated scenic Views and Prospects within County Meath are listed in Appendix 10, in Volume 2 and on Map 8.6 of the Meath County Development Plan. There are no designated scenic viewpoints within the study area (Figure 14.4.2.1 refers).

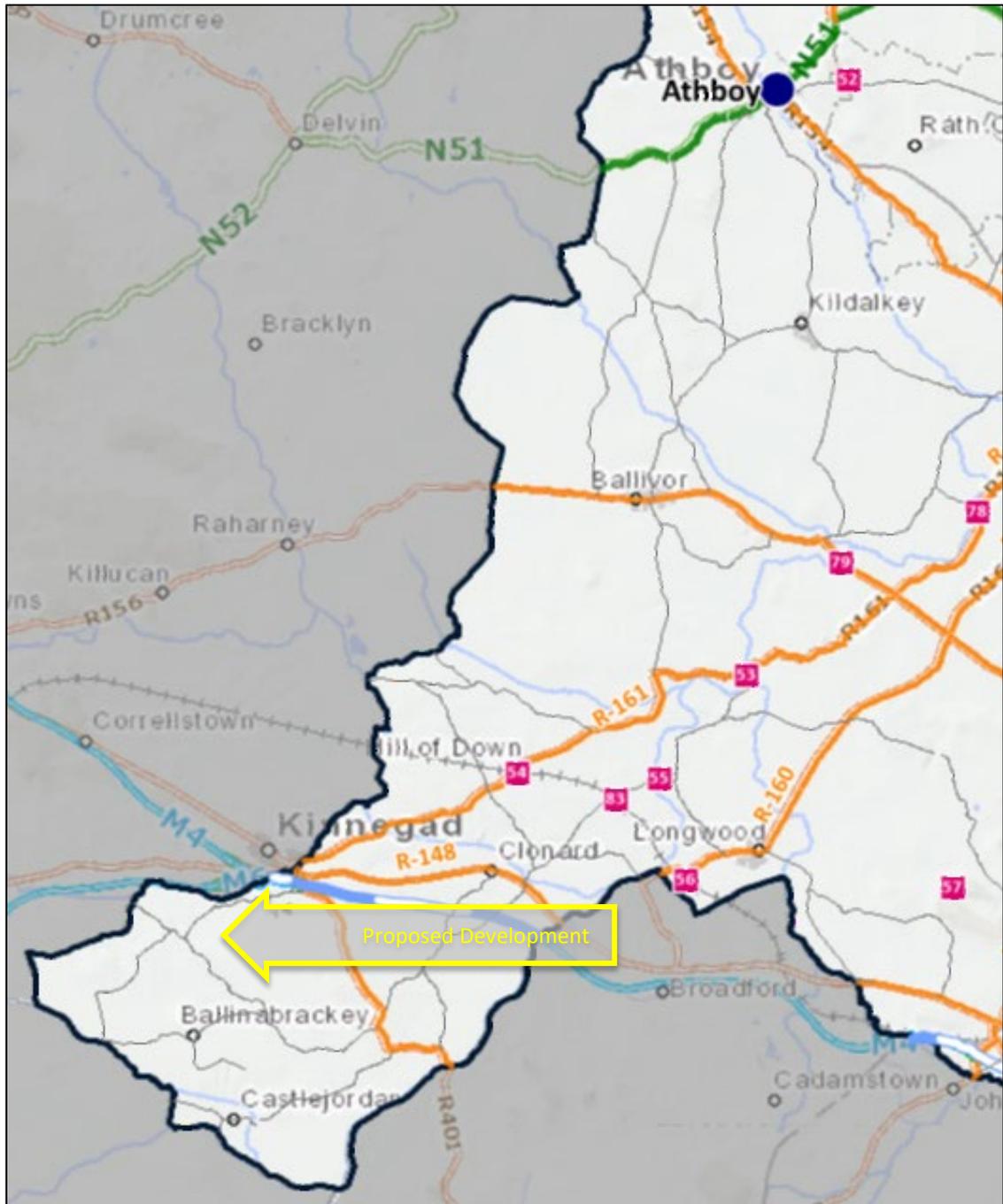


Figure 14.4.2.1: Excerpt from Meath Landscape Character Assessment, map 8.6 showing Views and Prospects.

County Westmeath and County Offaly

The study area includes areas within counties Westmeath and Offaly; however, these areas do not contain any scenic designations identified within the Westmeath or Offaly County Development Plans.



## 14.5 Existing Environment

The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape brought about by the proposed development will be assessed.

A description of the landscape and visual context of the proposed development and wider study area is provided below under the headings of landform and drainage, vegetation and land use, centres of population and houses, transport routes and public amenities and facilities and the site context. This includes elements that may be selected as visual receptors i.e. places and transport routes from which viewers can potentially see the proposed development.

### 14.5.1 Landform and Drainage

The study area is composed of gently undulating lands between 70m and 130m OD. The Mongagh River / Castlejordan River flows east through the study area to the south of the site, and the Kinnegad River meanders through the northern half of the study area. The application site is flanked by bogs to the west and east, the latter being Rossar Bog.

### 14.5.2 Vegetation and Land Use

The predominant land use in the vicinity is that of farmland consisting of small to medium-sized agricultural fields (Figure 14.5.2.1 refers). Field boundaries in the surrounding area tend to comprise of mounded ditches lined with mature trees. Mature tree-lined hedgerows also occur throughout the study area. However, land use is not homogenous as in the centre of the study area, immediately to the south of the application site, there is an existing quarry adjoined by the Breedon Cement Works; peat bogs to the east and west; commercial forestry to the northwest; and the urban area of Kinnegad to the north.



**Figure 14.5.2.1: Aerial view showing the application site boundary (red line) and the immediate landscape context (Google Earth Pro).**

### 14.5.3 Centres of Population and Houses

There is a reasonably dispersed rural population within the central study area, inhabiting crossroad settlements and linear clusters of dwellings along the road network. The main town is Kinnegad, c. 2km to the north of the application site, while Castlejordan, a smaller settlement, is located just within the southern extent of the study area.

### 14.5.4 Transport Routes

The M6 motorway is located c. 800m north of the application site and merges with the M4 motorway immediately to the south of Kinnegad. The R446, R401, R148, R161 regional roads converge on Kinnegad. A network of local roads also criss-crosses through the study area.

### 14.5.5 Public Amenities and Facilities

Recreational opportunities are limited to sports grounds and walking or cycling on the public road network.

### 14.5.6 Conservation Interests

Griffinstown House (c.1820) is a protected building located to the west of Kinnegad, and the curtilage has value as a distinct component of the landscape. A portion of the Mount Hevey Bog proposed Natural Heritage Area (pNHA) and Special Area Conservation (SAC) occurs



within the northernmost extents of the study area, located c. 4.5km from the application site. No other ecological designations were identified.

#### 14.6 Mitigation And Restoration Measures

The main mitigation measure employed in this instance is through 'mitigation by avoidance'. The siting of the proposed extraction area is entirely contained within the existing quarrying facility, which is located in a robust and well-contained rural area that also avails of both terrain and hedgerow screening such that the scheme will not be prominent within the surrounding landscape. In this respect, the proposed development is not perceived to impose itself on the existing landscape pattern.

#### 14.7 Identification of Viewshed Reference Points as a Basis for Assessment

Viewshed Reference Points (VRP's) are the locations used to study the visual impacts of a proposal in detail. It is not warranted to include each and every location that provides a view of a development as this would result in an unwieldy report and make it extremely difficult to draw out the key impacts arising from the proposed development. Instead, the selected viewpoints are intended to reflect a range of different receptor types, distances and angles. The visual impact of a proposed development is assessed by Macro Works using up to six categories of receptor type as listed below:

- Key Views (from features of national or international importance);
- Designated Scenic Routes and Views;
- Local Community views;
- Centres of Population;
- Major Routes; and
- Amenity and heritage features.

VRP's might be relevant to more than one category, and this makes them even more valid for inclusion in the assessment. The receptors intended to be represented by a particular VRP are listed at the beginning of each viewpoint appraisal.

The Viewshed Reference Points selected in this instance are set out in the Table 14.7.1 and Figure 14.7.1 below.

**Table 14.7.1: Outline Description of Selected Viewshed Reference Points (VRPs)**

VRP No.	Location	Direction of View
VP1	Local road, Knockersally/Colehill	NE
VP2	L8021 local road, Killaskillen	W
VP3	Local road, Cappaboggan	E
VP4	Local road, Killaskillen	S

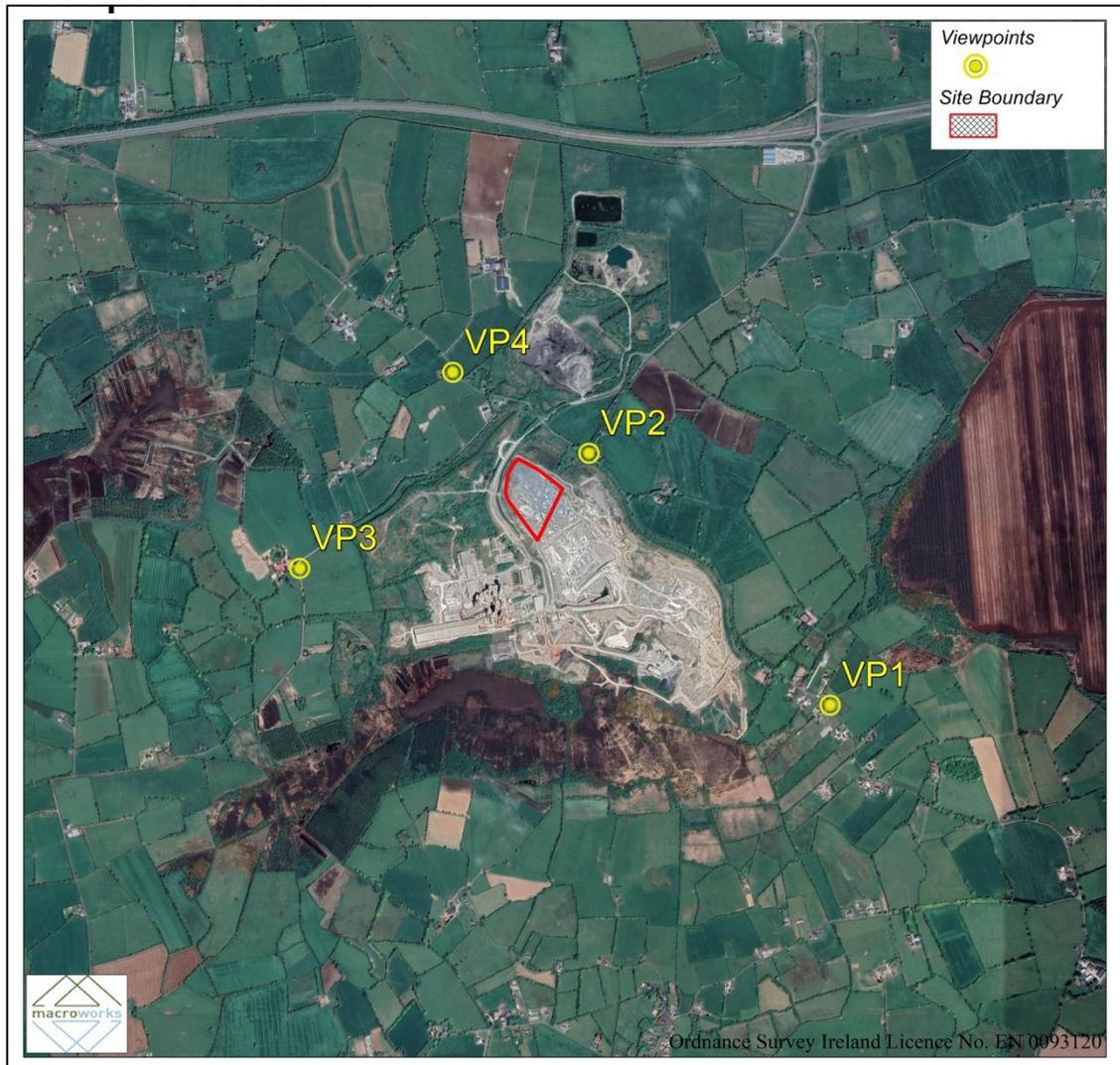


Figure 14.7.1: Viewpoint location map.

## 14.8 Impact Assessment

### 14.8.1 Landscape Impact

#### Landscape Value and Sensitivity

Landscape value and sensitivity are considered in relation to a number of factors highlighted in the Guidelines for Landscape and Visual Impact Assessment 2013, which are set out below and discussed relative to the proposal site and wider study area.

#### **Landscape quality (condition)**

The area around the application site is dominated by the presence of the Breedon Cement Works and adjoining quarry, which has a distinctly industrial extractive character and is of a substantial scale. There is a range of agricultural land management practices within the wider study area, some relatively intensive, with few untidy, fallow or unused areas. Generally, field boundaries appear well maintained, but there are instances where post and wire fences have replaced hedgerows. The field patterns have changed dramatically within the study area due



to hedgerow removal, agricultural intensification and the M4 and M6 motorways. Most of the bog areas within the study area have been exploited for peat production.

### **Scenic quality**

A pleasant countryside aesthetic prevails in some portions of the study area. However, it is generally a rural environment with associated productive rather than scenic values. Furthermore, it is dominated by the overt cement factory structures.

### **Rarity and Representativeness**

The study area is not a distinctive or rare landscape, particularly in the context of County Meath - a county that contains numerous landscape heritage features that are recognised at an international level. There are no particularly unique or remarkable landscape elements within the study area.

### **Conservation interests**

National Parks and Wildlife Service have two designations associated with the small portion of the exploited bog that occurs within the northern part of the study area. However, due to the notable intervening distance, neither has any direct associations with the application site.

### **Recreation Value**

The landscape of the study area is not particularly synonymous with outdoor recreation other than perhaps informal use of the bog areas.

### **Perceptual aspects**

A minor degree of rural tranquillity occurs in the wider study area, away from the main roads, where the hedgerow structures create some sense of enclosure, and there are some naturalistic qualities relating to the Mongagh River / Castlejordan River and the Kinnegad River.

### **Cultural Associations**

There would not appear to be any strong landscape associations to particular people, historical events or mythology within the central study area. That is not to say that none exist, as all places have local landscape associations with certain families or historical incidents, such as the churches, cemeteries, ringforts, crannogs, holy wells and moated sites; however, these would not necessarily be associated with landscape values for the wider population. County Meath, in general, has a high concentration of important heritage sites but these are not located in this part of the County.

### **Landscape Sensitivity Summary**

LCA 15 - 'South West Lowlands' has been categorised as having 'high value' in the Meath CDP, which is the median category on the (5 level) scale, and although this LCA has been judged to be of 'moderate / medium sensitivity' in the Meath CDP, the bog areas adjacent to the application site identify more readily as post-industrial remnants rather than as a typical rural



typology, and a key consideration is that the central study area is already strongly influenced by the existing Breedon Cement Works and adjoining quarry.

Based on the factors outlined above, it is considered that this is a complex and productive landscape with typical rural land uses contrasted with extractive industries in the hinterland of Kinnegad. The study area is by no means a rare or distinctive landscape and instead is a typical rural setting with robust and productive landscape values rather than susceptible scenic or naturalistic values. On balance, the landscape sensitivity to the proposed development is deemed to be **Low**.

#### Magnitude of Landscape Effects

In terms of physical landscape effects, the proposal involves deepening of a 4.13 hectare area of the north-western portion of the current permitted limestone quarry by four extractive benches to 10m OD.

The physical landscape impacts are classified as 'negative' and their duration is 'permanent' (effects defined as lasting over sixty years in accordance with EPA guidelines). Although there is potential that the quarry could be subject of an infill proposal in the future, quarrying activities are generally not readily reversible.

This is a productive extractive and rural landscape containing the existing quarry and Breedon Cement Works, intensive arable agricultural, major transportation infrastructure and other rural hinterland industries. Therefore, it is not considered that the proposed deepening of a portion of the existing extraction area will noticeably detract from the integrity of landscape patterns or the productive landscape character that prevails in the area.

Quarry related activities, such as the movement of heavy vehicles within, as well as to and from the existing quarry are already commonplace in the immediate context of the application site. The proposed development will not result in any increase to the output of the existing limestone quarry or to the production capacity of the existing cement plant to the south. The proposed extraction area is within an already active quarry, thus will only involve an extension to the duration of the current quarrying activity, but without a notable change in nature or frequency.

On the basis of the factors discussed above it is considered that the magnitude of landscape impact is in the order of Low in the immediate vicinity of the application site (c. <500m from site boundaries). The magnitude of impact will soon reduce thereafter as the proposed deepening to the existing extraction area in the north-eastern portion of the existing quarry becomes a smaller component of the overall landscape fabric and is will be read in conjunction with the existing quarry.

With reference to the significance matrix (Table 14.3.1.3), the Low landscape sensitivity judgement attributed to the study area coupled with a Low magnitude of landscape impact is considered to result in an overall significance of no greater than **Slight-imperceptible** within the immediate vicinity of the site and reducing to slight and Imperceptible at greater distances.



## 14.8.2 Visual Impact Assessment

### Sensitivity of Visual Receptors

Table 14.8.2.1 uses the criteria set out in Section 14.3.2 to determine sensitivity at each of the viewpoints selected to represent visual receptors.

**Table 14.8.2.1: Analysis of Visual Receptor Sensitivity at Viewshed Reference Points**

Scale of value for each criterion			
Strong association	Moderate association	Mild association	Negligible association

Values associated with the view	VP1	VP2	VP3	VP4
Susceptibility of viewers to changes in views				
Recognised scenic value of the view				
Views from within highly sensitive landscape areas				
Primary views from residences				
Intensity of use, popularity (number of viewers)				
Viewer connection with the landscape				
Provision of vast, elevated panoramic views				
Sense of remoteness / tranquillity at the viewing location				
Degree of perceived naturalness				
Presence of striking or noteworthy features				
Sense of historical, cultural and / or spiritual significance				
Rarity or uniqueness of the view				
Integrity of the landscape character within the view				
Sense of place at the viewing location				
Sense of awe				
<b>Overall sensitivity assessment</b>	<b>ML</b>	<b>ML</b>	<b>ML</b>	<b>ML</b>

N = Negligible; L = low sensitivity; ML = medium-low sensitivity; M = medium sensitivity; HM = High-medium sensitivity; H = high sensitivity; VH = very high sensitivity

## 14.8.3 Magnitude of Visual Effects

The assessment of visual impacts at each of the selected viewpoints is aided by photomontages of the proposed development. Photomontages are a 'photo-real' depiction of the scheme within the view utilising a rendered three-dimensional model of the development, which has been geo-referenced to allow accurate placement and scale. For each viewpoint, the following images have been produced:

1. Existing view; and
2. Extent view (showing lateral extents of the existing quarry and the 4.13 hectares area proposed to be deepened.)



**Table 14.8.3.1: Assessment of visual impacts at selected viewpoints**

VP No.	Title and description of existing view	Receptor Sensitivity	Description and Magnitude of Visual impact	Pre-mitigation Significance/ Quality/ Duration of Visual Impact	Residual Significance/ Quality/ Duration of Visual Impact
VP1	<b>Local road, Knockersally/Colehill</b> This is a complex roadside view. In the foreground is the pavement of a road adjoined by several residential properties, one which is prominent in the middle ground. The view is foreshortened by vegetation in the middle-to-background.	ML	The proposed quarry deepening will be fully screened by existing vegetation and landform from this location, consequently the magnitude of impact is deemed <b>Negligible</b> .	Imperceptible/ Neutral/ Long term.	Imperceptible/ Neutral/ Long term.
VP2	<b>L8021 local road, Killaskillen</b> This is an enclosed view. A local road junction occupies the foreground. A derelict dwelling within the perimeter of the existing quarry and a stone boundary wall occur in the middle ground. Mature vegetation within the existing quarry foreshortens the view to the west.	ML	The proposed quarry deepening will be fully screened by existing vegetation and landform from this location, consequently the magnitude of impact is deemed <b>Negligible</b> .	Imperceptible/ Neutral/ Long term.	Imperceptible/ Neutral/ Long term.
VP3	<b>Local road, Cappaboggan</b> This is a broad view afforded from a local road to the west of the proposed development. In the foreground, a gently undulating pasture slopes gradually towards the viewpoint. The uppermost portion of an existing berm within the existing quarry site are visibly rising just above the canopies of a belt of mature vegetation in the middle ground. Structures at the Lagan Cement Lansdown Cement Works are readily identifiable to the southeast.	ML	The proposed quarry deepening will be fully screened by existing vegetation and landform from this location, consequently the magnitude of impact is deemed <b>Negligible</b> .	Imperceptible/ Neutral/ Long term.	Imperceptible/ Neutral/ Long term.
VP4	<b>Local road, Killaskillen</b> This is a locally elevated point on a local road to the north of the application site. Roadside hedgerows are maintained at low height and are neatly trimmed. In the	ML	The proposed quarry deepening will be fully screened by existing vegetation and landform from	Imperceptible/ Neutral/ Long term.	Imperceptible/ Neutral/ Long term.



	background tree planting within the existing quarry site screens views to the south but the upper portions of buildings at the at the Lagan Cement Lansdown Cement Works are also clearly visible.		this location, consequently the magnitude of impact is deemed <b>Negligible</b> .		
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#### **14.9 Cumulative and In-combination Impact**

The main cumulative effect in this instance is in relation to the existing adjoining quarry. The in-combination effects of the existing quarry and this proposed deepening of the north-western portion has been the focus of the assessment already undertaken in respect of both landscape impacts and visual impacts in Section 14.8. Separate consideration of cumulative effects is, therefore, not considered necessary in this instance. Overall, the cumulative landscape and visual impact of the proposed development is not considered to be significant.

#### **14.10 Interactions with other Environmental Attributes**

None identified.

#### **14.11 Residual Impacts**

The proposed mitigation is considered to be embedded within the design of the development and were therefore included in the photomontages and formed an integral part of the assessment of predicted impacts in Section 14.8. Thus, residual impacts are considered to be the same as predicted impacts in this instance, as it was considered unnecessary / confusing to assess pre-mitigation and post-mitigation views separately.

#### **14.12 Monitoring**

Ongoing monitoring of effects or mitigation measures is not considered necessary in this instance.

#### **14.13 Difficulties Encountered**

There were no difficulties encountered in the process of completing the LVIA.



## **Appendix 14.1 MONTAGES**