12. LANDSCAPE AND VISUAL

12.1 Introduction

This Chapter of the Environmental Impact Assessment Report (EIAR) addresses the potential landscape and visual impact of the Proposed Development, which includes plans to further develop the existing quarry and all associated siteworks at the existing Ballyquin Quarry.

The emphasis in this chapter is on the likely significant direct and indirect effects of the Proposed Development. The Chapter includes the Landscape and Visual Impact Assessment (LVIA) methodology, descriptions of the Proposed Development and existing landscape based on relevant guidance. It presents the relevant landscape policy with specific reference to extraction and the study area in which the Proposed Development Site is located.

The landscape of the Site and wider area is described in terms of its existing character, which includes a description of landscape value, the susceptibility of the landscape to change and a determination of landscape sensitivity. The LVIA of the Proposed Development uses representative viewpoints. The potential impacts in terms of both landscape and visual are then assessed, including cumulative impacts.

This chapter comprises the following sections:

- **Introduction:** Description of the Proposed Development, its location and essential aspects requiring the most consideration from an LVIA perspective;
- **Methodology and Assessment Criteria:** Outline of the methodology and guidance used to conduct the LVIA;
- **Landscape Baseline:** Review of the landscape policy context and landscape designations pertinent to the Site, a description of the baseline landscape conditions and character of the Proposed Development Site and wider landscape setting and identification of landscape value and landscape sensitivities;
- **Visual Baseline:** Appraisal of likely visibility of the Proposed Development from prominent visual receptors located within 2.5km of the Site, including a description of visibility from designated scenic amenity designations. The visual baseline identifies key visual receptors and locations selected as viewpoints for impact assessments;
- **Landscape and Visual Effects:** Determination of the likely 'Significant' landscape and visual effects of the Proposed Development, including an assessment of likely cumulative landscape and visual effects. The assessment of effects is informed by a site visit. Cumulative and in-combination effects are also assessed, addressing the interactions of the various development elements under assessment in this EIAR, as well as other permitted and planned developments in the wider landscape area.

12.1.2 Statement of Authority

MKO has developed extensive expertise and experience over the last 15 years in the LVIA of a range of projects, including residential developments, quarries, road schemes and wind energy developments.

This LVIA was carried out by Alan Roache. Alan is an Environmental Scientist and LVIA Specialist with MKO. His primary role at MKO is producing the LVIA chapter of EIAR reports. Alan holds an MSc. in Environmental Leadership from University of Galway. Since joining MKO, Alan has contributed to the LVIA of renewable energy infrastructure, quarries, commercial, recreational, and residential projects.

The LVIA was reviewed and finalised by Jack Workman MSc, TMLI. Jack is member of the British Landscape Institute as a Technician Member (TMLI) and he is the Landscape & Visual Project Director

at MKO. Jack is an Environmental Scientist and LVIA specialist. Jack Workman's primary role at MKO is producing the LVIA chapter of EIA reports for large infrastructure developments. Jack holds an MSc. in Coastal and Marine Environments and a BSc. in Psychology, he is a member of the Landscape Research Group, as well as holding a membership with the Chartered Institute of Water and Environmental Management.

12.1.3 Proposed Development Description

A detailed description of the Proposed Development is included in Chapter 3. The planning application boundary area measures approximately 97.5 ha. The Proposed Development being applied for under this planning application includes for the construction of a soil inspection shed, refuelling area, settlement ponds, road improvements, drainage network and environmental berms. The Proposed Development also includes for the extraction, processing and washing of sand from an area measuring approximately 16.3 ha which will allow for the extraction of approximately 1,428,571 tonnes of material. The Proposed Development also includes for the infilling and restoration of an existing and future quarry void with inert soil and stone over an area of approximately 38 ha. Extraction of sand will stop when rock is met.

12.1.3.4 Construction Phase

Construction works at the Site will be minimal. It is estimated that the construction phase of the proposed works required will take approximately 1 month. The construction phase will include:

- Preparation of Site for construction;
- Stripping of overburden soils under archaeological supervision for use in construction of environmental berms and ongoing Site restoration works;
- Removal of existing internal hedgerows in greenfield extraction area,
- Pouring of concrete for soil inspection area/refuelling area foundation;
- Construction of new drainage network and fuel/oil interceptor at refuelling area;
- Erection of quarantine inspection shed;
- Road paving/improvements;
- Construction of settlement ponds;
- Construction of a fixed processing plant including water management system and ponds for the washing of aggregates; and
- Construction of a new chain-link perimeter fence on the eastern and northern boundaries of the extraction area.

Minor excavations will be required for the installation of drainage pipework. It is proposed that excavated soil material will be reused onsite.

It is anticipated that normal construction working hours will be in line with the opening hours for the existing operational quarry as set out in Section 3.5.5 of Chapter 3.

12.1.3.5 Proposed Extraction

The Proposed Development being applied for under this current planning application includes for the extraction, processing and washing of sand from an area measuring approximately 16.3 ha which will allow for the extraction of approximately 1,428,571 tonnes of material. The Proposed Extraction Area is all within the same landholding of the applicant.

It is intended to extend the extraction area of the existing quarry horizontally and vertically using mechanical excavation techniques. The depth of sand varies across the Proposed Extraction Area, as a result levels of excavation will vary from approx. 76mAOD in the north of the Site to 57.5mAOD in the south of the Site. The zone of sand ranges from 7 to 14m in thickness. Extraction of sand will stop when rock is met. There will be no extraction of rock. Extraction will be by dry working above the water

table. Extracted material will be brought to the washing plant if it requires washing otherwise it will be sold directly out the gate.

12.1.3.6 Proposed Infilling

There will be a phased restoration of the quarry void working from the base of the void vertically building up soil and stone. The material will be spread in layers, approximately 1 to 2m each, up to ground level. If required, the layers will be compacted using the dozer which is spreading the material.

The temporary side slopes will be engineered to form slopes in the order of 1:1.5 (vertical: horizontal). Temporary access ramps into and out of active backfilling areas will be at a gradient of approximately 1:10 (vertical: horizontal).

During Site restoration works the upper surface of the backfilled materials will be graded so as to ensure surface water run-off falls to drains around the perimeter of the infill area as it is being backfilled.

Following completion of the infilling works, the topsoil removed during quarrying will be placed and the soils rolled. Natural colonisation of plant species will occur from the seedbank within the redistributed soil. Following completion of the restoration and site decommissioning works, provision will be made for further, short-term (2-year) period of environmental monitoring of air, surface water and groundwater.

12.1.3.7 Proposed Landscape Restoration Plan (LRP)

A dedicated Landscape Restoration Plan (LRP) has been prepared as part of the Proposed Development. The details of the LRP are illustrated in Appendix 12-1 and the key measures and details of the LRP are reported in Appendix 12-2.

The LRP aims to mitigate landscape and visual impacts during active phases (extraction and infilling) of the Proposed Development. A long-term objective of the LRP is to restore the landscape of the Site to harmonise with the landform and landcover of the lands surrounding the Proposed Development Site after extraction and infilling has occurred. A key component of the LRP is a nature positive design which supports the Biodiversity Enhancement and Management Plan (BEMP) which is included as Appendix 5-1 of Chapter 5. The LRP will support the BEMP in the restoration and replacement of any features of the Site (e.g. hedgerows or woodland) which support biodiversity, and which will be lost during the construction, extraction or infilling phases. In a general sense, where vegetation loss will occur during extraction and infilling, planting is proposed to replace any losses with an aim of enhancing the biodiversity of the Site. The LRP is illustrated in Appendix 12-1 showing the following 3 elements:

- Page 1 - Landscape and Visual Mitigation Measures During the extraction
- Page 2 - Landform Restoration during proposed infilling
- Page 3 - Landcover Restoration and Proposed Planting After infilling

12.1.4 Essential Aspects of the Proposed Development from an LVIA perspective

Guidance for LVIA, the Guidelines for Landscape and Visual Impact Assessment (3rd ed., LI & IEMA, 2013) states that:

> *"it is important to make sure that the project description provides all the information needed to identify its effects on particular aspects of the environment. For LVIA it is important to*

understand, from the project description, the essential aspects of the scheme that will potentially give rise to its effects on the landscape and visual amenity".

The essential aspects of the proposal from an LVIA perspective are the proposed extraction and infilling, as these are the activities likely to cause the greatest landscape and visual effects. The essential aspects include the requisite extraction activities in the extraction phase, and then also the activities required to infill and restore the quarry. From a landscape effects perspective, the extraction and infilling will cause the greatest change to the physical fabric of the landscape and landscape character of the Site and will be a key focus of the assessment of landscape effects in this Chapter. There will also be landscape and visual effects during the infilling as part of the restoration. This will result in a visual effect as the existing void will be infilled, hence, causing a rise in elevation from the ground level within the quarry void.

In terms of visual effects, there is a greenfield area to the southeast of the Site beyond the existing quarry void where new extraction is proposed. This is the most visually exposed area of the Site and will be a key focus of the assessment of visual effects in this Chapter.

Following completion of the extraction phase, infilling and replanting will occur as part of the LRP, as described previously in 12.1.3.7 Proposed Landscape Restoration Plan (LRP). This will likely cause positive change following extraction and infilling and will also be comprehensively assessed in the Chapter.

The proposed soil inspection shed is approximately 10.7m tall and the proposed washplant is approximately 8.7m tall, which are potentially visually prominent infrastructure elements of the Proposed Development. The landscape and visual effects arising from these elements are considered in the visibility appraisals conducted on site and are reported later in this Chapter.

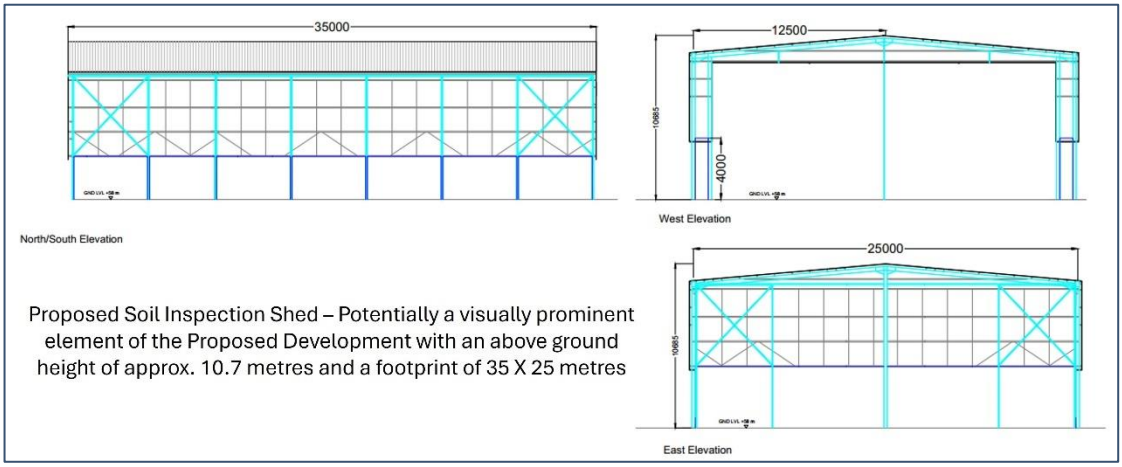

Figure 12-1 Side profile of the Proposed Inspection Shed Extracted from Planning Drawings of the Proposed Development

12.1.5 Site Location

The Proposed Development Site is located approximately 8km southwest of the town of Killaloe and 1.5km to the northwest of the village of Bridgetown. The Site is accessed from an existing entrance on the R466 Regional Road. A map of the location of the Proposed Development is shown below. The boundary of the Proposed Development Site is defined by the green line marked on the map as 'EIAR Study Area'. However, the LVIA in this Chapter considers a wider study area for assessment of landscape and visual effects in all areas within 2.5km of the Site, defined by a black dotted line as the 'LVIA Study Area'.

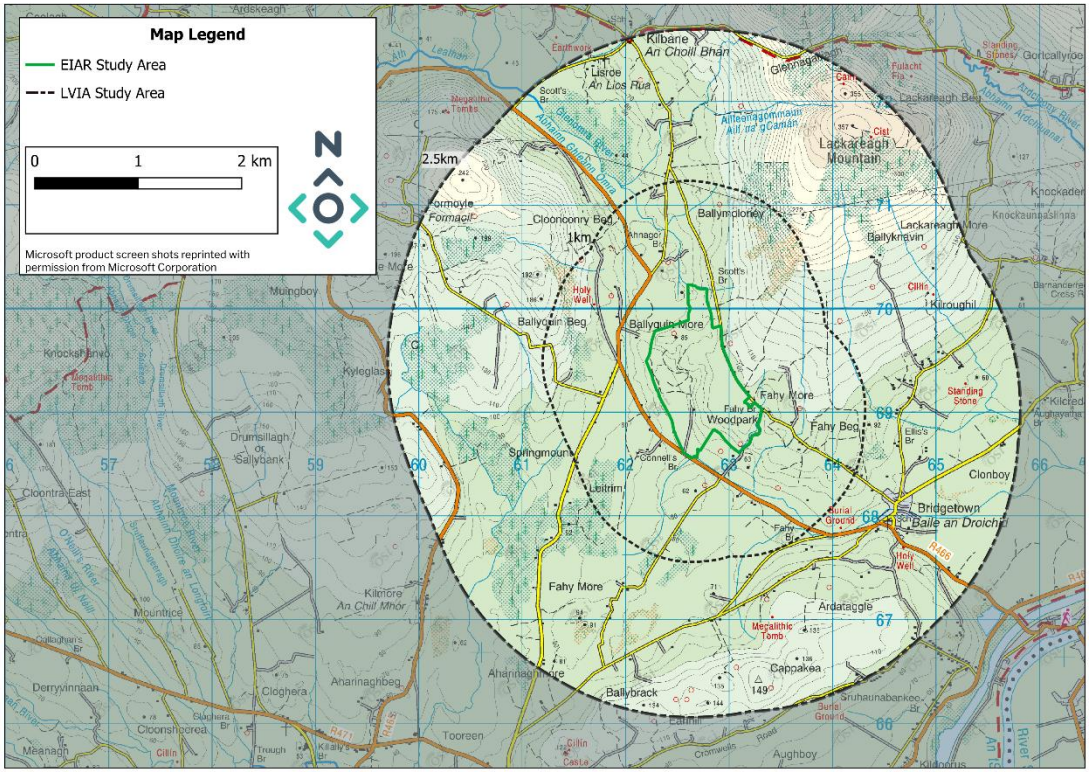

Figure 12-2 Site Location and LVIA Study Area

12.1.6 'Do-Nothing' Scenario

If the Proposed Development were not to proceed, no changes would be made to the current land-use practice. The Site would remain largely unaltered as an existing quarry extraction Site as a result of the Do-Nothing Scenario.

12.2 Methodology and Assessment Criteria

This section outlines the methodology used to undertake the LVIA of the Proposed Development, including a description of the following:

- Guidelines and reference materials used to conduct the LVIA;
- Study area chosen for the conduct of baseline and visual investigations;
- Methods for assessing landscape effects;
- Methods for assessing visual effects.

12.2.1 Guidance & Reference Documents

In 2000, the Department of the Environment and Local Government (DoELG, formerly Department of Environment and Local Government) published the 'Landscape and Landscape Assessment: Consultation Draft of Guidelines for Planning Authorities' (hereafter, DoELG 2000 Guidance), which recommended that all Local Authorities adopt a standardised approach to landscape assessment for incorporation into development plans and consideration as part of the planning process. However, at the time of writing this report, the DoELG 2000 Guidance remains in draft form.

In 2002, Ireland signed and ratified the European Landscape Convention (ELC), which introduced a pan-European concept centring on the quality of landscape protection, management and planning. In 2015, the Department of Arts, Heritage and the Gaeltacht accordingly published a National Landscape Strategy for Ireland, aiming to ensure compliance with the ELC and containing six main objectives, which included developing a 'National Landscape Character Assessment' as well as 'Landscape Policies'.

Certain sections of this EIAR are based on the landscape character assessment guidelines presented in the DoELG document outlined above; however, the LVIA in this report is primarily based on the following guidance, published in the UK:

- Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) (Landscape Institute & Institute of Environmental Management and Assessment [LI & IEMA], 2013).

In addition, the following three other guidelines were also consulted during the preparation of this LVIA:

- 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' (Environmental Protection Agency of Ireland [EPA], 2022);
- 'Visual Representation of Development Proposals' (Landscape Institute Technical Guidance Note 06/19, 2019) (hereafter, LI TGN 06/19);
- Clare County Development Plan 2023–2029 (CCDP).

12.2.2 Scope and Definition of the LVIA Study Area for Baseline Landscape and Visual Investigations

The GLVIA3 (LI & IEMA, 2013) guidance refers to the identification of the area of landscape that is to be covered while assessing landscape and visual effects. The guidelines state:

> *'The study areas should include the site itself and the full extent of the wider landscape around it which the proposed development may influence in a significant manner'.*

For the purposes of this LVIA, where the 'Proposed Development Site' or 'the Site' is referred to in this Chapter, this relates to the EIAR Study Area as is illustrated in green in Figure 12-2 . The Proposed Development Site is discussed in some detail in terms of its landscape character in Section 12.3 'Landscape Baseline'. However, the landscape and visual baseline mapping, visibility appraisals and viewpoint selection are based on a wider study area, consisting of all areas within a 2.5km buffer from the EIAR Study Area, referred to throughout this Chapter as the 'LVIA Study Area'. The LVIA Study Area was shown previously on the Site location map in Figure 12-2 .

Considering the scope and scale of the Proposed Development and its existing landscape setting, it is considered that landscape and visual effects will not be significant beyond the 2.5km LVIA Study Area; therefore, all landscape and visual effects from locations beyond 2.5km were scoped out of this assessment.

Initial baseline investigations of the LVIA Study Area were conducted through desk-top studies, constraints mapping and site visits. The landscape baseline exercise (presented in Section 12.3) identifies landscape policy pertinent to the Site and LVIA Study Area such as landscape designations contained in the CCDP. This includes policies on landscape and landscape character, designated landscapes and protected views. The Proposed Development Site is described in terms of landscape character types as identified in the DoELG 2000 Guidance as well as the surrounding landscapes within the LVIA Study Area. The landscape baseline exercise identifies key landscape values and sensitivities within the Site and wider landscape setting.

The visual baseline exercise (presented in Section 12.4 'Visual Baseline') includes an appraisal of the likely visibility of the Proposed Development from key visual receptors within the surrounding landscape as well as those within the immediate setting of the Site itself. This includes a description of views towards the Proposed Development from a variety of perspectives, informing the visual impact assessment.

12.2.3 Assessing Landscape Effects

In line with the GLVIA3 (LI & IEMA, 2013), the potential effects on landscape receptors and visual receptors are assessed separately. This section details the methods used to determine the likely significant landscape effects of the Proposed Development on landscape receptors.

The methodology for assessing landscape effects uses qualitative methods in order to arrive at an overall impact assessment, based on the DoELG 2000 Guidance as well as the GLVIA3 (LI & IEMA, 2013).

Here, 'landscape effects' are described as changes which affect the landscape as a resource. This includes how the Proposed Development will affect the physical elements that make up the landscape, as well as its aesthetic and perceptual aspects and its landscape character. Landscape effects also relate to changes in the structure of the landscape. Under the GLVIA3 (LI & IEMA, 2013), the assessment of likely significant effects on landscape receptors includes a judgement on both the 'sensitivity' of the receptor as well as the 'magnitude of change'.

12.2.3.4 Landscape Sensitivity: Value & Susceptibility to Change

Landscape 'Sensitivity' is described in the GLVIA3 (LI & IEMA, 2013) as a combination of the landscape's 'Susceptibility to Change' as well as the 'Value' attached to the landscape.

Landscape susceptibility to change is described as the ability of the landscape receptor (either the overall character, quality of the landscape or a particular landscape feature) to accommodate the proposed development without undue consequences for the maintenance of the baseline (existing) landscape and/or the aims of landscape planning policies and strategies. Table 12-1 below presents differing assessment criteria for susceptibility to change.

Table 12-1: Assessment Criteria for Landscape Susceptibility to Change

Susceptibility of Landscape Receptor to Change	Description and Example Criteria
'High'	Landscape receptors where the overall character of the landscape receptor or the nature of the individual landscape receptor causes it to have a high susceptibility to change considering its inherent characteristics and where the landscape receptor has a low ability to accommodate the proposed change without undue consequences for the maintenance of its landscape character, and/or its quality or condition, and/or its particular aesthetic and perceptual aspects, and where such change is not in compliance with planning policies/strategies.
'Medium'	Landscape receptors where the overall character of the landscape receptor or the nature of the individual landscape receptor causes it to have a medium susceptibility to change considering its inherent characteristics and where the landscape receptor has a moderate ability to accommodate the proposed change without undue consequences for the maintenance of its landscape character, and/or its quality or condition, and/or its particular aesthetic and perceptual aspects, with consideration given to planning policies/strategies.
'Low'	Landscape receptors where the overall character of the landscape receptor or the nature of the individual landscape receptor causes it to have a low susceptibility to change considering its inherent characteristics and where the landscape receptor has a Strong ability to accommodate the proposed change without undue consequences for the maintenance of its landscape character, and/or its quality or condition, and/or its particular aesthetic and perceptual aspects, and where such change may be in compliance with planning policies/strategies.

Landscape 'Value' is a combination of values which are assessed in Section 12.3 'Landscape Baseline', combining any formal landscape designations, and, where there are no designations, judgements based on individual elements of the landscape receptor, for example particular landscape features, notable aesthetic, perceptual or experiential qualities, and combination of these contributors.

Notably, the GLVIA3 (LI & IEMA, 2013, p.89) states that:

> *'...there should not be over-reliance on designations as the sole indicator of value'.*

Accordingly, the assessments of landscape value undertaken in the LVIA included consideration of various elements that contribute to landscape value of specific receptors, using best practice standards and professional judgement. Where this occurred, landscape value was judged based on clearly stated criteria. Table 12-2 below presents differing assessment criteria for landscape value.

Table 12-2 Assessment Criteria for Landscape Value

Value Attached to Landscape Elements	Description and Example Criteria
'High'	Landscape receptors forming part of designations (e.g. areas of amenity, scenic routes/views) in the development plan, or at a national or international level, or landscape receptors not designated but where the receptor is judged to be of equivalent value using clearly stated criteria including wildness, naturalness, very strong cultural heritage or natural heritage associations and/or very high recreational value.
'Medium'	Landscape receptors where value is not formally designated but are of value as good examples of high quality, intact landscapes or landscape features and are deemed to be of relatively high scenic quality. Landscapes or landscape receptors that contain some rare elements, include areas or features which are wild or have a sense of naturalness, have strong cultural associations or which have recreational value.
'Low'	Landscapes that are not formally designated and considered as modified. Areas which do not have particularly scenic qualities, do not include rare elements or landscape features and do not have strongly evident cultural or heritage associations.

Section 12.3 'Landscape Baseline' also describes and determines the landscape value of the Proposed Development Site and its wider landscape setting in order to establish the capacity of the immediate landscape, as is prescribed by best practice guidance (GLVIA3, 2013, p.80):

> *'...as part of the baseline description the value of the potentially affected landscape should be established'.*

Comprehension of landscape value and its susceptibility to change enables determination of the sensitivity of the landscape at a micro-level, as well as the Proposed Development Site itself and the wider landscape setting.

In combining the assessment of the landscape value of a landscape receptor with the susceptibility to change of that receptor, it is noted here that a judgement of 'High' landscape value does not necessarily imply that this receptor has a 'High' susceptibility to change, and it is emphasised that this relationship can be complex. The combination of these to judgements, which determines the overall landscape 'Sensitivity', is undertaken using professional judgement with the rationale for judgements clearly explained in the description of the assessment of effects or in the baseline study. On this basis, landscape receptors have been assigned one of the four following 'Sensitivity' ratings:

- Very High;
- High;
- Medium;
- Low.

No table is provided for the description of these different classifications of landscape sensitivity as the relationship between susceptibility to change and landscape value is inherently complex and not suitable to concise definitions. It is noted that sensitivity classifications are generally guided by local and national planning policy, particularly for Landscape Character Areas (LCAs) and county policy in relation to these, as well as other relevant policy in relation to quarry developments. However, it is further noted that, in cases where local variations in landscape receptors merited smaller-scale focused

assessment potentially differing from the policy, this was undertaken using professional judgement and is clearly explained in the text of this Chapter.

12.2.3.5 Magnitude of Landscape Change

The 'Magnitude of Change', both within a given LCA or for a specific landscape receptor, is defined by a combination of the visual presence—that is, the size and scale—of the change, the extent of the area to be affected and the duration and reversibility of the effect. As part of the impact assessment process, the magnitude of change for each LCA and landscape receptor was assessed using the definitions outlined below in Table 12-3.

Table 12-3 Assessment Criteria for Magnitude of Landscape Change

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

12.2.3.6 Landscape Effects Assessment Matrix

The overall 'Significance' of landscape effects is determined by combining the landscape receptor 'Sensitivity' and the 'Magnitude of Change' classifications, according to the Landscape Effects Assessment Matrix shown below in Table 12-4.

In the matrix, landscape receptor sensitivity is shown in the first, left-hand column and magnitude of landscape change is shown in the first row at the top. This matrix is used as an indicative tool to assist in determining the significance of landscape effects. In different circumstances, differing levels of mitigating factors may ultimately result in a different determination of the final rating of significance. The 'Significance' of a landscape effect is based on a balance between the 'Sensitivity' of the receptor and the 'Magnitude of Change' of the effect.

Table 12-4 Landscape Effects Assessment Matrix

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

The final 'Significance' rating of the landscape effect is then arrived at using a combination of the matrix and the EPA (2022) classification definitions, shown below in Table 12-5.

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

Table 12-5 Impact Assessment Significance Classification from EPA (2022) for Landscape Effects

Matrix Classification Significance	EPA Significance Classification	EPA (2022) Definition of Significance
Major	Profound	An effect which obliterates sensitive characteristics.
Major/Moderate	Very significant	An effect, which by its character, magnitude, duration or intensity alters most of a sensitive aspect of the environment.
Moderate	Significant	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Moderate/Minor	Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Minor	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Minor/Negligible	Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Negligible	Imperceptible	An effect capable of measurement but without significant consequences.

12.2.4 Assessing Visual Effects

'Visual effects' relate to the changes in views and visual amenity of the surroundings of individuals or groups of people, brought about by the Proposed Development. These may result from changes in content and character of views as a result in changes to the landscape.

It should be noted that, in assessing visual effects, there are different types of effects:

- **Visual obstruction:** Occurs when there is an impact on a view which blocks the view;
- **Visual intrusion:** Occurs when there is an impact on a view, but which does not block the view.

Considering that the Proposed Development primarily comprises vertical extraction below existing ground level and subsequent infilling, it is considered that only visual intrusion is likely to occur, although the potential for visual obstruction is also considered and assessed in this LVIA.

The significance of the effect on visual amenity is a combination of the sensitivity of the receptor balanced with the magnitude of the change occurring within a view. The likely significant effects of the Proposed Development in terms of visual and landscape effects are informed by on-site visibility appraisals and the assessment of visual effects at specific 'viewpoints', which are photographic imagery showing multiple views towards the Proposed Development from receptors in the surrounding landscape, presented and assessed in Section 12.4 'Visual Baseline'.

A step-by-step process is followed when selecting appropriate viewpoint locations used in the assessment of visual effects. The first step is to select a number of representative locations following a detailed desk top study. These locations are based on the following criteria:

- Having potential visibility of the Site (as constrained by the nature of the Proposed Development being vertical downward extraction);
- Being located within sensitive landscape designations according to policy, e.g. View and Prospects, Scenic Routes and areas classed as being sensitive;
- Having proximity to receptors such as settlements, groups of residential dwellings or recreational routes or amenity areas;
- Being located within publicly accessible areas of on public roads, particularly more trafficked routes;
- Representing views that cover a wide area in terms of geographical location, elevation and varying distance from the Site.

Mitigating factors are then taken into consideration to arrive at a 'Residual' visual effect. Residual visual effects are graded upon the same 'impact assessment classification of significance' scale used for landscape effects, as defined by the EPA (2022), which is included below in Table 12-6 of Section 12.2.4.4 'Visual Effects Assessment Matrix'.

12.2.4.4 Visual Receptor Sensitivity

The 'Sensitivity' of a visual receptor depends on the occupation or activity of the people involved, as well the extent to which the attention is focused on views and visual amenity, according to the GLVIA3 (LI & IEMA, 2013). Visual receptor sensitivity is assessed as being 'Very High', 'High', 'Medium', or 'Low', based on the definition of descriptions and examples set out below in Table 12-6.

Table 12-6 Assessment Criteria for Visual Receptor Sensitivity

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

As described earlier, viewpoints are specific locations which are representative of key visual receptors. Photographic imagery has been captured from these viewpoints and an assessment of visual effects has been conducted from these locations using the imagery as a guide.

The viewpoint assessment below in Section 12.4.3 consider all receptors represented in the determination of the visual receptor sensitivity rating for each viewpoint. This determination takes a balanced approach considering the types, sensitivities, and quantities of visual receptors represented. The sensitivity rating given to each viewpoint in Section 12.4.3 considers both the susceptibility to change of the visual receptors represented, as well as the value attached to the available views at that particular location.

12.2.4.5 Magnitude of Visual Change

The 'Magnitude of Change' in terms of the visual change resulting at each viewpoint is determined by assessing a combination of scale of the change, the extent of the area to be affected and the duration and reversibility of the effect, determined by reviewing the photomontage and wireframe images for each viewpoint. The 'Magnitude of Change' is determined in accordance with the definitions and descriptions included below in Table 12-7.

Table 12-7 Assessment Criteria for Magnitude of Visual Change

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

12.2.4.6 Visual Effects Assessment Matrix

The final 'Significance' rating of visual effects is determined by combining the visual receptor 'Sensitivity' and the 'Magnitude of Change' classifications, according to the Visual Effects Assessment Matrix shown below in Table 12-8.

In the matrix, visual receptor sensitivity is shown in the first, left-hand column and magnitude of the visual change is shown in the first row at the top of the table. This matrix is used as an indicative tool to assist in determining the significance of visual effects. In different circumstances, differing levels of mitigating factors may ultimately result in a different determination of the final rating of significance. The 'Significance' of a visual effect is based on a balance between the 'Sensitivity' of the receptor and the 'Magnitude of Change' of the effect.

Table 12-8 Visual Effects Assessment Matrix

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

The significance of the visual effect is arrived at using a combination of the above matrix and what is known as the 'Visual Effect Significance Graph' from the EPA (2022) (shown in Section 12.2.5 Determination of Residual Landscape and Visual Effects (see next section).

The determination of significance uses a seven-point scale, ranging from 'Major' to 'Negligible'. This seven-point scale is then translated to the EPA (2022) impact assessment classifications of 'Significance'.

Table 12-9 Impact Assessment Significance Classification from EPA (2022) for Visual Effects

Matrix Classification Significance	EPA Significance Classification	EPA (2022) Definition of Significance
Major	Profound	An effect which obliterates sensitive characteristics.
Major/Moderate	Very significant	An effect, which by its character, magnitude, duration or intensity alters most of a sensitive aspect of the environment.
Moderate	Significant	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Moderate/Minor	Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Minor	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Minor/Negligible	Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Negligible	Imperceptible	An effect capable of measurement but without significant consequences.

12.2.5 Determination of Residual Landscape and Visual Effects

After determining the 'Significance' of landscape and visual effects using the above assessment matrices (and significance graph in the case of visual effects), mitigating factors are then taken into consideration to arrive at the final 'Residual' effect rating, translated to the EPA classification scheme. In some cases, mitigating factors merit a reduction in classification.

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

Particularly for determining residual visual effects, the formulaic process created by the use of the above matrices (Table 12-4 and Table 12-5) does provide an indicative initial assessment, which can be seen clearly in the assessment of photomontages in Section *12.4.3 'Viewpoints: Visual Impact Assessment'.*

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

In actuality, a wide range of factors, mitigating or otherwise, can factor into the final determination, and it is not possible to capture the complexity involved in balancing all considerations within the necessarily limited definitions contained in the matrices.

This then naturally results in circumstances whereby the process of the determination of significance using the formulaic method involved with the matrices shown above in can result in misrepresentations of the overall significance of visual effects. It is only by applying professional judgement and composing narrative descriptions of the effect, that such complexity can be integrated into the final determination of significance.

Therefore, the formulaic methods based upon the matrices presented above are combined with professional judgement in the determination of significance. This is shown by the 'Visual Effects Significance Graph' below in Figure 12-3 (adapted from the EPA, 2022) which illustrates how the professional judgement of the competent expert is used to properly determine the significance of an effect taking all considerations into account.

Accordingly, in this LVIA, focus is placed upon the narrative description of effects (see Sub-Section 3.36 of the GLVIA3, LI & IEMA, 2013, p.41) given the naturally subjective nature of the significance determination process, particularly in relation to visual effects, ensuring that the rationale for the overall judgement is clear (see Sub-Sections 3.28 and 3.29 in '*Step 2: Combining the Judgments*', GLVIA3, 2013, p.40). The comprehensive assessment of photomontages included in this LVIA aims to provide a transparent and robust determination of residual visual effects utilising the graph in Figure 12-3 in combination with a clear and logical narrative.

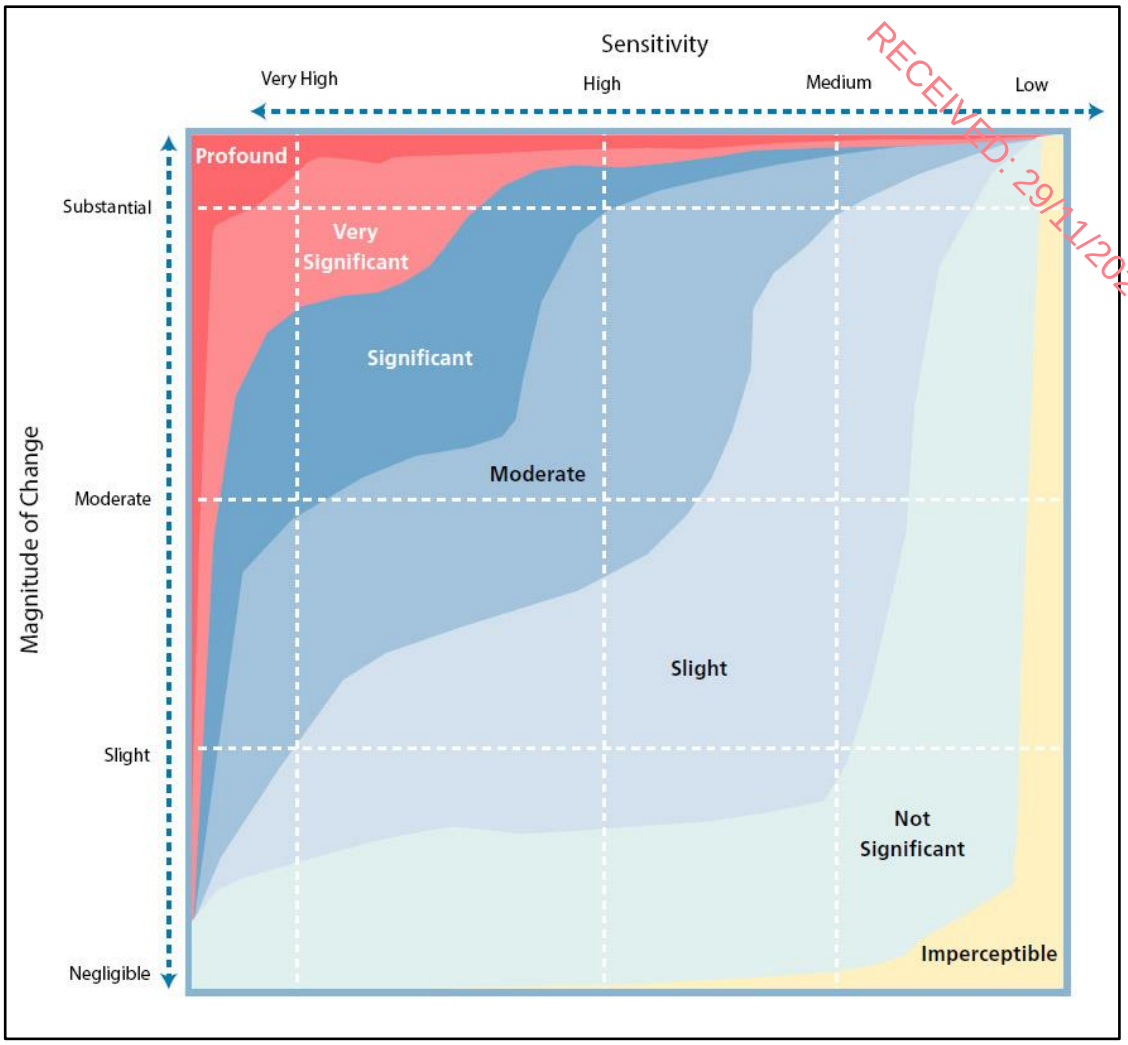

Figure 12-3 Visual Effects Significance Graph (adapted from EPA, 2022)

12.2.6 Assessing Cumulative Effects

This Chapter assesses the likely landscape and visual impacts of the Proposed Development, both independently, as well as in combination with all other existing developments in the LVIA Study Area. The assessment considers the Proposed Development in combination with all *'likely future receiving environments'* (EPA, 2022) which includes all relevant existing, permitted and proposed developments in the 2.5km LVIA Study Area.

The effects reported in this Chapter use appropriate and logical narrative to discuss cumulative interactions between the Proposed Development and all other developments. The discussion of cumulative interactions on specific landscape and visual receptors is relative to the effects on that receptor and proportionate to the likelihood of 'Significant' landscape and visual effects occurring.

Assessment of Cumulative Landscape Effects

The assessment of cumulative landscape effects considers cases in which two or more developments have the potential to cumulatively effect the physical fabric of the landscape and specific landscape components and receptors. Cumulative effects on landscape character arise when two or more developments introduce new features into the landscape. In this way, they can change the landscape character to such an extent that they create a different landscape character type, in a similar way to large scale afforestation. The change need not be adverse; some derelict or degraded landscapes may be enhanced as a result of such a change in landscape character.

Assessment of Cumulative Visual Effects

The GLVIA3 (LI & IEMA, 2013) notes that cumulative visual effects can be experienced **in combination**, where two or more developments are visible from one viewpoint, either **simultaneously** or **in succession**, and these are considered in the assessment of visual effects from the selected viewpoints for this LVIA.

An additional type of cumulative visual effect includes where two or more developments are seen **sequentially**, in which a viewer journeys from one viewpoint to another, or along a transport or recreational route, thereby viewing the same or different developments in succession. Analysis of the photographic imagery, as well as Site visits and field work undertaken, enables sequential visibility to be assessed and reported in this Chapter.

12.3 Landscape Baseline

This section of the chapter identifies and describes landscape policy designations and sensitive landscape receptors located in the LVIA Study Area (within 2.5km from the Proposed Development Study Area). The receiving landscape of the Site and surrounding areas are also described in terms of their landscape character and landscape value.

12.3.2 Landscape Policy Context: Clare County Development Plan 2023–2029

The Proposed Development Site is located in County Clare, therefore, the Clare County Development Plan 2023–2029 (hereafter referred to as 'CCDP') has been consulted to identify relevant landscape policy designations in the LVIA Study Area. This section reports the details of a desk study undertaken to identify relevant policies on landscape and landscape character, designated landscapes and views and prospects in the LVIA Study Area.

12.3.2.4 General Landscape Policy: County Clare

The CCDP contains policies and objectives relating to landscape, recreation and amenity referred to in subsequent sections of this report. The CCDP lists a set of objectives for sustainable landscape management of County Clare. These strategic aims are identified in Chapter 14, Section 14.1 of the CCDP as follows:

- *'To ensure the implementation of the National Landscape Strategy for Ireland 2015–2025 in County Clare;*
- *To implement the 'Clare's Living Landscapes' approach to landscape management and enhancement throughout the County;*
- *To encourage the utilisation of the Clare County Landscape Character Assessment in both the preparation and assessment of planning applications;*
- *To utilise the 'Clare Living Landscapes' approach to ensure that development in the County takes place in the location / landscape deemed most appropriate; and*
- *To sustain the natural and cultural heritage of the County'.*

The following section of this Chapter comprehensively address the policies stated above in relation to the preservation of landscape character and landscape sensitivity. Landscape Character Assessment Policy and Designated Landscape Character Areas (LCAs)

In Chapter 14 of the CCDP, Clare County Council have presented a Landscape Character Assessment which categorises Co. Clare into 26 different Landscape Character Types (LCTs). The Proposed Development is located within the 'Glacial Valley' LCT, with the LVIA Study Area extending into the

'River Valley Farmland' LCT. Below, Figure 12-4 presents the LCT designations, with the LCT of the Proposed Development Site indicated by a red arrow.

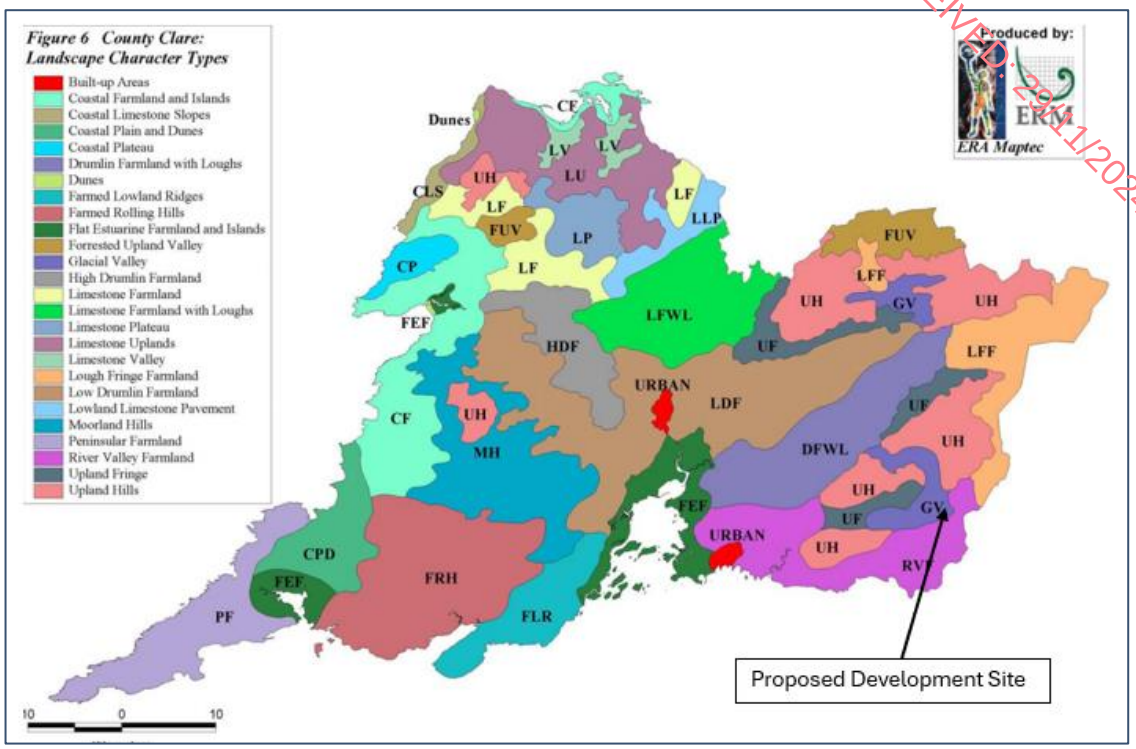

Figure 12-4 Landscape Character Types Map; modified from the LCAC (p.5)

The Landscape Character Assessment further categorises Co. Clare into 21 Landscape Character Areas (LCAs), as shown below in Figure 12-5. The CCDP defines LCAs as:

> *'Units of the landscape that are geographically specific and have their own character and sense of place. Each LCA has its own distinctive character, based upon patterns of geology, landform, land use, cultural, historical and ecological features'.*

The Proposed Development is located in LCA 8, called 'Slieve Bernagh Uplands', with the LVIA Study Area extending into LCA 9, 'River Shannon Farmland', as shown below Figure 12-5. In the CCDP, LCA 8: Slieve Bernagh Uplands is described as:

- *'Extensively planted with coniferous plantations in parts, the open upperslopes are largely blanket bog and wet heathy landcover with some turbury evident;*
- *On the lower slopes, there is an increase in pasture and more enclosure generally by hedgerows and hedgebanks along narrow roads'.*

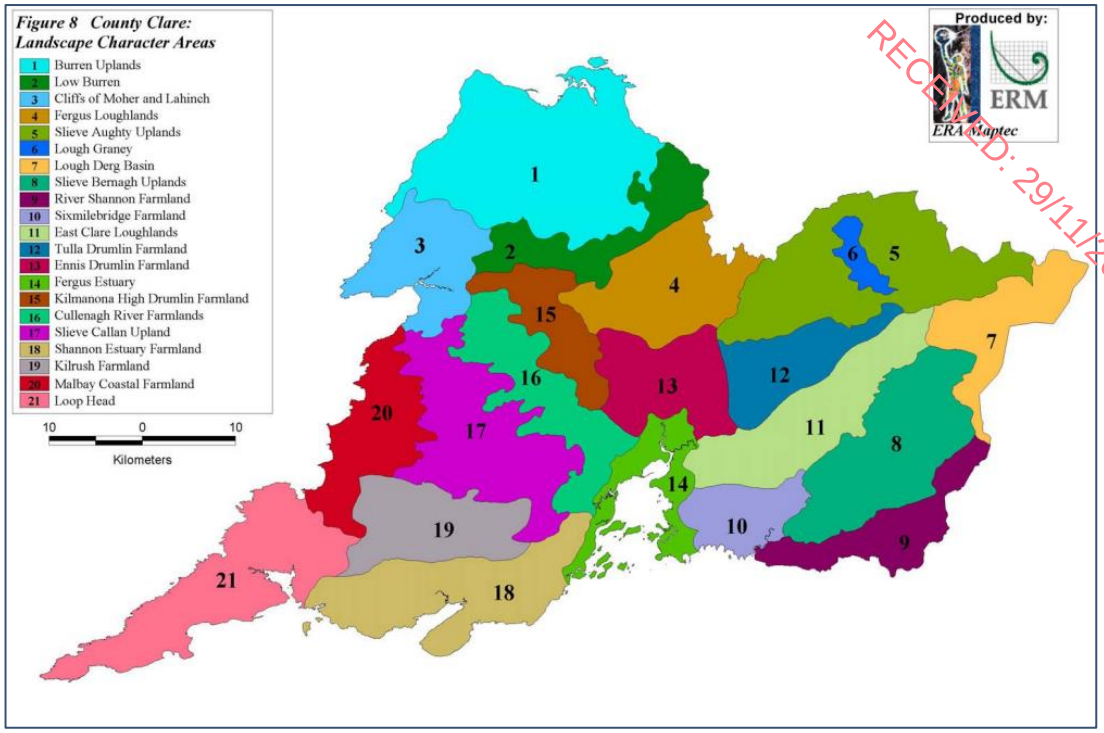

Figure 12-5 Landscape Character Areas (LCAs) Map of Co. Clare; extracted from the CCDP

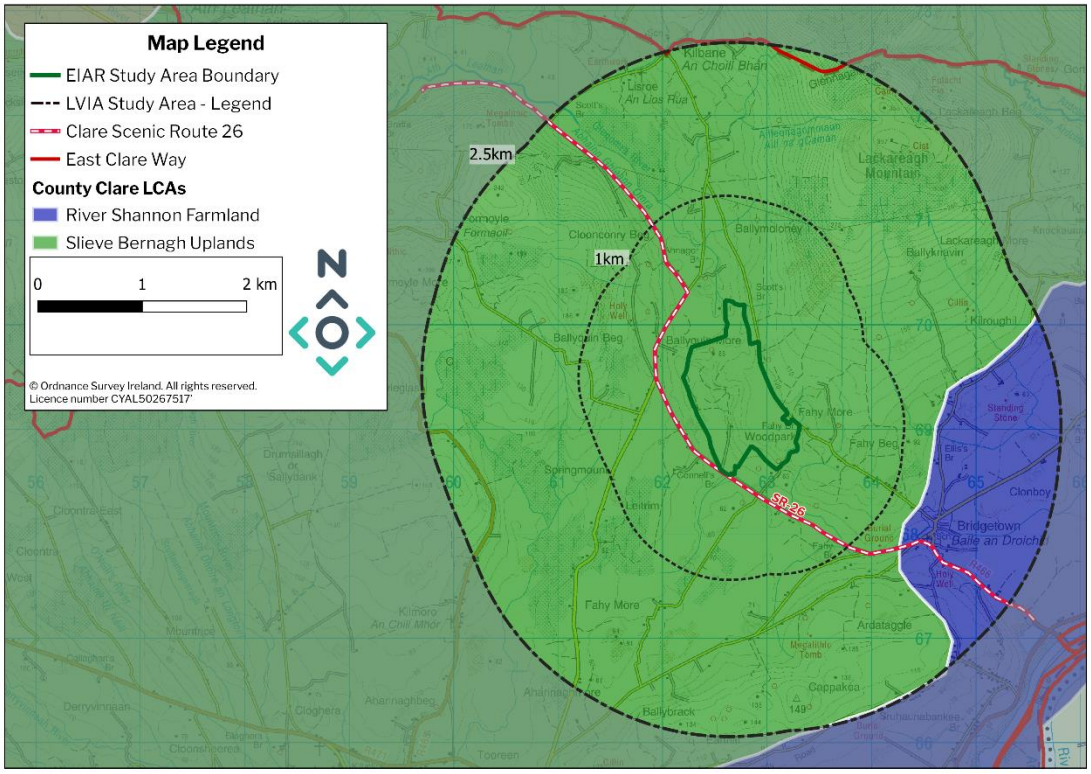

Figure 12-6 Scenic Route 26 and LCAs in the LVIA Study Area

12.3.2.5 Landscape Sensitivity Rating

Section 5.13.12 of Volume 10b of the CCDP establishes 'landscape sensitivity' ratings in which emphasis is placed on the sensitivity of designated Scenic Routes, 'Heritage Landscapes', loughs, ridges and islands. Section 14.3.2.3 of the CCDP also designates Heritage Landscapes as the most sensitive areas in Co. Clare; these landscapes are:

- Lough Derg and the Eastern Uplands;
- The Burren;
- The Fergus/Shannon Estuary;
- The Coast.

The Proposed Development is not located in any Co. Clare Heritage Landscape and there is no Heritage landscape in the LVIA Study Area. As seen below in Figure 12-7, the Proposed Development is located in an LCA classified as 'Low' sensitivity in the Landscape Character Assessment of County Clare 2004 (hereafter referred to as LCACC), defined as *'unlikely to be adversely affected by change'*.

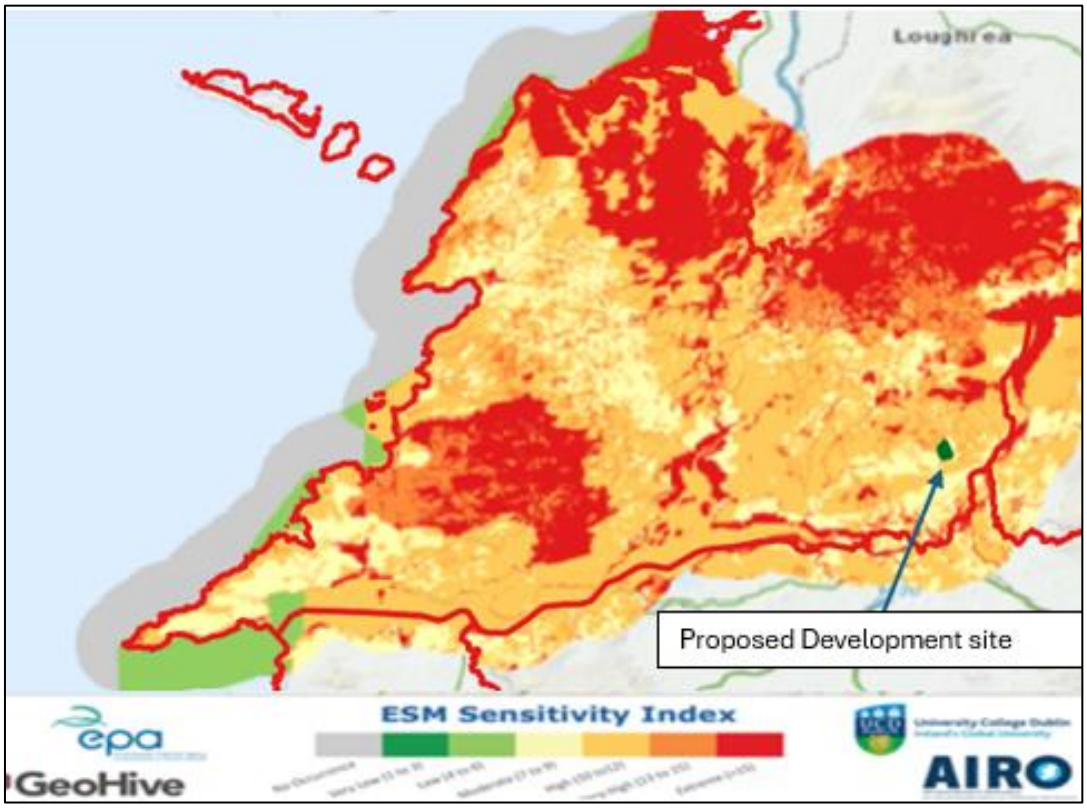

Figure 12-7 Environmental Sensitivity Map; extracted from the CCDP

CCDP also identifies three types of living landscapes, as follows:

- *"Settled Landscapes – areas where people work.*
- *Working Landscapes – intensively settled and developed areas within Settled Landscapes with a unique natural resource.*
- *Heritage Landscapes – areas where natural and cultural heritage are given priority and where development is not precluded but happens more slowly and carefully"*

The Proposed Development Site is located within a Settled Landscape. It is an objective of Clare County Council;

> *"permit development in areas designated as 'settled landscapes' to sustain and enhance quality of life and residential amenity and promote economic activity"*

Under Policy CDP 13.3, Developments in Settled Landscapes will be required to demonstrate the following:

1. *"That the site has been selected to avoid visual prominence.*
2. *That the site layouts avail of existing topography and vegetation to reduce visibility from scenic routes, walking trails, water bodies, public amenities and roads.*
3. *That design of buildings and structures reduces visual impact through careful choice of forms, finishes and colours, and that any site works seek to reduce visual impact."*

The assessments in this Chapter will consider the effect of the Proposed Development on the settled landscape of the LVIA Study Area in mind of the policies cited above.

12.3.2.6 Protected Views and Scenic Routes

Section 14.5 of the CCDP relates to protected views and prospects through the designation of Scenic Routes as follows:

> *'There is a need to protect and conserve views adjoining public roads throughout the County where these views are of high amenity value. In conserving views, it is not proposed that this should give rise to the prohibition of development along these routes but development, where permitted, should not seriously hinder or obstruct these views and should be designed and located to minimise their visual impact'.*

Designated Scenic Routes are mapped in the CCDP in Volume 2 (Map C), Map 14A and Appendix 5 of that plan; those that exist in the LVIA Study Area have been mapped above Figure 12-6.

The CCDP has the following objective in relation to designated Scenic Routes, which states:

> ***'CPD14.7:** It is an objective of Clare County Council:*
>
> a) *'To protect sensitive areas from inappropriate development while providing for development and change that will benefit the rural community;*
> b) *To ensure that proposed developments take into consideration their effects on views from the public road towards scenic features or areas and are designed and located to minimise their impact; and*
> c) *To ensure that appropriate standards of location, siting, design, finishing and landscaping are achieved'.*

Within the LVIA Study Area, one Scenic Route was identified: SR-26, on the R466 Regional Road between Broadford and O'Briensbridge, which comes in close proximity to the west of the Proposed Development Site. The LVIA in this chapter includes a comprehensive assessment of the Proposed Development on designated scenic route SR-26.

12.3.2.7 Recreational Routes

The East Clare way is located to the north of the LVIA Study Area, approximately 2.3km from the Proposed Development at its nearest point.

12.3.2.8 Landscape Policies Pertaining to Quarry Development

The CCDP has set out the following objectives for the development in quarrying, mining and mineral extraction.

It is an objective of Clare County Council:

a) *'To promote the extraction of minerals and aggregates and their associated processes where such activities do not have a significant negative impact on the environment, landscape, public health, archaeology, County Geological sites and/or sites of geological importance or residential amenities of the receiving environment and where such operations are in compliance with all national regulations and guidelines applicable to quarrying and mining activities.*

b) *To avoid an unreasonable risk of environmental harm due to the toxicity of chemicals and their demonstrated potential to cause damage to the environment, the use of the following chemicals as a processing agent shall be prohibited from use in any proposed processing operation located above or adjacent to surface or ground water or which could potentially impact such waters regardless of their location – mercury, cyanide or cyanide compounds, breakdown products of cyanide or sulfuric acid.*

c) *To support the satisfactory and sensitive re-instatement and / or re-use of disused quarries and extraction facilities, where active extraction use has ceased. Future uses should include amenity, recreation and biodiversity areas and shall be informed by an assessment of the specific site/lands in accordance with the restoration plan under the facility's EPA licence'.*

In mind of the policies stated above, the assessments in this Chapter demonstrate how the Proposed Development, which includes appropriate mitigation measures as part of the dedicated Landscape Restoration Plan, will not have a significant impact on the landscape and visual amenities of the receiving environment.

In addition, the need to drive waste up the waste hierarchy and away from landfill is clearly established in the Waste Framework Directive, national waste policy and regional waste policy. The strong construction industry sector has led to a significant increase in the generation of soils and stone in the West Region including Clare.

As a result, there is an urgent need for Local Authorities in the region to provide for soil recovery facilities to meet demand for recovery and re-use of inert materials.

For this facility, and in terms of providing future capacity, the regional waste plans provide guidance on the type of soil recovery sites required and other considerations. In summary these are:

- The authorisation of future backfilling or soil recovery capacity in the regions should be co-ordinated by regulatory bodies so the right scale and balanced capacity is developed. Imbalances in a region are to be avoided where possible as well as inadequate supply;
- The plans favour the development of large, long-life restoration sites, such as old quarries, ahead of shorter span sites (e.g. permitted or registered sites) for soil recovery activities; and,
- The environmental protection criteria as set out in the plan which guide the siting of new facilities must be met. The regulatory threshold for environmental protection has been increased and applicants must demonstrate the protection of environmental receptors from future site activities.

Given that there is a large void space available for infilling at the Proposed Development Site, and that the quarry Site is readily accessible from the national road network, it is considered that the application area is suitable for the development of a soil waste recovery facility at this location. In addition, the application Site can avail of the existing Site infrastructure, Site management procedures and the experienced staff, all of which contributes to this being a sustainable option for the development of such a facility.

The need for the Proposed Development is also driven by its beneficial after-use which is integral to the sustainable extraction of aggregates. The restoration of the quarry void will return the Site area to a land use which is in keeping with its surrounds i.e. grassed field agricultural systems.

The Proposed Development can avail of the existing Site infrastructure, Site management procedures and the experienced staff all of which contributes to this being the most sustainable option for the delivery of products to industry.

12.3.3 Landscape Character of the Proposed Development Site

The Proposed Development is located within the Landowner Boundary of the Ballyquin Quarry Site. This is currently an existing sand and gravel quarry, which is considered a modified working landscape. Below, Figure 12-8 shows an aerial image of the Proposed Development Site. The blue hashed line represents the Proposed Extraction Area boundary, and the orange dotted line represents the Proposed Restoration Area.

As can be seen in the aerial imagery, the Site is surrounded by a rural landscape comprising fields of agricultural grassland as well as an existing quarry to the southeast. Drone imagery (Figure 12-8 through Figure 12-11) taken from the southeast of the Proposed Development Site illustrates the landscape character, with the Proposed Extraction Area as well as the Proposed Restoration Area outlined.

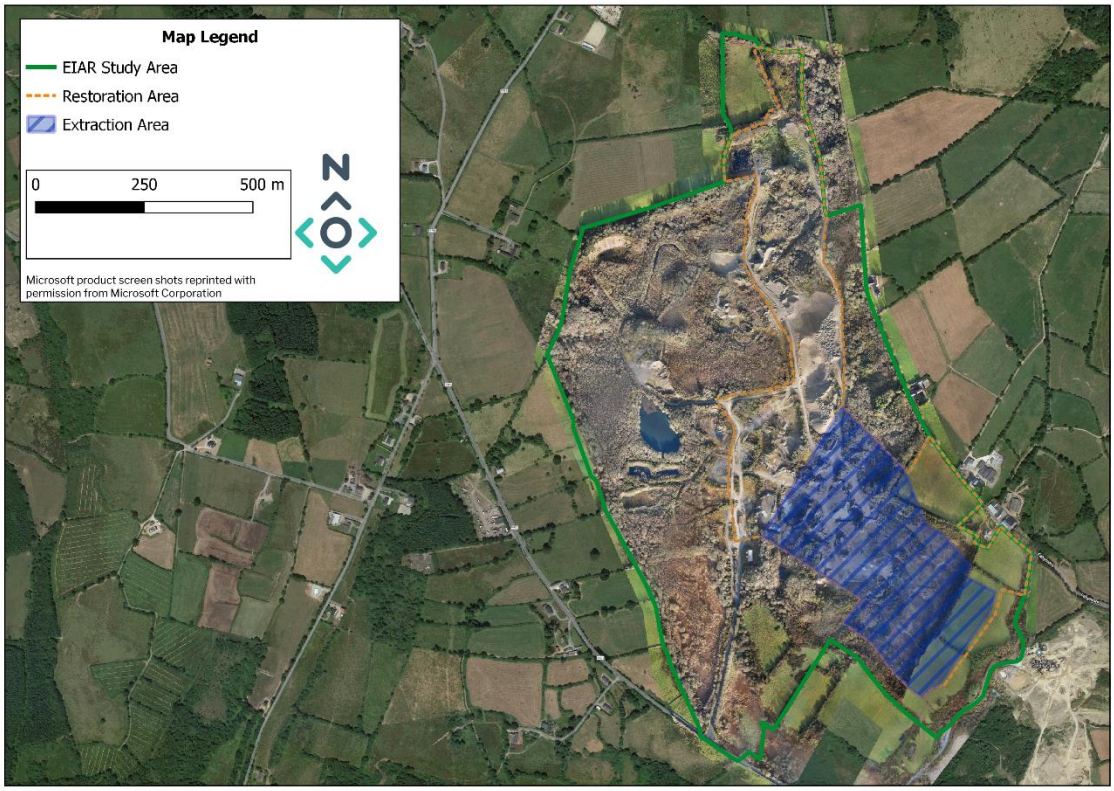

Figure 12-8 Drone Aerial Imagery of the Proposed Development Site

Figure 12-9 below shows a digital twin of the Proposed Development with indicative outlines showing the EIAR Study Area, the Proposed Restoration area and the Proposed Extraction Area. The area of greenfield agricultural landscape to the southwest of the Site is outlined by a black arrow. The area of mature broad-leafed woodland to the northwest of the Site is also indicated by on the image below. This area of mature broad-leafed woodland is of ecological and natural value and will not be impacted by the Proposed Development as it is located outside the boundary of the Proposed Restoration Area and the Proposed Extraction Area.

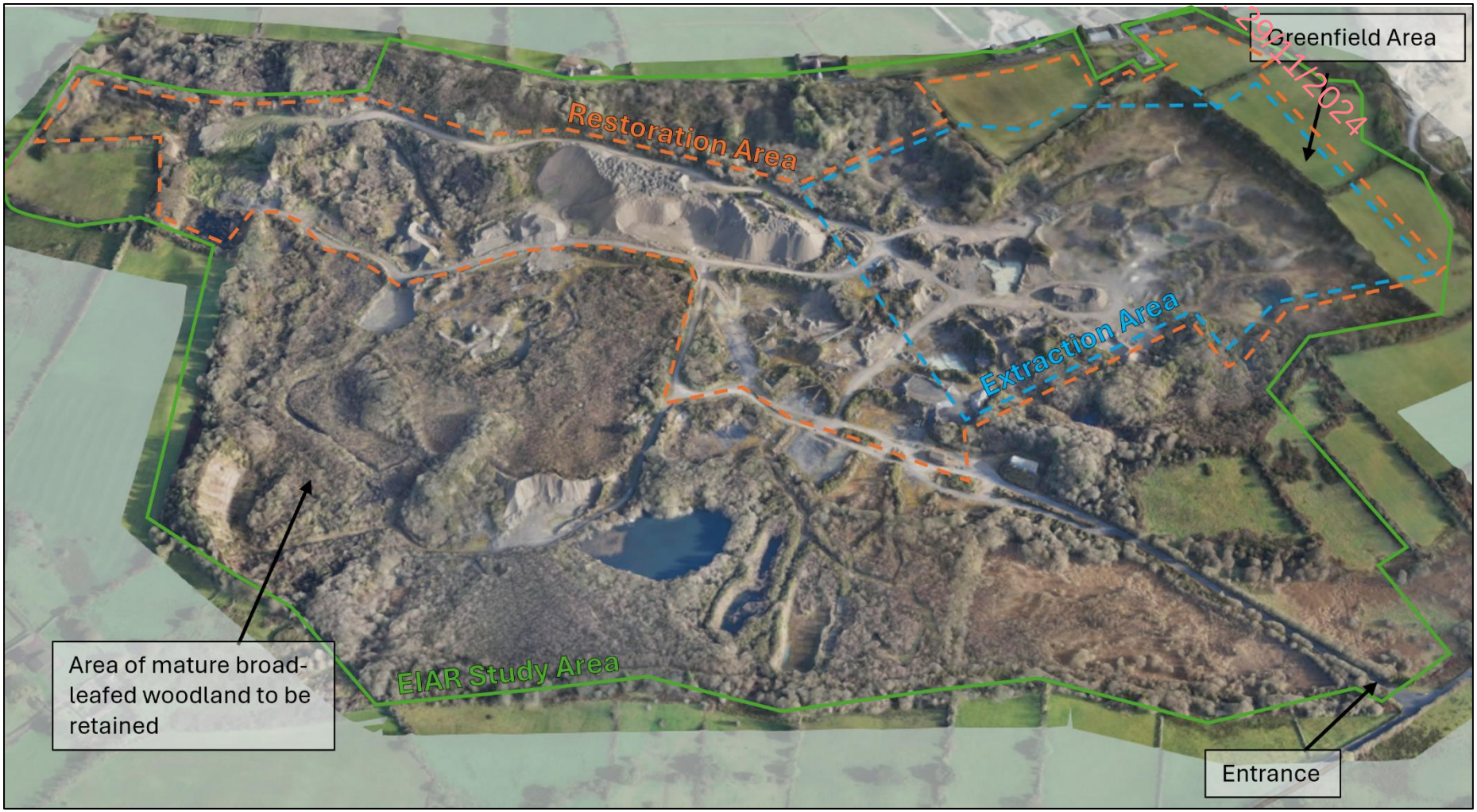

Figure 12-9 Digital Twin of the Proposed Development Site with indicative outlines

Figure 12-10 Drone Aerial Imagery from the Southeast of the Proposed Development Site

Figure 12-11 Drone Aerial Imagery from the northeast of the Proposed Development Site

Landcover and Land Use

The Proposed Development Site is part of a larger quarry complex, subject to previous extraction activities resulting in a landcover that includes a sand and gravel quarry extraction area. A substantial portion of the quarry has revegetated over time as seen in the images below. The western boundary is densely vegetated, comprising mature pockets of woodland, shrubs, trees and scrub.

The primary land use on the Site is quarrying activities for sand and gravel extraction. As shown below in the subsequent imagery, the quarry void, quarry infrastructure and internal roads strongly influence the existing character of the Site.

Plate 12-1 Image from a hill to the southeast of the Site facing north, depicting the existing quarry void and the Wider Landscape setting of the Glenomra Valley

The groundcover of the Site is generally sand, gravel and cobble stones with re-established vegetation in areas. Areas containing stockpiles are mostly concentrated to the centre of the Site. Outside the areas of previous operations on the Site, vegetation has been re-established. Due to quarrying of the area, the landscape consists of steep, tiered ridgelines created during previous extraction activity (example shown below in Plate 12-2).

Plate 12-2 Image depicting steep tiered ridgelines of the existing Site terrain

Site Entrance

The road entrance to the Proposed Development Site is off the R466 Regional Road. The R466 widens near the entrance to allow for a turnoff point to accommodate larger vehicles to enter the road from the southwestern side. This entrance road and entrance area is lined by dense trees and vegetation as seen below in Plate 12-3 . the mature treelines visually screen and obstruct most views into the Proposed Development Site. However, there are views to the north-east from the entrance area, where the south-eastern extent of the Site is visible, the likely visual impact of the Proposed Development in this particular view will be comprehensively assessed later in this chapter.

Plate 12-3 Road Entrance to the Existing Site from the R466 Regional Road

Past the facility building, the road widens to comprise a large, flat and gravel working area. Quarrying machinery occupies the southern side of the Site, with larger stockpiles to the east. This area is characterized by its industrial quarrying infrastructure, signs, road barriers and equipment. Tall quarrying plant are visually prominent features in the centre of the Site and can be seen at a distance in Figure 12-7 below.

Plate 12-4 View from the centre of the Site showing existing quarry infrastructure

Site Area to the North

The north side of the application boundary is characterised by gravel tracks and roads which are generally along the sides of large stockpiles. These mounds of loose sand and gravel are the distinguishing characteristics of the northeast area of the Proposed Development Site, as seen below in Plate 12-5. This section of the quarry has been previously excavated and is at a lower ground level than the terrain to the east and south of the Site (both due to extraction and natural undulations in the landform). Vegetation is well-established to the eastern and western boundary sides, particularly large areas of dense woodland along the western perimeter of the Proposed Development Site, where no extraction or restoration is proposed.

As shown below in Plate 12-6, the northern perimeter of the Site is bound by dense woodland which will not be impacted by the Proposed Development. As reported in Section 12.4 the visibility appraisals determined that the woodland and rise in landform at the northern end of the Site and other mature vegetation in the landscape to the north will restrict visibility of the Proposed Development from receptors to the north.

Plate 12-5 View to the north from the centre of the Site showing a large stockpile

Plate 12-6 View facing north from the north of the Site in a Proposed Restoration Area

Site Area to the South

Most of the Proposed Extraction Area to the south and south-east of the Proposed Development Site is located within an existing quarry void, with tiered ridgelines. There has been substantial re-colonisation by many trees and shrubs since extraction ceased in this area, as seen below in Plate 12-7 and Plate 12-8.

Plate 12-7 View from within the Site, facing south-east towards the Proposed Extraction Area

Plate 12-8 View facing southeast toward the Proposed Extraction Area in the south of the Site

Greenfield area at the south-eastern extent of the Site

An area of the Proposed Extraction Area and the Proposed Restoration Area extends beyond the existing quarry void, essentially to the south-east beyond the elevated step or ridge shown in the Plate 12-8 above. This area is greenfield and comprises portions of two fields of agricultural grassland currently used as grazing pasture as seen in Plate 12-9 and Plate 12-10 below. The fields are bound by hedgerows and dissected by a linear line of mature woodland.

Plate 12-9 View facing northeast from the greenfield area to the south of the Proposed Development Site

Plate 12-10 View facing south from the greenfield area to the south of the Site

The image above shows a view south across a small valley from the greenfield area where Proposed Extraction and Proposed Infilling will occur. This field is the most visually exposed part of the Site where Proposed Extraction Area and the Proposed Restoration Area will be visible. A sparse scattering of residential receptors are visible in the landscape and are likely to have clear visibility of the

operations of the Proposed Development in this area of the Site. These receptors, and others to the south-west from this location are represented by Viewpoint 6 which is located in the townland of Fahy More South. The impact assessment of visual effects arising from Viewpoint 6 is reported in Section 12.5 of this Chapter

Landform and Topography

As shown in Figure 12-12 below, the Proposed Development Site is situated in a relatively low-lying valley with the topography rising on either side to form hills to the east and northwest. The map shows the topographic gradients existent within the Site, approximately 50m difference in elevation from the lowest to the highest vantage points. The Site gradient increases from west to east, with the most elevated areas to the east of the Site (approx. 95m AOD or 'above ordnance datum') and the lowest areas to the west of the Site, closest to the Site entrance and the R466 Regional Road (approx. 45m AOD). Figure 12-12 below shows a digital surface model produced from drone imagery showing above ground surface features and landform, providing an insight into the topography of the Site. Areas of lower elevation are existent in the western areas within the Proposed Development Site however, the terrain is generally uneven and characterised by steep ridges, mounds and sharp depressions.

Figure 12-12 Landform of the Proposed Development Site

A comprehensive description of the existing drainage regimes on the Site and the likely effects of the Proposed Development are included in Chapter 8 'Hydrology and Hydrogeology' of this EIAR.

Plate 12-11 View from the centre of the Site facing northwest

Cultural Heritage and Recreation

Three recorded monuments, CL044-073 - Enclosure, CL044-074 - Enclosure and CL044-078 - Enclosure, are located within the Proposed Development boundary. A total of twenty-nine monuments are located within 2km of the Proposed Development boundary. These monuments are commonplace features in the rural landscape of Ireland; they are not considered of county, regional or national value and are not recreational destinations with safe public access or high visitor numbers. These receptors are therefore not considered high sensitivity in the context of this LVIA. The Site comprises private lands and is not currently used for recreational purposes.

A comprehensive description of the existing cultural heritage sites within the wider landscape and the likely effects of the Proposed Development are included in Chapter 11 'Cultural Heritage' of this EIAR.

Views from within the Site

Photos were captured from elevated vantage points within the Proposed Development Site where open landscape views are available. These are presented below in Plate 12-12 and Plate 12-13.

Plate 12-12 View facing south from the southeastern boundary of the Site

Plate 12-13 View from the north of the Site facing northwest towards distant hills, overlooking a forested area

12.3.3.5 Wider Landscape Setting: Landscape Character

The Proposed Development Site is located in the Glenomra Valley in East Co. Clare. This valley is located in the Slieve Bernagh Uplands LCA which includes undulating terrain and a network of valleys comprising both farmland and transitional marginal landscape types and land uses such as agriculture and commercial forestry, as well as other extraction industry. The LVIA Study Area generally comprises agricultural farmlands with residential properties and agricultural buildings sparsely scattered across a patchwork of fields, as illustrated in Plate 12-14 below.

The Proposed Development Site is located in the townland of Ballyquin, 1.5km to the northwest of the village of Bridgetown. The landscape of the LVIA Study Area is sparsely settled, with singular dwellings and farmsteads organised along a network of regional and local roads. No main villages or population centres are nearby, and no prominent transport routes or national roads traverse the area, as shown by the image below.

Plate 12-14 View from the Gap Road (L7080) showing scattered residential and agricultural buildings within the Wider Landscape Area of the Site

At a macro-scale, the LVIA Study Area (area within 2.5km) is a valley landscape, with approximately 300m difference between the topography of the Proposed Development Site and the rise in topography to the east forming Lackareagh Mountain. To the west of the Site, the valley topography rises to approx. 175m above the Site. This difference in elevation is visible below in Figure 12-13. The resulting variation in topography does provide a sense of visual containment within the landscape. The valley walls to the east and west of the Site significantly enclose the Proposed Development. In mind of the Proposed Development as a vertical extraction, these topographical characteristics largely restrict the potential visibility of Proposed Extraction activity from the north, west and south.

Figure 12-13 below shows all residential settlements located in the LVIA Study Area and their positioning relative to the Proposed Development, along with the topography of the area. The wider landscape surrounding the Proposed Development Site is considered to be an area of relatively low population density and there is substantial set-back distance and physical landscape buffers between the Site and all residential receptors.

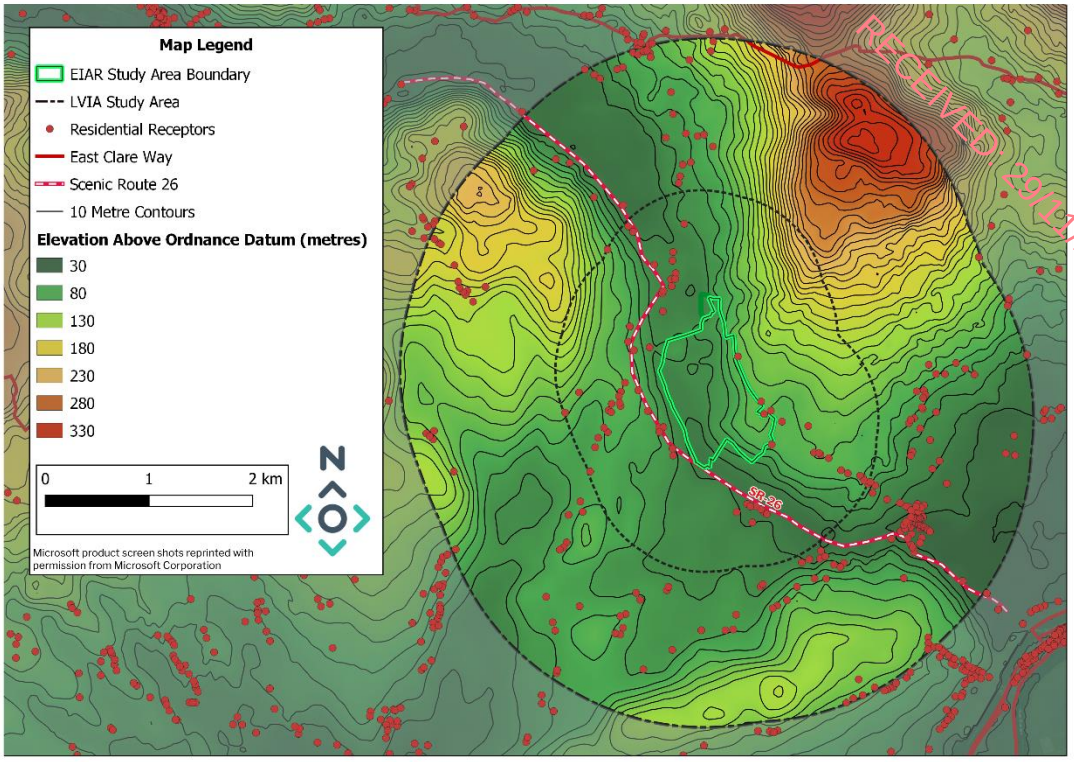

Figure 12-13 Landform and Residence Distribution in the LVIA Study Area

12.3.4 Landscape Value and Sensitivity

This section establishes a baseline 'Value' of the landscape character of the Proposed Development Site and its surrounding area, informed by rating the 'Susceptibility to Change' considering the collective appraisal of seven indicators of landscape value in the LVIA guidance (listed below). The Value and Susceptibility to Change ratings are then combined to assign an overall 'Sensitivity' rating of the Site.

This is done in order to establish the capacity for development of the immediate landscape in which the Proposed Development will be built, as is prescribed by the following best practice guidance (GLVIA3, 2013, p.80):

> *'...As part of the baseline description the value of the potentially affected landscape should be established'.*

The determination of landscape Value takes into consideration the scenic amenity designations, the sensitivity and value designations found in the local landscape policy as well as other indications of landscape value attached to undesignated landscapes.

Table 12-10 below describes the following seven indicators appraised collectively to establish landscape Value and Susceptibility to Change, which were then considered in forming the overall landscape Sensitivity classification of the Site:

- Landscape designations (LCA setting, Scenic Routes and Views, amenity areas, etc.);
- Quality/condition of landscape elements;
- Scenic/aesthetic qualities;
- Rarity/conversation status;
- Wildness/naturalness;
- Recreational value;
- Cultural meaning/associations.

The ratings of Value and Susceptibility range from High, Medium, or Low, while the overall Sensitivity is assigned as **Very High**, **High**, **Medium** or **Low**.

Table 12-10 Indications of Landscape Value and Susceptibility to Change

Indicator	Description
Landscape Designations	Designations include: › Scenic Route 26 (SR-26) › Settled Landscape (CCDP) › LCA 8 – Slieve Bernagh Uplands › LCA 9 – River Shannon Farmland › Settled Landscape In the CCDP, the land where the Proposed Development is located has been designated as a 'Settled Landscape', which has a designated landscape sensitivity of 'Low: Unlikely to be adversely affected by change'. The Proposed Development Site is located in close proximity to SR-26 which passes along the western perimeter of the Site. However, the direction of the view towards Proposed Development is mostly screened by the vegetation.
Landscape Elements Quality/Condition	Definition: Refers to the physical state of the landscape of the Proposed Development Site and the condition of each of its individual elements. An area of mature broad-leafed woodland exists to the west of the Proposed Development Site and is of biodiversity and landscape value. However, this area will not be altered as part of the Proposed Development. A greenfield area consisting of rural agricultural fields exists to the southeast of the Proposed Development Site. There are biodiversity corridors in the hedgerows within these fields. However, these agricultural fields are not of any unique value and are commonplace in the surrounding agricultural landscape. A large proportion of the landscape of the Proposed Development Site is degraded due to the extraction activity on the Site. The immediate surrounding area is regarded as modified by man in terms of the agricultural and quarrying activity.
Scenic/Aesthetic Qualities	The Site is located in the rural landscape of the Glenomra valley which is a landscape setting of some scenic and aesthetic value due to its undulating hills and the extensive patchwork of small agricultural fields. This landscape setting can be experienced from many areas within the Site where elevated vantage points upon ridges show open views of the wider landscape. However, only shorter ranging views are available from most areas within the quarry void and the evidence of extraction activities and associated infrastructure reduce the scenic and aesthetic qualities of the Site.

Indicator	Description
Rarity or Conservation Interests	A large area of broadleaf woodland is located along the western portion of the Site. There are three watercourses throughout the Site and an area of marsh at the north of the Site, as well as a large reed and sedge swamp at the south-west of the Site. These areas are valuable from a biodiversity perspective and will not be altered as part of the Proposed Development. Also, as reported in Chapter 5 – *Biodiversity,* the Site provides habitat for multiple species such as bats, barn owls, sandmartins, badgers, fox, pinemartin and fallow deer. A comprehensive assessment of the Biodiversity on the Site is included in Chapter 5.
Wildness/Naturalness	Due to the modified condition of the Proposed Development Site, there is not a particularly strong sense of wildness or naturalness. The centre of the Site consists of quarrying infrastructure, as well as buildings and a car park. However, an area of broad-leafed woodland to the west of the Site adds a sense of naturalness within the Site itself. In the surrounding area, the sense of wildness or naturalness is also limited as a result of agricultural and isolated residential land uses taking place in the wider landscape. However, it is not a densely populated area and there is a slight sense of isolation maybe of some wildness considering the rural nature of the Site and locational setting. Some broader areas of naturalness and wildness are existent within the surrounding landscape, such as Lackareagh Mountain to the northwest of the Site, although this has been highly modified by commercial forestry activity.
Recreational Value	A community consultation exercise for the Proposed Development determined that there is a local road which is used by local residents for walking to the east of the Proposed Development Site The Proposed Development Site itself is privately owned and not used for recreation activities. In addition, no designated walking or cycling routes are within or adjacent to the Site.
Cultural Meaning/ Associations	Three recorded monuments, CL044-073 - Enclosure, CL044-074 - Enclosure and CL044-078 - Enclosure, are located within the Proposed Development boundary. A total of twenty-nine monuments are located within 2km of the Proposed Development boundary These receptors are therefore not considered high sensitivity in the context of this LVIA. The Site comprises private lands and is not currently used for recreational purposes. A comprehensive description of the existing cultural heritage sites within the wider landscape and the likely effects of the Proposed Development are included in Chapter 11 'Cultural Heritage' of this EIAR.

Considering the collective appraisal of the indicators detailed above in Table 12-10 , this LVIA determines the following ratings for the Proposed Development Site:

- Landscape Value = High, Medium, Low
- Landscape Susceptibility to Change = High, Medium, Low
- **Overall Sensitivity = Very High, High, Medium, Low**

Rationale: In terms of landscape value of the Proposed Development Site comprises receptors of biodiversity value and some scenic qualities associated with the wider landscape setting, although most of these elements will not be altered as part of the Proposed Development. There are no cultural or heritage associations or recreational amenities within the Site itself; moreover, the Site is not the specific subject of any landscape or visual protections in local planning policy. However, the Site is located adjacent to a designated scenic route, although limited effects on its scenic sensitivities will occur as detailed in a comprehensive assessment later in this chapter. The Site itself is strongly characterised by the modification and degradation which has occurred from extraction activity and associated infrastructure. On balance the Site is considered to have a 'Medium' landscape value.

The Site is located in County Clare Settled Landscape, which comprises a majority of the landscape of County Clare. Settled landscape is generally a lower sensitivity landscape, particularly compared to the designated 'Heritage Landscape'. The Proposed Development will occur in an existing quarry with existing quarry infrastructure which has a very limited visual profile in the existing landscape. Finally, there is a limited amount of visibility towards the Proposed Development from SR-26, as mentioned in the table above (and demonstrated later in this Chapter). Therefore, the susceptibility of the landscape to the change brought about by the Proposed Development is deemed 'Low'.

Landscape sensitivity is described in the GLVIA3 (LI& IEMA, 2013) as a combination of the landscape's susceptibility to change as well as the value attached to the landscape. On the grounds of the aforementioned points, the overall landscape sensitivity of the Proposed Development Site is deemed '**Low**'.

12.4 Visual Baseline

This section of the LVIA establishes the likely visibility of the Proposed Development from landscape and visual receptors located in the LVIA Study Area (area within 2.5km of the Proposed Development Site). This includes a description of views towards the Proposed Development from a variety of perspectives which has informed the selection of viewpoints. Certain areas were scoped out from assessment where it is very unlikely that visibility will occur due to factors such as visual screening from vegetation, localised topography and the built environment.

12.4.2 Nature of the Proposed Development and its Visibility from Receptors within the Landscape

During the Extraction Phase, the Proposed Development predominantly comprises a vertical (downward) extraction. Therefore, visibility of this extraction and associated extraction activities are naturally, relatively limited from within the surrounding landscape, as all development generally occurs below the existing ground level.

Visibility of the Proposed Extraction could be excluded from the vast majority of the wider LVIA Study Area due to the nature of the Proposed Development as a vertical downward extraction. Visibility is further limited by the presence of mature hedgerows, tree lines and localised topography in the intervening landscape. Although, it is accepted that there is potential for the extraction to be visible from very elevated vantage points in the wider area.

There will also be visibility of the Proposed Development during the Restoration phase. Elements of the restoration such as infilling and proposed planting will be visible from some viewpoints. This will result in a visual effect as the existing void will be infilled, hence, causing a rise in elevation from the ground level within the quarry void.

Visibility of both the Proposed Extraction Area, Proposed Restoration Area and the plant infrastructure in the processing area are herein discussed in relation to annotated photos presented in the following section, showing views towards the Proposed Development Site.

Some infrastructure will be constructed above ground-level on the Site, including an inspection shed, wash plant and a processing plant.

12.4.3 Visibility of the Proposed Development: Views Toward the Site

A limited number of visual receptors are existent within the LVIA Study Area. One of the most sensitive receptors identified in the LVIA Study Area is the R466 Regional Road which is designated as SR-26 in the CCDP that runs in close proximity to the west and northwest of the Proposed Development Site. A short section of the East Clare Way is located approximately 2.3km to the north of the LVIA Study Area, the visibility appraisals reported below addressed visibility of the Proposed Development from this way marked walking trail to which is representative of High sensitivity receptors. No other designated scenic amenities or public recreational amenities are identified in the LVIA Study Area.

One small population centre is located to the south of the Proposed Development, Bridgetown; however, there is no visibility of the Site from this location. Therefore, the visibility appraisals focused on views from SR-26, as well as views along the local road network that represent residential receptors in the surrounding landscape.

The visibility appraisals reported below were informed by Site visits conducted in July 2023 and January 2024. All roads in the immediate vicinity of the Site were analysed. Site visits determined that there will be no visibility of the Proposed Development from a vast majority of the wider LVIA Study Area due to the nature of the Proposed Development as a below-ground extraction-based operation and its positioning relative to landform characteristics, as well as the presence of mature hedgerows and tree lines, both immediately adjacent to roads and throughout the intervening landscape.

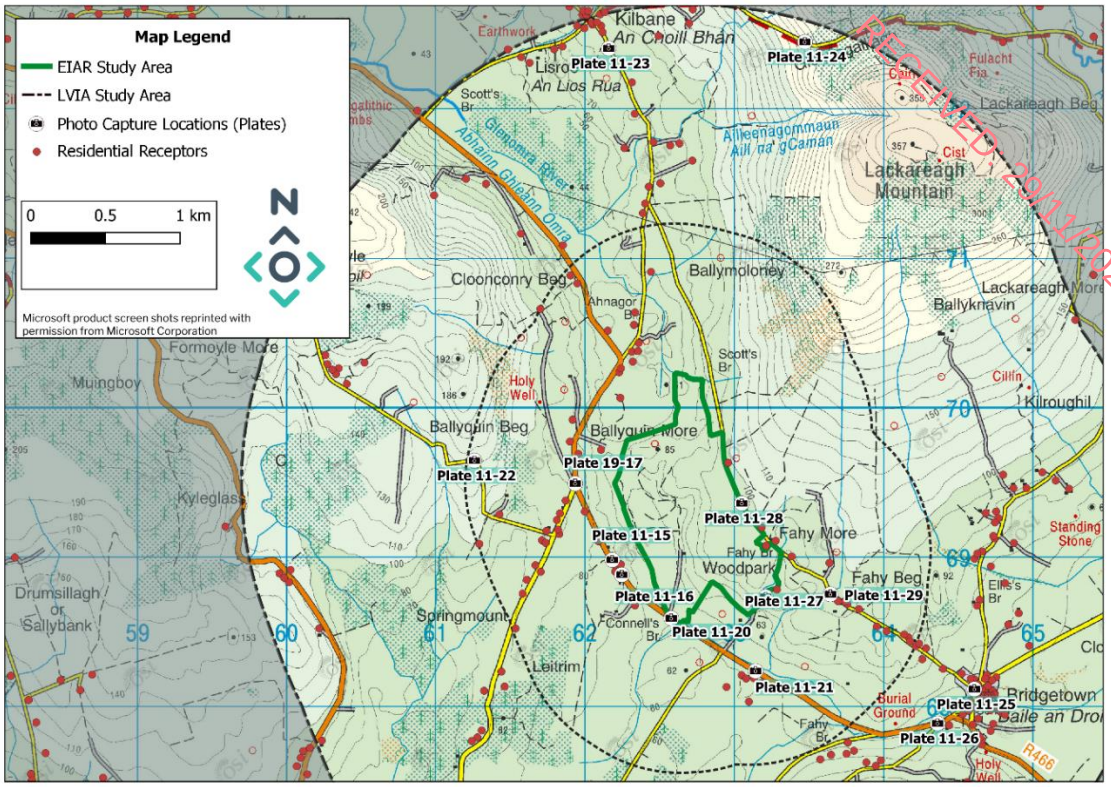

Figure 12-14 Visibility Appraisal with photo-capture locations (labelled as 'Plate') and Residential Receptors

R466 Regional Road / Scenic Route 26

The greatest visibility of the Proposed Development Site occurs from occasional instances on the R466 Regional Road (SR-26). These instances occur from a few elevated vantage points on this road where it passes in close proximity to the western boundary of the Proposed Development Site. In general, most views towards the Proposed Development Site along the R466 (SR-26) are obscured from view by mature and dense vegetation lining the roadside.

Four images are presented below which show differing views towards the Proposed Development from the west at locations on the R466 (SR-26) where intermittent gaps in roadside vegetation permit open views to the east. The images below are assessed as Viewpoints (VP1, VP2, VP3 and VP4 in Section 12.5 below). Images captured along this road also represent views from residential receptors in this area.

Plate 12-15 View facing east from R466 (SR-26) towards the Site in the townland of Leitrim (Viewpoint 2)

Plate 12-16 View from the west toward the Site from R466 (SR-26) in the townland of Leitrim (Viewpoint 1)

Plate 12-15 (Viewpoint 1 assessed later in Section 0) and Plate 12-16 (Viewpoint 5 assessed later in Section 12.5.60) above represent the most open views of the Proposed Development along the R466 (SR-26). As shown by the annotations on the photos, a relatively large horizontal extent of the Proposed Development Site is visible in these images across a small rural valley. The views consist of agricultural fields, pockets of woodland and a rise in topography in the left-background of the image in Plate 12-16 above which is Lackareagh Mountain.

Three residential receptors are located on in very close proximity to the viewpoint locations presented in the plates below, approximately 150m from the Proposed Development Site. There will be limited visibility of the Proposed Development from these residential receptors due to screening from mature vegetation in the intervening landscape will restrict views in the direction of the Site

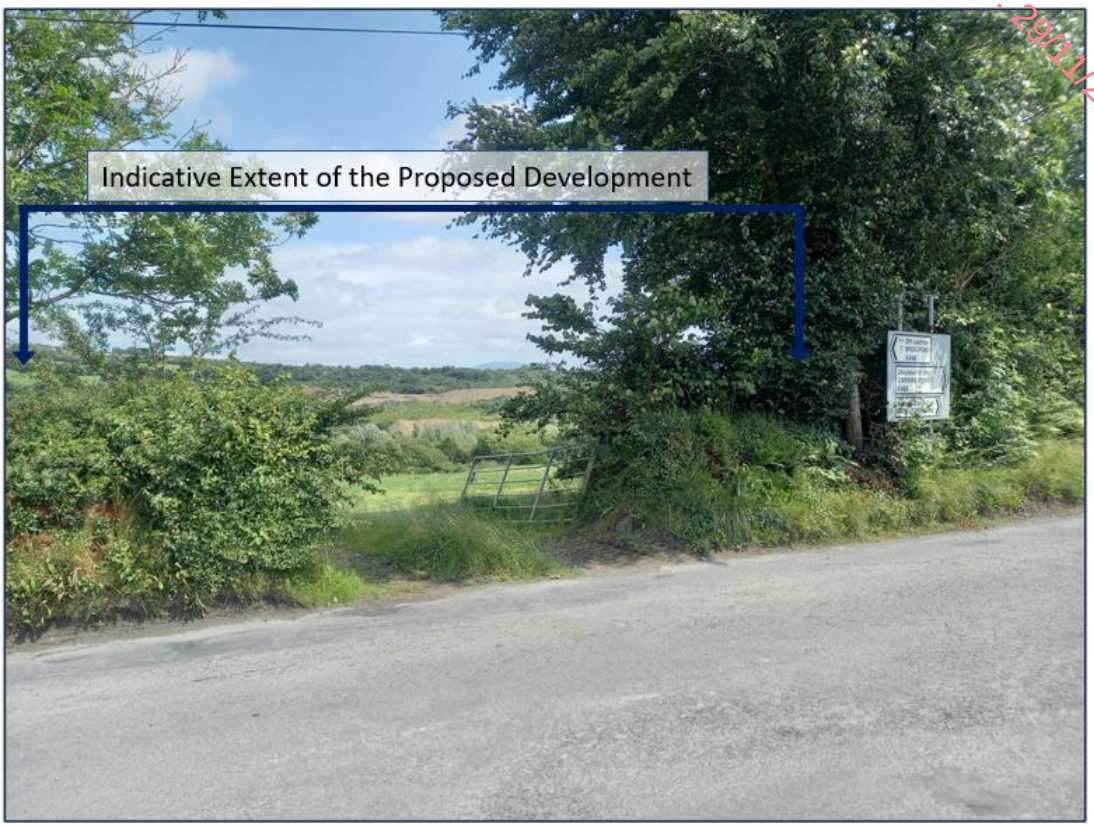

Plate 12-17 View facing southwest from the northwest of the Site from R466 (SR-26) at Springmount Road in the Townland of Ballyquin

Plate 12-17 shows a brief opening in the roadside vegetation which provides partial visibility of the Proposed Development from this junction on SR-26. This image is used as a viewpoint for visual impact assessment (Viewpoint 2) which is comprehensively reported in Section 12.4.3. It is key to note that there are only a few occasional instances where there are open views along the scenic route. The image below is also captured from Viewpoint 2 and illustrates the extent of mature roadside vegetation on the eastern side of the along the R466 which eliminates visibility of the Proposed Development from most of the designated scenic route (SR-26).

Plate 12-18 View to the south from Viewpoint 2 on Co. Clare Scenic Route 26 – No visibility due to dense roadside vegetation

The image below shows a view northbound on SR26 from Viewpoint 2. The road tapers downhill to the north from this location, and due to the gradient of the road and nature of roadside vegetation, visibility of the Proposed Development is unlikely to occur from this stretch of the scenic route.

Plate 12-19 View to the north from Viewpoint 2 on Co. Clare Scenic Route 26 – No visibility due to dense roadside vegetation and landform characteristics

Several residential receptors are located along Springmount Road, to the rear of this image; however, there is no visibility of the Proposed Development from these locations due to dense screening by vegetation. Therefore, no visual effects are likely to occur from these residential receptors.

Site Entrance from R466 (SR-26)

The entrance to Ballyquin Quarry is via the R466 (SR-26), west of the Proposed Development Site. A gap in the roadside vegetation enables open views towards the Site in an easterly direction. The Proposed Extraction of a greenfield area at the south-eastern extent of the Site is likely to be visible from this location, consequently, this location is used as a Viewpoint (Viewpoint 4) which is assessed below in Section 12.5.

Plate 12–12-20 Wide-angle view facing northwest from the Site entrance from R466(SR-26) in the townland of Leitrim.

Plate 12–12-20 above shows a wide-angle view of the Site entrance from the R466 (SR-26). Plate 12-21 below represents a 90-degree angle view from the Site entrance which will be assessed as Viewpoint 4 in Section 12.5.

Plate 12-21 View northwest from the Site entrance from R466 (SR-26) in Leitrim – Viewpoint 4

During a site visit, visibility appraisals on the R466 (SR-26) between the Site entrance (pictured above) and the village of Bridgetown determined that very limited visibility of the Proposed Development is likely to occur on this section of road and/or scenic route. However, one location was identified in the townland of Fahy More North where the Proposed Development will be seen from the route as illustrated below.

Plate 12-22 View facing northeast towards the Proposed Development from SR-26

There are several residential receptors located in this area to the south and south-west of the Site. Considering the relatively limited visibility shown by the annotations in the image above, another viewpoint was chosen to represent the residential receptors in this area where more open visibility will occur – Viewpoint 6. The location of viewpoint 6 is discussed below in Section 12.4.3.6 – *Views from the South.*

Ballyquin Beg Hill

Plate 12-23 View facing southeast from Ballyquin Beg Hill to the northwest of the Site

Plate 12-23 above shows a view from an elevated vantage point in close proximity to the Site in the townland of Ballyquin Beg. There will be no visibility from the residential receptors located further west along this road (to the rear of this viewpoint location); This image is used as a viewpoint for visual impact assessment (Viewpoint 3) as it is one of the only locations where there is an open view of the proposed Development from an elevated vantage point on the local road network in close proximity to the Site. Viewpoint 3 is comprehensively reported in Section 0.

12.4.3.5 Views from the North

Kilbane Village, the L3022-8 Local Road, and Residential receptors to the north of the Site

A small village called Kilbane is located to the north of the LVIA Study Area. Although the village is located at slightly higher elevation than the Proposed Development Site, visibility appraisals determined that there would be no visibility of the Proposed Development from the village itself due to localised landform and mature vegetation in the intervening landscape. The image below shows a view towards the Proposed Development from an elevated vantage point on the L3022-8 local road as it exits Kilbane to the south where there are open views in the direction of the Proposed Development Site.

Plate 12-24 View south towards the Proposed Development from a location on the Local Road south of Kilbane, no visibility likely to occur

No visibility of the Proposed Development is likely to occur from the location shown in the image above due to the mature woodland at the northern perimeter of the Site which will be retained and will visually screen views of any activities which are proposed as part of the Proposed Development. There is a scattering of residential receptors (approx. 20 No.) located between Kilbane and the northern extent of the Proposed Development Site in the townlands of Ballyquin More, Ballymoloney, Cloonycontoy More and Killeagy. These townlands generally comprise the area shown in the mid-ground of the image above. Visibility appraisals determined that it is very unlikely that the Proposed Development will be visible from the residential receptors in these townlands and the L3022-8 Local Road due to the undulating landscape, mature boundary vegetation, retention of mature woodland at the northern extent of the Site and also the lower elevation of most residential receptors in these areas.

The Gap Road / East Clare Way Walking Route

Plate 12-25 View facing south from the East Clare Way (along L7080) toward the Site in the Townland of Killeagy

Plate 12-25 shows the view from 7080 local road on Lackareagh Mountain, which is also forms part of the 'East Clare Walking Route', to the north of the Proposed Development Site. This viewpoint is approximately 2.3km from the Proposed Development at an elevation of 253m. It is the highest vantage point within the LVIA Study Area accessible by road. As seen in the image, the Proposed Development Site is visible; however, due to its distance, the existing quarry is barely distinguishable and is not a prominent feature within the landscape. Considering the distance and abundance of intervening features in the landscape (predominantly mature woodland) visibility of the Proposed Development is likely to be very limited from receptors on this walking trail.

12.4.3.6 Views from the South

Bridgetown

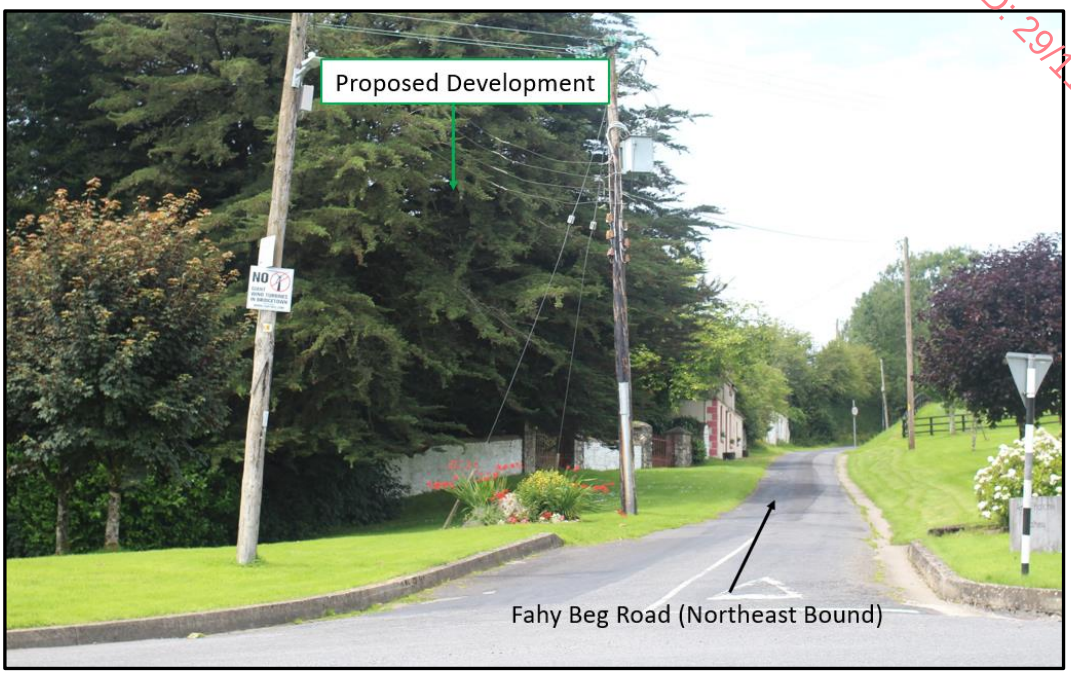

Plate 12-26 View northeast toward the Proposed Development from Bridgetown on Fahybeg Road

Bridgetown is the closest settlement to the Proposed Development Site, approx. 1.5km southeast of the Site. Views northwest towards the Proposed Development are heavily screened by vegetation and any impact is mitigated by distance from within the town. As seen above in Plate 12-26, there is no visibility of the Site from this location; further, there is also no visibility along Fahybeg Road heading northwest from Bridgetown toward the Proposed Development due to dense roadside vegetation. Therefore, no visual effects will occur.

R466 Regional Road (SR-26)

Plate 12-27 View northwest toward the Proposed Development from R466 (SR-26) outside of Bridgetown Village

Fahy More (South) Road

Plate 12-28 View facing north towards the Proposed Development from the Fahy More (South) local road to the south of the Site

Plate 12-28 above shows a view facing north towards the Proposed Development from across a low-lying agricultural landscape from the Fahymore (South) Road to the south of the Site. This image was captured approximately 380m from the Proposed Development Site. Some visibility of the Proposed Development will occur from this location, particularly the open greenfield area at the southeast of the Site which is clearly visible from this perspective. This image is used as a viewpoint for visual impact assessment (Viewpoint 6) and represents the multitude of residential receptors located to the south-west and south of the Site. Viewpoint 6 is comprehensively reported in Section 12.5.7.

12.4.3.7 Views from Receptors to the East of the Site

The Fahymore road runs to the southeast of the Site between the Jim Bolton Quarry and the Proposed Development. The majority of this route is screened by roadside vegetation as seen in the images below.

Plate 12-29 Dense vegetation evident along the Fahymore Road at the south-east of the Site – No Visibility of the Proposed Development

Plate 12-30 View facing north along the Fahymore road to the southeast of the Site, adjacent to the Jim Bolton Quarry

Plate 12-30 above shows a view from the Fahymore Road with a gated entrance to the Jim Bolton Quarry seen to the right of the image. There are no residential receptors located on this part Fahymore Road between the two quarries. No visibility of the Proposed Development will occur along this part of the route to the southeast of the route.

The Fahymore North Road is a left turn at the top of the Fahymore Road. The Fahymore North Road is a local road running alongside the northeast of the Site in a north-south direction. The images below are representative of views along the Fahymore North Road to the east of the Proposed Development.

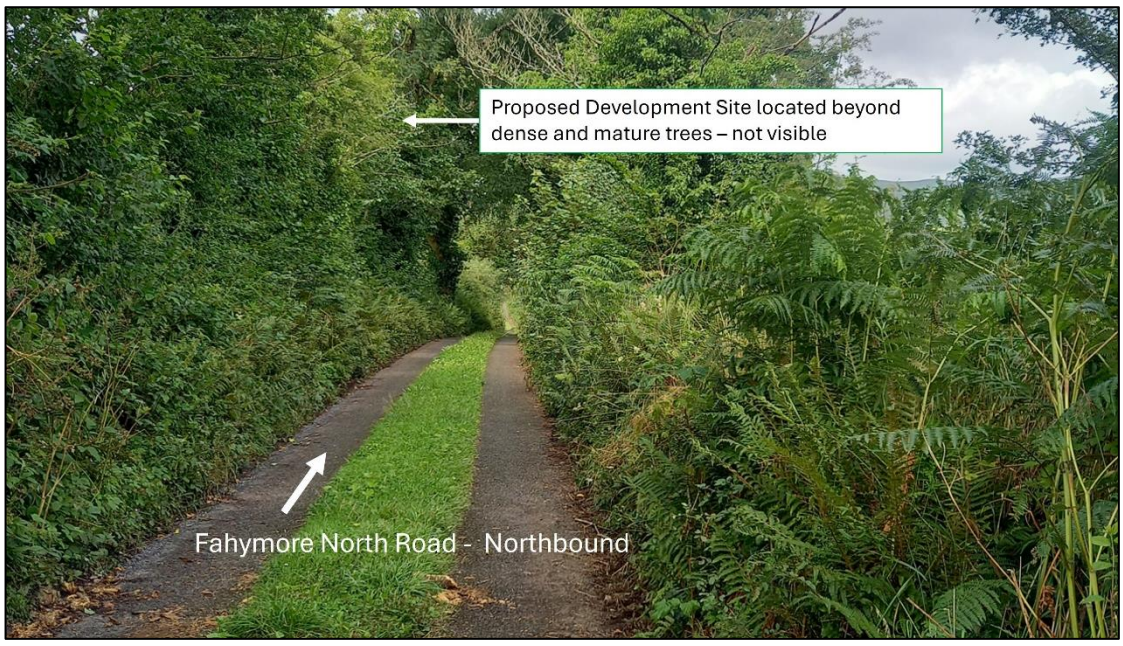

Plate 12-31 View on Fahymore North Road at the north-eastern extent of the Site – No visibility likely to occur

Plate 12-32 View on Fahymore North Road at the eastern boundary of the Site – No visibility of the Proposed Development likely to occur from the residential receptor visible in the image.

The majority of this route is lined by dense roadside vegetation which restricts views towards the Proposed Development from receptors on this road. There are five residential receptors located along this section of this route adjacent to the Proposed Development. As illustrated in Plate 12-32 (above) the visual screening by vegetation will obscure visibility of the Proposed Development and eliminate visual effects from most of the receptors on this road.

Plate 12-33 Views facing northwest along Fahymore North Road in the townland of Fahy More

Residential Receptors on Fahymore North Road (L-7126-0)

A small number of residential receptors are located immediately adjacent to the Proposed Development Site at the north-eastern boundary on the Fahymore North Road. Visibility appraisals determined that there were no suitable locations on the public road network for viewpoints representing these houses due to the dense roadside screening which is visible in the images presented above (Plate 12-31, Plate 12-32, Plate 12-33). However, it is acknowledged that these residences are susceptible to visual impact as the visual amenity may be different than seen from the public road. These receptors are considered 'High' Sensitivity, and due to their close proximity to the Site, they are some of the most sensitive receptors likely to experiences the greatest visual impact arising as a result of the Proposed Development.

Appendix 12-1 and Appendix 12-2 include details of the Landscape Restoration Plan (LRP). At the commencement of the extraction phase, the LRP includes measures such as creation of berms, native planting of mature hedgerows and infill planting of existing hedgerows. Also, as part of mitigation for effects of potential noise, an acoustic barrier will be installed to the south of a residential receptor adjacent to the Site. Figure 12-15 below shows where some of these measures will be implemented relative to the residential receptors adjacent to the Site. These measures, including the acoustic barrier, create a visual buffer between these residences and the Proposed Development Site to mitigate effects on residential visual amenity, reducing the likelihood of significant visual effects arising. An assessment of the visual effects including these mitigating measures are included in Section 12.6.

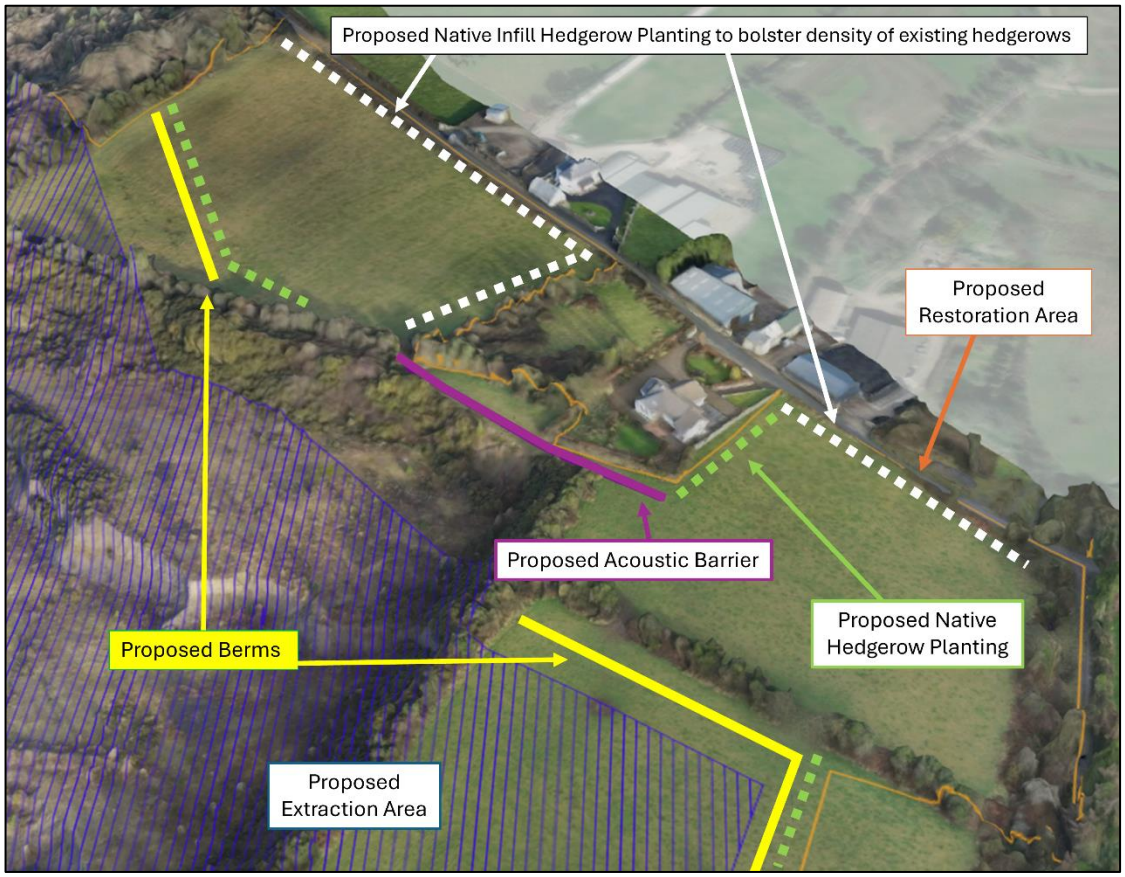

Figure 12-15 Restoration plans in the southeast of the Site in close proximity to residential receptors along the Fahymore (North) Road

12.4.3.8 Summary: Visibility Appraisal

The visibility appraisal conducted over multiple Site visits determined that visibility of the Proposed Development is likely to be very limited from visual receptors in the surrounding landscape. As detailed throughout the visual baseline exercise, visibility of the existing quarry Site is extremely limited from the North, South and East, with no visual impact of the Proposed Development likely to occur from receptors in these directions – excepting the three residential receptors shown in Figure 12-15 above. Consequently, no Viewpoints to the northeast and west are used in the impact assessment in the following Section of this Chapter – *Viewpoints: Visual Impact Assessment*.

Most visibility of the Proposed Development is likely to occur from locations to the west and south-west of the Site. Due to its location on the eastern side of the Glenomra Valley, the Proposed Development is most visually exposed from elevated vantage points on the western side of the Valley where open views across the lowest lying lands are permitted. The proposed extraction of the greenfield area in the south-eastern portion of the Site will be the most prominent and visible element of the Proposed Development, this is only likely to cause visual effects from receptors located to the west and south-west of the Site. Consequently, all Viewpoints assessed in the following section are located either to the west or south-west of the Site. Whilst the viewpoints all show open views towards the Proposed Development, they are not entirely representative of views in this area (west and south-west), as it is a landscape comprising undulating landform with mature vegetation cover where open views of the Proposed Development Site are generally very limited.

The Viewpoints generally represent views from the designated Scenic Route (R466 Regional Road) and residential receptors in this area (west and south-west). It is noted that this a sparsely settled area and only a very small number of residential receptors will have any visibility of the Proposed Development.

Some infrastructure will be constructed above ground-level on the Site, including an inspection shed, wash plant and a processing plant. These infrastructure elements, particularly the proposed inspection shed was identified as potentially being the most visually prominent infrastructure elements of the Proposed Development. The location of the proposed Inspection shed at the centre of the Site is illustrated in Figure 12-16 below.

Figure 12-16 Location of Proposed Inspection Shed within the Site relative to Existing infrastructure.

Visibility appraisals and Site visits determined that the existing infrastructure on the Site such as the office and shed (identified in the Figure 12-16 above) are not visible from receptors to the west where there are open views towards the Site (see photos throughout the visual baseline). These infrastructure elements are at lower base elevation than the eastern side of the existing quarry and are enclosed by a

combination of localised landform and mature woodland which conceal these elements from view from receptors to the north, south and west.

The proposed inspection shed is located at slightly higher base elevation than the existing buildings (approx. 2m than the inspection shed and approx. 5m above the existing shed). However, the proposed inspection shed is located in very close proximity to the existing buildings (approximately 68 metres north of the Site office 140m), and it is likely that it will avail of the same visual screening factors (landform and woodland) which obscure the existing infrastructure from view. If the Proposed Inspection shed is visible from receptors, it is only likely that a portion of the roof is visible. Analysis of the likely effects of the proposed inspection shed is included in the visual impact assessment tables in the following section.

The visibility appraisals identified locations where there is potential for longer ranging views in the direction of the Proposed Development from elevated vantage points in the LVIA Study Area. However, these locations are generally well-set-back from the Proposed Development, such that it is unlikely that the Proposed Development will be discernible, as seen above in Plate 12-25 on the East Clare Way.

It is also important to note that the Site is currently and existing quarry void. The Proposed Development will see further extraction activity however, the visual effects will remain largely unaltered considering that the landscape of the Site is an existing quarry void. Substantial positive landscape and visual effects will occur following the restoration phase as the quarry void will be infilled and restored to its original condition prior to quarrying activities.

Considering the lack of open visibility of the full extent of the Proposed Development from most visual receptors the Site visit determined that no verified photomontages are required to facilitate this LVIA. The landscape and visual effects reported in this chapter are therefore informed by the site visit, visibility appraisals and photographic imagery with annotations, labelling and written description of the changes likely to occur. A visual impact assessment is reported for 6 No. viewpoints to the west and south-west of the Site where most visibility occurs.

12.5 Viewpoints: Visual Impact Assessment

The viewpoints listed below are assessed using the LVIA methodology detailed above in Section 0 *'Assessing Visual Effects'* in the methodology. The locations of these Viewpoints are shown in Figure 12-17 below.

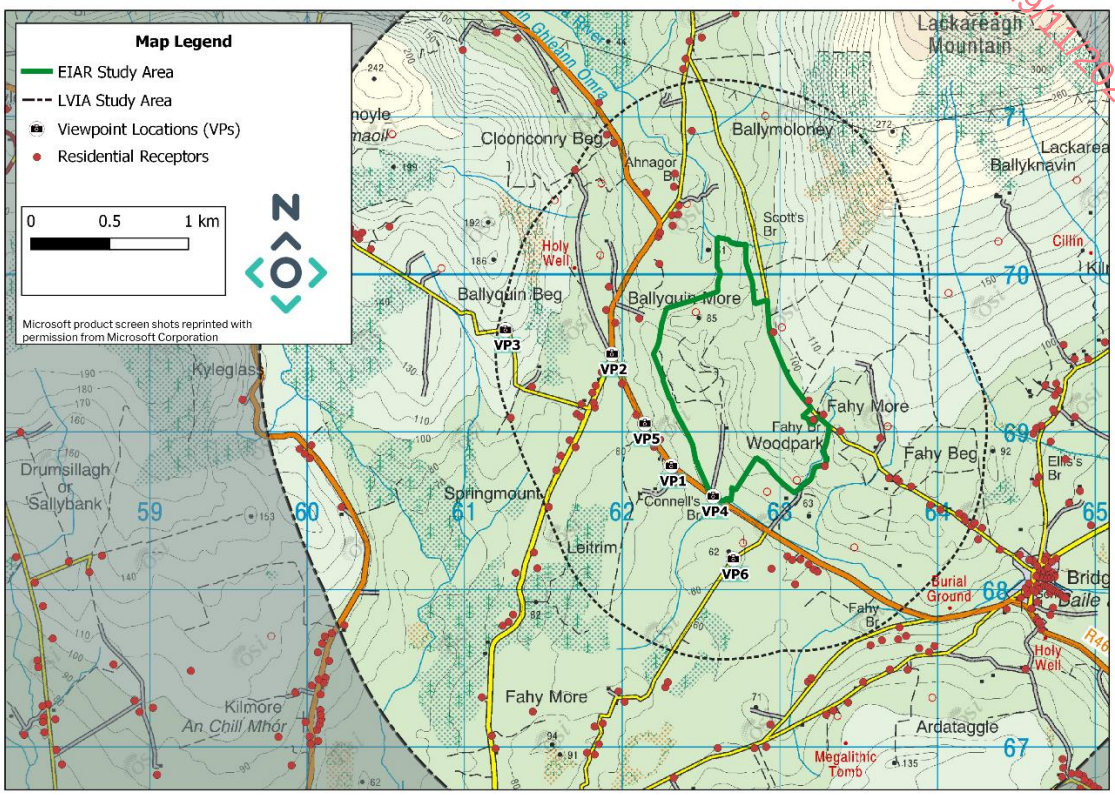

Figure 12-17 Viewpoint Locations Map

Table 12-11 Viewpoint Locations

Table of Viewpoints		
VP No.	**Description**	**Grid Ref. (ITM)**
VP1	View from the west of the Proposed Development located on the R466 (SR-26) in the townland of Leitrim.	E 562,257 N 669,021
VP2	View facing east from the R466 (SR-26) through gated entrance to private farmland.	E 561,892 N 669,537
VP3	View from an elevated vantage point on Ballyquin Beg Road. Located in Co. Clare, 920m west of the Proposed Development Study Area.	E 561,237 N 669,696
VP4	View from Site entrance along the R466 (SR-26), facing southeast towards the Proposed Development.	E 562,522 N 666,850
VP5	View facing east from R466 (SR-26), approximately 1.4km from the Proposed Development	E 562,193 N 668,945
VP6	View facing north from the townland of Fahy More South.	E 562,193 N 668,945

12.5.2 Viewpoint 1: R466 (Scenic Route 26)

Plate 12-34 Viewpoint 1: Existing View (420m West on R466/SR-26)

Plate 12-35 Viewpoint 1: Proposed View

Viewpoint 1: R466 (Scenic Route 26)			
Viewpoint Description and Details	› View from R466 (SR-26). › Located west of the Proposed Development, approx. 1.4km. › Grid Reference (ITM): E 562,257; N 669,021		
LCA and Sensitivity	LCA 8 Slieve Bernagh Uplands: **Low**	**Visual Receptor(s) and Sensitivity**	SR-26: **High** Residential receptors: **High**
Description of 'Baseline' View	The image shows a medium-range view of the Proposed Development across a small rural valley. The view consists of agricultural fields, pockets of mature woodland and a rise in topography in the left-background of the image, which represents Lackareagh Mountain. Almost the full horizontal extent of the existing Ballyquin quarry void is visible in the view. Stockpiles and existing quarrying infrastructure are visible to the left of the image, located within the centre of the Site.		
Proposed View – Construction and Extraction Phase	The area for proposed extraction is identified by a blue line annotation above. Most of the proposed extraction is located within the existing quarry void which is not visible from this viewpoint due to visual screening by an elevated ridgeline and mature woodland (retained) at the south-western portion of the Site. The area at the far right of the Proposed View includes a greenfield area where extraction activity will be visible and landscape change will be clearly seen. Berms and planting are proposed as part of the LRP (See Appendix 12-1 and Appendix 12-2) and will be seen in this greenfield area from this viewpoint. The proposed above ground- inspection shed, wash plant and a processing plant are likely to be visible to the left of the view where the other existing quarry infrastructure is visible. However, only the most elevated parts of this proposed infrastructure (e.g. roof of the proposed inspection shed) will be visible as they are located at lower base elevation than the infrastructure visible in the existing view.		
Proposed View – Restoration Phase	The Proposed Restoration Area is identified by an orange line annotation above. Change to the view will arise during the restoration phase where infilling operations will be seen within the existing and future quarry void. As the upper profile of the quarry voids are filled, temporary visual change will occur as machinery and infilling operations are visible. Following infilling and planting as part of the LRP, landform will become visible and will revegetate over time causing change to the landscape view.		
Cumulative Effects	The permitted Fahybeg Wind Farm will be visible in the background of this image in a future receiving environment. The void of the existing John Bolton quarry is visible to the background right of the view, to the right (south) of the Proposed Extraction Area. No other quarries or industrial facilities are visible from this viewpoint.		
Sensitivity of Visual Receptor(s)	**Sensitivity = High.** Rationale: This viewpoint has been given a 'High' sensitivity rating on account of its scenic route designation, SR-26.		

Viewpoint 1: R466 (Scenic Route 26)	
Magnitude of Change	**Magnitude = Slight.** Rationale: The Proposed Development will only be visible in a very small portion of the landscape view causing a short-term degree of change which is generally aligned with the existing character of the landscape – an existing quarry void. The Proposed Development does not alter any key sensitive aspects of the view from this location and is aligned with existing and emerging baseline trends.
Significance of Effect	**High × Slight = Moderate/Minor = 'Moderate' (EPA, 2022)** *'An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends'.*
Mitigation Factors	› Visual effects will occur momentarily for a small number of receptors as they drive along this small stretch of local road; › Visual effects will be neutral after implementation of the Landscape Restoration Plan, once planting has matured; › An existing inspection shed, wheel wash facility and processing infrastructure currently exist on the Site and therefore, the new proposed infrastructure will not add any novel visual elements to the Site. › The proposed infrastructure will also be visible in the same part of the view shown from this perspective and will be effectively absorbed into the existing landscape view. › The CCDP does not designate a specific point or viewing direction on SR-26; this portion of the route and the view shown is not considered a particularly scenic or sensitive part of the route. › This view is unrepresentative of views from SR-26, mature hedgerows along the route provide visual screening and this view is only intermittently visible through small windows in the hedges, such as gated entrances. › The majority of the current landscape of the Site is an existing quarry void, therefore, the Proposed Development will have a limited effect on the landscape.
Residual Effect	After considering all Mitigation Factors = **'Slight' (EPA, 2022)** *'An effect which causes noticeable changes in the character of the environment without affecting its sensitivities'.*

12.5.3 Viewpoint 2: R466 (Scenic Route 26 & Springmount Rd Junction

Plate 12-36 Viewpoint 2: Existing View (940m West of the Site)

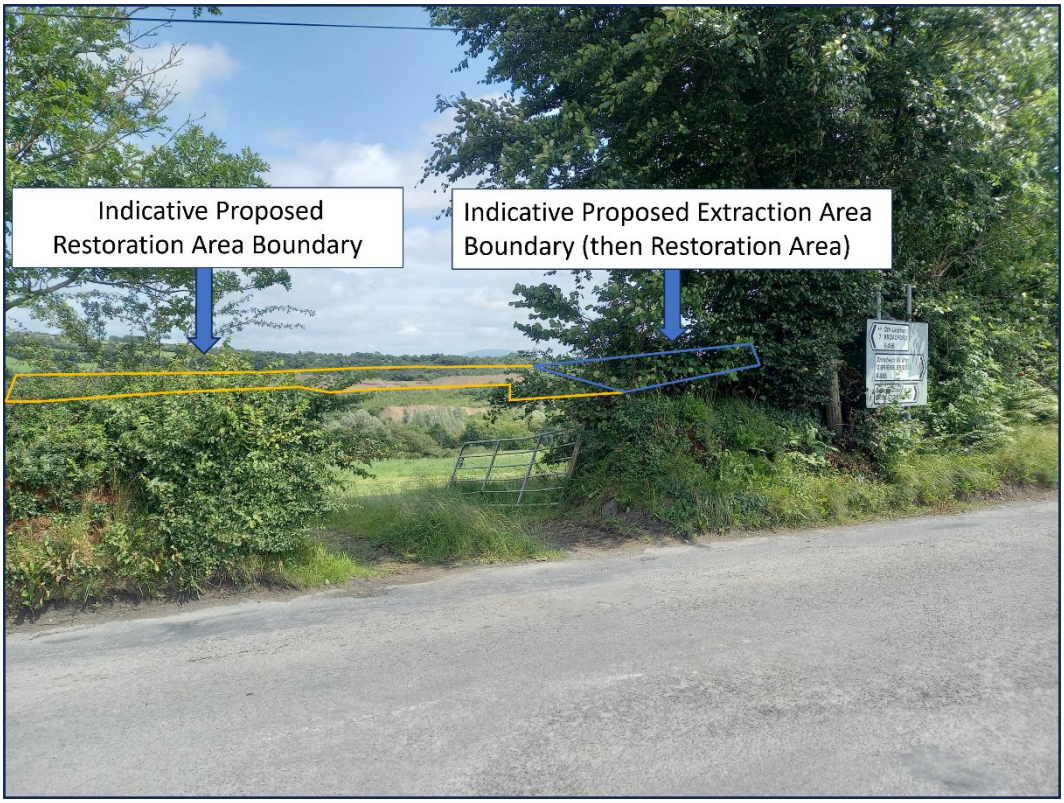

Plate 12-37 Viewpoint 2: Proposed View

Viewpoint 2 – R466 (SR-26) & Springmount Rd Junction			
Viewpoint Description and Details	› View from R466 & Springmount Road junction. › Located west of the Proposed Development, approx. 940m. › Grid Reference (ITM): E 561,904; N 669,529.		
LCA and Sensitivity	LCA 8 Slieve Bernagh Uplands: **Low**	**Visual Receptor(s) and Sensitivity**	SR-26: **High** Residential Receptors: **High**
Description of 'Baseline' View	View from the gated entrance to private farmland at the junction between R466 (SR-26) and Springmount Road. The view looks over an agricultural field and a tract of woodland. The landscape beyond the field is heavily vegetated with trees and large shrubs which provides visual screening from most of the working area of the Site. A section of the existing quarry void is visible through a gap in the roadside vegetation beyond a gate. Multiple stockpiles are noticeable with the existing quarry Site. The landscape rises further beyond the existing quarry with distant low-lying mountains visible in the background.		
Proposed View – Construction and Extraction Phase	The area for proposed extraction is identified by a blue line annotation above. Most of the proposed extraction is located within the existing quarry void which is not visible from this viewpoint due to visual screening by the roadside vegetation.		
Proposed View – Restoration Phase	Change to the view will arise during the restoration phase where infilling operations will be seen within the existing and future quarry void. As the upper profile of the quarry voids are filled, temporary visual change will occur as machinery and infilling operations are visible. The stockpiles visible in the view will be spread as part of the restoration phase. Following infilling and planting as part of the LRP, landform will become visible and will revegetate over time causing change to the landscape view.		
Cumulative Effects	The proposed permitted Fahybeg Wind Farm will be visible in the background of this image in a future receiving environment. No other quarries or industrial facilities are visible from this viewpoint.		
Sensitivity of Visual Receptor(s)	**Sensitivity = High.** Rationale: This viewpoint has been given a 'High' sensitivity rating on account of its scenic route designation, SR-26		
Magnitude of Change	**Magnitude = Negligible.** Rationale: It is unlikely that operations during the extraction phase will be visible from this viewpoint, it is only likely that short term restoration works will be visible from this perspective. The Proposed Development will only be visible in a very small portion of the landscape view through the gap in vegetation through the gate, causing a short-term degree of change which is generally aligned with the existing character of the landscape – an existing quarry void. The Proposed Development does not alter any key sensitive aspects of the view from this location and is aligned with existing and emerging baseline trends.		

Viewpoint 2 – R466 (SR-26) & Springmount Rd Junction	
Significance of Effect	**High × Negligible = Minor = 'Slight' (EPA, 2022)** *'An effect which causes noticeable changes in the character of the environment without affecting its sensitivities'.*
Mitigation Factors	› Visual effects will occur momentarily for a small number of receptors as they drive past this opening in roadside vegetation on this stretch of road; › No negative visual effects are likely to arise during the extraction phase, visual effects will be neutral after implementation of the Landscape Restoration Plan, once planting has matured; › The Proposed Development will have a very limited impact on the scenic sensitivities of the designated scenic route. › This view is unrepresentative of views from SR-26, mature hedgerows along the route provide visual screening and this view is only intermittently visible through small windows in the hedges, such as gated entrances. › The current landscape of the Site is an existing quarry void, therefore, the Proposed Development will have a limited impact on the character of this view
Residual Effect	After considering all Mitigation Factors = **'Not Significant' (EPA, 2022)** *'An effect which causes noticeable changes in the character of the environment but without significant consequences'.*

12.5.4 Viewpoint 3: Ballyquin Beg Hill

Plate 12-38 Viewpoint 3: Existing View

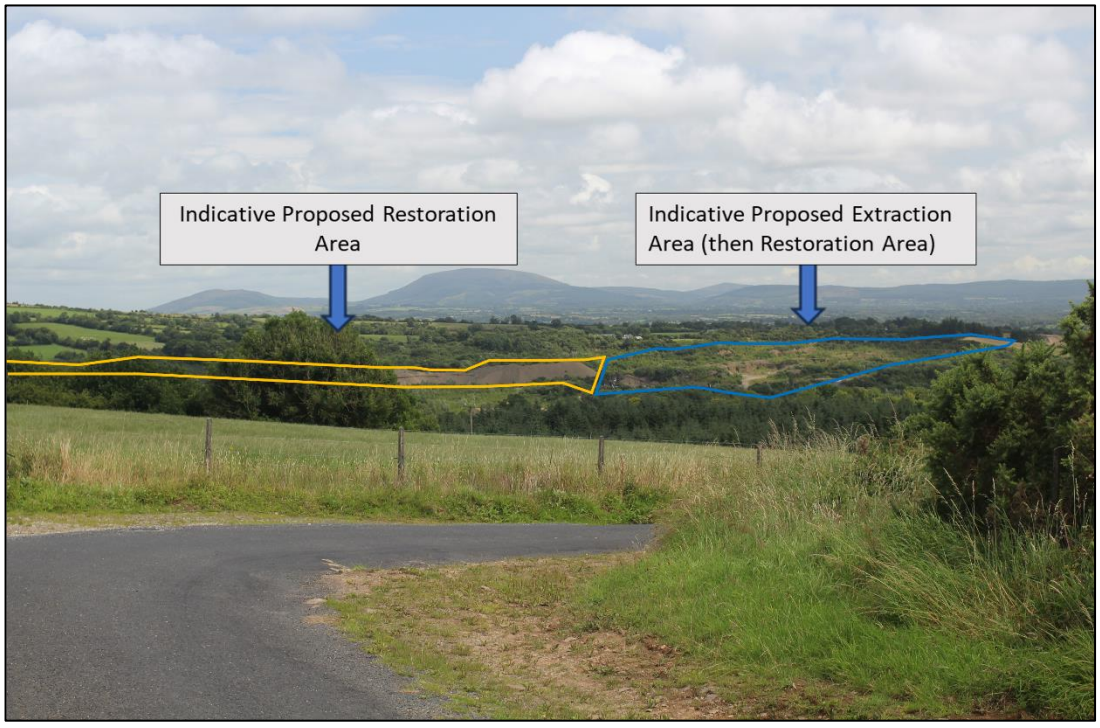

Plate 12-39 Viewpoint 3: Proposed View from Ballyquin Beg

Viewpoint 3 – Ballyquin Beg Hill			
Viewpoint Description and Details	› View from Ballyquin Beg hill, along the roadside looking southeast towards the Proposed Development. › Located approx. 940m from the Site. › Grid Reference (ITM): E 561,230; N 669,691		
LCA and Sensitivity	LCA 8 Slieve Bernagh Uplands: **Low**	**Visual Receptor(s) and Sensitivity**	Local road: **Low**
Description of 'Baseline' View	View from Ballyquin Beg Hill, overlooking the Ballyquin Quarry to the east. This viewpoint is at an elevated vantage point, providing a full, clear view of the surrounding landscape of the area and the existing quarry void of the Proposed Development Site. Ballyquin Beg Hill is mostly composed of agricultural pasture fields, allowing for open and medium ranging views of the Proposed Development. Conifer trees are visible at the base of the hill, in front of the Proposed Development Site. The Jim Bolton Sand & Gravel quarry is also partially visible from this viewpoint to the south (right side of the image) and behind the Proposed Development. It is distinguishable by the unvegetated mounds in the background behind the Proposed Development. Stockpiles are visible to the north (left of the picture) of the Site. They are unvegetated, giving visual contrast to the surrounding vegetated landscape. Some quarry infrastructure is also visible in the centre of the Site, to the right of the large stockpiles. A greenfield area at the south-east of the Site is distinguishable by the bare field at the top of the slope, in contrast to the more densely vegetated tree areas surrounding the Site. In the distance, Keeper Hill of Co. Tipperary is clearly distinguishable along the horizon.		
Proposed View – Construction and Extraction Phase	The area for proposed extraction is identified by a blue line annotation above. Most of the proposed extraction is located within the existing quarry void which has limited visibility from this viewpoint due to visual screening by an elevated ridgeline and mature woodland (retained) at the south-western portion of the Site and the nature of activities as vertical extraction. The extraction machinery and transport vehicles are likely to be partially visible from this elevated Viewpoint. The area at the far right of the Proposed View includes a greenfield area where extraction activity will be visible and landscape change will be clearly seen. Berms and planting are proposed as part of the LRP (See Appendix 12-1 and Appendix 12-2) and will be seen in this greenfield area from this viewpoint.		
Proposed View – Restoration Phase	Change to the view will arise during the restoration phase where infilling operations will be seen within the existing and future quarry void. As the upper profile of the quarry voids are filled, temporary visual change will occur as machinery and infilling operations are visible. In particular, the greenfield area to the far right of the Site from this Viewpoint will be infilled following extraction and this will be visible from this Viewpoint. Following infilling and planting as part of the LRP, landform will become visible and will revegetate over time causing change to the landscape view.		
Cumulative Effects	The elevated vantage point of this view will likely lead to some cumulative visual effects to occur, considering the visibility of the other active areas within Ballyquin Quarry and the additional visibility of the Jim Bolton Sand &		

	Gravel quarry from this location. The permitted Fahybeg Wind Farm will also be visible in the background of this image in a future receiving environment.
Sensitivity of Visual Receptor(s)	**Sensitivity = Low.** Rationale: The primary use of this local road would be commuting from residential homes along the road.
Magnitude of Change	**Magnitude = Moderate** From this elevated Viewpoint, the Proposed Development will be seen from a substantial distance which will result in a low level of change to the view and its composition.
Significance of Effect	**Low × Moderate = Minor = 'Slight' (EPA, 2022)** *'An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.*
Mitigation Factors	› Visual effects will be neutral after implementation of the landscape restoration plan, once planting has matured;
Residual Effect	After considering all Mitigation Factors = **'Slight' (EPA, 2022)** *'An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.*

12.5.5 Viewpoint 4: Site Entrance

Plate 12-40 Viewpoint 4: View northwest from the Site entrance from R466 (SR-26) in Leitrim

Plate 12-41 Viewpoint 4: Proposed View from Site Entrance

Viewpoint 4 – Site Entrance on R466 (SR-26)			
Viewpoint Description and Details	› View from Site entrance along the R466 (SR-26), facing southeast towards the Proposed Development. › Located at the Site Entrance, along the Proposed Development Site Boundary. › Grid Reference (ITM): E 562,522; N 666,850.		
LCA and Sensitivity	LCA 8 Slieve Bernagh Uplands: **Low**	**Visual Receptor(s) and Sensitivity**	Scenic Route 26: **High**
Description of 'Baseline' View	The Site entrance is visible in the foreground, it comprises of a widened entry way to accommodate working vehicles for easy access to the R466 (SR-26). A medium ranging view is shown through the large gap in roadside hedgerow where a flat marshy area comprising clusters of shrubs are seen. Landform rises in the background of the image where a field of grassland and a line of trees are visible.		
Proposed View – Construction and Extraction Phase	A section of the Proposed Extraction Area is visible in this image and is identified by a blue line annotation above. All mature vegetation seen in the foreground and middle-ground of the view will be retained as part of the Proposed Development. In this image, most of the proposed extraction is located at the greenfield area which is located at the southeast of the Site and seen as the elevated field in the left background of the image. Landscape change will be visible here in the Extraction Phase where this elevated landform is removed, and extraction activities will be clearly visible. Areas within the existing quarry void will not be visible from this viewpoint due to visual screening by an elevated ridgeline and mature woodland (retained) at		

Viewpoint 4 – Site Entrance on R466 (SR-26)	
	the south-western portion of the Site. Berms and planting are proposed as part of the LRP (See Appendix 12-1 and Appendix 12-2) and will be seen in this greenfield area from this viewpoint. Considering that this Viewpoint is located at the Site entrance, vehicles as a result of construction, quarrying and infilling activities will be seen entering and exiting the Site.
Proposed View – Restoration Phase	Change to the view will arise during the restoration phase where infilling operations will be seen within the existing and future quarry void. As the areas to the southeast of the Site (currently the greenfield area) are filled, temporary visual change will occur as machinery and infilling operations are visible. Following infilling and planting as part of the LRP, landform will become visible and will revegetate over time causing change to the landscape view. In addition, as part of the LRP, trees will be planted in the foreground of the image which will screen views towards the Proposed Extraction Area in this view once matured
Cumulative Effects	No cumulative visual effects will occur at the Viewpoint
Sensitivity of Visual Receptor(s)	**Sensitivity = High.** Rationale: This Viewpoint is located on SR-28
Magnitude of Change	**Magnitude = Slight.** Rationale: The Proposed Development would be visible at a sufficient distance to be perceptible, resulting in a low level of change to the view and its composition, as well as a low degree of contrast. The character of the view may be altered but will remain similar to the baseline existing situation.
Significance of Effect	**High × Slight = Moderate/Minor = 'Moderate' (EPA, 2022)** *'An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends'.*
Mitigation Factors	› Visual effects will be neutral after implementation of the landscape restoration plan, once planting has matured; › The CCDP does not designate a specific point or viewing direction on SR-26; this portion of the route and the view shown is not considered a particularly scenic or sensitive part of the route. › This view is unrepresentative of views from SR-26, mature hedgerows along the route provide visual screening and this view is only intermittently visible through small windows in the hedges, such as gated entrances. › Visual effects will occur momentarily for a small number of receptors as they drive along this small stretch of local road;
Residual Effect	After considering all Mitigation Factors = **'Slight' (EPA, 2022)** The construction vehicle traffic from quarrying activities will cause a Slight visual effect. Extraction not visible following mitigation planting

12.5.6 Viewpoint 5: R466 (Scenic Route 26)

Plate 12-42 Viewpoint 5: Existing View

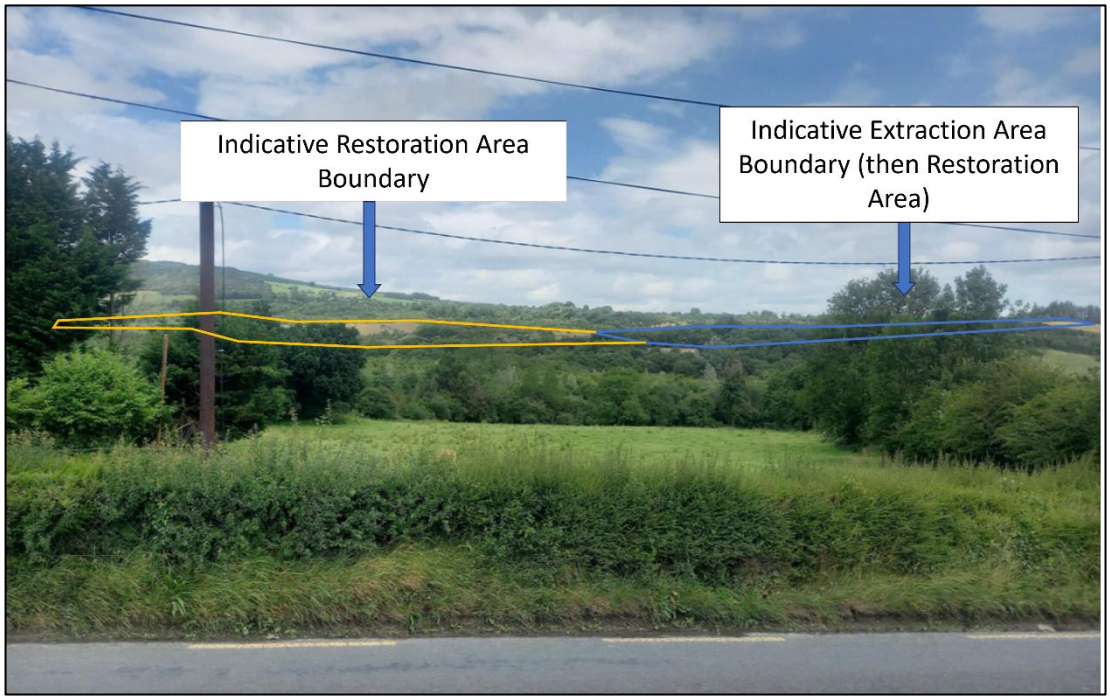

Plate 12-43 Viewpoint 5: Proposed View

Viewpoint 5: R466 (Scenic Route 26)			
Viewpoint Description and Details	› View from R466 (SR-26). › Located west of the Proposed Development, approx. 1.4km. › Grid Reference (ITM): E 562,193; N 668,945		
LCA and Sensitivity	LCA8 Slieve Bernagh Uplands: **Low**	**Visual Receptor(s) and Sensitivity**	SR-26: **High;** Residential receptors: **High**
Description of 'Baseline' View	The image shows a medium-range view of the Proposed Development Site from a slightly elevated vantage point on the R466 (SR-26) to the west of the Site, across a small rural valley. The view consists of agricultural fields, pockets of woodland and a rise in topography in the left-background of the image, which represents Lackareagh Mountain. The existing quarry void is visible as well as stockpiles which contrast against the highly vegetated landscape.		
Proposed View – Construction and Extraction Phase	The area for proposed extraction is identified by a blue line annotation above and is partially visible beyond intervening vegetation in the landscape. Most of the Proposed Extraction Area is located within the existing quarry void which is not visible from this viewpoint due to visual screening by the intervening vegetation. A small greenfield area is visible to the right of the image where extraction will take place and will be clearly visible from this viewpoint. It is unlikely that the proposed inspection shed will be visible from this viewpoint due to screening from vegetation in the intervening landscape. The rooftop of the proposed inspection shed may be visible in winter months when vegetation has lost its foliage, although this will amount to a very small degree of visual change in this view. Berms and planting are proposed as part of the LRP (See Appendix 12-1 and Appendix 12-2) and will be seen in this greenfield area from this viewpoint.		
Proposed View – Restoration Phase	The area for proposed restoration is identified by an orange line annotation above. Change to the view will arise during the restoration phase where infilling operations will be seen within the existing and future quarry void. As the upper profile of the quarry voids are filled, temporary visual change will occur as machinery and infilling operations are visible. Following infilling and planting as part of the LRP, landform will become visible and will revegetate over time causing change to the landscape view.		
Cumulative Effects	The permitted Fahybeg Wind Farm will be visible in the background of this image in a future receiving environment and will contribute to cumulative visual effects. The void of the existing John Bolton Quarry is visible from this viewpoint to the right of the Proposed Development Site and will contribute to cumulative visual effects.		
Sensitivity of Visual Receptor(s)	**Sensitivity = High.** Rationale: This viewpoint has been given a 'High sensitivity rating on account of its scenic route designation, SR-26.		
Magnitude of Change	**Magnitude = Slight.** Rationale: The Proposed Development will only be visible in a very small portion of the landscape view causing a short-term degree of change which is		

Viewpoint 5: R466 (Scenic Route 26)	
	generally aligned with the existing character of the landscape – an existing quarry void. The Proposed Development does not alter any key sensitive aspects of the view from this location and is aligned with existing and emerging baseline trends.
Significance of Effect	**High × Slight = Moderate/Minor = 'Moderate' (EPA, 2022)** *'An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends'.*
Mitigation Factors	› Visual effects will occur momentarily for receptors as they drive along this stretch of the scenic route; › The CCDP does not designate a specific point or viewing direction on SR-26; this portion of the route and the view shown is not considered a particularly scenic or sensitive part of the route. › This view is unrepresentative of views from SR-26, mature hedgerows along the route provide visual screening and this view is only intermittently visible through small windows in the hedges, such as gated entrances. Visual effects will be neutral after implementation of the Landscape Restoration Plan, once planting has matured;
Residual Effect	After considering all Mitigation Factors = **'Slight' (EPA, 2022)** *'An effect which causes noticeable changes in the character of the environment without affecting its sensitivities'.*

12.5.7 Viewpoint 6: Fahy More (South)

Plate 12-44 Viewpoint 6: Existing View – Panoramic View

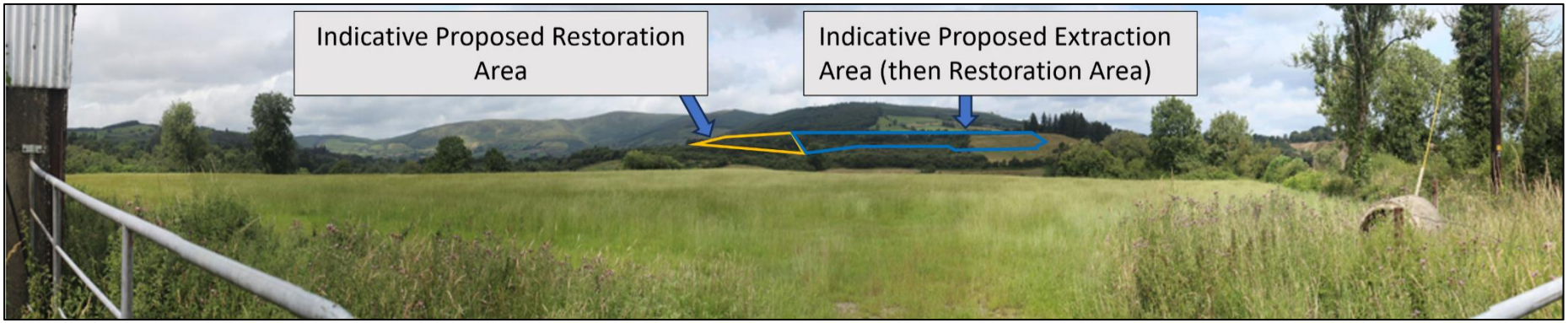

Plate 12-45 Viewpoint 6: Proposed View – Panoramic View

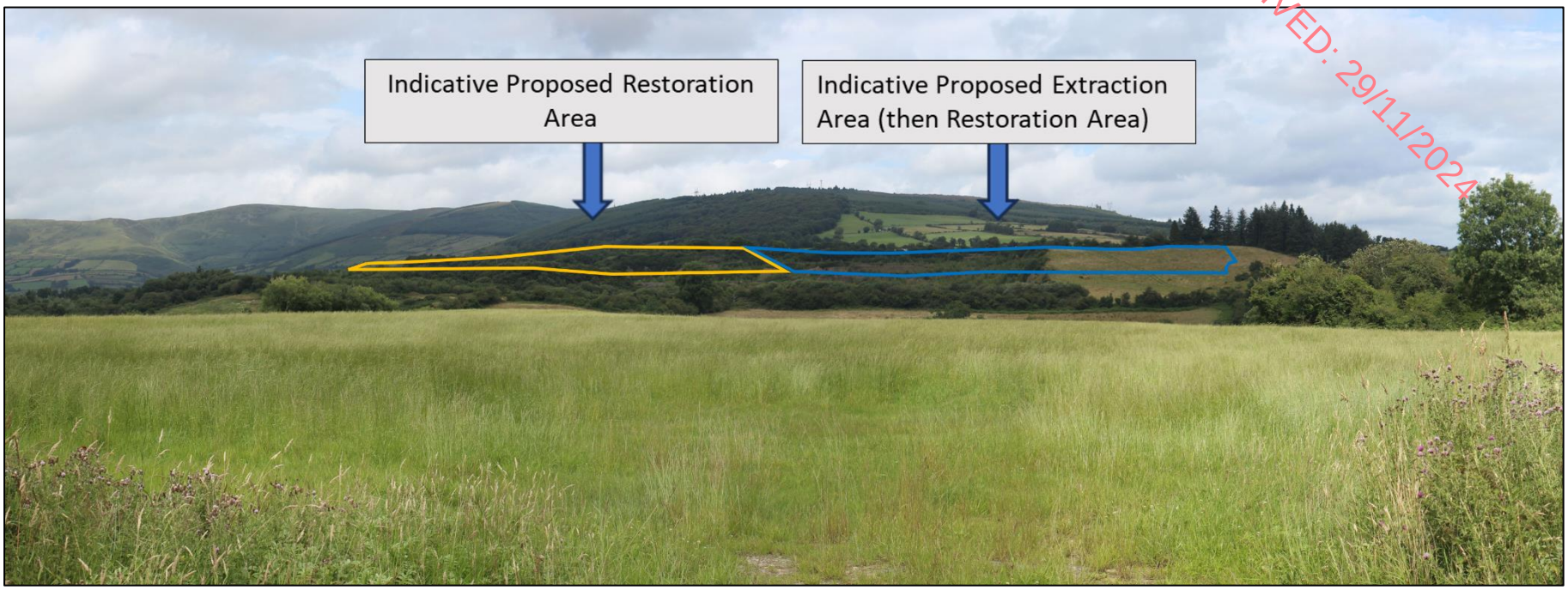

Plate 12-46 Viewpoint 6: Proposed View (Zoomed)

Viewpoint 6: Fahy More (South) Road			
Viewpoint Description and Details	› View from Fahy More (South) Road › Located south of the Proposed Development, approximately 380 metres. › Grid Reference (ITM):		
LCA and Sensitivity	LCA8 Slieve Bernagh Uplands: **Low**	**Visual Receptor(s) and Sensitivity**	Road users on local road: **Low** Residential Receptors: **High/Medium**
Description of 'Baseline' View	The image shows a long-range view of the Proposed Development across an agricultural landscape. The view consists of agricultural fields, pockets of mature woodland and a rise in topography in the left-background of the image to a peak called Lackareagh Mountain and an area of commercial forestry. The field in the foreground of the image in very flat relative to the landscape in this image. The southern portion of the existing Ballyquin quarry void is visible in the view, with the most northern section not visible due to visual screening from landform and mature woodland. The greenfield area in the southern section of the Site is clearly visible in this image.		
Proposed View – Construction and Extraction Phase	The area for proposed extraction is identified by a blue line annotation above. A greenfield area is visible to the centre and right of the image where extraction will take place and there will be clear visual change to the landscape in this view where the landform of this field and part of the tall treeline on the ridge is removed and extraction activities will be seen. Tall and visually prominent elements of the Proposed Development such as the proposed inspection shed will not be visible from this viewpoint as they are located beyond the slightly elevated landform and woodland to the left of the view. Berms and planting are proposed as part of the LRP (See Appendix 12-1 and Appendix 12-2) and will be seen around the blue boundary within the greenfield area from this viewpoint.		
Proposed View – Restoration Phase	Change to the view will arise during the restoration phase where infilling operations will occur following extraction in the greenfield area to the southeast of the Site. Following infilling and planting as part of the LRP, the landform will return to its original form prior to extraction. The landscape will revegetate over time, both naturally and in combination with proposed planting measures in the LRP and return to its original state prior to extraction causing change to the landscape view. Berms will be added to the landscape and will be visible around the greenfield area to the southwest of the Site		
Cumulative Effects	The permitted Fahybeg Wind Farm will be visible in the background of this image in a future receiving environment. The quarry void and operations of the existing John Bolton quarry are partially visible to the right of the view presented. Both Fahy Beg Wind Farm and the John Bolton Quarry will give rise to some cumulative visual effects from receptors in this area.		
Sensitivity of Visual Receptor(s)	**Sensitivity = Medium** Rationale: This Viewpoint is located in close proximity to a cluster of residential receptors to the south and south-west of the Site which will have similar views towards the greenfield area in the southwest of the Site. This viewpoint represents a relatively small number of residential receptors which		

Viewpoint 6: Fahy More (South) Road	
	have greater set back from the Site than is shown in this view. On balance, sensitivity of the viewpoint is considered Medium.
Magnitude of Change	**Magnitude = Moderate.** From this Viewpoint, the extraction and restoration in the greenfield area to the southwest of the Site will be clearly visible and will change the composition of the landscape view. There will also be some cumulative visual change in combination with permitted Fahy Beg and the existing John Bolton Quarry.
Significance of Effect	**Medium × Moderate = Moderate/Minor = 'Moderate' (EPA, 2022)** *'An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends'.*
Mitigation Factors	› Visual effects will be neutral after implementation of the Landscape Restoration Plan, once planting has matured around the greenfield area to the southwest of the Site; › With the exception of the greenfield area to the southeast of the Site, visibility of other quarrying activities in other areas of the Site will be limited and screened by the vegetation along the boundary of the Proposed Development Site. › This Viewpoint is taken from a local road with low volumes of traffic; › This viewpoint shows an open view in close proximity to the Site (approx. 400 metres). Most residences with open views of the Site susceptible to visual impacts are likely to be further set back than the view shown above.
Residual Effect	After considering all Mitigation Factors = **'Moderate' (EPA, 2022)** *'An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.*

12.6 Likely Significant Landscape and Visual Effects

The assessment of likely significant landscape and visual effects in this section follows the methodology detailed previously in Section 12.2.3 *'Assessing Landscape Effects'* and Section 12.2.4 *'Assessing Visual Effects'*.

12.6.2 'Do Nothing' Scenario

If the Proposed Development were not to proceed, there would be no change to the existing environment. The landscape of the Proposed Development Site would remain largely unaltered as an existing quarry. Should this occur, the landscape and visual impact would be neutral in the context of this EIAR.

12.6.3 Construction Phase Effects

The construction phase is required to enable the Proposed Development activities. A comprehensive description of the construction phase activities of the Proposed Development are detailed in Section 3.3.1. of Chapter 3 of this EIAR. Construction works for the proposed works at the Site will be minimal. The construction phase will include:

- Preparation of Site for construction;
- Stripping of overburden soils under archaeological supervision for use in construction of environmental berms and ongoing Site restoration works;
- Removal of existing internal hedgerows in greenfield extraction area,
- Pouring of concrete for soil inspection area/refuelling area foundation;
- Construction of new drainage network and fuel/oil interceptor at refuelling area;
- Erection of quarantine inspection shed;
- Road paving/improvements;
- Construction of settlement ponds;
- Construction of a fixed processing plant including water management system and ponds for the washing of aggregates; and
- Construction of a new chain-link perimeter fence on the eastern and northern boundaries of the Proposed Extraction Area.

It is estimated that the construction phase of the proposed works will require approximately 1 month; therefore, all effects of the construction phase works will be 'Temporary'.

12.6.3.4 Construction Phase: Landscape Effects

The construction works listed above will have an effect on the landscape where the landform and landcover of the Proposed Development Site is materially altered to accommodate the new infrastructure. The construction activities are likely to cause temporary impacts on the landscape. However, the new quarry infrastructure (e.g. inspection shed, wheel wash area and processing plant) will be permanent structures with the intention of retaining them throughout the lifespan of the project (to decommissioning phase). Therefore, landscape effects arising from these will be permanent. In terms of landscape character, the construction of new quarrying infrastructure will be aligned with the existing land use and character of the Site as an existing quarry which already comprises quarry infrastructure. Excepting the removal of hedgerows in the greenfield area at the south-eastern extent of the site, the change to the landscape will be highly localised within the Site itself due to the relative enclosure provided by the existing quarry void, localised landform features and mature woodland surrounding the Site.

As determined previously in Section 12.3.4 'Landscape Value & Sensitivity', the Site is deemed to be a landscape of 'Low' Sensitivity.

In terms of the magnitude of change of the effect, the construction works are considered to cause a 'Moderate' change to the landscape of the Proposed Development Site, which is rated as having 'Low' sensitivity. Therefore, the construction phase will amount to a 'Long-term', 'Negative' landscape effect of 'Slight' significance. These landscape effects are highly localised to the landscape of the Site itself.

12.6.3.5 Construction Phase: Visual Effects

Visual effects arising from construction activities will mostly occur at the surface level and will be highly localised within the Proposed Development Site itself and in its immediate vicinity. As identified in the Visual Baseline exercise (See Section 12.4.3.8 – *Summary Visibility Appraisal),* the Proposed Development is only likely to be visible from a small number of receptors to the west and south-west of the Site and one residential receptor to the north-east.

Removal of vegetation in the green field area at the south-eastern extent of the Site will be the most visible change to scenic amenity occurring in the construction phase due to the visual exposure of this treeline on an elevated ridgeline. This will be visible from both residential receptors to the south and south-west (represented by Viewpoint 6), as well as occasional glimpses from road users on elevated sections of the R466 (SR-26) where there are gaps in mature roadside vegetation (Viewpoints 1, 2, 3 and 4).

Receptors on the regional road (See Viewpoints 1 and 5), a local road in the townland of Ballyquin Beg (viewpoint 3) and a small number of residents to the west will also have partial visibility of the construction work required for the proposed above ground-infrastructure such as the inspection shed, wash plant and a processing plant. Only construction of the most elevated parts (e.g. the roof of the inspection shed) will be visible from these receptors. Movement of construction vehicles will be evident from receptors to the west, particularly for road users and residential receptors. The Proposed Development will amount to a very small degree of visual change to the visual amenity of these receptors during the construction phase, a 'Negligible' magnitude of change. Residential receptors and the designated scenic route are considered High Sensitivity. Construction activities will therefore cause visual effects 'Temporary', 'Negative' and 'Slight' visual effects on these on these receptors during the construction phase. The visual effects of permanent infrastructure such as the impaction shed will be 'Long-Term'.

Specific visual effects on receptors from Viewpoints (previous Section 12.5) are discussed in relation to the Extraction phase in the following section.

12.6.4 Extraction Phase Effects

Sand extraction will occur during the extraction phase thus landscape and visual effects will arise as the ground cover is removed and landform of the Site is further excavated. The sand will be extracted from an area measuring approximately 16.3 ha which will allow for the extraction of approximately 1,428,571 tonnes of material. It is important to note that the Site is currently an existing quarry void. A majority of the proposed extraction activity will occur within the enclosure of the existing quarry void, below current ground level, and therefore landscape and visual effects will be highly localised to within the Site itself. However, the greenfield area at the southeastern extent of the Site is relatively prominent landform, visually exposed to some areas to the west and south-west of the LVIA Study Area. The proposed extraction of this greenfield area will cause the greatest landscape and visual effects of the Proposed Development as the landform of existing field will be substantially altered from the baseline as the ground-level will be extracted to create a quarry void.

Most boundary vegetation around the Site will be retained; however, several hedgerows and treelines are to be removed to facilitate extraction activities in the greenfield area. The Landscape Restoration Plan (LRP) is detailed in both Appendix 12-1 and Appendix 12-2 and includes several mitigation measures for implementation at the start of the extraction phase. These include creation of berms and semi-mature planting of native species around the perimeter of the Proposed Extraction Area to replace any vegetation loss required to facilitate extraction.

Discussion of landscape and visual effects in relation to specific landscape and visual receptors is discussed below.

12.6.4.4 Extraction Phase: Landscape Effects

As determined previously in Section 12.3.4 'Landscape Value & Sensitivity', the Site is deemed to be a landscape of 'Low' Sensitivity.

Landscape effects will occur during the excavation phase as the ground-level of the Site is further deepened. Extraction within the existing quarry void will equate to a 'Slight' degree of change to the baseline character of the Site and localised long-term landscape effects of 'Not Significant'.

A 'Substantial' magnitude of landscape change will occur in the localised greenfield area to the southeast of the Proposed Development Site as the topsoil and vegetation are cleared and material is excavated. This will cause the physical fabric of the landscape of the Site to be substantially altered from a greenfield site comprising agricultural fields to that of a working quarry. Although this area is greenfield, it is a field of agricultural grassland and is considered a part of a modified working landscape of 'Low' sensitivity. The Low sensitivity combined with the 'Substantial' magnitude of change

equates to a Long-Term Negative landscape effect of 'Moderate' significance on this area of the Site and landscape. After mitigation included as part of the Site Restoration Phase and measures in the LRP such as infilling and planting are implemented following the extraction phase, residual landscape effects will be 'Not Significant' and 'Neutral'.

As reported throughout this Chapter, visibility of the proposed extraction is likely to be very localised to a few areas of the landscape to the west and south-west of the LVIA Study Area. Therefore, effects on the wider landscape character of the LVIA Study Area is very limited. The Proposed Development Site and most of the LVIA Study Area is located in the Slieve Bernagh Uplands LCA and Co. Clare Settled Landscape. Considering the 'Negligible' degree of change to the character of the landscape of this LCA and the Settled landscape (due to the very limited visibility), 'No Significant' effects are deemed to arise on these designations from the proposed extraction.

12.6.4.5 Extraction Phase: Visual Effects

During the Extraction Phase, the Proposed Development predominantly comprises a vertical (downward) extraction. Therefore, visibility of this extraction and associated extraction activities are naturally, relatively limited from within the surrounding landscape, as all development generally occurs below the existing ground level, particularly the proposed extraction within the existing quarry void. Visibility of the proposed extraction could be excluded from the vast majority of the wider LVIA Study Area, with the exception of slightly elevated vantage points to the west and south-west of the Site. The proposed extraction of the greenfield area in the south-eastern portion of the Site will be the most prominent and visible element of the Proposed Development, this is only likely to cause visual effects from receptors located to the west and south-west of the Site. The SR-26 along with the residential receptors in close proximity to the Site are the most sensitive receptors in the LVIA Study Area, which have both been assigned as 'High' sensitivity receptors.

Scenic Route 26

As outlined in 12.6.4, the Scenic Route 26 represents a key sensitive receptor in within the LVIA Study Area. Although this scenic route passes in close proximity to the Proposed Development Site boundary, the views towards the Site along this route are very intermittent and limited to short gaps in the roadside vegetation. Viewpoint 1, Viewpoint 2, Viewpoint 4 and Viewpoint 5 have been captured from locations on Scenic Route 26 where the most open views towards the Proposed Development were found from this route. Some key points are worth noting in relation to visual effects on Scenic Route 26:

- The Viewpoints assessed in Section 12.5 are generally unrepresentative of views of the Site from SR-26, mature hedgerows along the route provide visual screening and views are only intermittently visible through approximately 4 windows in the hedges, such as gated entrances.
- Visual effects will occur momentarily for receptors as they drive past the few locations where visibility occurs on the road;
- The CCDP does not designate a specific point or viewing direction on SR-26; the small portion of the route and shown by the viewpoints is not considered a particularly scenic or sensitive part of the route.

As outlined in Section 12.5, Viewpoint 1 and Viewpoint 5 were deemed to have a 'Slight' residual visual effect whilst Viewpoint 2 was deemed to have a 'Not Significant' residual visual effect. Viewpoint 4 is located at the Site entrance, also on Scenic Route 26. Planting is proposed as part of the LRP to screen the Proposed Development from view at the start of the extraction phase. No visual effects will occur from Viewpoint 4 once vegetation establishes and matures. To conclude, the key scenic sensitivities of Scenic Route 26 will not be significantly impacted by the Proposed Development.

Residential Receptors to the South-west and South (townlands of Fahy More South, Fahy More North and Fahy Beg)

As outlined in Section 12.4, a cluster of residential receptors have open views across a relatively low-lying and flat landscape towards the greenfield area to southern extent of the Proposed Development. Viewpoint 6 was captured to the south/southwest of the Site to represent views from these residential receptors. As outlined in Plate 12-46 extraction and restoration activities will occur at this area of the Site and hence, visual effects will occur on residential receptors at this location. There will be clear visual change to the landscape in this view where the landform of this field and part of the tall treeline on the ridge is removed during the extraction phase and extraction activities will be seen. Change to the view will also arise during the restoration phase where infilling operations will occur following extraction in the greenfield area to the southeast of the Site. In addition, berms and planting are proposed as part of the LRP (See Appendix 12-1 and Appendix 12-2) and will be seen around the blue boundary within the greenfield area from this viewpoint. However, some key points are worth noting in relation to visual effects on these residential receptors to the south and southwest of the Site;

- Following infilling and planting as part of the LRP, over time the landform will return to its original form prior to extraction.
- The tall and visually prominent elements of the Proposed Development such as the proposed inspection shed will not be visible from this viewpoint as they are located beyond the slightly elevated landform and woodland to the left of the view.
- With the exception of the greenfield area to the southeast of the Site, visibility of other quarrying activities in other areas of the Site will be limited and screened by the vegetation along the boundary of the Proposed Development Site.
- the imagery from Viewpoint 6 (See Plate 12-46Plate 12-46 previously)shows an open view in close proximity to the Site (approx. 400 metres). Most residences with open views of the Site susceptible to these visual impacts are likely to be further set back than the view shown.

As outlined in 12.5.7, Viewpoint 6 was deemed to have a 'Moderate' magnitude of change, and a 'Moderate' residual visual effect was deemed to arise.

Views from Elevated Vantage Points

The Proposed Development will be visible from other occasional elevated vantage points within the wider LVIA Study Area, although in general many of these are vantage points are net representative of high sensitivity receptors. For example, Viewpoint 3 shows a view from an elevated vantage point in the LVIA Study Area that is accessible by a local road. Viewpoint 3 shows an open view into the Site where visual effects will be clearly visible, and a 'Moderate' Magnitude of change will occur. This viewpoint is located on a relatively low trafficked local road and does not represent any high sensitivity receptors (e.g. residents or recreational routes) and therefore is considered a viewpoint of 'Low' sensitivity. Residual effects were deemed to be 'Slight' from Viewpoint 6.

The East Clare Way

The East Clare Way is a way marked walking trail at the very northern extent of the LVIA Study Area representing High sensitivity receptors likely to be experiencing the landscape in a recreational capacity. Plate 12-25 (see visual baseline section) shows a view towards the Proposed Development from an elevated vantage point on the walking trail. Considering the distance (approx. 2.5km) and the multitude of features in the intervening landscape including mature woodland at the northern extent of the Site visibility of the proposed Development is unlikely to be distinguishable in the landscape, equating to a 'Negligible' magnitude of change and residual visual effects on this walking trail are deemed to be 'Not Significant'.

Residential Receptors to the East on Fahymore North Road (L-7126-0

Section 12.4.3.7 identifies 3 No. residential receptors in very close proximity to the north eastern boundary of the Proposed Development. During the visual baseline exercise these 3 No. properties were identified as being some of the most sensitive visual receptors within the LVIA Study Area which are most susceptible to visual impacts from the Proposed Development. This cluster of residential receptors are located in very close proximity to the Proposed Development boundary as shown in Figure 12-14. As outlined in 12.4.3, visibility appraisals determined that there were no suitable locations on the public road network for viewpoints representing these houses due to the dense roadside screening which is visible in the images presented above (Plate 12-31, Plate 12-32, Plate 12-33). However, it is acknowledged that these residences are susceptible to visual impact as the visual amenity may be different than seen from the public road – for example views from upper storey windows. These receptors are considered 'High' Sensitivity, and due to their close proximity to the Site, and the magnitude of change will likely be 'Moderate' from the house immediately adjacent to the existing quarry void, as shown in the image below.

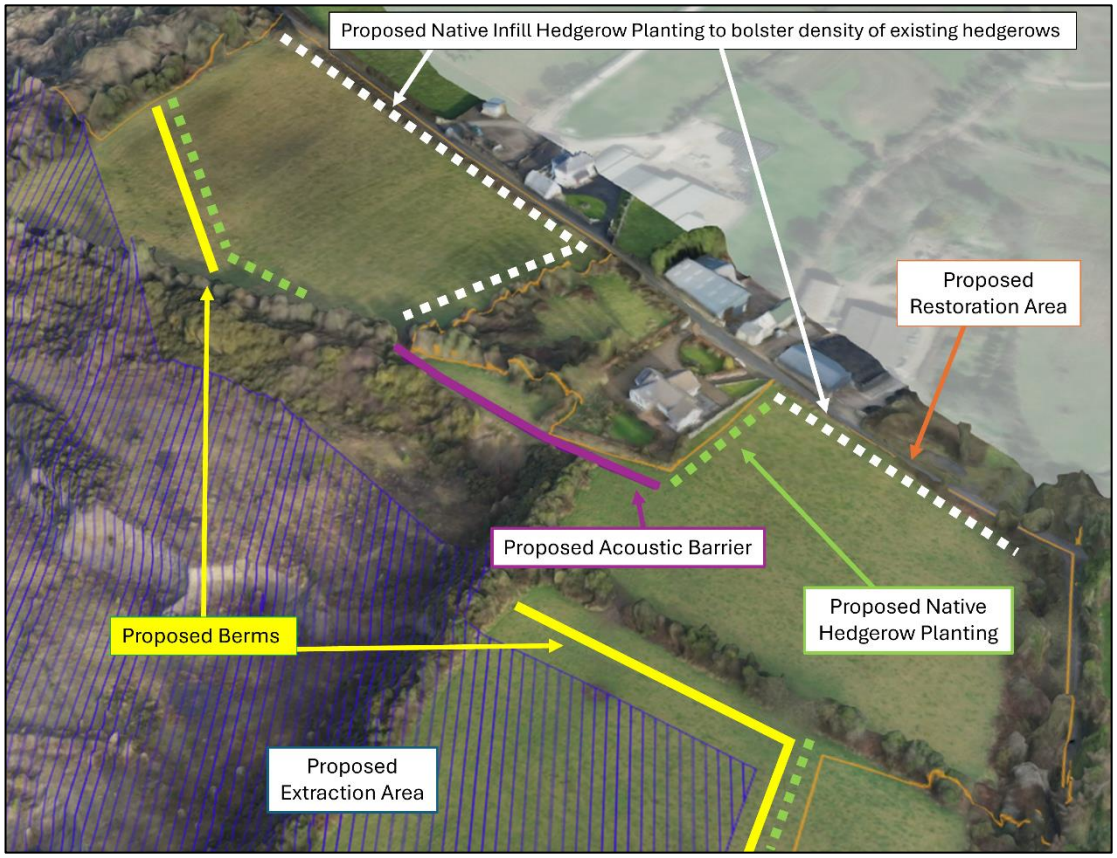

Figure 12-18 Mitigation Measures to eliminate and reduce visual impact on 3 No. Residential receptors.

Appendix 12-1 and Appendix 12-2 include details of the Landscape Restoration Plan (LRP). At the commencement of the extraction phase, the LRP includes measures such as creation of berms, native planting of mature hedgerows and infill planting of existing hedgerows. It is also proposed to include an acoustic barrier between the Site and the closest residential receptor. Figure 12-18 shows where some of these measures of the LRP and the acoustic barrier that will be implemented relative to the residential receptors adjacent to the Site. These measures will create a visual buffer between these residences and the Proposed Development Site to mitigate effects on residential visual amenity, reducing the likelihood of significant visual effects arising. The berms and acoustic barrier will act as a physical visual buffer between these residences and the Proposed Development. Infill planting and new lines of hedgerow will add to the visual barrier, and once matured will align these measures with the existing character of the landscape as perceived from these residences. Extraction activity in the greenfield are to the east of the Site is not likely to be visible from these residential receptors due to the existing screening from

mature vegetation, as well as proposed mitigation measures. As shown in the figure above, the resident immediately adjacent to the Site is located at an elevated vantage point relative to the existing quarry void, therefore some occasional visibility of operations in the extraction phase are likely to be unavoidable from upper storey windows, however, visibility from the garden and ground floor will likely be eliminated.

Following implementation of these mitigation measures and once planting has matured, residual visual effects are likely to be 'Slight' 'Long-term' and 'Neutral' considering the change in view will be of new vegetation aligned with the existing baseline views.

12.6.5 Landscape Restoration Phase Effects

The LRP is a key part of the decommissioning phase of the Proposed Development Site and an integral measure designed to mitigate landscape and visual effects of the Proposed Development. The ultimate objective of the LRP is to restore the landscape of the Site to harmonise with the landform and landcover of the lands surrounding the Proposed Development Site after extraction has occurred. The key measures of the LRP are described below whilst detailed descriptions of the measures involved as part of the LRP can be found in Appendix 12-1 and Appendix 12-2. The relevant landscape and visual effects arising from these measures are reported below in Section 12.6.5.5.

Infilling

One of the principal activities to be undertaken at the Site is for the restoration of lands within an existing and future quarry void. The quarry void shall be infilled to the point of producing a landform which effectively merges into the surrounding landscape. It is proposed to import approximately 4,471,200 tonnes of inert soil and stone material or stone by-product, or river dredge spoil for the infilling and restoration of an existing and future quarry void in order to return the land to a beneficial use.

Replanting

As outlined in Appendix 12-2, the LRP includes a planting plan to replace and offset any vegetation lost during the extraction phase and re-establish biodiversity corridors throughout the landscape of the Site. Hedgerows are proposed to ensure connectivity for biodiversity throughout the Site. The linear layout of hedgerow planting has been designed to emulate the irregular pattern of small field cells which exist in the wider landscape setting surrounding the Site. There is a network of linear biodiversity corridors and areas of mature woodland within the Site, and the proposed replanting will link with these existing areas to improve connectivity across the Site and wider landscape.

Decommissioning

Following completion of extraction, infilling and restoration, all built infrastructure on the Site including the weighbridge, wheel-wash facility, inspection shed, office and other associated buildings will be decommissioned and removed off-site.

Finally, following completion of the restoration and Site decommissioning works, provision will be made for further, short-term (<1 year) environmental monitoring as per planning and licence requirements.

12.6.5.5 Landscape and Visual Effects arising from the Landscape Restoration Phase

Landscape and Visual Effects arising during operations of the Restoration phase

Short-term, negative landscape and visual effects will occur to receptors at the start of the restoration phase as a result of the operations involved in infilling. The landscape and visual effects arising from the infilling operations will be similar in nature to those of the extraction phase and therefore, similar impacts will occur as on Viewpoints outlined in Section 12.5. As outlined in Section 12.5.7, Viewpoint 6 offers an open view towards an area within the restoration boundary and will undergo a 'Moderate' magnitude of change as a result of the infilling activities.

Landscape and Visual Effects arising following completion of Restoration Phase

Following completion of the restoration works and implementation of the LRP, the existing quarry void will be infilled, vegetation will re-planted and eventually mature over time meaning that the Site will return to a state similar to the landscape prior to quarry activities. At this point, the landscape character of the Site will become of similar character to that of the surrounding agricultural landscape. The restored landform will be visible from all Viewpoints assessed in Section 12.5 and will result in positive landscape and visual effects. A 'Moderate' and 'Long-term' 'Neutral/Positive' impact on the landscape and visual amenity will occur.

12.6.6 Cumulative Landscape and Visual Effects

The existing Jim Bolton Quarry is located to the southeast of the Proposed Development. This quarry and the Proposed Development contribute cumulative effects on this landscape area. However, there will be limited instances where both quarries are viewed in combination with the exception of some views from ethe west such as those seen in VP1, VP3, VP5 and VP6.

A wind energy development proposal, the permitted Fahybeg Wind Farm, is located to the north-east of the LVIA Study Area. The Proposed Development is located approximately 500 metres from the nearest turbine of the Fahybeg wind farm. The permitted wind farm comprises 8 turbines. In a future baseline scenario this wind farm development would cause relatively substantial change to the landscape and visual amenity of the area and would inevitably contribute cumulative landscape and visual effects with the Proposed Development.

As is comprehensively reported in this Chapter (particularly in Sectip12.4) the Proposed Development will have very limited visual exposure in the receiving landscape and will be mostly indiscernible from most sensitive landscape and visual receptors. In this regards its potential contribution to any cumulative landscape and visual effects will not be significant.

12.7 Conclusion

The area surrounding the Proposed Development is a sparsely populated, rural landscape. It is generally characterised as a modified working landscape where land use is typically dominated by agriculture (livestock), forestry, and other extractive quarrying activities.

The landscape of the Site is that of an existing quarry void of low landscape sensitivity with areas of value such as mature woodland remaining unchanged and unaffected as part of the Proposed Development. The extraction activity as part of the Proposed Development will cause the greatest change to the landscape. Due to the enclosure provided by the existing quarry void and the nature of vertical extraction activity, most landscape effects will be highly localised to within Site itself and changes with limited change on landscape character from the existing baseline.

The greatest landscape and visual effects will arise from extraction of a greenfield area at the south-eastern extent of the Site. This will cause the most noticeable and visually prominent change in landscape character as fields of grassland will become a quarry. This change will only occur within a small portion of the landscape but will be visible from a small number of receptors to the west including rural housing and occasional instances on the R446 Regional Road.

The new proposed infrastructure on the Site will replace the existing infrastructure on the Site and hence, will not add any new elements to the Site itself. Taller elements of the proposed infrastructure, such as the soil inspection shed will be mostly screened from view by vegetation along the Site boundary and localised landform. Therefore, visibility will be limited to the most elevated elements of this building.

The key sensitive receptors with any visibility of the Proposed Development were identified as a small portion of Scenic Route 26 on the R446 Regional Road and residential receptors in close proximity to the Site. In this regard, the Proposed Development will cause highly localised landscape and visual effects to a few receptors to the west and south-west of the LVIA Study Area, and 3 No. residential receptors to the north-east of the Site.

Scenic Route 26 runs in close proximity to the western boundary of the Proposed Development Site, however, visibility along this route will be limited to a few occasional gaps in the roadside vegetation along this route where Moderate visual effects will occur. The Proposed Development will not significantly affect the key scenic sensitivities of this scenic route.

Moderate visual effects will occur from residential receptors to the west and south-west of the Site where there will be open views of extraction and infilling operations in the greenfield area at the south-eastern extent of the Site. A small cluster of residences adjacent the north-eastern boundary of the Site is highly susceptible to visual effects due to their proximity. However, many mitigation measures are proposed to eliminate visual impacts as part of the Landscape Restoration Plan (LRP) and will ultimately result in 'Slight' residual visual effects.

The measure implemented as part of the LRP, including replanting of treelines and hedgerows along the Site boundary, a noise barrier and landscape berms, will provide substantial visual screening of extraction phase activities and mitigate many of the associated visual effects for receptors in close proximity to the Proposed Development. Positive landscape and visual effects will occur following the restoration phase as the quarry void will be infilled and restored to its original condition prior to quarrying activities in this area of the landscape. Short-term negative landscape and visual effects will occur as a result of operations required to infill the Site. Following decommissioning and complete implementation of the LRP including extensive planting, the landscape of the Site will harmonise with the landform, landcover and character of the surrounding lands, resulting in positive landscape and visual effects.