CONTENTS

TABLES

FIGURES

APPENDICES

INTRODUCTION

Background

13.1 This chapter of the EIAR assesses the landscape and visual effects arising from the establishment and operation of a materials recovery / recycling facility and inert landfill facility at Ballinclare Quarry, Kilbride, Co. Wicklow which comprises three key elements

- a soil washing plant to win aggregate from imported soil and stone;
- a construction and demolition (C&D) waste recycling facility to produce aggregate from construction and demolition waste (principally concrete); and
- an inert engineered (i.e. lined) landfill to facilitate backfilling and restoration of the existing quarry void.

13.2 The planning application site, hereafter referred to as the application site or the site, is located approximately 2.5km to the north-west of the small settlement of Kilbride and c. 2.5 km south of the village of Glenealy. The larger settlements of Rathdrum and Wicklow town are located 5.5 km to the west and 6 km to the north-east, respectively. The M11 motorway runs in a north-south direction c. 400 m to the east of the site.

13.3 The application site comprises a large disused quarry void, a former processing area in the south-eastern corner of the site and a concrete paved area to the west of the site access road, some areas of grassland and scrub (within which settlement ponds are located) as well as substantial tree belts surrounding the site.

13.4 This planning application provides for the installation and operation of a soil washing plant, the construction of an industrial shed (with roof mounted solar panels) at the proposed C&D waste recovery facility, the substantial backfilling of the existing quarry void to a maximum level of 80 m OD and the progressive restoration of the completed landfill landform to a long-term native woodland habitat. The development also provides for the continued use of established site infrastructure and services and felling of a number of mature trees to facilitate the widening of the existing site access road. Further details on the proposed development, including the proposed Landscape and Restoration Plan (Figure 2-4) are provided in Chapter 2 of this EIAR.

13.5 This Chapter should be read in conjunction with the following EIAR figures, at the end of this report, which have been prepared in support of this chapter:

- Figure 13-1: Landscape Baseline and Viewpoint Locations
- Figure 13-2: Viewpoint/Photomontage A
- Figure 13-3: Viewpoint/Photomontage B
- Figure 13-4: Viewpoints C & D
- Figure 13-5: Viewpoints E & F

Scope of Work / EIA Scoping

13.6 EPA guidelines in relation to preparation of an EIAR (May 2022) suggest the following typical headings that may be included in respect of the prescribed environmental topic / receptor ‘The Landscape’:

- Landscape Appearance and Character;
- Landscape Context;
- Views and Prospects; and
- Historical Landscapes.

13.7 These headings are incorporated in this assessment, as appropriate. However, in the absence of more detailed Irish guidance, the assessment presented herein is based on

the Third Edition of the Guidelines for Landscape and Visual Impact Assessment published by the Landscape Institute and Institute of Environmental Management and Assessment (hereinafter referred to as 'GLVIA3'). These guidelines are widely accepted as best practice for Landscape and Visual Assessment (LVIA) in Ireland.

13.8 GLVIA3 emphasises that landscape and visual effects are related but independent issues; landscape effects are changes in the landscape, its character and quality; while visual effects relate to the appearance of any changes and the resulting effect on visual amenity.

13.9 The assessment of overall landscape and visual effects and their significance is defined in terms of the relationship between the sensitivity of the landscape / visual receptors and the magnitude of the change.

13.10 As GLVIA3 (paragraph 2.23) states, professional judgement is an important part of the LVIA process: whilst there may be some scope for objective measurement of landscape and visual changes, much of the assessment must rely on qualitative judgements. It is critical that these judgements are based upon a clear and transparent method so that the reasoning can be followed and examined by others.

13.11 GLVIA3 sets out a framework for making judgements about the level of effects that may result from change or development. It describes a step-by-step approach in which: judgements about the value and susceptibility of the receptor are combined into a judgement about sensitivity; judgements about the size / scale of the effect, its geographical extent and its duration and reversibility are combined into a judgement about the magnitude of the effect; and finally, the judgements about sensitivity of the receptor and the magnitude of the effect are combined to judge the level of the effect. If the assessment forms part of an EIA, a threshold may then be identified to show which effects are considered to be significant and which are not.

13.12 GLVIA3 is not prescriptive about exactly how the various judgments required in this framework should be made. This is a matter for individual practitioners to decide and explain. In this document it has been assessed that Major or Major / Moderate levels of effect are significant.

13.13 The full LVIA methodology is described in Appendix 13-A. Please note that much of the terminology used in assessing the landscape and visual effects is in accordance with the above-mentioned EPA Guidelines. However, the terminology used in this LVIA to describe the level of effects (= "significance of effects" in the EPA Guidelines) differs slightly from said EPA Guidelines, based on examples provided in GLVIA3.

Technical Standards

13.14 Photography and visual representations are based on the principles set out in the Landscape Institute – Technical Guidance Note 06/19 – Visual Representation of Development Proposals. There is no Irish standard / guidance, and in our experience, it is typically considered sufficient to provide two (annotated) viewpoints on one A3-sized sheet, using a range of horizontal angles of view (i.e. 75˚-105˚) to illustrate the full extent of the development within each photograph presented, as well as the context within which the site is located.

13.15 The Landscape Institute – Technical Guidance Note 02/21 Assessing landscape value outside national designations - was considered in the preparation of the assessment methodology, as set out in **Appendix 13-A** at the end of this chapter.

Consultations / Consultees

13.16 As this development constitutes Strategic Infrastructure Development (SID), a formal pre-application consultation exercise was undertaken with a number of prescribed bodies on the advice / direction of An Bord Pleanála, including An Chomhairle Éalaíon, Fáilte Éireann and The Heritage Council.

13.17 Consultations were also held with nearby residents and members of the general public in August and September 2024. Details of these consultations and the feedback obtained therefrom is provided in a separate report submitted in support of the SID application to An Bord Pleanála. Any specific feedback provided in respect of landscape and visual impacts has been considered and addressed as appropriate in drafting this Chapter of the EIAR.

13.18 Following a review of published development plans and the site survey, it was considered that there was no requirement for a separate formal consultation to be carried out regarding the landscape and visual effects of the proposed development.

Contributors / Author(s)

13.19 The LVIA including site work and completion of drawings was carried out by Anne Merkle, a Principal Landscape Architect with SLR Consulting Ireland. Anne graduated from the Nürtingen-Geislingen University (Germany) in Landscape Architecture (Dipl.-Ing. (FH)), in 2002. She has 20+ years' experience working for landscape consultancies in Ireland, specialising in Landscape and Visual Impact Assessments for a wide range of projects, including quarries, waste recovery facilities, wind farms, powerlines and mixed developments. In 2017, Anne completed an MSc in Biodiversity and Land Use Planning at NUI Galway. She is a full member of the Irish Landscape Institute (MILI) since 2005.

Sources of Information

13.20 The assessment is based upon a desk top assessment of relevant plans, guidance and landscape character assessments, as well as a thorough site assessment carried out in June 2024. The desktop study and field work were informed by:

- Wicklow County Development Plan (WCDP) 2022-2028
- digital and paper (Ordnance Survey Ireland) mapping at different scales; and
- information available on the internet (such as satellite images and information on recreational facilities and nature conservation sites)

Study Area

13.21 A study area of up to 3 km surrounding the application site was established on foot of the desktop study and previous experience of the site and surrounding local area. The study area takes account of the undulating topography which surrounds the application site and the presence of many wooded areas in the locality, which minimises the likelihood that the proposed development will be visible from greater distances. While views are screened from many locations, the 3km study area is maintained for the purposes of providing landscape context.

Field Survey

13.22 Detailed field surveys were carried out on 13th May 2019 and 29th May 2024, in variably sunny / overcast, but bright, conditions with good visibility. Photographs were taken during the second field survey in May 2024, using a Nikon D610 digital SLR full frame camera, with a fixed 50mm lens, mounted on a tripod with a panoramic head. The individual photos were taken in portrait format.

13.23 In accordance with GLVIA3, the field survey and viewpoint photography concentrated on publicly accessible areas, such as the road and public footpath networks, residential and outdoor recreational areas.

Limitations / Difficulties Encountered

13.24 No difficulties were encountered during the desktop study, field survey or in the preparation of this EIAR Chapter.

Significant Risks

13.25 There are no known significant risks to human health or environmental effects, which may occur in relation to this landscape and visual impact assessment.

REGULATORY BACKGROUND

13.26 The following paragraphs set out the regulatory background with regard to LVIA in Ireland and the site-specific planning background relevant to the proposed development.

Legislation

13.27 In 2002, Ireland ratified the European Landscape Convention, which promotes the protection, management and planning of landscapes. The National Landscape Strategy for Ireland 2015-2025 was published "to ensure compliance with the European Landscape Convention and establish principles for protecting and enhancing the landscape while positively managing its change".

13.28 Article 1a of the European Landscape Convention defines landscape as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". This definition has been included in the Planning and Development (Amendment) Act 2010, along with the requirement that objectives relating to landscape shall be included in development plans.

13.29 There is no Irish legislation specifically governing the preparation of landscape and visual impact assessments.

Planning Policy and Development Control

13.30 The Wicklow County Development Plan (WCDP) 2022-2028 is the statutory plan detailing the development objectives of the Local Authority in which the application site is situate.

13.31 Those objectives, with relevance to this assessment, are listed below. The location / extent of all relevant landscape and visual designations are shown on **Figure 13-1**, at the end of this EIAR Chapter.

Woodlands, Trees and Hedgerows

13.32 Section 17.4 'Natural Heritage & Biodiversity Objectives' of the current WCDP contains the following Woodlands, Trees and Hedgerow Objectives, relevant to this assessment.

- CPO 17.20 "Development that requires the felling of mature trees of environmental and/or amenity value, even though they may not have a TPO in place, will be discouraged."
- CPO 17.22 "To require and ensure the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees, as part of the development management process, and require the planting of native broad-leaved species, and species of local provenance in all new developments."
- CPO 17.23 "To require the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the County. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site in advance of the commencement of construction works on the site (unless otherwise agreed by the Planning Authority)."

Landscape

13.33 Section 17.4 'Natural Heritage and Biodiversity Objectives' of the current WCDP contains three Landscape Objectives, two of which are of specific relevance to this assessment.

- CPO 17.35 "All development proposals shall have regard to the County landscape classification hierarchy in particular the key landscape features and characteristics identified in the Wicklow Landscape Assessment (set in Volume 3 of the 2016 County Development Plan) and the 'Key Development Considerations' set out for each landscape area set out in Section 5 of the Wicklow Landscape Assessment."
- CPO 17.37: "To resist development that would significantly or unnecessarily alter the natural landscape and topography, including land infilling / reclamation projects or projects involving significant landscape remodelling, unless it can be demonstrated that the development would enhance the landscape and / or not give rise to adverse impacts."

13.34 The General Development Considerations (GDC) listed in Volume 3: Appendix 5 Wicklow Landscape Assessment of the 2016 WCDP include the following measures:

- 4: "New development shall be required to be visually integrated into the landscape by ensuring the retention, conservation and enhancement where possible of local characteristics such as stone walls, hedgerows, entrances and field boundaries."

13.35 The Corridor Area Key Development Considerations (KDC) listed in Volume 3: Appendix 5 Wicklow Landscape Assessment of the 2016 WCDP include the following objectives:

- 1: "To protect views and prospects from the corridor area towards the surrounding landscape areas from development that would either obstruct the views / prospect from the identified vantage point or form an obtrusive or incongruous feature in that view / prospect. Due regard will be paid in assessing development applications to the span and scope of the view / prospect and the location of the development within that view / prospect."
- 2: "Development proposals within this area should aim to locate within existing clusters of structures / tree stands and avoid locating new development in open fields."

Views and Prospects

13.36 Section 17.4 'Natural Heritage and Biodiversity Objectives' of the current WCDP contains the following Views and Prospects Objective:

- CPO 17.38: "To protect listed views and prospects from development that would either obstruct the view / prospect from the identified vantage point or form an obtrusive or incongruous feature in that view / prospect. Due regard will be paid in assessing development applications to the span and scope of the view / prospect and the location of the development within that view / prospect."

13.37 None of the 'Views of Special Amenity Value or Special Interest' listed in the current WCDP are located in the vicinity of the application site / within the study area.

13.38 The following three listed 'Prospects of Special Amenity Value or Special Interest' are located within a 3km radius of the application site, although none are directed towards the site and these will therefore not be considered further as part of this assessment:

- 30: R750 to Arklow - Prospect towards sea from Coast Road (note: it appears that the description provided in Schedule 17.12 does not match the location of the prospect shown on Map No. 17.11, which follows the M11 for ca. 2km, north of junction with the R751, at The Beehive.
- 32: N11 at the Tap and Kilbride - Prospect of Kilbride and Castletimon Hills.
- 40: L5118 Deputy's Pass, Glenealy - Prospect both sides of Deputy's Pass including woodland.

Waste Management / Extractive Industry

13.39 The current WCDP does not contain objectives regarding soil washing, C&D recovery or inert landfill facilities. The proposed development is located within a disused quarry and the proposed inert landfilling activities will essentially provide for the long-term backfill and restoration of the quarry. Therefore, the following objectives regarding the Extractive Industry, set out in Section 9.6 'Objectives for Wicklow's Rural Economy' of the current WCDP, are considered of some relevance to this assessment:

- Strategic Objective: "To support and facilitate the exploitation of County Wicklow's natural aggregate resources in a manner, which does not unduly impinge on the environmental quality, and the visual and residential amenity of an area. …"
- CPO 9.52: "To facilitate and encourage the exploration and exploitation of minerals in the County in a manner, which is consistent with the principle of sustainability and protection of residential, environmental and tourism amenities."
- CPO 9.55: "To have regard to the following guidance documents (as may be amended, replaced or supplemented) in the assessment of planning applications for quarries and ancillary facilities:
  - … 'Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals)', EPA 2006; …"

RECEIVING ENVIRONMENT

Landscape Baseline

Existing Relevant Landscape Character Assessment

13.40 A Landscape Assessment for County Wicklow was prepared as part of the 2016 WCDP and this is referred to in Section 17.3 in the current WCDP 2022-2028. It is stated that the 2016 landscape assessment *"has not been updated for the purposes on this plan and is considered to remain a robust and up to date reflection of the landscape character zones of the County."*

13.41 The Landscape Assessment identifies 6 distinctive landscape categories, which are divided further into 15 Landscape Areas. The landscape categories include Areas of Outstanding Natural Beauty (AONB) and Areas of High Amenity (AHA).

13.42 The application site at Ballinclare Quarry is located within the 'Corridor Area' landscape category and within 'The N11 / Eastern Corridor' Landscape Area, which comprises a 1km to 8km wide corridor area which follows the route of the M11 Motorway / N11 National Primary Road from the boundary with Co. Dublin in the north to the boundary with Co. Wexford in the south.

13.43 The nearest other Landscape Areas to the site are the 'South East Mountain Lowlands', 350m to the south and the 'North East Mountain Lowlands', 850m to the north. Both of these are classed as AHAs, which are described as "lands adjoining the AONB which act as a form of gateway to the more remote and wild upland areas".

13.44 The 'N11/Eastern Corridor' Landscape Area is described as follows : *"This area covers the main access corridor area along the east of the County. The boundary of the eastern access corridor generally follows what is considered to be the areas upon which the greatest influence is exerted by this primary access route. This route, for the most part, runs through the more low-lying and accessible tracts of land, dissects the Glen of the Downs wood in the north of the County and provides expansive coastal views north of Wicklow Town. This landscape area acts as the main connection between the major towns along the east coast of the County."*

13.45 The following further description / characterisation of the 'N11/Eastern Corridor' Landscape Area is provided: *"Corridor area landscape category relates to lands adjoining,*

surrounding or considered to be influenced by the man-made features of the N11 and N81. These lands generally fall between the 80m and 150m contour line following the path of the more low-lying and easily developable lands for such road infrastructure. … Development proposals within the western and north eastern corridor landscape area should not unduly impinge on any views or prospects in these areas. …"

13.46 The following description / characterisation of the 'North East Mountain Lowlands' Landscape Area is provided: *"The North East Mountain Lowlands are characterised by undulating topography generally extending north of Rathdrum, east of the village of Laragh towards the Village of Roundwood as far as The Great Sugar Loaf. The area provides for varying hill formations and forestry plantations most notably at Devil's Glen."*

13.47 The 'South East Mountain Lowlands' Landscape Area is covered by the following description / characterisation: *"The South East Mountain Lowlands are characterised by undulating topography generally extending from south of Rathdrum through the valley of Avoca north east of Aughrim. The valley follows the path of Avonbeg and Avonmore rivers providing for an enclosed landscape created by the presence of the above hill formation to the north east and the rising lands to the west towards Cushbawn. …"*

Landscape of the Site and its Context

13.48 GLVIA3 recommends that a landscape character assessment should be carried out as part of the baseline study (paragraph 5.4). This should consider:

- The elements that make up the landscape (e.g., physical, land cover and the influence of human activity);
- Aesthetic and perceptual aspects (e.g., scale, complexity, openness, tranquillity or wildness); and
- The overall character of the area.

Landscape Elements

13.49 As previously mentioned, the application site is located c. 2.5 km to the north-west of the small settlement of Kilbride and c. 2.5 km south of the village of Glenealy. It covers the entire existing disused Ballinclare Quarry complex, including a large quarry void, a former processing yard, a paved concrete area, site access and welfare facilities, some areas of grassland and scrub (within which the former settlement ponds are located) as well as substantial tree belts around the site.

13.50 The former quarry is located in the eastern foothills of the Wicklow Mountains, on the southern side of a low hill south of the Potters River. It is bound to the west and south by local roads and to the north and east by areas of dense woodland / scrub. Ground levels along the site boundaries range from 50 m Ordnance Datum (OD) in the vicinity of the site entrance, to 65 m OD in the western corner of the site to 90 m OD at the highest point at the top of the quarry face along the northern boundary. The existing quarry void covers approximately the north-eastern third of the application site. Extraction across the quarry generally extended to a floor level of approximately 37 m OD, although it extends locally to 22 m OD in one area in the centre of the quarry floor.

13.51 The application site is adjoined by woodland / scrub areas to the north, east and south and by agricultural land to the west. The wider landscape is made up of a mix of agricultural land and blocks of deciduous woodland and conifer plantations. The deciduous woodlands are mostly located near the valley floors, while the conifer plantations are more typical on higher elevations and on hill tops. The agricultural land is made up of small to medium sized fields, most of which are under pasture. Almost all field boundaries are marked by dense hedgerows lined with mature trees.

13.52 The topography surrounding the application site is complex. The valley of the Potters River winds through the study area in an approximate northwest-southeast direction and

is surrounded by several local highpoints and ridgelines. The levels along the river range from approximately 75mOD at the western end of Deputy's Pass to just under 30mOD at Kilbride.

13.53 Local highpoints include elevations of 217mOD to the northwest, 147mOD to the west, 270mOD to the southwest, 135mOD to the south, 137mOD to the east, 75mOD to the northeast and 158mOD to the north of the application site. Further west, beyond the study area boundary, the land first falls slightly towards Rathdrum and the Avonmore River valley before rising to heights over 400mOD in the Wicklow Mountains. To the east of the study area boundary, the topography continues to be undulating, but ultimately falls towards the Irish Sea.

13.54 The undulating site boundaries and vegetation covered sections of the application site are characteristic of the surrounding landscape. The existing quarry void and associated tall rock faces are atypical elements, although their appearance has softened in recent years, as the rock has weathered and benches and crevices have been colonised by scrub.

13.55 The main transport route within the study area is the M11-motorway, which is located approximately 400m to the east of the application site. The former N11 National Primary Road, now reclassified as the R772 Regional Road, is located immediately east of the M11. The R752 and the R754 Regional Roads traverse the north-western and south-eastern corners of the study area respectively. A dense network of local roads straddles the highpoints within the study area, connecting the areas between the higher rated regional / national roads.

13.56 Apart from the more formal settlements of Glenealy and Kilbride, residential development within the study area consists of ribbon development and one-off housing along the network of local roads surrounding the site. The largest clusters of properties are located along the roads around Ballycapple Hill and to the north of Kilbride. The larger settlements of Rathdrum and Wicklow town are located 5.5 km west and 6 km north-east, respectively.

13.57 As indicated within the Landscape Assessment of Wicklow (see above), the study area is under pressure from development, due to its proximity to the M11 corridor, which is reflected in the presence of many manmade structures, such as the national / regional roads, a 220kV transmission line just east of the application site, residential and farm properties, as well as Ballinclare Quarry itself, another quarry previously operated by a third party to the south-west and an established municipal landfill site at Ballynagran, c. 2.5 km to the north-east.

13.58 Due to this strong influence of human activity within the study area, there are few locations from where no man-made structures are visible (i.e. mostly roads, buildings or electricity poles / pylons). Nevertheless, the landscape retains a generally scenic appearance, in particular in elevated locations, where long distance views open up across undulating lush green lowlands and towards the Wicklow Mountains.

Aesthetic and Perceptual Aspects

13.59 The scale of the landscape ranges from small at the lower elevations, where it is restricted by roadside and intervening vegetation, to large at the higher elevations, where long-distance views open up.

13.60 Due to the mix of agricultural fields, bound by hedgerows, and woodland areas, the colours pallet is dominated by multiple shades of green, while the textures have some variation, but are repetitive. There is, however, no apparent regular pattern anywhere within the study area. The existing two quarries and the landfill site contribute some localised contrasting shades of brown, grey and blue.

13.61 While the study area has an overall natural appearance, there is little sense of wildness or remoteness, due to the many signs of human activity, such as improved grassland, conifer plantations, electricity poles / pylons, residential properties and roads, in particular the

busy M11 motorway corridor. Traffic noise is regularly audible along the roads, particularly in the vicinity of the M11, also diminishing the sense of tranquillity.

13.62 The existing northern quarry face within the application site is a noticeable, but well-established, feature, visible in some parts of the study area. Its appearance has softened over the last decade, as the rock has weathered and grass and scrub species have colonised the quarry benches.

Overall Character

13.63 The site assessment supports the inclusion of the site and its immediate context in a transitional position between the 'N11 / Eastern Corridor' and 'Mountain Lowlands' Landscape Areas, as set out in the Landscape Assessment for Co. Wicklow. This is due to the proximity to the M11 motorway, paired with the undulating topography with various hill formations and forestry plantations.

Protected Nature Conservation Sites

13.64 The National Parks and Wildlife Service (NPWS) website was reviewed for protected nature conservation sites in proximity to the application site, as these provide an indication of the natural heritage value placed on the local landscape.

13.65 The following Special Area of Conservation (SAC) and proposed Natural Heritage Area (pNHA) are located within the study area (refer to **Figure 13-1** for the location and extent of these sites):

- Deputy's Pass Nature Reserve SAC (Site code 000717) – 1.7 km to the north-west
- Glenealy Woods pNHA (Site code 001756) – 1.1 km to the north-west

Visual Baseline

Existing Visibility

13.66 The visibility of the application site was initially assessed by a desktop study of OSI Discovery Maps (1:50,000), available aerial photography and having regard to previous landscape and visual impact assessments carried out in respect of planned development at Ballinclare Quarry. It was therefore known that the undulating topography surrounding the application site, combined with the presence of mature vegetation reduces the visual envelope significantly (i.e. the area from where the site is actually visible).

13.67 The site survey confirmed that views of the existing quarry and other internal elements of the application site are greatly restricted by a combination of roadside / intervening vegetation and the undulating topography within the study area. This includes the dense shelterbelts, which screen views from the local roads along the western and southern site boundaries, except around the site entrance.

13.68 Parts of the internal elements of the application site are only visible from the sloping land to the south, south-west and west, from elevations above ca. 80 m OD to the top of the nearest ridgeline, i.e. no further than 2 km to the south and west. The available views from publicly accessible areas, comprise some partial views from Kilmacurragh Botanic Gardens and from short stretches of the local road to the north of Westaston Hill. It should however be noted that roadside and intervening vegetation, as well as intervening topography screen part, if not all, of the existing quarry development, in the majority of views from the area within 2km to the south and west. Also, large parts of this area comprise agricultural land which is not publicly accessible.

13.69 There are also some residential properties within 2km to the south and west, with potential views of the application site. However, the total number of properties with visibility is greatly reduced by mature vegetation along most property boundaries, as well as locally intervening topography and vegetation.

13.70 Viewpoint photography was taken during the 2024 field survey from several locations throughout the study area. A total of six viewpoints were subsequently selected to represent the range of available views, including some viewpoints illustrating how the site is screened by intervening topography / vegetation.

13.71 The location of the six viewpoints is illustrated on **Figure 13-1**. For each of the viewpoints, annotated panoramic images showing the existing view are provided (refer to **Viewpoints A-F** on **Figures 13-2 to 13-5**). The panoramas are made up from 5-7 individual photographic frames, which were merged together using Adobe Photoshop software. It should be noted that photography is a tool to assist in the visualisation process and cannot be expected to replicate the actual view that would be attained on the ground.

13.72 For two of the viewpoints photomontages (PM) were prepared, illustrating the changes to the landform within the application site, which would result from the proposed development, as well as the associated restoration woodland planting, at four different stages of the development (refer to **Viewpoints A-B**):

- 1 – The existing view (May 2024).
- 2 – The inert landfill facility on completion of backfill Phase 1A, with Phase 1 of the proposed native woodland newly planted.
- 3 – The inert landfill facility on completion of backfill Phase 2, with the Phase 1 native woodland planting fully established and Phase 2 newly planted.
- 4 – The inert landfill facility with all filling completed, the Phase 1 native woodland planting starting to mature, Phase 2 fully established and Phase 3 newly planted; i.e. final restoration completed.

13.73 **Viewpoint A** was taken from within an agricultural field, ca. 300 m to the south of the site. While this viewpoint is not publicly accessible, it was chosen, as it illustrates one of the closest distance views, in which the upper existing quarry face within the site is openly visible. Further to that, Viewpoint A generally represents views from the sloping land to the south and west of the site, including some residential properties. Although, in most other views locally intervening topography and vegetation is expected to at least partially restrict the extent to which the quarry face is visible (also refer to **Viewpoints B, E and F**). From Viewpoint A the upper quarry face and a small section of the former processing / stockpiling area are visible in the midground, surrounded by a mix of abundant scrub and woodland vegetation. The quarry void and lower parts of the quarry face are screened by the topography of the quarry. All other internal areas associated with the proposed development are completely screened by the abundant vegetation along the site boundaries and within the site. This includes the area surrounding the proposed soil washing plant, the proposed C&D area, the site access road and associated infrastructure, as well as the existing settlement ponds and proposed site for the Integrated Constructed Wetland (ICW). To the back of the view, distant hills covered with pasture fields and woodland / forestry plantations are visible.

13.74 **Viewpoint B** was taken from a similar viewing direction as Viewpoint A, but from a distance of c. 1 km further from the site and from a greater elevation (c. 50 m higher up). The viewpoint is located along the local road on the northern slopes of Westaston Hill, near the south-eastern corner of the National Botanic Gardens in Kilmacurragh. This viewpoint represents intermittent views from a c. 1km section of this road to the east of this viewpoint, up to the location of Viewpoint F. Residential properties in the vicinity of this section of the road are expected to experience a similar view, although probably further restricted by boundary vegetation. Due to the greater elevation, slightly more of the existing upper quarry face is visible, but a similarly small section of the former processing / stockpiling area is visible in the midground. The majority of the quarry void remains screened by the topography of the quarry. The remainder of the application site is fully screened by the undulating agricultural pasture land and associated vegetation visible in

the foreground of the view. Similar to Viewpoint A, distant hills covered with pasture fields and woodland / forestry plantations are visible to the back of the view, more openly in this case, again due to the higher elevation.

13.75 **Viewpoints C & D** represent views from the local roads along the southern and western boundary of the application site. They illustrate how the dense woodland vegetation / tall treelines along these boundaries fully screen any views of the internal parts of the site. This is with the exception of the site entrance (refer to Viewpoint C), from where some of the infrastructure along the access road, as well as a small section of the existing quarry face can be glimpsed. Views into the site are similarly blocked from the continuation of the two roads to the north and east of the quarry, including any residential properties along these roads.

13.76 **Viewpoint E** represents a number of available views in the vicinity of the eastern boundary of the National Botanic Gardens at Kilmacurragh. In these views parts of the top section of the existing quarry face within the application site are visible, while the remainder of the site is fully screened by intervening topography (and vegetation). Similar to the other elevated viewpoints, the quarry face is framed by abundant woodland / scrub vegetation, with undulating pastureland visible in the foreground and pasture / woodland / forestry covered hills visible in the background. It should be noted that the application site is fully screened from most locations within the Arboretum. There are some similar, intermittent views of the upper section of the quarry face from the local road to the north-west of the Arboretum, although this is dependant on how recently the roadside hedgerow has been cut and only from the higher elevations. Further to that, there are some residential properties in this area, with potentially similar views.

13.77 **Viewpoint F** is similar to Viewpoint B, located at the eastern end of the section of road with intermittent visibility on the northern slopes of Westaston Hill. Due to the slightly different viewing angle, more of the western half of the existing quarry face is visible. However, with the exception of the existing workshop and a small section of the former processing / storage area, all other internal elements of the application site are screened. Again, the quarry face is framed by abundant woodland / scrub vegetation, with undulating pastureland visible in the foreground and pasture / woodland / forestry covered hills visible in the background.

Outdoor Recreational Facilities within the Study Area

13.78 The study area was searched for available outdoor recreational facilities, as these provide an indication of the recreational value placed on the local landscape, as well as potential visual receptors present within the area.

13.79 The National Botanic Gardens at Kilmacurragh, an outpost of the National Botanic Garden in Glasnevin, Dublin, is located just under 1 km to the south-west of Ballinclare Quarry.

13.80 A number of walking trails are located within the Deputy's Pass nature reserve, which can be accessed from a public car park about halfway along the pass.

IMPACT ASSESSMENT

13.81 This section sets out the effects that the proposed development would have on both landscape and visual receptors (as identified below), during the operational stage of the proposed material recovery / recycling facility and inert landfill (including restoration stage activities), as well as during the post-operational stage, when all backfilling and restoration works have been completed. It is based on the detailed project description and layout drawings presented in Chapter 2 of this EIAR.

Aspects with Potential to Cause Landscape and Visual Effects

Operational Stage

13.82 The operational stage of the proposed development for the purpose of this assessment is deemed to also include the initial construction / site establishment phase. The combined duration of these phases will cover a period of up to 25 years. This will be the maximum duration of activity at the proposed facility and the time within which all restoration works will be completed.

13.83 The following elements of the proposed development, at the operational stage, are those which are most likely to result in landscape and visual effects (refer to the **Figure 2-4 - Proposed Landscape and Restoration Plan**, in Chapter 2 of this EIAR):

- Removal of c. 15 mature conifers along the western side of the site access road, to facilitate the provision of an HGV queuing lane.
- The removal of c. 1.1 ha of grassland and some associated scrub vegetation to facilitate the construction of the ICW.
- The removal of some scrub vegetation around the rim of the quarry void to facilitate inert landfilling activities.
- Changes to the landform, due to the inert landfill activities, which will result in the ground levels within the quarry void and of the former processing area to its south, being raised to levels similar to those which existed prior to any extractive / quarrying activity taking place within the site.
- Proposed native woodland planting over large sections of the application site, in several phases, in line with the phasing of the landfilling / backfilling activities and as part of the restoration of the proposed C&D recovery area.

13.84 It should be noted that apart from the exiting fixed lighting that is already in place along the existing access road, some fixed downward facing lights will be installed at the C&D recovery area and on the proposed soil washing plant. Other than that, lighting will comprise mobile lighting on the plant and machinery used within the site, as part of the landfilling, soil washing and C&D recovery activities. All lighting will only be in use for wintertime operations, when darkness falls within permitted operation hours.

13.85 As it is proposed to operate the facility between 08:00 hours and 18:00 hours Monday to Friday, there will therefore be periods where such lighting will be required for c. 1 hour in the morning and c. 2 hours in the evening in the middle of the winter period. Night-time light pollution caused by the proposed development will be of brief duration during winter months. This is not considered to result in a significant impact.

Post-Operational Stage

13.86 The post-operational stage of the proposed development, for the purpose of this assessment, is considered to be the period following the closure of the proposed facility and when all restoration works are completed.

13.87 The following elements of the proposed development, at the post-operational stage, are those which are most likely to result in landscape and visual effects:

- The final fill landform, which will initially still be noticeable, but will in time become more obscured, as the native woodland planting matures.
- The top section of the existing quarry void, which will be retained to facilitate continued nesting by peregrine falcons.

Sensitive Receptors

Landscape Receptors

13.88 The landscape receptors potentially affected by the proposed development and therefore considered as part of the assessment of landscape effects, are:

- Overall Character:
  - Transitional eastern corridor / mountain lowlands landscape character

13.89 While c. 15 mature conifers, c. 1.1 ha of grassland and some sections of scrub will be removed to facilitate the development, neither of these elements comprise rare or distinctive features in the local landscape. Their removal is unlikely to result in significant effects on the local landscape character and these are therefore not considered sensitive landscape receptors.

13.90 No distinctive or highly sensitive aesthetic / perceptual aspects were identified in the vicinity of the application site, such as wildness or tranquillity. This is due to the existing human influences throughout the study area. Also, the existing scale, textures and patterns throughout the study area are unlikely to be affected, due to the location of the proposed development within an existing quarry complex, which is largely screened and has been long-established in the local landscape. Therefore, no aesthetic or perceptual aspects were identified as sensitive landscape receptors.

Visual Receptors

13.91 The visual receptors, potentially affected by the proposed development and therefore considered as part of the assessment of visual effects, are:

- Residents:
  - c. 7 residential properties within 0.5 km to the south and 1.5 km to the west of the application site (represented by **Viewpoint / Photomontage A** on **Figure 13-2**);
  - 10 - 12 residential properties along the local road on the northern slope of Westaston Hill (represented by **Viewpoint / Photomontage B** on **Figure 13-3 and Viewpoint F** on **Figure 13-5**); and
  - c. 6 residential properties within 1 km to the north-west of the National Botanic Gardens at Kilmacurragh (represented by **Viewpoint E** on **Figure 13-5**).
- Recreational users:
  - Visitors to the National Botanic Gardens, Kilmacurragh (represented by **Viewpoint E** on **Figure 13-5**).
- Vehicle users:
  - Intermittently along c. 1,000m of the local road on the northern slope of Westaston Hill (represented by **Viewpoint / Photomontage B** on **Figure 13-3 and Viewpoint F** on **Figure 13-5**); and
  - Few glimpsed views along a c.300m section of the local road to the north-west of the National Botanic Gardens at Kilmacurragh (represented by **Viewpoint E** on **Figure 13-5**).

13.92 Note that any changes along the access road to the application site would be difficult to discern from a moving car. While some road users and adjoining residents will experience views of HGVs using the local road (L1157) to the east of the site entrance, the effects will be intermittent and views into the wider landscape will not be affected / blocked, due to the existing enclosure from the dense roadside vegetation along this road.

13.93 Further to that, the proposed number of HGV movements arising from the proposed development will be lower compared to those previously permitted by the grant of planning permission in respect of former quarrying activities (Planning Ref. 14/2228). In

light of this, residents and road users along the local road to the east of the site entrance were not identified as sensitive visual receptors.

Operational Stage Landscape Effects

Landscape Sensitivity

13.94 In accordance with GLVIA3, the sensitivity of landscape receptors is determined by combining their value with their susceptibility to the type of development proposed.

13.95 In determining the value of landscapes, GLVIA3 recommends that the starting point should be to consider landscape-related designations. In this context it is important to note that no part of the application site or its immediate context is included within a statutory landscape designation.

13.96 GLVIA3 states that the value of undesignated sites should also be considered. Table 1 of Landscape Institute Technical Guidance Note 2/21 supersedes Box 5.1 of GLVIA3 and provides a helpful guide for assessing these sites. A full assessment against a list of factors set out in the Technical Guidance Note is included in Table 13-1, below.

Table 13-1
Evaluation of the Value of the Site and its Immediate Context

Factor	Assessment	Notes
Natural Heritage	COMMUNITY	The site is not designated for natural heritage purposes but contains and is surrounded by a mix of woodlands, treelines, hedgerows and scrub areas which are of local habitat value. Also, there are an SAC and a pNHA within 2km north-west of the site.
Cultural Heritage	LOW	No heritage assets are located within or in the immediate vicinity of the site.
Landscape Condition	COMMUNITY	The agricultural landscape surrounding the application site is in a good condition with well-tended fields and hedgerows. Also the areas of woodland / forestry are in a good condition. While the existing quarry development, in particular the existing quarry face, comprises an incongruous feature, this is long-established and has become a familiar feature in the local landscape. The existing high voltage powerline to the east of the site is a more distracting feature, with its pylons, the bottom half of which has been painted white, which makes them particularly noticeable.
Associations	LOW	No known associations with art, literature or events.
Distinctiveness	LOW	The application site and surrounding land comprises a common Irish undulating agricultural landscape, with no distinctive features. Locally, the existing quarry face may confer some sense of place.
Recreational	COMMUNITY	The site is not publicly accessible. The National Botanic Gardens, Kilmacurragh are located within 1km south-west of the site. Views into the wider landscape are part of the experience, when visiting the site. The upper quarry face forms part of some of the available views.

Factor	Assessment	Notes
Perceptual (Scenic)	COMMUNITY	While there are no distinctive views or landmarks within the local landscape and despite distracting elements, such as the high voltage powerlines, the undulating topography with its mix of pastureland and woodland / forestry areas is generally visually appealing.
Perceptual (Wilderness and Tranquillity)	LOW	The site and immediate surrounding area have no strong perceptual value, such as remoteness, wildness or tranquillity, due to the common presence of built development and other human influences (e.g. traffic noise).
Functional	COMMUNITY	The woodland / forestry areas, treelines, hedgerows and scrub areas within and surrounding the site, have a function as part of the local green infrastructure network and as a carbon sink (on a local scale).

13.97 Using the factors set out in **Table 13-1**, it has been concluded that the site and its immediate context has some value at the community level, in particular regarding the scenic rural agricultural nature of the landscape, including the many existing woodland / forestry areas, treelines, hedgerows and scrub areas. However, there are no aspects that would support the elevation of the value of the local landscape above the community level.

13.98 The susceptibility of each of the landscape receptors is assessed in **Table 13-2**. This is combined with the previously assessed value, to provide a judgement of the overall sensitivity.

Table 13-2
Sensitivity of Landscape Receptors

Landscape Receptors	Value	Susceptibility	Overall Sensitivity
Overall Character			
Transitional Eastern Corridor / Mountain Lowlands Landscape Character	LOCAL AUTHORITY / COMMUNITY (due to the scenic agricultural landscape with many wooded areas)	LOW Considering the proposed development is fully located within an existing quarry complex and the substantial screening provided by existing woodlands / treelines within and in the vicinity of the application site, it is considered that the characteristics of the landscape are able to accommodate the proposed development without transformational adverse effects.	**LOW**

Magnitude of Landscape Change

13.99 **Table 13-3** describes the size and scale, geographical extent and duration / reversibility of the landscape effects for each landscape receptor, all of which contribute to the assessment of the magnitude of these effects.

Table 13-3
Magnitude of Landscape Change

Visual Receptors	Factors	Magnitude of Change
Overall Character		
Transitional Eastern Corridor / Mountain Lowlands Landscape Character	Size and Scale: **SMALL** Geographical Extent: **SMALL** Duration / Reversibility: **LONG-TERM – REVERSIBLE** **Notes**: The landfilling activities will have similarities to the extraction activities that have previously taken place within the quarry area, to agricultural activities within the study area and to the activities at the established landfill at Ballynagran to the north-east of the site. The emerging landform will be aligned with and tie into the surrounding topography and the proposed phased restoration to native woodland will continually decrease the area actively worked. The landfilling activities are therefore not considered a new element within the local landscape. The upper section of the existing quarry face will be retained for ecological reasons (i.e. peregrine falcon nesting). As this is a long-established element in the local environment, which locally confers a sense of place, it contributes to the overall composition / balance of the landscape not being changed. The changes will influence the landscape at the site level and within a small part of the undulating richly vegetated landscape surrounding the site, i.e. within 1.5km to the south and west. The operational stage will last for a up to 25 years, with sections of the landfill area being progressively restored to native woodland habitat in three phases. The works are theoretically reversible; however, reversibility is not desirable in this case, considering the positive impact the restored site will have on landscape character.	**MEDIUM-SLIGHT**

Assessment of Landscape Effects and Significance

13.100 An assessment of the landscape effects during the operational phase, based on the sensitivity of each of the landscape receptors combined with the magnitude of change experienced by each of them, is provided in **Table 13-4** below. The assessment also includes a judgment of the nature of the effect (i.e. negative/positive/neutral).

Table 13-4
Assessment of Landscape Effects

Landscape Receptor	Sensitivity	Magnitude	Landscape Effects	Nature of Effect
Overall Character				
Transitional Eastern Corridor / Mountain Lowlands Landscape Character	LOW	MEDIUM - SLIGHT	**MINOR**	Negative

13.101 None of these landscape effects are assessed to be significant.

Post – Operational Stage Landscape Effects

13.102 At the post-operational stage, the entire landfill area and the C&D recovery area(s) will have been planted with native woodland, with those parts planted as part of the early restoration phases being established and starting to mature. Over time the woodland areas will more and more merge with the surrounding vegetation and become fully assimilated into the local landscape character. As a result, the landscape effects will reduce to **NEGLIGIBLE** and will become neutral, or even positive.

Operational Stage Visual Effects

Visual Receptor Sensitivity

13.103 The value placed on each of the types of visual receptors identified above is described in **Table 13-5** below. The susceptibility to change of each of the receptor types is also described (in line with the LVIA Methodology presented in **Appendix 13-A**) and a judgement on overall sensitivity made.

Table 13-5
Sensitivity of Visual Receptors

Visual Receptors	Value	Susceptibility	Overall Sensitivity
Residents			
All residential receptors identified.	LOW (No specific designated or locally promoted views)	HIGH (Susceptible to changes in views, particularly from gardens and living rooms)	**MEDIUM**
Recreational Users			
Visitors to National Botanic Gardens, Kilmacurragh.	LOW (No specific designated or locally promoted views)	HIGH (Susceptible to changes in views from eastern boundary of site)	**MEDIUM**
Vehicle Users			
All vehicle users identified.	LOW (No specific designated or locally promoted views)	LOW (Unlikely to be focused on views)	**LOW**

Magnitude of Visual Change

13.104 **Table 13-6** describes the size & scale, geographical extent and duration/reversibility of the visual effects for each visual receptor, all of which contribute to the assessment of the magnitude of these effects.

Table 13-6
Magnitude of Visual Change

Visual Receptors	Factors	Magnitude of Change
Residents only		
c. 7 properties within 0.5 km to the south and 1.5 km to the west of the site (**Viewpoint / Photomontage A**)	Size and Scale: **MEDIUM** Geographical Extent: **SMALL** Duration / Reversibility: **LONG-TERM – REVERSIBLE** **Notes:** Much of the development activities, including early-stage (Phase 1) inert landfill activity and the C&D waste recovery and soil washing activities will be screened by topography and vegetation. c. 15 tall conifers along the internal access road, will be removed from this view, but will leave no obvious gap, as nearby trees will be retained. Some existing concrete structures, south of the quarry void will be removed, on commencement of the development, having a slightly positive effect on the view. Some of the vehicle movements within the former processing/ stockpiling area in the south eastern corner of the application site and the landfill activities above the c. 50m contour will be visible in the midground of the available views, in front of the existing quarry face. As demonstrated by the different stages of Photomontage A, the new landform created by the fill activities will be built up in several phases, with those areas fully completed being planted with native woodland in three stages. This will result in the actively worked areas being consistently reduced and ensuring early-stage restoration of sections of the site. All visible elements will be contained within the existing quarry complex, framed by the surrounding abundant vegetation. The skyline or views into the wider landscape will not be affected. A section of the upper quarry face will be retained for continued nesting by peregrine falcon and will remain visible. However, this is a well-established feature in existing views and will be offset by the remainder of the site beginning to merge with surrounding vegetation, as the native woodland areas become established and begin to mature. Overall, the composition of the views will be altered to a moderate degree. The views would be experienced by the residents of a very limited number of properties, whose views are typically at least partially screened by vegetation along the property boundaries. The phased changes within the site including the restoration to native woodland will be visible for the duration of the operational stage.	**MEDIUM**

Visual Receptors	Factors	Magnitude of Change
Residents and vehicle users		
c. 1,000 m of the local road on the northern slope of Westaston Hill 10-12 adjoining properties **(Viewpoint / Photomontage B & Viewpoint F)**	Size and Scale: **SMALL** Geographical Extent: **SMALL** Duration / Reversibility: **LONG-TERM – REVERSIBLE** **Notes:** The changes within the application site for views from these visual receptors will be similar to those described for Viewpoint / Photomontage A above, as illustrated by Viewpoint / Photomontage B. However, these views are experienced from a higher elevation and at a greater distance, which reduces the proportion of the view occupied by the development, resulting in the overall composition of the views being altered to a smaller degree. The views would be experienced by the residents of a very limited number of properties, whose views are typically at least partially screened by vegetation along their own property boundaries. There would also be a restricted number of road users experiencing these views, as this is an infrequently used road and views are intermittent, especially if the roadside hedgerow has not been recently cut. The phased changes within the site including the restoration to native woodland will be visible for the duration of the operational stage.	**MEDIUM / SLIGHT**
Residents, recreational and vehicle users		
Visitors to National Botanic Gardens, Kilmacurragh c. 6 residential properties Glimpsed views from local road within 1 km to the north-west of the Gardens **(Viewpoint E)**	Size and Scale: **NEGLIGIBLE** Geographical Extent: **SMALL** Duration / Reversibility: **MEDIUM-TERM – REVERSIBLE** **Notes:** Only the top of the existing quarry face is visible in views from these receptors, most of which will not be affected by the works. The face is a long-established element in these views and considering how the rock has weathered over the years, almost has the appearance of a natural cliff face. The only visible works associated with the proposed development will be landfilling at the most elevated levels immediately in front of the existing quarry face, as well as the trees to be planted in this area, which will become visible as they mature. Overall, the change in the views will be barely perceptible. The views would be experienced by the residents of a very limited number of properties, whose views are typically at least partially screened by vegetation along their property boundaries. While the Botanic Gardens at Kilmacurragh are popular with visitors, most views from within the site are restricted by trees and there are only few locations along the eastern boundary	**SLIGHT / NEGLIGIBLE**

Visual Receptors	Factors	Magnitude of Change
	where the top of the existing quarry face can be seen, reducing the number of receptors. There would also be a very restricted number of road users experiencing these views, as the views can only be glimpsed and only if when the roadside hedgerow was recently cut. The activities within the site will only be visible for a limited duration towards the end of Phase 2 landfilling.	

Assessment of Visual Effects and Significance

13.105 An assessment of the visual effects during the combined construction / operational phase, based on the sensitivity of each of the visual receptors combined with the magnitude of change experienced by each of them, are provided in **Table 13-3** below. The assessment also includes a judgment of the nature of the effect (i.e. negative / positive / neutral).

Table 13-7
Assessment of Visual Effects

Visual Receptor	Sensitivity	Magnitude	Visual Effects	Nature of Effect
Residents				
c. 7 residential properties within 0.5 km to the south and 1.5 km to the west of the application site. (**Viewpoint / Photomontage A**)	MEDIUM	MEDIUM	**MODERATE**	Negative
10-12 residential properties along the local road on the northern slope of Westaston Hill (**Viewpoint / Photomontage B and Viewpoint F**)	MEDIUM	MEDIUM / SLIGHT	**MODERATE / MINOR**	Negative
c. 6 residential properties within 1 km to the north-west of the National Botanic Gardens, Kilmacurragh **(Viewpoint E)**	MEDIUM	SLIGHT / NEGLIGIBLE	**MINOR**	Negative
Recreational Users				
Visitors to the National Botanic Gardens, Kilmacurragh (**Viewpoints E**)	MEDIUM	SLIGHT / NEGLIGIBLE	**MINOR**	Negative
Vehicle Users				
Intermittently along ca. 1,000m of the local road on the northern slope of Westaston Hill (**Viewpoint / Photomontage B and Viewpoint F**)	LOW	MEDIUM / SLIGHT	**MINOR**	Negative

Visual Receptor	Sensitivity	Magnitude	Visual Effects	Nature of Effect
Few glimpsed views along a ca. 300m section of the local road to the north-west of the National Botanic Gardens, Kilmacurragh **(Viewpoint E)**	LOW	SLIGHT / NEGLIGIBLE	**NEGLIGIBLE**	Negative

13.106 None of these visual effects are assessed to be significant, including the moderate effect on residential properties within 0.5 km to the south and 1.5 km to the west, due to the small group of receptors affected by these moderate effects.

Post – Operational Stage Visual Effects

13.107 At the post-operational stage, the entire fill area and C&D recovery area will have been planted with native woodland, with those parts planted as part of the early restoration phase being fully established/maturing and becoming noticeable in the existing views. Over time the woodland areas will more and more merge with the surrounding vegetation and become fully assimilated into the existing views, with a small section of the existing quarry face remaining visible at all times. As a result, the effects on all visual receptors will reduce to **MINOR / NEGLIGIBLE** and will become neutral or even positive.

Direct / Indirect Effects

13.108 All landscape and visual effects described above are direct effects. The proposed development is not considered to have indirect effects in landscape and visual terms, i.e. the proposed development is unlikely to cause consequential changes to the surrounding landscape character areas or to existing views of the landscape surrounding the application site.

Compliance with Relevant Planning Policies

Woodlands, Trees and Hedgerows

13.109 No hedgerows or other distinctive boundary treatment will be removed, as part of the proposed development. The removal of mature trees within the site will be kept to a minimum and will comprise c. 15 mature spruce along the existing site access road to facilitate construction of the proposed HGV queuing lanes. These trees are categorised as being of low arboricultural quality / value (refer also to EIA Chapter 5 (Biodiversity)). The removal of these trees will be offset by the proposed establishment of c. 17 ha of native woodland, as part of the phased restoration of the application site.

13.110 In order to ensure the preservation and enhancement of the existing woodland areas on site, a long-term tree management plan will be prepared and implemented. This management plan will also be applied to the establishment and long-term management of the proposed native woodland planting areas.

13.111 In light of the above, the proposed development at Ballinclare Quarry is deemed to comply with **Objectives CPO 17.20, CPO 17.22 and CPO 17.23** of the current Wicklow CDP.

Landscape

13.112 The above landscape and visual assessment was carried out with due regard to the Wicklow Landscape Assessment and has concluded that there will be no significant landscape or visual effects, due to the proposed development at Ballinclare Quarry.

13.113 The photomontages provided (refer to **Figure 13-2** and **13-3**) illustrate that the proposed backfilled landform will not significantly alter the natural landscape / topography. Instead, the proposed landform will be similar to the ground levels at the application site prior to

any quarrying activities taking place and will tie into the surrounding land. Once all of the backfilled area is restored to native woodland, the proposed development will be visually integrated into, and will enhance, the local landscape.

13.114 None of the protected views and prospects listed in the current Wicklow CDP would be affected by the proposed development. Also, it would be fully located within an existing quarry complex and will make use of the substantial screening of the existing abundant vegetation within the site.

13.115 In view of the above, the development is deemed to comply with **Objectives CPO 17.35 and CPO 17.37** of the current Wicklow CDP, as well as **GDC 4 and Corridor Area KDC 1 and 2** of the 2016 Wicklow Landscape Assessment.

Waste Management / Extractive Industry

13.116 As mentioned above, the landscape and visual assessment has concluded that there will be no significant landscape or visual effects arising from the proposed development at Ballinclare Quarry, i.e. the development will *"not unduly impinge on the"* visual amenity of the area or on its environmental quality in landscape terms.

13.117 The restoration proposals were designed with regard to the 'Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals)', EPA 2006, which identifies natural habitats (e.g. native woodland) as a beneficial after-use.

13.118 In view of the above, the development is deemed to comply with the Strategic Objective regarding aggregate resources and **Objectives CPO 9.52 and CPO 9.55** of the current Wicklow CDP.

Unplanned Events (i.e. Accidents)

13.119 It is highly unlikely that any unplanned events within the application site would result in significant landscape or visual impact.

Cumulative / Synergistic Impacts

13.120 From a landscape perspective, activities at the existing residual waste landfill at Ballynagran, 2.5km to the northeast, are similar to the proposed development and therefore a potential for cumulative landscape or visual impacts exist. One possible element associated with both developments is the presence / visibility of HGVs on local roads. Access to the existing landfill site at Ballynagran from the M11 Motorway travels along a very short stretch of the L1113 Local Road west of the M11-Junction 18. All HGV's hauling soil and stone / C&D waste to the proposed waste facility at Ballinclare Quarry will be routed along the L1157 Local Road and no HGV traffic will be routed along the L1113. There will therefore be no cumulative visual impact associated with HGV movements generated by both developments along the L1113 Local Road.

13.121 Both the Ballynagran landfill site and the application site are visible in views from a small number of elevated locations north of Westaston Hill (refer to Viewpoints B and F on Figure 13-3 and Figure 13-5). The two sites are visually separated by agricultural land, tree-lined hedgerows and scrub areas in all available views and take up small areas in the overall panoramic views. Also considering the limited remaining lifespan of the existing residual landfill and that of the proposed development and the ultimate positive landscape and visual effects at the application site, the cumulative landscape and visual impact of both the existing and proposed landfill are considered to be small and not significant.

13.122 Further to the above, there are no other existing developments or known developments currently in planning and development that would result in any cumulative landscape or visual impacts in combination with the proposed development at Ballinclare Quarry.

Transboundary Impacts

13.123 The proposed application site is not located in the vicinity of a national boundary. Therefore, transboundary landscape or visual impacts will not arise.

Interaction with Other Impacts

13.124 There are no known interactions with other environmental impacts.

'Do-nothing Scenario'

13.125 If the proposed development does not proceed, no further works will take place within the application site. The quarry void would refill with water once pumping ceased and the quarry faces left to be naturally recolonised by locally occurring grass and scrub species, thereby slowly reducing the visibility of the existing quarry faces. While the landscape and visual effects will ultimately be reduced, a large section of the quarry face will remain noticeable in distant external views and the landform within the site will remain significantly altered compared with its original state (i.e. prior to any quarrying activities taking place).

MITIGATION MEASURES

Operational Stage

13.126 The proposed development was designed to minimise the potential landscape and visual effects. This design includes

- the containment of the development within the existing quarry development footprint;
- the reinstatement of ground levels similar to those present prior to any quarrying activities taking place;
- the retention and suitable management of all existing boundary vegetation, which reduces the visibility of the proposed development from local roads and nearby residential properties significantly; and
- the restoration of the landfill and C&D area to a native woodland habitat, which will ultimately result in the full integration of the site into existing views and the local landscape character, as well as having many biodiversity benefits (refer to **Figure 2-4** Landscape and Restoration Plan).

13.127 The visibility of the elevated elements of the application site / proposed development (e.g. the existing upper quarry face) in a small number of views from similarly elevated locations cannot be prevented and is not considered necessary, as the existing quarry face is a long-established element in the local landscape. Therefore, no additional landscape / visual mitigation measures are proposed during the operational stage of the proposed development.

Post – Operational Stage

13.128 During the post-operational stage, the fully restored application site will integrate into the surrounding landscape, resulting in negligible landscape or visual effects, or rather neutral to positive effects. Additional landscape / visual mitigation measures are therefore not considered necessary at this stage of the proposed development.

RESIDUAL IMPACT ASSESSMENT

Operational Stage

13.129 As no additional mitigation measures are proposed during the operational stage, the residual levels of landscape and visual impact would be as per the assessment above. In summary, the assessment has found that the proposed development would have minor

landscape effects on the local landscape character receptor (i.e. levels of impact not considered to be significant), during the operational stage.

13.130 The visual effects on views would range from none for the majority of locations within the study area, to negligible to moderate for a small number of residential, recreational and vehicular receptors within 1.5 km to the south and west of the site (i.e. all impacts not regarded as significant).

Post – Operational Stage

13.131 As no additional mitigation measures are proposed during the post-operational stage, the residual levels of landscape and visual impact would be as per the assessment above. In summary, following the completion of the proposed development, including the restoration of the infill and C&D areas to native woodland, the predicted landscape and visual effects would reduce to minor / negligible or less for all receptors identified.

MONITORING

13.132 There will be a 2-year aftercare period to ensure the successful establishment of the native woodland planting, followed by the long-term management of the woodland areas by a suitably qualified forestry contractor (refer to **EIAR Figure 2-4**).

13.133 Aside from these management activities, there are no monitoring requirements, arising from this landscape and visual assessment.

REFERENCES

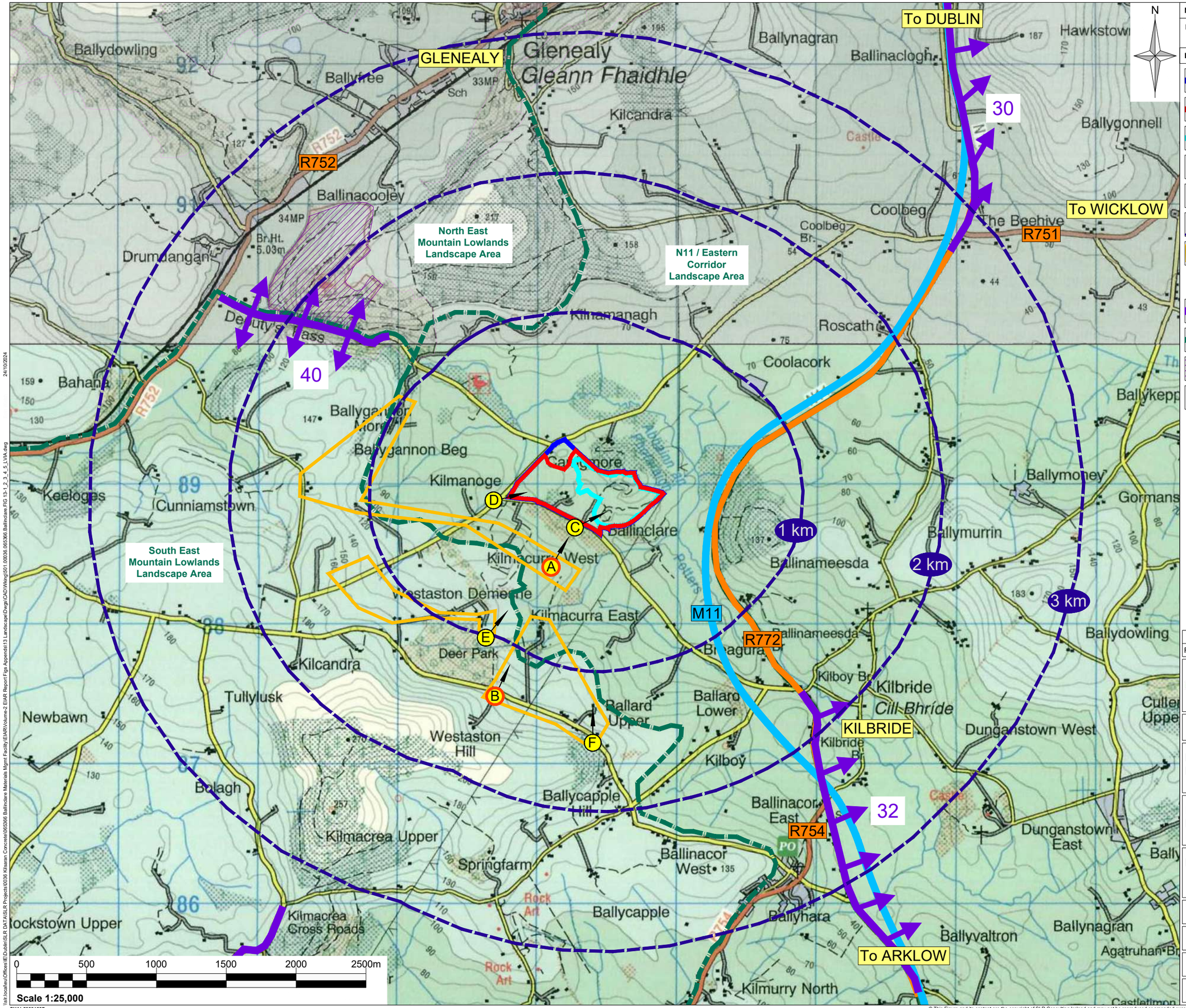
Environmental Protection Agency (May 2022) Guidelines on the Information to be contained in Environmental Impact Assessment Reports, EPA Ireland

The Landscape Institute with the Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition, Routledge

The Landscape Institute (2019) Technical Guidance Note 06/19: Visual Representation of Development Proposals, Landscape Institute

The Landscape Institute (2021) Technical Guidance Note 02/21: Assessing landscape value outside national designations, Landscape Institute

FIGURES



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Notes:

Extraction from OSI Discovery Series Map No. 56 & 62

Legend:

- Land Interest Boundary
- Planning Application Area
- Proposed Inert Waste Landfill Area
- Viewpoint Locations
- Photomontage Locations
- Approximate Distance from Application Boundary
- Areas / sections of road with similar (intermittent) views of the proposed development to that of the sample viewpoint(s) contained within the area

Landscape Baseline

- Prospects of Special Amenity Value or Special Interest (Wicklow County Development Plan 2022-2028)
- Landscape Character Area Boundary (Wicklow County Development Plan 2022-2028)
- Special Area of Conservation (SAC)
- Proposed Natural Heritage Area (pNHA)

Rev	Amendments	Date	By	Chk	Auth

SLR Consulting Ireland
7 Dundrum Business Park,
Windy Arbour,
Dublin,
Ireland,
D14 N2Y7

www.slrconsulting.com

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KILSARAN CONCRETE
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Figure Title
Landscape Baseline & Viewpoint Locations

Scale		SLR Project No.	
1:25,000	@ A3	065366.00001	
Designed	**Drawn**	**Checked**	**Authorised**
SH	SH	AM	AM
Date	**Date**	**Date**	**Date**
10/24	10/24	10/24	10/24

Figure Number **Figure 13-1** | Rev. **0**

24/10/2024
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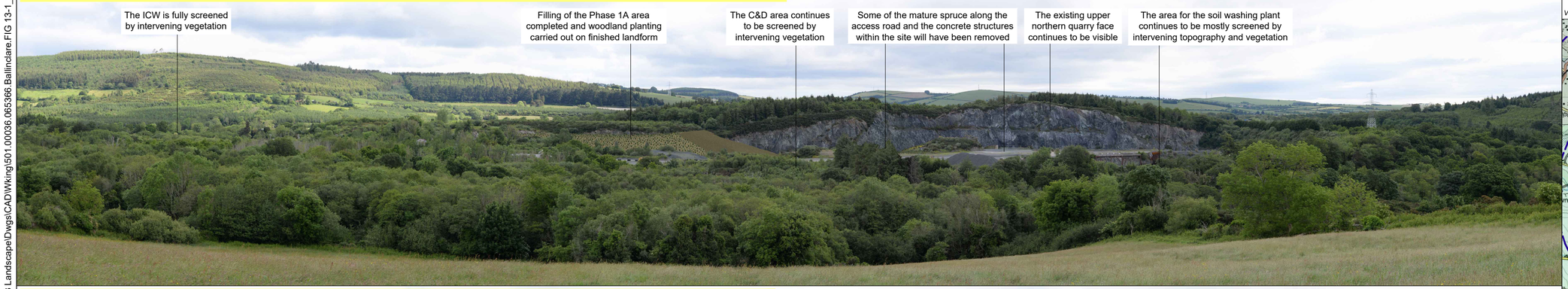
CYAL50381397

Viewpoint / Photomontage A: Existing View (May 2024)

Viewpoint / Photomontage A: Inert Waste Landfill, on completion of infill phase 1A (Phase 1 of woodland planting carried out)



Viewpoint / Photomontage A: Inert Waste Landfill, on completion of infill phase 2 (Phase 2 of woodland planting carried out)

Viewpoint / Photomontage A: Inert Waste Landfill, on completion of final restoration

Viewpoint / Photomontage A: Private agricultural field, c. 300m south of Ballinclare Quarry

Grid Coordinates (ITM): **725036:688499** Approximate Elevation: **90m AOD** Distance from planning application boundary: **320m** Direction of View: **North-east** Date/time of photograph: **29/05/2024 @ 09:45**

Description: The above view represents any views of Ballinclare Quarry from the sloping land to the south and south-west of the site. While there are few publicly accessible locations within this area (refer to Viewpoint / Photomontage B), there are a number of private properties with potentially similar views. The photomontages provided illustrate how the fill areas will become visible in front of the existing quarry face, in several phases. It further illustrates the proposed phased woodland planting, and how those areas of woodland planted at an earlier stage, are fully established and are starting to mature, by the time Phase 3 of the filling works is completed. The woodland planting will merge with the surrounding vegetation leaving little trace of the former quarry. That is except for the top of the existing quarry face, which will be retained for continued use by peregrine falcon.

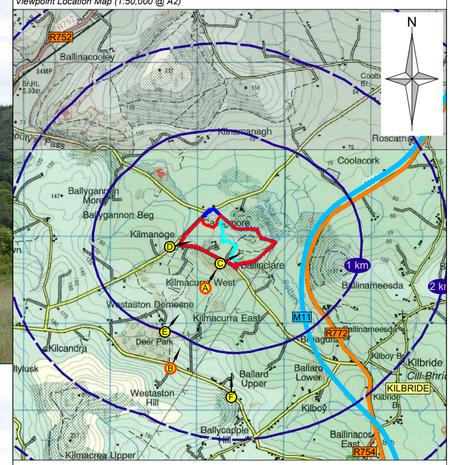
Notes:

Extraction from OSI Discovery Series Map No. 56 & 62

Legend:

- Land Interest Boundary
- Planning Application Area
- Proposed Inert Waste Landfill Area
- Viewpoint Locations
- Photomontage Locations
- Approximate Distance from Application Boundary

Viewpoint Location Map (1:50,000 @ A2)



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SLR Consulting Ireland
7 Dundrum Business Park,
Windy Arbour,
Dublin,
Ireland,
D14 N2Y7

www.slrconsulting.com

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Figure Title
Viewpoint / Photomontage A

Scale	SLR Project No.
NTS @ A2	065366.00001

Designed	Drawn	Checked	Authorised
SH	SH	AM	AM
Date 10/24	Date 10/24	Date 10/24	Date 10/24

Figure Number **Figure 13-2** Rev. **0**

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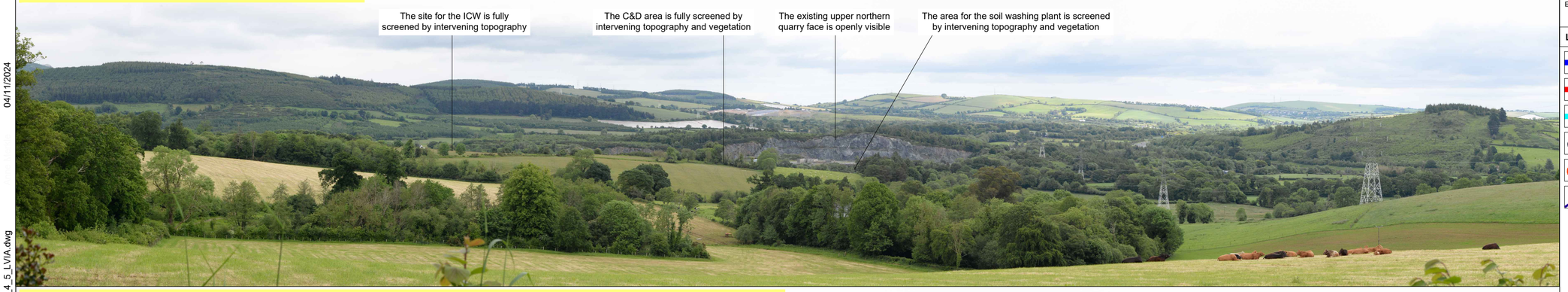
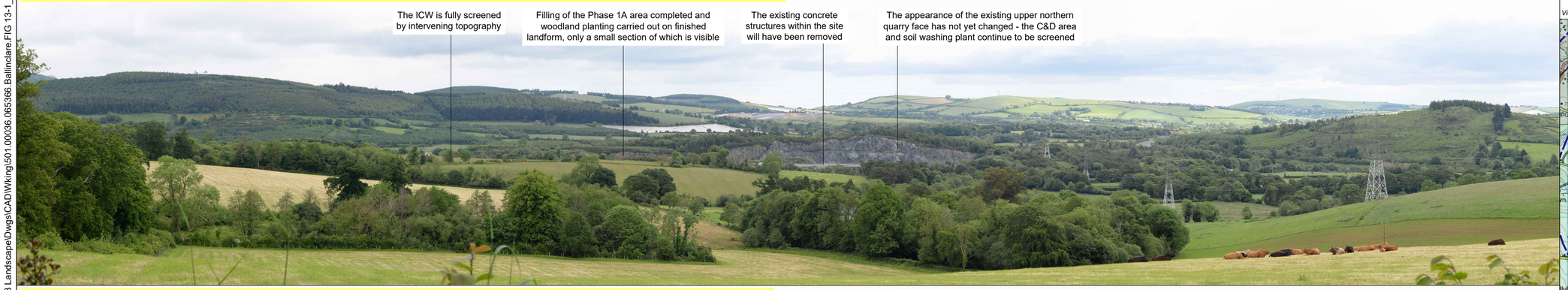
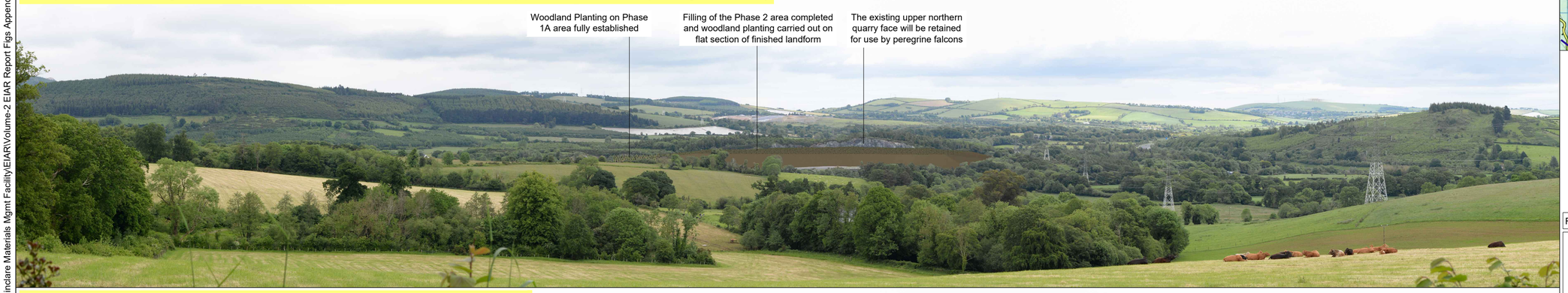
Viewpoint / Photomontage B: Existing View (May 2024)



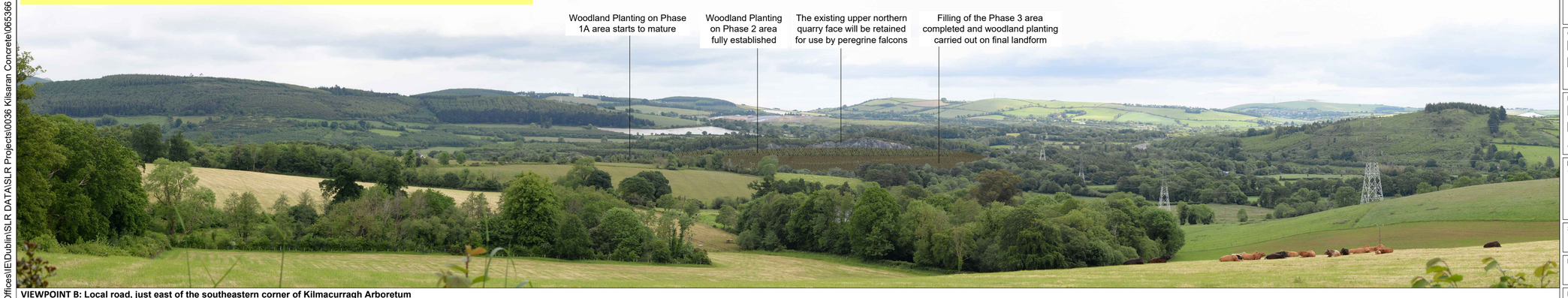
Viewpoint / Photomontage B: Inert Waste Landfill, on completion of infill phase 1A (Phase 1 of woodland planting carried out)



Viewpoint / Photomontage B: Inert Waste Landfill, on completion of infill phase 2 (Phase 2 of woodland planting carried out)



Viewpoint / Photomontage B: Inert Waste Landfill, on completion of final restoration



VIEWPOINT B: Local road, just east of the southeastern corner of Kilmacurragh Arboretum

Grid Coordinates (ITM): **724661:687552** Approximate Elevation: **140m AOD** Distance from planning application boundary: **1,390m** Direction of View: **North-east** Date/time of photograph: **29/05/2024 @ 11:15**

Description: This is one of the first available open views of Ballinclare Quarry from the road to the south of Kilmacurragh Arboretum, when travelling eastwards. It should be noted that this photo was taken from a standing position over the generally dense roadside vegetation and would not be available, when seated in a car. Further west of this viewpoint intervening vegetation fully screens the quarry. Further east intermittent views are available for about 1km, as far as the location of Viewpoint F. The photomontages provided illustrate how the fill areas will become visible in front of the existing quarry face, in several phases. It further illustrates the proposed phased woodland planting, and how those areas of woodland planted at an earlier stage, are fully established and are starting to mature, by the time Phase 3 of the filling works is completed. The woodland planting will merge with the surrounding vegetation leaving little trace of the former quarry. That is except for the top of the existing quarry face, which will be retained for continued use by peregrine falcon.

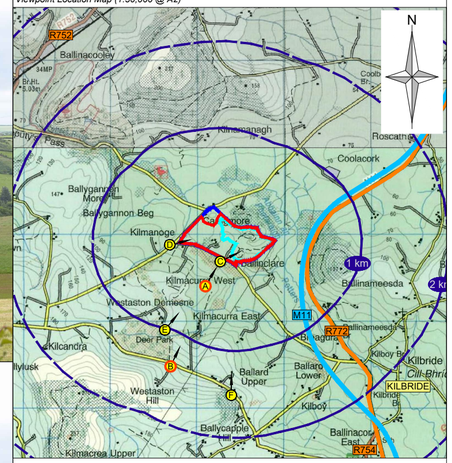
Notes:

Extraction from OSI Discovery Series Map No. 56 & 62

Legend:

- Land Interest Boundary
- Planning Application Area
- Proposed Inert Waste Landfill Area
- Viewpoint Locations
- Photomontage Locations
- Approximate Distance from Application Boundary

Viewpoint Location Map (1:50,000 @ A2)



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SLR Consulting Ireland
7 Dundrum Business Park,
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Figure Title
Viewpoint / Photomontage B

Scale	SLR Project No.
NTS @ A2	065366.00001

Designed	Drawn	Checked	Authorised
SH	SH	AM	AM
Date 10/24	Date 10/24	Date 10/24	Date 10/24

Figure Number **Figure 13-3** Rev. **0**

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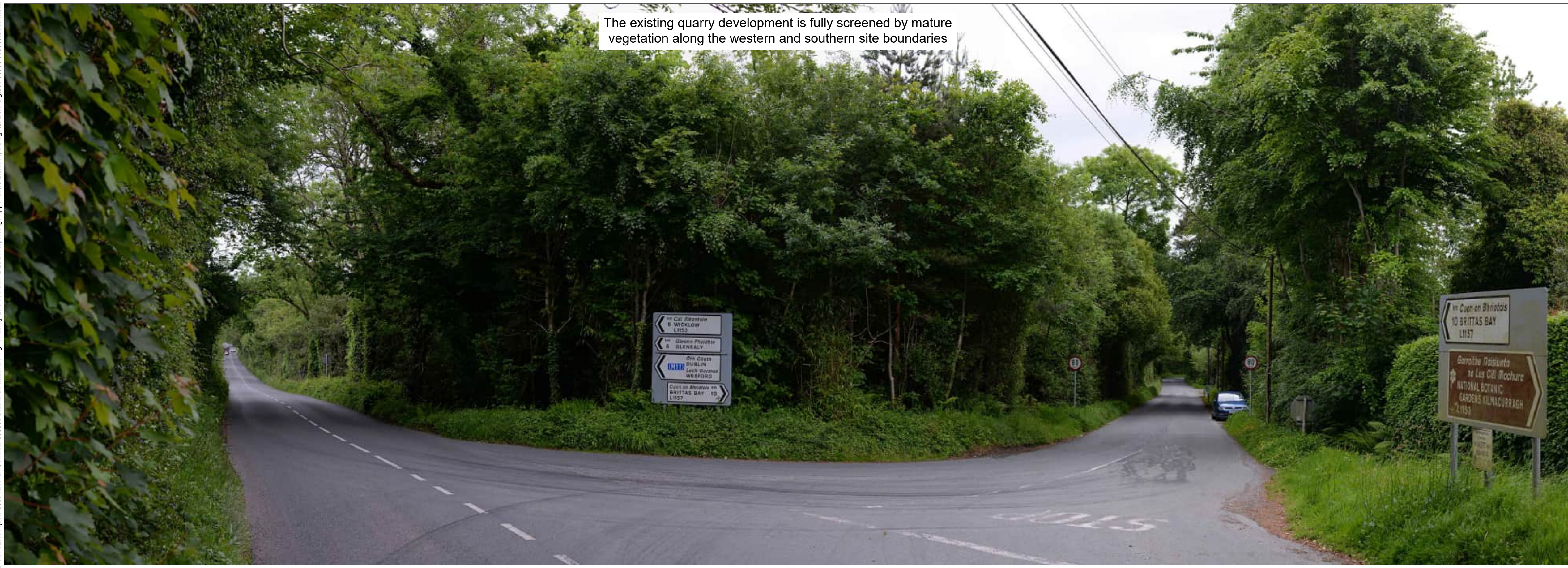
VIEWPOINT C: Local Road at the entrance to Ballinclare Quarry

Grid Coordinates (ITM): **725235:688754** Approximate Elevation: **55m AOD** Distance from planning application boundary: **5m** Direction of View: **North-east** Date/time of photograph: **29/05/2024 @ 10:30**

Description: The existing quarry is fully screened along the full length of this road by roadside and intervening vegetation, with the exception of this glimpsed view along the access road, as one passes the site entrance. A small section of the existing northern quarry face is visible in this view. The width of this view will be widened marginally, as a line of mature spruce will be removed along the internal access road to facilitate its widening. However, the trees adjoining the road (i.e. behind the wall to the front of the gate) will be retained and continue to provided substantial screening on both sides of the entrance. The proposed landfilling activities will be visible for a short duration towards the end of the works, as the more elevated levels are reached. The works will result in an area of sloping ground, which will be planted with a native woodland, becoming visible instead of the quarry face.



VIEWPOINT D: Junction of local roads at Kilmanoge at the southwestern corner of the application site

Grid Coordinates (ITM): **724656:688932** Approximate Elevation: **70m AOD** Distance from planning application boundary: **50m** Direction of View: **North-east** Date/time of photograph: **29/05/2024 @ 10:45**

Description: The existing quarry development is fully screened in views from the road along the western and southern site boundaries by roadside vegetation. The proposed landfilling activities will be fully screened at all times from both roads (except for at the site entrance, refer to Viewpoint C).

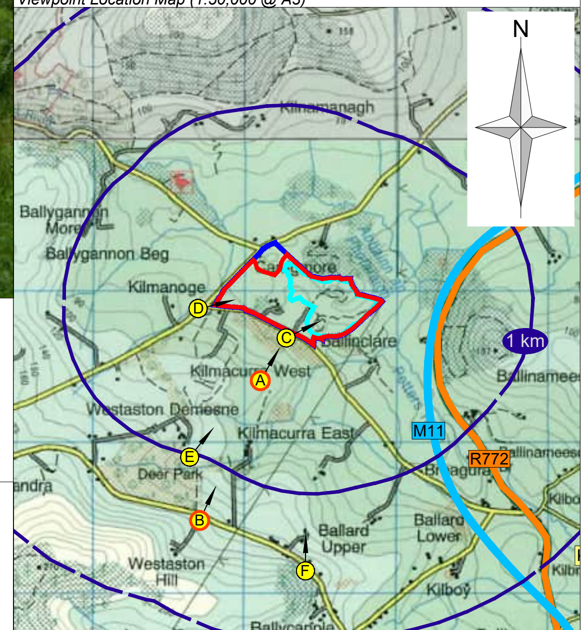
Notes:

Extraction from OSI Discovery Series Map No. 56 & 62

Legend:

- Land Interest Boundary
- Planning Application Area
- Proposed Inert Waste Landfill Area
- Viewpoint Locations
- Photomontage Locations
- Approximate Distance from Application Boundary

Viewpoint Location Map (1:50,000 @ A3)



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SLR Consulting Ireland
7 Dundrum Business Park,
Windy Arbour,
Dublin,
Ireland,
D14 N2Y7

www.slrconsulting.com

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Figure Title
Viewpoints C & D

Scale		SLR Project No.	
NTS @ A3		065366.00001	
Designed	Drawn	Checked	Authorised
SH	SH	AM	AM
Date	Date	Date	Date
10/24	10/24	10/24	10/24

Figure Number: **Figure 13-4** Rev.: **0**

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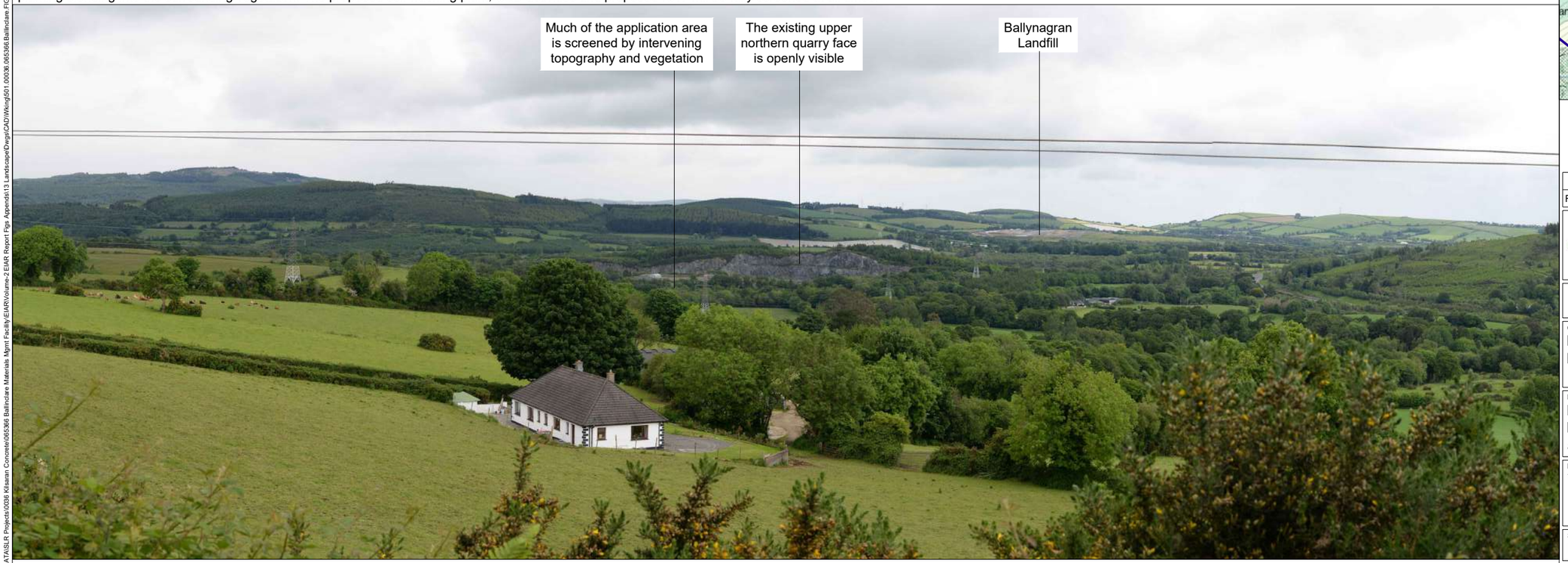
VIEWPOINT E: Kilmacurragh Arboretum, from the wildflower meadow east of Kilmacurragh House

Grid Coordinates (ITM): **724587:687980** Approximate Elevation: **110m AOD** Distance from planning application boundary: **1,000m** Direction of View: **North-east** Date/time of photograph: **29/05/2024 @ 11:45**

Description: The upper section of the existing northern face at Ballinclare Quarry is visible in a number of views along the eastern boundary of Kilmacurragh Arboretum. Similar views are a available from a short section of the local road to the northwest of the Arboretum and a number of private properties in elevated locations to the west/soutwest of the application area . The proposed landfilling activities will be temporarily visible, when the most elevated levels are reached, with the uppermost section of the eixting face being retained for use by peregrine falcons. The works will result in an area of level ground ground becoming visible to the front of the face, which will be planted with a native woodland. Ultimately, the appearance of the quarry face will be softened, with the woodland planting blending into the surrounding vegetation. The proposed soil washing plant, C&D activities and proposed ICW will be fully screened at all times.



VIEWPOINT F: Local Road at Ballard Upper

Grid Coordinates (ITM): **725309:687247** Approximate Elevation: **145m AOD** Distance from planning application boundary: **1,450m** Direction of View: **North** Date/time of photograph: **29/05/2024 @ 11:25**

Description: This is one of the first available open views of Ballinclare Quarry from the road to the south of Kilmacurragh Arboretum, when travelling west along this road. It should be noted that this photo was taken from a standing position over the generally dense roadside vegetation and is more restricted, when seated in a car. Further east of this viewpoint intervening topography and vegetation fully screens the quarry. Further west intermittent views are available for about 1km, as far as the location of Viewpoint B. The upper two benches of the existing northern face at Ballinclare Quarry are visible in the available views. The proposed landfilling activities will be temporarily visible, when the levels approximately above the 50m contour are reached. The works will result in a level area becoming visible to the front of the quarry face, which will be planted with a native woodland. This will soften the appearance of the quarry face, with the woodland planting blending into the surrounding vegetation. The proposed soil washing plant and C&D activities and proposed ICW will be fully screened.

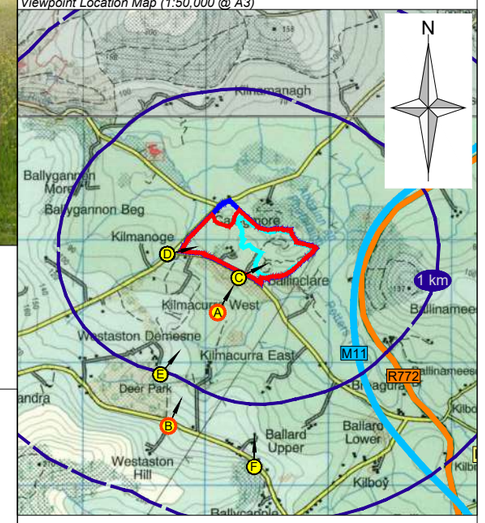
Notes:

Extraction from OSI Discovery Series Map No. 56 & 62

Legend:

- Land Interest Boundary
- Planning Application Area
- Proposed Inert Waste Landfill Area
- Viewpoint Locations
- Photomontage Locations
- Approximate Distance from Application Boundary

Viewpoint Location Map (1:50,000 @ A3)



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SLR Consulting Ireland
7 Dundrum Business Park,
Windy Arbour,
Dublin,
Ireland,
D14 N2Y7

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Figure Title
Viewpoints E & F

Scale	SLR Project No.
NTS @ A3	065366.00001

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Date 10/24	Date 10/24	Date 10/24	Date 10/24

Figure Number **Figure 13-5** Rev. **0**

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APPENDICES

APPENDIX 13-A
Criteria and Definitions used in Assessing Landscape and Visual Effects

Introduction

Landscape and Visual Impact Assessment (LVIA) is a tool used to identify the effects of development on *"landscape as an environmental resource in its own right and on people's views and visual amenity"* (GLVIA3, paragraph 1.1). GLVIA3[1] (paragraph 2.22) states that these two elements, although inter-related, should be assessed separately. GLVIA3 is the main source of guidance on LVIA.

Landscape is a definable set of characteristics resulting from the interaction of natural, physical and human factors: it is a resource in its own right. Its assessment is distinct from visual assessment, which considers effects on the views and visual amenity of different groups of people at particular locations. Clear separation of these two topics is recommended in GLVIA3.

As GLVIA3 (paragraph 2.23) states, professional judgement is an important part of the LVIA process: whilst there is scope for objective measurement of landscape and visual changes, much of the assessment must rely on qualitative judgements. It is critical that these judgements are based upon a clear and transparent method so that the reasoning can be followed and examined by others.

Impacts can be defined as the action being taken, whereas effects are the changes result from that action. This method of assessment assesses landscape and visual effects.

Landscape and visual effects can be positive, negative or neutral in nature. Positive effects are those which enhance and/or reinforce the characteristics which are valued. Negative effects are those which remove and/or undermine the characteristics which are valued. Neutral effects are changes which are consistent with the characteristics of the landscape or view.

In LVIAs which form part of an EIA, it is necessary for identify significant and non-significant effects. In non-EIA LVIAs, also known as appraisals, the same principles and process as LVIA may be applied but, in so doing, it is not required to establish whether the effects arising are or are not significant given that the exercise is not being undertaken for EIA purposes (see GLVIA3 statement of clarification 1/13 10-06-13, Landscape Institute).

Landscape Effects

Landscape, as defined in the European Landscape Convention, is defined as "*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors"*, (Council of Europe, 2000). Landscape does not apply only to special or designated places, nor is it limited to countryside.

GLVIA3 (paragraph 5.34) recommends that the effect of the development on landscape receptors is assessed. Landscape receptors are the components of the landscape that are likely to be affected by the proposed development and can include individual elements (such as hedges or buildings), aesthetic and perceptual characteristics (for example sense of naturalness, tranquillity or openness), or, at a larger scale, the character of a defined character area or landscape type. Designated areas (such as National Parks or Areas of Outstanding Natural Beauty (AONBs)) are also landscape receptors.

This assessment is being undertaken because the proposed development has the potential to remove or add elements to the landscape, to alter aesthetic or perceptual aspects, and to add or remove characteristics and thus potentially change overall character.

Judging landscape effects requires a methodical assessment of the sensitivity of the landscape receptors to the proposed development and the magnitude of effect which would be experienced by each receptor.

[1] Landscape Institute and Institute of Environmental Management and Assessment 'Guidelines for Landscape and Visual Impact Assessment' (Third Edition, April 2013)

Landscape Sensitivity

Sensitivity of landscape receptors is assessed by combining an assessment of the susceptibility of landscape receptors to the type of change which is proposed with the value attached to the landscape. (GLVIA3, paragraph 5.39).

Value Attached to Landscape Receptors

Landscape receptors may be valued at community, local, national or international level. Existing landscape designations provide the starting point for this assessment, as set out in **Table 13A-1** below.

The table sets out the interpretation of landscape designations in terms of the value attached to different landscape receptors. As GLVIA3 (paragraph 5.24) notes, at the local scale of an LVIA study area it may be found that the landscape value of a specific area may be different to that suggested by the formal designation.

Table 13A-1
Interpretation of Landscape Designations

Designation	Description	Value
World Heritage Sites, candidate World Heritage Site	Unique sites, features or areas identified as being of international importance according to UNESCO criteria. Consideration should be given to their settings especially where these contribute to the attributes of outstanding universal value for which such an area of landscape is valued.	International
National Parks	Areas of landscape identified as being of national importance for their natural beauty and the opportunities they offer for outdoor recreation. Consideration should be given to their settings especially where these contribute to the special qualities for which the landscape is valued.	National
Local Landscape Designations (such as Areas of Outstanding Natural Beauty or Areas of High Amenity) included in local planning documents; or other landscapes of identified value.	Areas of landscape identified as having importance at the local authority level.	Local Authority
Undesignated landscapes of community value	Landscapes which do not have any formal designation but which are assessed as having value to local communities, perhaps on the basis of demonstrable physical attributes which elevate it above ordinary countryside.	Local Authority / Community
Landscapes of low value	Landscapes in poor condition or fundamentally altered by presence of intrusive man-made structures.	Low

Where landscapes are not designated and where no other local authority guidance on value is available, an assessment is made by reference to criteria in the **Table 13A-2** below. This is based on Table 1 of Landscape Institute Technical Guidance Note 2/21. These factors are not fixed and should be reviewed on a case-by-case basis. When assessing landscape value of a site it is important to consider not only the site itself but also its context.

Landscapes may be judged to be of local authority or community value on the basis of one or more of these factors. There may also be occasional circumstances where an undesignated landscape may be judged to be of national value, for example where it has a clear connection with a nationally designated landscape or is otherwise considered to be of equivalent value to a national designation. Similarly, on occasions there may be areas within designated landscapes that do not meet the designation criteria or demonstrate the key characteristics/special qualities in a way that is consistent with the rest of the designated area.

An overall assessment is made for each landscape receptor, based on an overview of the above criteria, to determine its value - whether for example it is comparable to a local authority landscape designation or similar, or whether it is of value to local people and communities. For example, an intact landscape in good condition, where scenic quality, tranquillity, and/or conservation interests make a particular contribution to the landscape, or where there are important cultural or historical associations, might be of equivalent value to a local landscape designation. Conversely, a degraded landscape in poor condition, with no particular scenic qualities or natural or cultural heritage interest is likely to be considered of limited landscape value.

Table 13A-2
Factors Considered in Assessing the Value of Non-Designated Landscapes

Factor	Criteria
Natural Heritage	Landscape with clear evidence of ecological, geological, geomorphological or physiographic interest. Presence of wildlife and habitats that contribute to the sense of place. Landscape which contains valued natural capital assets that contribute to ecosystem services.
Cultural Heritage	Landscape with clear evidence of archaeological, historical or cultural interest. Landscape which contributes to the significance of heritage assets. Landscape which offers a dimension of time depth.
Landscape Condition	Landscape which is in a good physical state both with regard to individual elements and overall landscape structure. Absence of detracting/incongruous features.
Associations	Landscape which is connected with notable people, events and the arts.
Distinctiveness	Landscape that has a strong sense of identity or place. Presence of distinctive features that are characteristic of a place, or presence of rare/unusual features that confer a strong sense of place. Includes landscape that makes an important contribution to the character or identity of a settlement.
Recreational	Landscape offering recreational opportunities where experience of landscape is important. Includes open access areas, common land and rights of way where appreciation of the landscape is an important element of the experience. Landscape that forms part of a view that that is important to the enjoyment of a recreational activity.
Perceptual (Scenic)	Landscape that appeals to the senses, primarily the visual sense. Distinctive features, or distinctive combinations of features. Strong aesthetic qualities. Visual diversity or contrasts. Memorable/distinctive views or landmarks, or landscape that contributes to these.

Factor	Criteria
Perceptual (Wildness and Tranquillity)	Landscape with a strong perceptual value notably remoteness, wildness, tranquillity and/or dark skies.
Functional	Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape. Natural hydrological systems, important parts of the green infrastructure network, pollinator rich habitats. Landscapes that have strong physical or functional links with an adjacent national landscape designation or are important to the appreciation of the designated landscape and its special qualities.

Susceptibility of Landscape Receptors to Change

As set out in GLVIA3, susceptibility refers to the ability of the landscape receptor to *"accommodate the proposed development without undue adverse consequences for the baseline situation and/or the achievement of landscape planning policies and strategies"*. Judgement of susceptibility is particular to the specific characteristics of the proposed development and the ability of a particular landscape or feature to accommodate the type of change proposed and makes reference to the criteria set out in **Table 13A-3** below. Aspects of the character of the landscape that may be affected by a particular type of development include landform, skylines, land cover, enclosure, human influences including settlement pattern and aesthetic and perceptual aspects such as the scale of the landscape, its form, line, texture, pattern and grain, complexity, and its sense of movement, remoteness, wildness or tranquillity.

For example, an urban landscape which contains a number of industrial buildings may have a low susceptibility to buildings of a similar scale and character. Conversely a rural landscape containing only remote farmsteads is likely to have a high susceptibility to large-scale built development.

Table 13A-3
Landscape Receptor Susceptibility to Change

Susceptibility	Criteria
High	The landscape receptor is highly susceptible to the proposed development because the key characteristics of the landscape have no or very limited ability to accommodate it without transformational adverse effects, taking account of the existing character and quality of the landscape.
Medium	The landscape receptor is moderately susceptible to the proposed development because the relevant characteristics of the landscape have some ability to accommodate it without transformational adverse effects, taking account of the existing character and quality of the landscape.
Low	The landscape receptor has low susceptibility to the proposed development because the relevant characteristics of the landscape are generally able to accommodate it without transformational adverse effects, taking account of the existing character and quality of the landscape.

Defining Sensitivity

As has been noted above, the sensitivity of landscape receptors is defined in terms of the relationship between value and susceptibility to change as indicated in **Figure 13A-1** below. This summarises the general nature of the relationship but it is not formulaic and only indicates general categories of sensitivity. Professional judgement is applied on a case-by-case basis in determining sensitivity of individual receptors with the diagram only serving as a guide.

Figure 13A-1
Example Levels of Sensitivity defined by Value and Susceptibility of Landscape Receptors

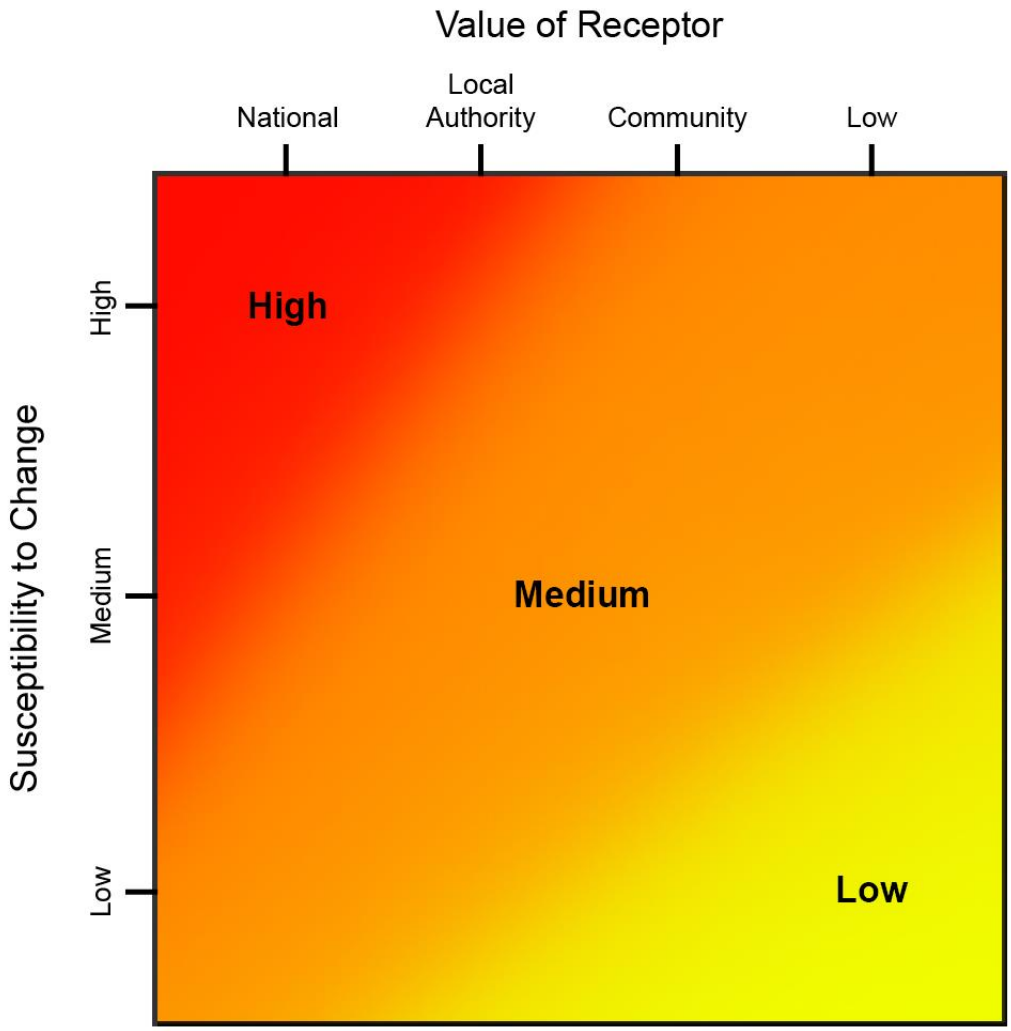


Table 13A-4 below summarises the nature of the relationship but it is not formulaic and only indicates general categories of sensitivity. Judgements are made about each landscape receptor, with the table serving as a guide.

Where, taking into account the component judgements about the value and susceptibility of the landscape receptor, sensitivity is judged to lie between levels, an intermediate assessment of high/medium or medium/low is adopted. In a few limited cases a category of less than low (very low) may be used where the landscape is of low value and susceptibility is particularly low.

Table 13A-4
Example Levels of Sensitivity defined by Value and Susceptibility of Landscape Receptors

Susceptibility	Criteria
High	The landscape receptor is of international or national value and is considered to have high susceptibility to the effects of the proposed development. OR The landscape receptor is of national value and is considered to have medium susceptibility to the effects of the proposed development.
Medium	The landscape receptor is of international or national value and is considered to have low susceptibility to the effects of the proposed development. OR The landscape receptor is of local authority value and is considered to have high susceptibility to the effects of the proposed development. OR The landscape receptor is of local authority value and is considered to have medium susceptibility to the effects of the proposed development. OR The landscape receptor is of community value and is considered to have high susceptibility to the effects of the proposed development.
Low	The landscape receptor is of local authority value and is considered to have low susceptibility to the effects of the proposed development. OR The landscape receptor is of community value and is considered to have medium susceptibility to the effects of the proposed development. OR The landscape receptor is of community value and is considered to have low susceptibility to the effects of the proposed development.

Magnitude of Landscape Change

The magnitude of landscape change is established by assessing the size or scale of change, the geographical extent of the area influenced and the duration and potential reversibility of the change.

Size and Scale of Change

The size and/or scale of change in the landscape takes into consideration the following factors:

- the extent/proportion of landscape elements lost or added; and/or
- the degree to which aesthetic/perceptual aspects are altered; and
- whether this is likely to change the key characteristics of the landscape.

The criteria used to assess the size and scale of landscape change are based upon the amount of change that will occur as a result of the proposed development, as described in **Table 13A-5** below.

Table 13A-5
Magnitude of Landscape Change: Size / Scale of Change

Category	Description
Large level of landscape change	There would be a large level of change in landscape character, and especially to the key characteristics if, for example, the proposed development: • becomes a dominant feature in the landscape, changing the balance of landscape characteristics; and/or • would dominate important visual connections with other landscape types, where this is a key characteristic of the area.
Medium level of landscape change	There would be a medium level of change in landscape character, and especially to the key characteristics if, for example: • the proposed development would be more prominent but would not change the overall balance or composition of the landscape; and/or • key visual connections to other landscape types may be interrupted intermittently by the proposed development, but these connections would not be dominated by them.
Small level of landscape change	There would be a small level of change in landscape character, and especially to the key characteristics if, for example: • there would be no introduction of new elements into the landscape and the proposed development would not significantly change the composition/balance of the landscape.
Negligible level of landscape change/ No change	There would be a negligible or no level of change in landscape character, and especially to the key characteristics if, for example, the proposed development would be a small element and/or would be a considerable distance from the receptor.

Geographical Extent of Change

The geographical extent of landscape change is assessed by determining the area over which the changes will influence the landscape, as set out in **Table 13A-6**. For example, this could be at the site level, in the immediate setting of the site, or over some or all of the landscape character types or areas affected.

Table 13A-6
Magnitude of Landscape Change: Geographical Extent

Category	Description
Large extent of landscape change	Affects a wider area, far from the site itself.
Medium extent of landscape change	Landscape change extends beyond the site boundaries.
Small extent of landscape change	Change affecting a localised area, often focused on the site itself.
Negligible extent of landscape change	The change will affect only a negligible extent of the landscape receptor under consideration.

Duration and Reversibility of Change

The duration of the landscape change is categorised in **Table 13A-7** below, which considers whether the change will be permanent and irreversible or temporary and reversible. The levels of duration are based on the EPA Guidelines on the information to be contained in Environmental Impact Assessment Reports (2022).

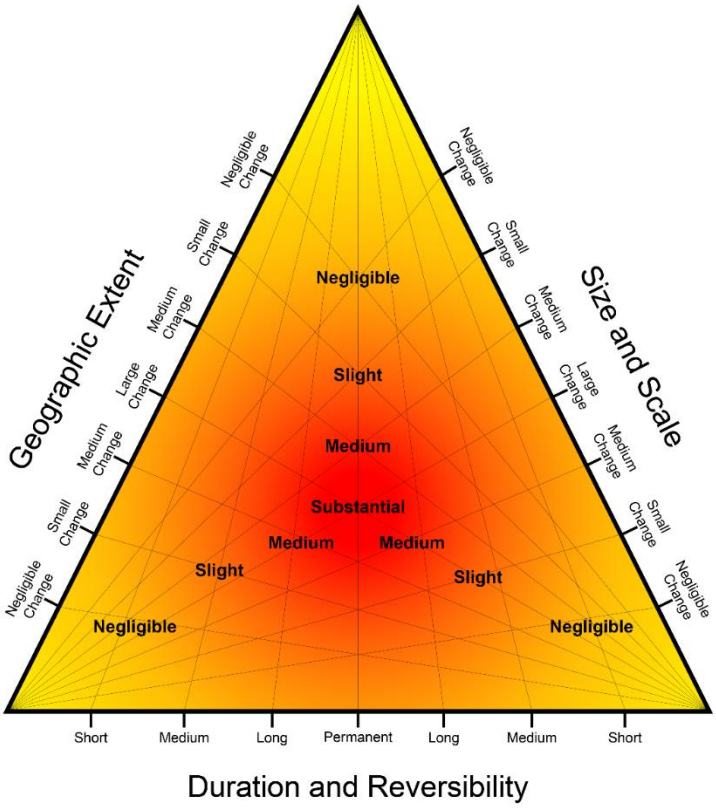
Table 13A-7
Magnitude of Landscape Change: Duration and Reversibility

Category	Description
Permanent/ Irreversible	Change that will last for over 60 years and is deemed irreversible.
Long-term reversible	Change that will last between 15 and 60 years and is potentially, or theoretically reversible.
Medium-term reversible	Change that will last between 7 and 15 years and is wholly or partially reversible.
Temporary/ Short-term reversible	Change that will last from 0 to 7 years and is reversible - includes construction effects.

Deciding on Overall Magnitude of Landscape Change

The relationships between the three factors that contribute to assessment of the magnitude of landscape effects are illustrated graphically, as a guide, in **Figure 13A-2** below. Various combinations are possible and the overall magnitude of each effect is determined using professional judgement rather than by formulaic application of the relationships in the diagram.

Figure 13A-2
Determining the Magnitude of Landscape Change

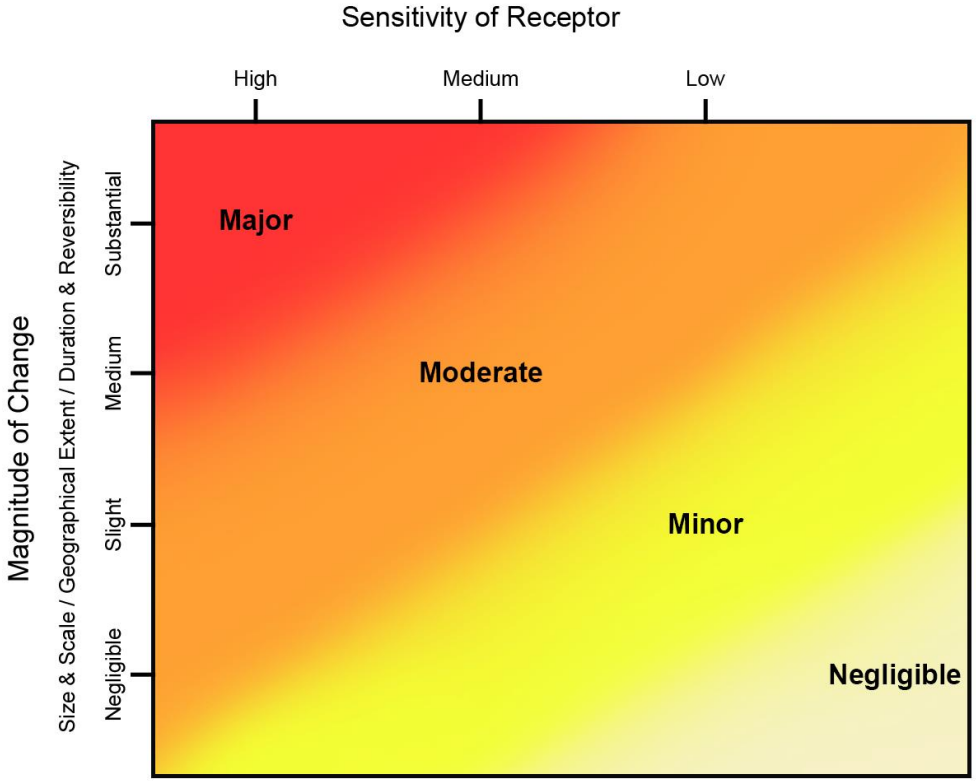


Assessment of Landscape Effects

The assessment of overall landscape effects is defined in terms of the relationship between the sensitivity of the landscape receptors and the magnitude of the change. The diagram below (**Figure 13A-3**) summarises the nature of the relationship but it is not formulaic. Judgements are made about each landscape effect using this diagram as a guide.

Major and Major/Moderate effects are regarded as important planning considerations in landscape and visual appraisals (or significant effects in landscape and visual impact assessments). Moderate effects are not considered to be important planning considerations / significant effects, although it is possible that a concentration of such effects could be considered to be an important planning consideration / significant effect.

Figure 13A-3
Assessment of Landscape Effects



Visual Effects

Visual effects are the effects of change and development on the views available to people and their visual amenity. Visual receptors are the people whose views may be affected by the proposed development. They generally include users of walking trails or other recreational facilities or attractions; travellers who may pass through the study area because they are visiting, living or working there; residents living in the study area, either as individuals or, more often, as a community; and people at their place of work:

- Communities within settlements (i.e. towns and villages);
- Residents of individual properties and clusters of properties outside settlements;
- People using nationally designated or regionally promoted footpaths and cycle routes;
- Visitors at publicly accessible sites including, for example, gardens and designed landscapes, historic sites, and other visitor attractions or outdoor recreational facilities where the landscape or seascape is an important part of the experience;
- Users of outdoor sport and recreation facilities;
- Visitors staying at caravan parks or camp sites;
- Road users on recognised scenic or promoted tourist routes;
- Users of other roads;
- Rail passengers;
- People at their place of work.

Judging visual effects requires a methodical assessment of the sensitivity of the visual receptors to the proposed development and the magnitude of effect which would be experienced by each receptor.

Viewpoints are chosen (in discussion with the competent authority and other stakeholders and interested parties) for a variety of reasons but most commonly because they represent views experienced by relevant groups of people although they may also include specific promoted or otherwise important viewpoints.

Visual Sensitivity

Sensitivity of visual receptors is assessed by combining an assessment of the susceptibility of visual receptors to the type of change which is proposed with the value attached to the views. (GLVIA3, paragraph 6.30).

Value Attached to Views

Different levels of value are attached to the views experienced by particular groups of people at particular viewpoints. Assessment of value takes account of a number of factors, including:

- Recognition of the view through some form of planning designation or by its association with particular heritage assets; and
- The popularity of the viewpoint, in part denoted by its appearance in guidebooks, literature or art, or on tourist maps, by information from stakeholders and by the evidence of use including facilities provided for its enjoyment (seating, signage, parking places, etc.); and
- Other evidence of the value attached to views by people including consultation with local planning authorities, some of whom have carried out assessments of valued views, and professional assessment of the quality of views.

The assessment of the value of views is summarised in **Table 13A-8** below. These criteria are provided for guidance only.

Table 13A-8
Examples of Factors Considered in assessing the Value Attached to Views

Value	Description
High	Views from nationally (and in some cases internationally) known viewpoints, which: • have some form of planning designation; or • are associated with internationally or nationally designated landscapes or important heritage assets; or • are promoted in sources such as maps and tourist literature; or • are linked with important and popular visitor attractions where the view forms a recognised part of the visitor experience; or • have important cultural associations. Also, may include views judged by assessors to be of high value.
Medium	Views from viewpoints of some importance at regional or local levels, which: • have some form of local planning designation associated with locally designated landscapes or areas of equivalent landscape quality; or • are promoted in local sources; or • are linked with locally important and popular visitor attractions where the view forms a recognised part of the visitor experience; or • have important local cultural associations. Also, may include views judged by the assessors to be of medium value.
Low	Views from viewpoints which, although they may have value to local people: • have no formal planning status; or • are not associated with designated or otherwise high-quality landscapes; or • are not linked with popular visitor attractions; or • have no known cultural associations. Also, may include views judged by the assessors to be of low value.

Susceptibility of Visual Receptors to Change

The susceptibility of different types of people to changes in views is mainly a function of:

- The occupation or activity of the viewer at a given viewpoint; and
- The extent to which the viewer's attention or interest be focussed on a particular view and the visual amenity experienced at a given view.

The susceptibility of different groups of viewers is assessed with reference to the guidance in **Table 13A-9** below. However, as noted in GLVIA3 *"this division is not black and white and, in reality, there will be a gradation in susceptibility to change"*. Therefore, the susceptibility of each group of people affected is considered for each project and assessments are included in the relevant text in the report.

Table 13A-9
Visual Receptor Susceptibility to Change

Susceptibility	Description
High	Residents; People engaged in outdoor recreation where their attention is likely to be focused on the landscape and on particular views; Visitors to heritage assets or other attractions where views of the surroundings are an important part of the experience; Communities where views contribute to the landscape setting enjoyed by the residents.
Medium	Travellers on scenic routes where the attention of drivers and passengers is likely to be focused on the landscape and on particular views. People engaged in outdoor sport or recreation, which may involve appreciation of views e.g. users of golf courses.
Low	People engaged in outdoor sport or recreation, which does not involve appreciation of views; People at their place of work whose attention is focused on their work; where the setting is not important to quality of working life; Travellers, where the view is incidental to the journey.

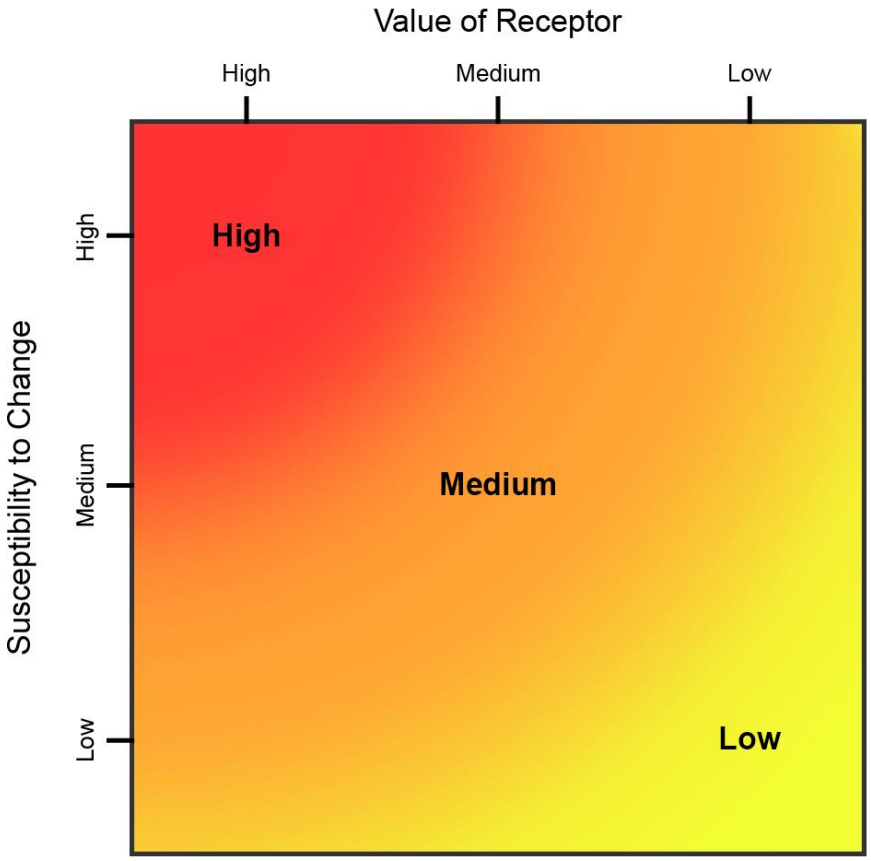
Defining Sensitivity

The sensitivity of visual receptors is defined in terms of the relationship between the value of views and the susceptibility of the different receptors to the proposed change. **Figure 13A-4** below summarises the nature of the relationship; it is not formulaic and only indicates general categories of sensitivity. Judgements are made on merit about each visual receptor, with the table below only serving as a guide. **Table 13A-10** sets down the main categories that may occur but again it is not comprehensive and other combinations may occur.

Table 13A-10
Example Levels of Sensitivity defined by Value and Susceptibility of Visual Receptors

Sensitivity	Criteria
High	The visual receptor group is highly susceptible to changes in views and visual amenity and relevant views are of high value. OR The visual receptor group has a medium level of susceptibility to changes in views and visual amenity and relevant views are of high value. OR The visual receptor group is highly susceptible to changes in views and visual amenity and relevant views are of value at the medium level.
Medium	The visual receptor group is highly susceptible to changes in views and visual amenity and relevant views are of value at the low level. OR The visual receptor group has a medium level of susceptibility to changes in views and visual amenity and relevant views are of value at the medium level. OR The visual receptor group has a low level of susceptibility to changes in views and visual amenity and relevant views are of value at the high level.
Low	The visual receptor group has a medium level of susceptibility to changes in views and visual amenity and relevant views are of value at the low level. OR The visual receptor group has a low level of susceptibility to changes in views and visual amenity and relevant views are of value at the medium level. OR The visual receptor group has a low level of susceptibility to changes in views and visual amenity and relevant views are of value at the low level.

Figure 13A-4
Levels of Sensitivity Defined by Value and Susceptibility of Visual Receptor Groups



Magnitude of Visual Change

The magnitude of visual change is established by assessing the size or scale of change, the geographical extent of the area influenced and the duration and potential reversibility of the change.

Size and Scale of Change

The criteria used to assess the size/scale of visual change are as follows:

- the scale of the change in the view with respect to the loss or addition of features in the view, changes in its composition, including the proportion of the view occupied by the proposed development and distance of view;
- the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of factors such as form, scale and mass, line, height, colour and texture; and
- the nature of the view of the proposed development, for example whether views will be full, partial or glimpses or sequential views while passing through the landscape.

The above criteria are summarised in the **Table 13A-11** below:

Table 13A-11
Magnitude of Visual Change: Size/Scale of Change

Sensitivity	Criteria
Large visual change	The proposed development will cause a complete or large change in the view, resulting from the loss of important features in or the addition of important new ones, to the extent that this will substantially alter the composition of the view and the visual amenity it offers.
Medium visual change	The proposed development will cause a clearly noticeable change in the view, resulting from the loss of features or the addition of new ones, to the extent that this will alter to a moderate degree the composition of the view and the visual amenity it offers. Views may be partial/intermittent.
Small visual change	The proposed development will cause a perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this will partially alter the composition of the view and the visual amenity it offers. Views may be partial only.
Negligible visual change	The proposed development will cause a barely perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this will barely alter the composition of the view and the visual amenity it offers. Views may be glimpsed only.
No change	The proposed development will cause no change to the view.

Geographical Extent of Change

The geographical extent of the visual change identified at representative viewpoints is assessed by reference to a combination of the Zone of Theoretical Visibility (ZTV), where this has been prepared, and field work, and consideration of the criteria in **Table 13A-12** below. Representative viewpoints are used as 'sample' points to assess the typical change experienced by different groups of visual receptors at different distances and directions from the proposed development. The geographical extent of the visual change is judged for each group of receptors: for example, people using a particular route or public amenity, drawing on the viewpoint assessments, plus information about the distribution of that particular group of people in the Study Area.

The following factors are considered for each representative viewpoint:

- the angle of view in relation to the main activity of the receptor;
- the distance of the viewpoint from the proposed development; and
- the extent of the area over which changes would be visible.

Thus, low levels of change identified at representative viewpoints may be extensive or limited in terms of the geographical area they are apparent from: for example, a view of the proposed development from elevated Access Land may be widely visible from much or all of the accessible area or may be confined to a small proportion of the area. Similarly, a view from a public footpath may be visible from a single isolated viewpoint, or over a prolonged stretch of the route. Community views may be experienced from a small number of dwellings or affect numerous residential properties.

Table 13A-12
Magnitude of Visual Change: Geographical Extent of Change

Category	Description
Large extent of visual change	The proposed development is seen by the group of receptors in many locations across the Study Area or from the majority of a linear route and/or by large numbers of viewers; or the effect on the specific view(s) is extensive.
Medium extent of visual change	The proposed development is seen by the group of receptors from a medium number of locations across the Study Area or from a medium part of a linear route and/or by a medium number of viewers; or the effect on the specific view is moderately extensive.
Small extent of visual change	The proposed development is seen by the group of receptors at a small number of locations across the Study Area or from only limited sections of a linear route and/or by a small number of viewers; or the effect on a specific view is small.
Negligible extent of visual change	The proposed development is either not visible in the Study Area or is seen by the receptor group at only one or two locations or from a very limited section of a linear route and/or by a very small number of viewers; or the effect on the specific view is barely discernible.

Duration and Reversibility

The duration of the visual change at viewpoints is categorised in **Table 13A-13** below, which considers whether views will be permanent and irreversible or temporary and reversible. The levels of duration are based on the EPA Guidelines on the information to be contained in EIA Reports (2022).

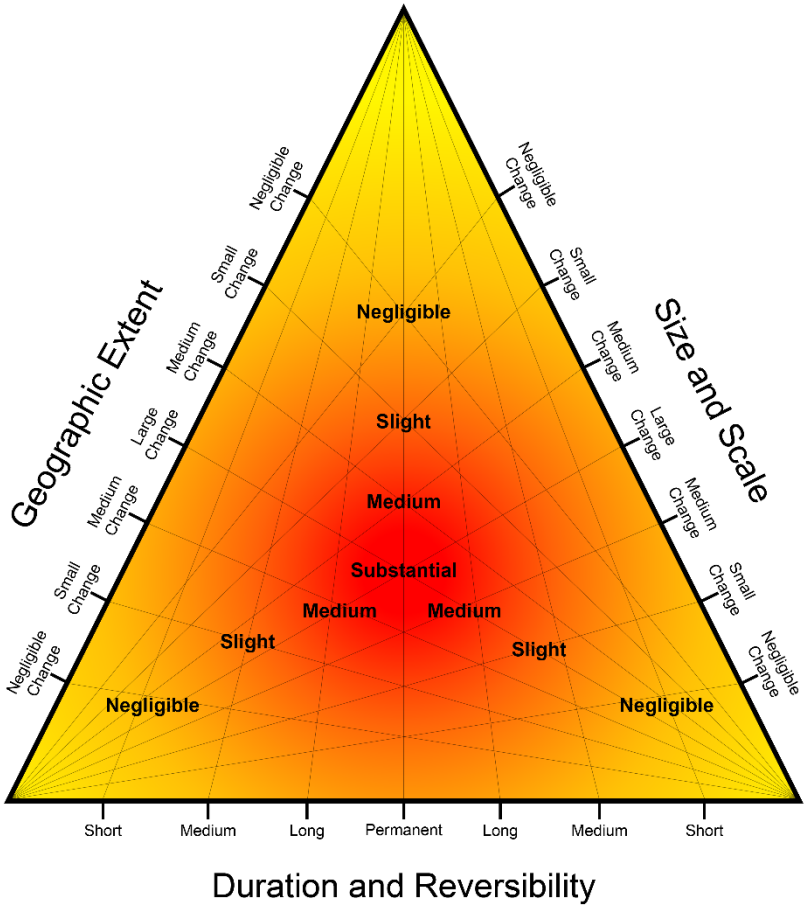
Table 13A-13
Magnitude of Visual Change: Duration and Reversibility

Category	Description
Permanent/ Irreversible	Change that will last for over 60 years and is deemed irreversible.
Long-term reversible	Change that will last between 15 and 60 years and is potentially, or theoretically reversible.
Medium-term reversible	Change that will last between 7 and 15 years and is wholly or partially reversible.
Temporary / Short-term reversible	Change that will last from 0 to 7 years and is reversible - includes construction effects.

Deciding on Overall Magnitude of Visual Change

The relationships between the three factors that contribute to assessment of the magnitude of visual effects are illustrated graphically, as a guide, in **Figure 13A-5** below. Various combinations are possible and the overall magnitude of each effect is made using professional judgement rather than by formulaic application of the relationships in the diagram.

Figure 13A-5
Determining the Magnitude of Visual Change

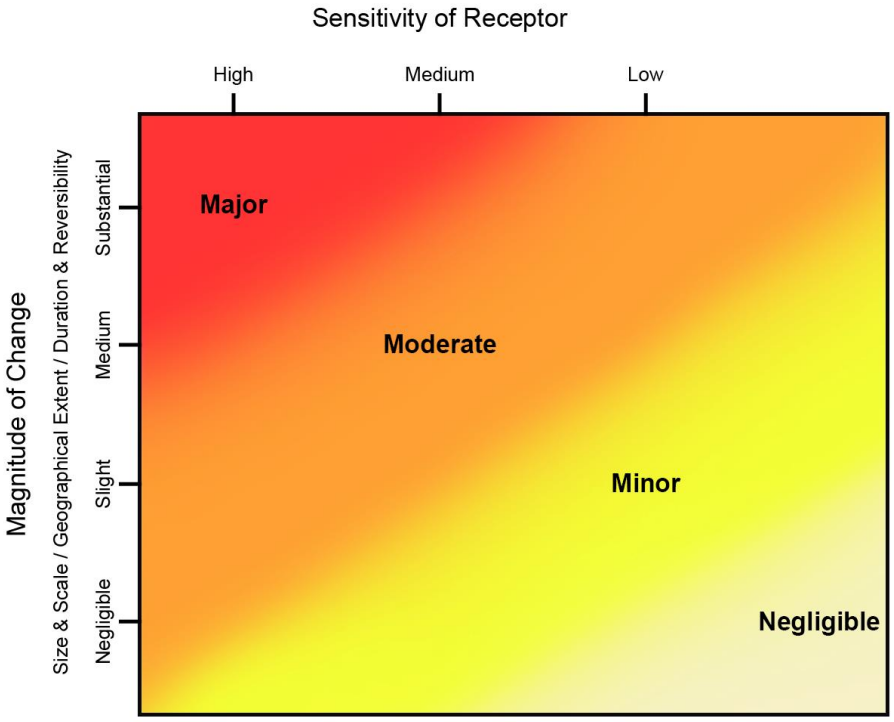


Assessment of Visual Effects and Significance

The assessment of visual effects is defined in terms of the relationship between the sensitivity of the visual receptors (value and susceptibility) and the magnitude of the change. The diagram below (**Figure 13A-6**) summarises the nature of the relationship but it is not formulaic and only indicates broad levels of effect. Judgements are made about each visual effect using this diagram as a guide.

Major and Major/Moderate effects are regarded as important planning considerations in landscape and visual appraisals (or significant effects in landscape and visual impact assessments). Moderate effects are not considered to be important planning considerations/significant effects, although it is possible that a concentration of such effects could be considered to be an important planning consideration/significant effect.

Figure 13A-6
Assessment of Visual Effects



APPENDIX 13-B
Viewpoint Photography and Photomontage Methodology

Introduction

An integral part of the assessment/appraisal process is often the recording of viewpoint photography and the preparation of visualisations, including photomontages. Such output is valuable in illustrating visual change for assessment purposes and in helping readers to understand the nature of that change.

It is essential that such output is prepared to be technically correct and an accurate representation of that which is illustrates.

The photography and visualisations are prepared with knowledge and understanding of the principles and guidance provided in a number of relevant documents, including:

- Landscape Institute (2011) Advice Note 01/11, Photography and Photomontage in Landscape and Visual Impact Assessment;
- Landscape Institute (2017): Technical Guidance Note 06/19: Visual Representation of Development Proposals;
- Scottish Natural Heritage (December 2014) Visual Representation of Wind Farms, Version 2.2; and
- The Highland Council (2017) Visualisation Standards for Wind Energy Developments.

Note that not all elements of the above documents are relevant to all developments and a pragmatic and proportionate approach has been taken to illustrate the Proposed Development effectively.

Viewpoints

The viewpoints are chosen to reflect a range of views towards the Proposed Development and the selection process is explained in the assessment/appraisal.

At each viewpoint baseline photography is recorded to allow the analysis of the effects that are predicted to occur as a result of the proposed development. Where appropriate, the assessment / appraisal involves the production of computer-generated visualisations / photomontages for a number of viewpoints to illustrate views of the Proposed Development. The viewpoints form an important element of the visual assessment/appraisal and can also be used to inform judgements in relation to the potential effects on landscape/townscape receptors.

Viewpoint Photography

Photography is undertaken through the use of digital single lens reflex (dSLR) camera and a prime lens[2], with the camera and lens combination being comparable with a 35mm format camera and 50mm focal length lens combination. The camera is mounted on a tripod with a panoramic head in order to obtain a stable platform for single frame and panoramic views. A camera height of approximately 1.5m is used at each location, unless otherwise stated. The position of the tripod is recorded with a handheld GPS device. In addition to recording the location of the viewpoint, observations in regard to time of day, weather, cloud cover, and visibility are made.

Following completion of the fieldwork, the photography is reviewed and the clearest images selected for the production of panoramic images. In some cases, limited adjustments are made to the images through the use of Adobe Photoshop software in order to improve appearance of the photography e.g. adjustments to exposure and sharpness. The photography for each viewpoint comprises a panorama created by joining the images in Adobe Photoshop, using cylindrical projection.

[2] fixed focal length, as opposed to a zoom lens

Three-Dimensional Modelling

A three-dimensional model has been prepared for the proposed development and the surrounding area using survey software. This links a model of the proposed development with digital terrain model data for the surrounding landform using Ordnance Survey grid co-ordinates.

Reference points are selected and positioned in the survey software. These reference points reflect clearly identifiable elements that are visible in the baseline photography. These use of reference points allows verification of the visualisations/photomontages and accurate scaling/positioning of the Proposed Development in relation to baseline components of the view.

Where fully rendered views of the proposed development are produced in 3D modelling software, virtual cameras are positioned in the correct position relative to the development to match the baseline viewpoint photography. The lighting of the view in the 3D model is selected based upon the date, time and weather conditions applicable to the photography. While every effort is undertaken to render the development to account for the prevailing lighting conditions, some adjustment of the rendering and/or photograph is sometimes required to create a suitably realistic impression of the development.

Visualisations

The visualisations/photomontages that form part of the assessment/appraisal are presented in a way that provides a predicted view of the Proposed Development relative to, and within, the surrounding context. The main objective of the visualisation/photomontage process is to assist the assessor in determining the change and resultant effect on the receptors at the viewpoint location.

In the case of photomontages, Adobe Photoshop is used to combine the image of the three-dimensional survey model with the baseline photography using the reference points present in both (as described in the three-dimensional modelling step above). The modelled view of the proposed development is then integrated with the photography as a third layer, and matched to the reference points in the survey model and rendered view to accurately position and scale the Proposed Development within the view. The Proposed Development is also placed carefully in relation to foreground and background vegetation to ensure it is depicted in a realistic way.

The visualisations/photomontages are presented in at A3 size for ease of viewing. The visualisations should be used in the field at the viewpoint location to help appreciate the level of effect that is likely to result from the Proposed Development.