



13. LANDSCAPE AND VISUAL

13.1 Introduction

This Landscape and Visual Assessment (LVIA) has been prepared to accompany a planning application for a Long Duration Energy Storage (LDES) Facility in the townland of Ballynahone, Co. Donegal.

This LVIA describes the landscape context of the proposed development and assesses the likely landscape and visual impacts of the scheme on the receiving environment. Although closely linked, landscape and visual impacts are assessed separately.

- Landscape Impact Assessment (LIA) relates to assessing effects of a development on the landscape as a resource in its own right and is concerned with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.
- Visual Impact Assessment (VIA) relates to assessing effects of a development on specific views and on the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements. Visual impacts may occur from; Visual Obstruction (blocking of a view, be it full, partial or intermittent) or; Visual Intrusion (interruption of a view without blocking).

13.1.1 Approach

This LVIA adopts an approach that is founded in the following best practice guidance documents:

- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) publication entitled Guidelines for Landscape and Visual Impact Assessment, 2013 (GLVIA3);
- Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022); and
- 'Photography and Photomontage in Landscape and Visual Impact Assessment', Landscape Institute Technical Guidance Note 06/2019.

Please refer to Section 1.2 of this Report for details on the Statement of Authority for the author of this Section.

13.1.2 Description of the Proposed Development

Refer to the full description of the proposed development available in Section 2.

13.2 Methodology

This document uses methodology as prescribed in the previously mentioned GLVIA3, which follows the European Landscape Convention (ELC) definition of landscape:

'Landscape is 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). Thus, GLVIA-2013 covers all landscapes from "high mountains and wild countryside to urban and fringe farmland (rural landscapes), marine and coastal landscapes (seascapes) and the landscapes of villages towns and cities (townscapes)" - whether protected or degraded.



13.2.1 Scope of the Assessment

GLVIA3 establishes guidelines and not a specific methodology. The preface recognises that:

'This edition concentrates on principles and processes. It does not provide a detailed or formulaic 'recipe' that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand.'

The methodology for this assessment has therefore been developed specifically for this assessment to ensure that it is appropriate and fit for purpose. The LVIA Methodology can be summarised as undertaking the following key tasks:

- Desk study and site visits in January 2024;
- Defining the Baseline Landscape setting and conditions;
- Identification and Evaluation of key components of the proposed development;
- Consideration of Mitigation Measures;
- Assessment of Landscape Effects;
- Assessment of Visual Effects; and
- Summary Statement of Significance.

13.2.2 Study Area

From similar studies, it is anticipated that the proposed development is likely to be difficult to discern beyond approximately 2km and is not likely to give rise to significant landscape or visual impacts beyond approximately 1km. In the interests of a comprehensive appraisal, a 2km radius study area is used in this instance. However, there will be a particular focus on receptors contained within 500-1000m, except where iconic or designated scenic viewpoints exist at greater distances out to 2km (refer to **Figure 13-1**).

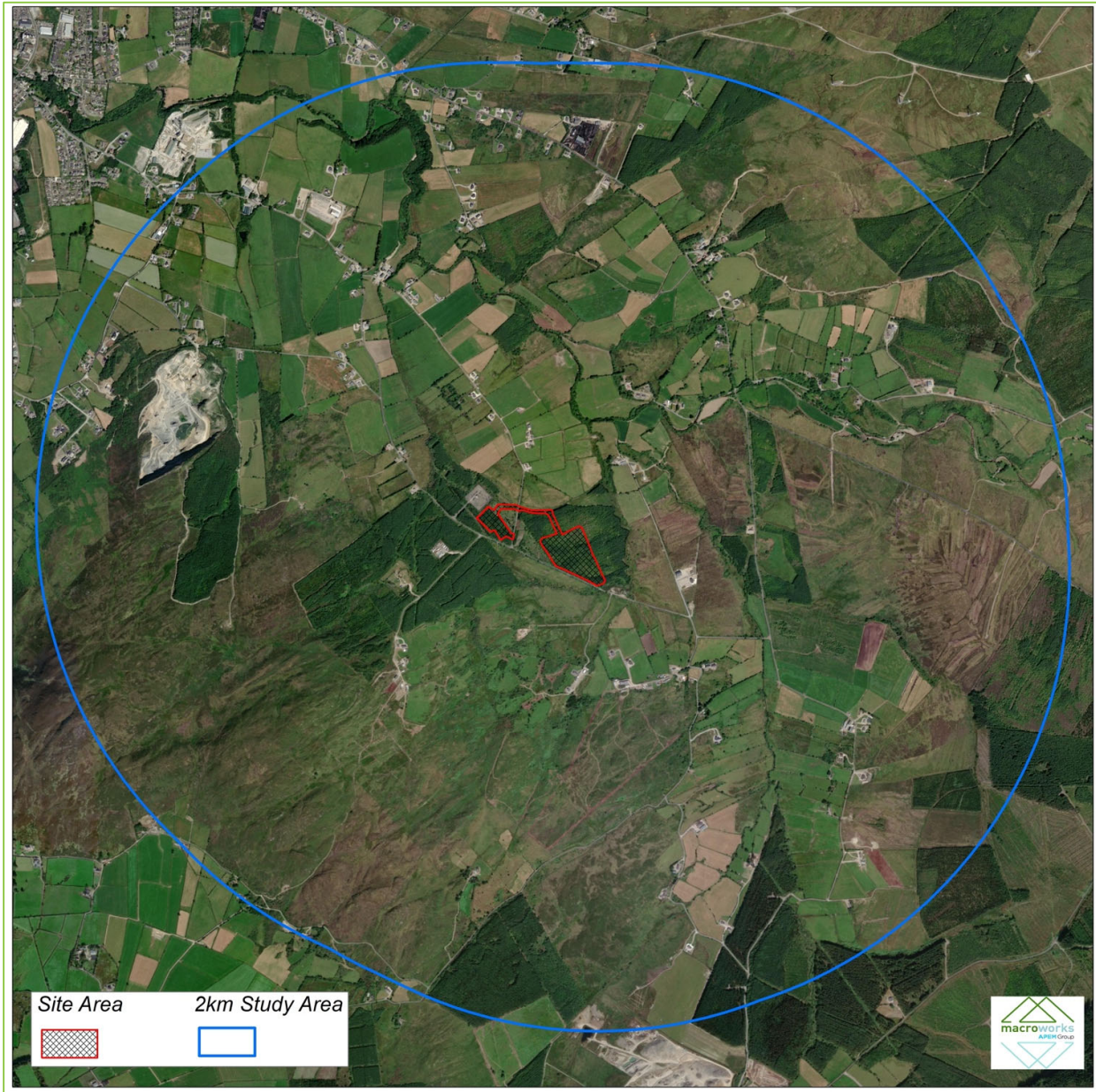


Figure 13-1: Extent of the 2km study area.

13.2.2.1 Landscape Impact Assessment Criteria

This part of the LVIA provides an assessment of how the introduction of the proposed development will affect the physical features and fabric of the landscape, and then how the proposals influence landscape character with reference to published descriptions of character and an understanding of the contemporary character of the landscape as informed through desktop and site studies.

When assessing the potential landscape effects of the development, the value and sensitivity of the landscape receptor is weighed against the magnitude of impact to determine the significance of the landscape effect. Criteria outlined below are used to guide these judgements.



13.2.2.2 Landscape Sensitivity

The sensitivity of the landscape to change is the degree to which a particular setting can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. In accordance with GLVIA3, the sensitivity of a landscape receptor (Landscape Character Area or feature) is derived from combining judgements in relation to its susceptibility to change and its value. The judgement reflects such factors as its quality, value, contribution to landscape character and the degree to which the particular element or characteristic can be replaced or substituted. Landscape Value and Sensitivity is classified using the following criteria outlined in **Table 13-1** below;

Table 13-1: Landscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (World Heritage Site/National Park), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level (Area of Outstanding Natural Beauty), where the principal management objectives are likely to be considered conservation of the existing character.
Medium	Areas where the landscape character exhibits some capacity and scope for development. Examples of which are landscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the landscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated landscapes that may also have some elements or features of recognisable quality, where landscape management objectives include, enhancement, repair and restoration.
Negligible	Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value.

13.2.2.3 Magnitude of Change - Landscape

The magnitude of change is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed development and to a lesser extent the duration and reversibility of that effect. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the immediate setting that may have an effect on the landscape character. **Table 13-2** refers.



Table 13-2: Magnitude of Change - Landscape

Magnitude of Impact	Description
Very High	Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an extensive change of the landscape in terms of character, value and quality.
High	Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to a considerable change of the landscape in terms of character, value and quality.
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to noticeable changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements that would lead to discernible changes in landscape character, and quality.
Negligible	Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable leading to no material change to landscape character, and quality.

13.2.2.4 Visual Impact Assessment Criteria

This part of the LVIA provides an assessment of how the introduction of the proposed development will affect views within the landscape. It therefore needs to consider:

- Direct impacts of the proposed development upon views through intrusion or obstruction;
- The reaction of viewers who may be affected, e.g. residents, walkers, road users; and
- The overall impact on visual amenity.

It has been deemed appropriate to structure the assessment around a series of representative viewpoint locations. All viewpoints are located within the public domain and are representative of views available from main thoroughfares and pedestrian areas within the vicinity of the proposed development. The selected viewpoints are considered to be comprehensive in communicating the variable nature of the visual effects.

When assessing the potential visual effects of the development, the sensitivity of the visual receptor is weighed against the magnitude of the visual impact to determine the significance of the visual effect. Criteria outlined below are used to guide these judgements.



13.2.2.5 Sensitivity of Visual Receptors to Change

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

“Residents at home;

People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on particular views;

Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience;

Communities where views contribute to the landscape setting enjoyed by residents in the area;

Travellers on road rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened”.

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

“People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape;

People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life”.

13.2.2.6 Values attached to the Views

The value attached to a view is determined by considering the following:

Recognised scenic value of the view (Development Plan designations, guidebooks, touring maps, postcards etc). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the case of County Developments Plans, for example, a public consultation process is required;

Views from within highly sensitive landscape areas. These are likely to be in the form of Architectural Conservation Areas, which are incorporated within the Development Plan and therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;

Primary views from residential receptors. Even within a dynamic city context, views from residential properties are an important consideration in respect of residential amenity;

Intensity of use, popularity. This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at a national or regional scale;

Provision of vast, elevated panoramic views. This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;

Sense of remoteness and/or tranquillity. Receptors taking in a remote and tranquil scene, which is likely to be fairly static, are likely to be more receptive to changes in the view than those taking in the view of a busy street scene, for example;

Degree of perceived naturalness. Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by distinctly manmade features;

Presence of striking or noteworthy features. A view might be strongly valued because it contains a distinctive and memorable landscape / townscape feature such as a cathedral or castle;

Historical, cultural and / or spiritual significance. Such attributes may be evident or sensed by receptors at certain viewing locations, which may attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;



Rarity or uniqueness of the view. This might include the noteworthy representativeness of a certain landscape type and considers whether the receptor could take in similar views anywhere in the broader region or the country;

Integrity of the landscape character. This looks at the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;

Sense of place. This considers whether there is special sense of wholeness and harmony at the viewing location;

Sense of awe. This considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations which are deemed to satisfy many of the above criteria are likely to be of higher sensitivity, and no relative importance is inferred by the order of listing.

It is recognised that a viewer’s interpretation and experience of the landscape can have preferential and subjective components. Where relevant, judgements are made on those elements of the landscape that are considered to contribute more prominently and positively to the visual landscape resource as well as those elements that contribute negatively. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

13.2.3 Magnitude of Change - Visual

The magnitude of change is again a product of the scale, extent, or degree of change that is likely to be experienced as a result of the proposed development. This is directly influenced by its ‘visual presence / prominence’, as experienced by visual receptors in the landscape. These terms are somewhat quantitative in nature, and essentially relate to how noticeable or ‘dominant’ the proposal is within a particular view. Aside from the obvious influence of scale and distance, a development’s visual presence is influenced by the extent and complexity of the view, contextual movement in the landscape, the nature of its backdrop, and its relationship with other focal points or prominent features within the view. It is often, though not always, expressed using one of the following terms: Minimal; Sub-dominant; Co-dominant; Dominant; Highly dominant. Criteria used to inform judgements are provided in **Error! Reference source not found.**

Table 13-3: Magnitude of Visual Effects

Criteria	Description
Very High	Complete or very substantial change in view, dominant, involving complete or very substantial obstruction of existing view or complete change in character and composition of baseline, e.g., through removal of key elements
High	A major change in the view that is highly prominent and has a strong influence on the overall view. This may involve the substantial obstruction of existing views or a complete change in character and composition of baseline, e.g. through removal of key elements or the introduction of new features that would heavily influence key elements.



Criteria	Description
Medium	Moderate change in view: which may involve partial obstruction of existing view or partial change in character and composition of baseline, i.e., pre-development view through the introduction of new elements or removal of existing elements. Change may be prominent but would not substantially alter scale and character of the surroundings and the wider setting. View character may be partially changed through the introduction of features which, though uncharacteristic, may not necessarily be visually discordant.
Low	Minor change in baseline, i.e. pre-development view - change would be distinguishable from the surroundings whilst composition and character would be similar to the pre change circumstances.
Negligible	Very slight change in baseline, i.e. pre-development view - change would be barely discernible. Composition and character of view substantially unaltered.

13.2.4 Significance of Effect

The significance of a landscape or visual effect is based on a balance between the sensitivity of the receptor and the magnitude of change, and is categorised as Profound, Substantial, Moderate, Slight, or Imperceptible. Intermediate judgements are also provided to enable an effect to be more accurately described where relevant. ‘No Effect’ may also be recorded as appropriate where the effect is so negligible it is not noteworthy.

The significance category judgement is arrived at using the Significance Matrix at **Error! Reference source not found.** as a guide. This applies the principle of significance being a function of magnitude weighed against sensitivity, but employs slightly different terminology that avoids the potentially confusing use of the term ‘significant’ (as recommended by GLVIA3 Statement of Clarification 1/13 (Landscape institute, 10th June 2013)).

Indicative criteria descriptions used in relation to the significance of effect category are presented at **Table 13-5.**



Table 13-4: Significance Matrix

	Sensitivity of Receptor				
Magnitude	Very High	High	Medium	Low	Negligible
Very High	Profound	Profound-substantial	Substantial	Moderate	Slight
High	Profound-substantial	Substantial	Substantial - moderate	Moderate-slight	Slight-imperceptible
Medium	Substantial	Substantial - moderate	Moderate	Slight	Imperceptible
Low	Moderate	Moderate-slight	Slight	Slight-imperceptible	Imperceptible
Negligible	Slight	Slight-imperceptible	Imperceptible	Imperceptible	Imperceptible

Table 13-5: Indicative significance of effect criteria descriptions

	Landscape	Visual
Profound	There are notable changes in landscape characteristics over an extensive area or a very intensive change over a more limited area.	The view is entirely altered, obscured or affected.
Substantial	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the landscape. There are notable changes in landscape characteristics over a substantial area or an intensive change over a more limited area.	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the visual environment. The proposal affects a large proportion of the overall visual composition, or views are so affected that they form a new element in the physical landscape.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. There are minor changes over some of the area or moderate changes in a localised area.	An effect that alters the character of the visual environment in a manner that is consistent with existing and emerging trends. The proposal affects an appreciable segment of the overall visual composition, or there is an intrusion in the foreground of a view.



	Landscape	Visual
Slight	An effect which causes noticeable changes in the character of the landscape without affecting its sensitivities. There are minor changes over a small proportion of the area or moderate changes in a localised area or changes that are repairable over time.	An effect which causes noticeable changes in the character of the visual environment without affecting its sensitivities. The affected view forms only a small element in the overall visual composition or changes the view in a marginal manner.
Imperceptible	An effect capable of measurement but without noticeable consequences. There are no noticeable changes to landscape context, character or features.	An effect capable of measurement but without noticeable consequences. Although the development may be visible, it would be difficult to discern resulting in minimal change to views.

It is important that the likely effects of the proposals are transparently assessed and understood in order that the determining authority can bring a balanced, well-informed judgement to bear when making a planning decision.

As such, whilst the significance matrix and criteria provide a useful guide, the significance of an effect is ultimately determined by the landscape specialist using professional judgement, and also in the context of occasionally using hybrid judgements to account for nuance.

Effects assessed as ‘Substantial’ or greater (shaded cells) are considered to be the most notable in landscape and visual terms, and may be regarded as ‘Significant’, albeit it is important to note that this is not a reflection on their acceptability in planning terms.

13.2.5 Quality of Effects

In addition to assessing the significance of landscape and visual effects, the quality of the effects is also determined. Within this LVIA, effects are described as negative/adverse, neutral, or positive/beneficial, and the following criteria has been used to guide these judgements.

Positive/beneficial - A change which improves the quality of the environment, enhancing the existing view/landscape;

Neutral - No effects or effects that are imperceptible, within normal bounds of variation e.g. will neither detract from nor enhance the existing view/landscape;

Negative/adverse - A change which reduces the quality of the environment, detracting from the existing view/landscape.

In the case of new energy / infrastructure developments within rural and semi-rural settings, the landscape and visual change brought about by an increased scale and intensity of built form is seldom considered to be positive / beneficial. Effects in these contexts are generally considered to be adverse in nature, or neutral, where the effect has little influence on the landscape/views.



13.3 Landscape and Visual Policy Context and Designations

13.3.1 Donegal County Development Plan 2024-2030

Section 11 – ‘The Natural and built Heritage’ of the current Donegal County Development Plan incorporates landscape and visual policies and objectives. Subsection 11.2 relates more specifically to the landscapes and states that In relation to the landscape this Section also states that “*County Donegal has a unique and distinctive landscape with a wide diversity of landscape types including significant arable and grazing lands, agricultural plains, inland waterways, boglands, mountains and an extensive and varied coastline of rocky outcrops, cliffs and sandy beaches. The many islands both inhabited and uninhabited also have their own unique landscape identity. The natural diversity of the landscape coupled with built and cultural heritage features such as archaeological monuments, stonewalls, hedgerows, woodlands, field patterns, settlements and buildings further inform the inherent character of the county*”.

Within the current County Development Plan the landscape of County Donegal is categorised into ‘3 layers of value’ shown on map 11.1 of the current plan (**Error! Reference source not found.** refers). The 3 layers of value include:

Areas of Especially High Scenic Amenity (EHSA) - These are sublime natural landscapes of the highest quality that are synonymous with the identity of County Donegal. These areas have extremely limited capacity to assimilate additional development.

Areas of High Scenic Amenity (HSA) - These are landscapes of significant aesthetic, cultural, heritage and environmental quality that are unique to their locality and are a fundamental element of the landscape and identity of County Donegal. These areas have the capacity to absorb sensitively located development of scale, design and use that will enable assimilation into the receiving landscape and which does not detract from the quality of the landscape, subject to compliance with all other objectives and policies of the plan.

Areas of Moderate Scenic Amenity (MSA) - These are primarily landscapes outside Local Area Plan Boundaries and Settlement framework boundaries, that have a unique, rural and generally agricultural quality. These areas have the capacity to absorb additional development that is suitably located, sited and designed subject to compliance with all other objectives and policies of the Plan.

The proposed development is entirely contained within an MSA designation, the lowest scenic amenity designation outlined within the current Donegal CDP. Indeed, this broad MSA designations cloaks much of the study area with the only divergence from this relating to and EHSA designations contained around the elevated parts of Mouldy Hill in the southwest quadrant of the study area. A brief corridor of a HAS designation also occurs within the eastern extent of the site along a local road corridor.

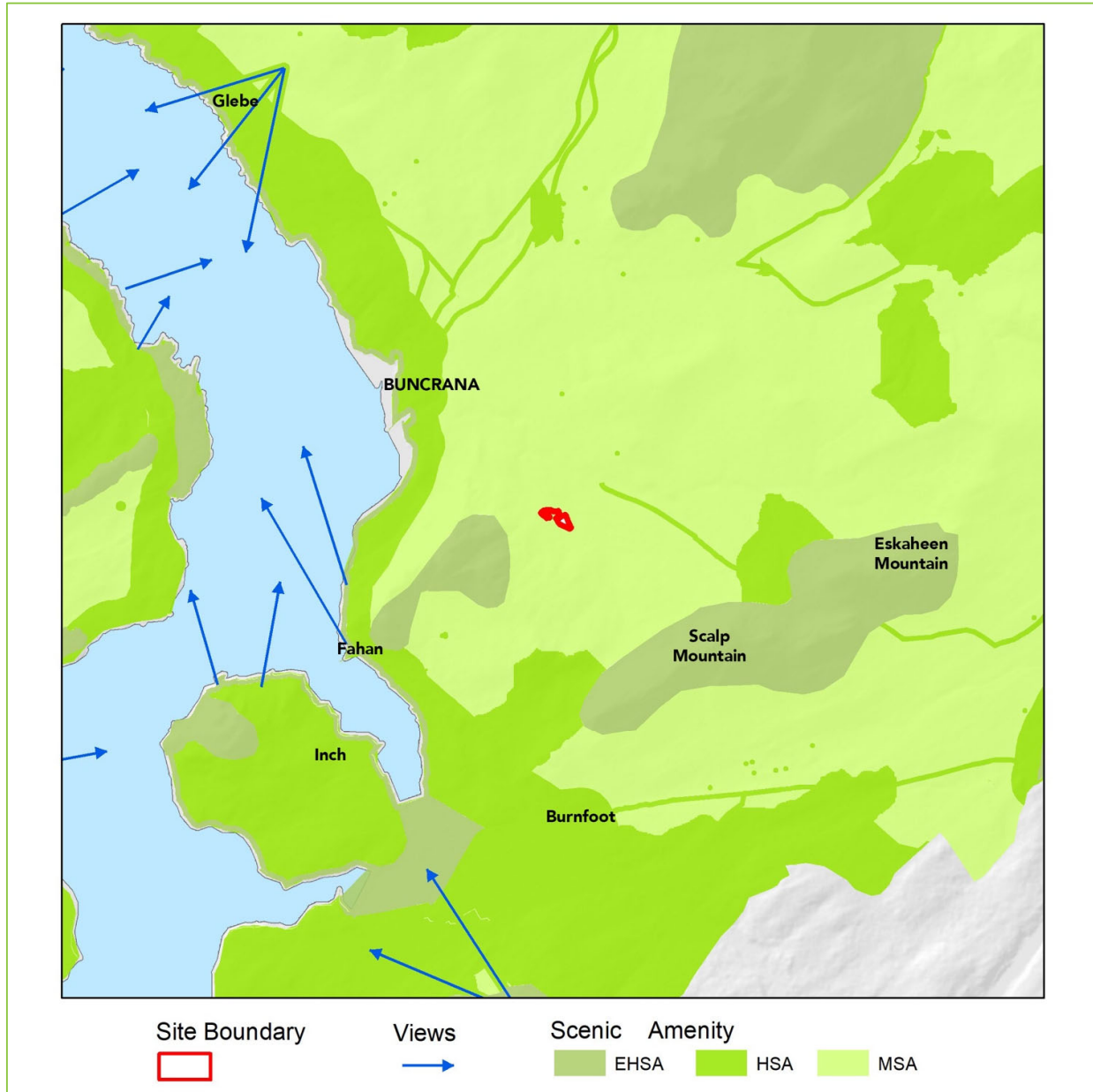


Figure 13-2: Excerpt from the current Donegal CDP 2018-2024 showing scenic amenity designations in relation to the proposed development

Section 11 of the County Development Plan also lists a number of objectives and policies some of which are relevant to the Development and are included below.

Relevant Policies and Objectives:

L-O-1: *To protect, manage and conserve the character, quality and value of the Donegal landscape.*

L-P-1: *To protect areas identified as ‘Especially High Scenic Amenity’ on Map 11.1 ‘Scenic Amenity’. Within these areas, only developments of strategic importance, or developments that are provided for by policy elsewhere in this Plan may be considered*



L-P-2: To protect areas identified as ‘High Scenic Amenity’ and ‘Moderate Scenic Amenity’ on Map 11.1 ‘Scenic Amenity’. Within these areas, only development of a nature, location and scale that integrates with, and reflects the character and amenity of the landscape may be considered, subject to compliance with other relevant policies of the Plan

L-P-3: To safeguard the scenic context, cultural landscape significance, recreational/tourism amenities, and environmental amenities of the County’s coastline from inappropriate development, save for strategic infrastructure provision of overriding regional or national public interest. This policy will be implemented by the Council in so far as same can be practicably and reasonably achieved within the context of Strategic Infrastructure Projects including, but not restricted to, the TEN-T Priority Route Improvement Project, Donegal, the Bridgend to County border project scheme, the Buncrana Inner Relief Road and Greenways

L-P-4: To protect the character of the following approach roads to the Glenveagh National Park:

a. Glendowan to Doochary road

b. Dunlewey to Termon Road

c. Churchill to Termon

d. Muckish Gap to Calabber Bridge

L-P-6: To safeguard prominent skylines and ridgelines from inappropriate development

L-P-7: To preserve the views and prospects of special amenity value and interest as identified on Map 11.1

L-P-8: To preserve scenic views between public roads and the sea, lakes and rivers. Such developments shall be considered on the basis of the following criteria.

a. whether the integrity of the view has been affected to-date by development;

b. whether the development would intrude significantly on the view; and

c. whether the development would materially alter the view.

In operating this policy, a reasonable and balanced approach shall be implemented so as to ensure that the policy does not act as a blanket ban on developments between the road and the sea, lakes and river but also seeks to maintain existing landscape qualities in the area.

13.3.1.1 Donegal County Development Plan 2024-2030 - Landscape Character Assessment

A landscape character assessment was prepared in May 2016 and is included as part of the current Donegal County Development Plan 2024-2030. The assessment identified landscape types and landscape character areas throughout the county. The landscape types in Donegal (Figure 13-3) are described as “*the foundations of its rich and unique character; in both the variety of types and in their juxtaposition, giving a strong and vibrant contrast in many areas, with mountains and uplands overlooking beaches, estuaries, farmland and lakes, resulting in a dynamic and striking landscape of discernible scenic quality*”.

Whilst the proposal site is predominantly contained within an area of forestry, the landscape type for the site in the current CDP is defined as 'Agricultural Arable and Pasture'. A varied mix of other landscape types are also included within the study area and include '0-200m Atlantic Blanket Bog', 'Agricultural Foothills', 'Agricultural Riverine', 'Upland Heath & Moorland', 'Forest and Woodland' and 'Agricultural Coastal'.



Within County Donegal, 44 individual landscape character areas were identified with the Development situated in the LCA 'Buncrana Coast' (**Error! Reference source not found.** refers) which is described as *"a historic landscape intrinsically associated with Lough Swilly as evident from the plethora of recorded monuments and protected structures in the landscape including enclosures, middens, cairns, promontory forts, Napoleonic forts, a castle and seaside Victorian architecture"*. It is important to note that the proposed development is located immediately west of the LCA 'Scalp Mountain' which contains the eastern half of the study area. This LCA is described as *"characterised by widespread upland blanket bog and dominated by the imposing Scalp and Iskaheen mountains. Substantial areas of commercial forestry extend throughout the area and 22 wind turbines are located in 2 groupings of 10 and 12 in the west of this LCA"*.

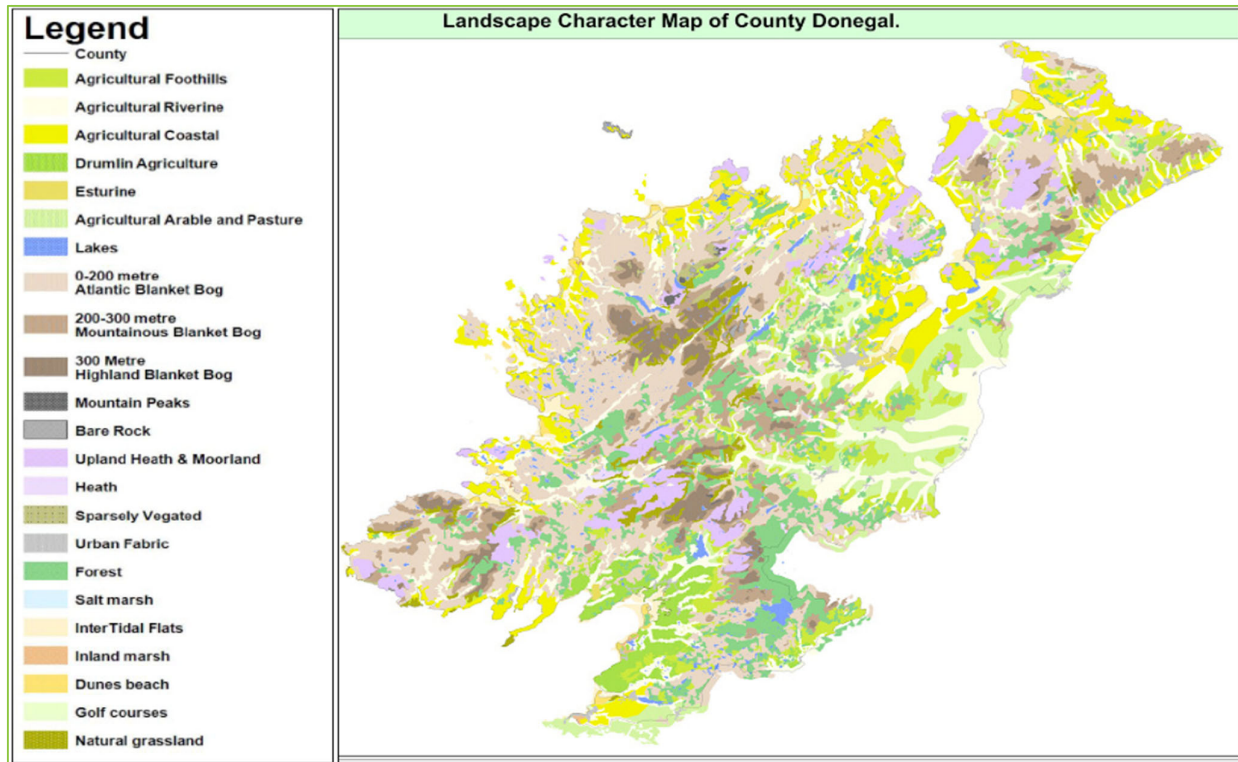


Figure 13-3: Figure 1.4 of the Landscape Character Assessment of Donegal (May 2016) showing approximate location of the site in relation to landscape character types in County Donegal.

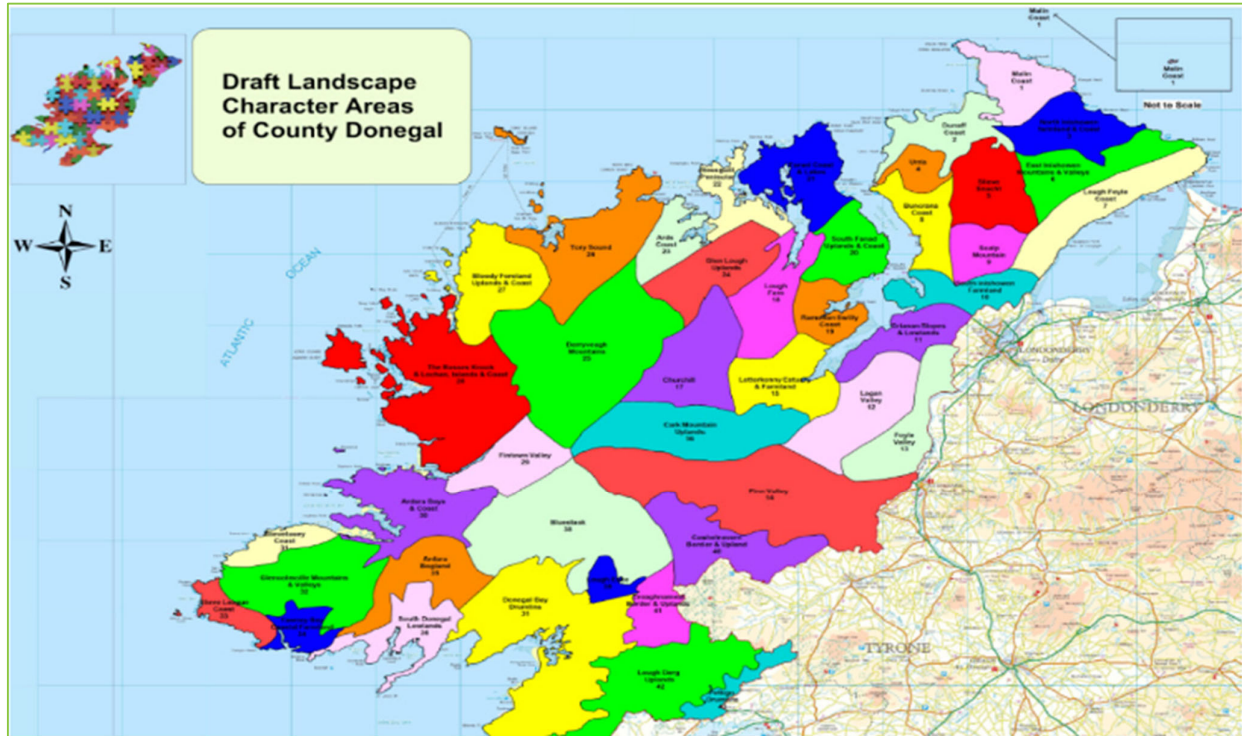


Figure 13-4: Figure 1.7 of the Landscape Character Assessment of Donegal (May 2016) showing approximate location of the site in relation to landscape character areas in County Donegal

13.3.1.2 Donegal County Development Plan 2024-2030 - Protected Views

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

All of the scenic routes and views that fall inside the Zone of Theoretic Visibility (refer to Figure 13-6 below) pattern were investigated during fieldwork to determine whether actual views of the proposed wind farm might be afforded. Where visibility may occur, a viewpoint has been selected for use in the visual impact appraisal later in this Section. In some instances, a single viewpoint is selected to represent a stretch of designated scenic route or a cluster of designated scenic views, particularly distant ones.

The current County Development Plan (2018-2024) categorises the landscape into three layers of value which are noted in the section above. Scenic views in county Donegal are also identified on Map 7.1.1 of the current county development plan. There are no protected views within the current Donegal CDP located within the 2km study area. Indeed, the nearest views are located along the coastline outside of the study area to the west and relate to views oriented in the opposite direction of the site across Lough Swilly.



13.4 Existing Environment

13.4.1 Landscape Baseline

The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape brought about by the proposed development will be assessed. A description of the landscape context of the proposed application site (including the 110 kV substation and grid connection) and wider study area is provided below under the headings of landform and drainage, vegetation and land use, centres of population and houses, transport routes and public amenities and facilities. Although this description forms part of the landscape baseline, many of the landscape elements identified also relate to visual receptors i.e. places and transport routes from which viewers can potentially see the proposed development. The visual resource will be described in greater detail in the visual baseline section below.

13.4.1.1 *Landform and Drainage*

The landscape of the study area is heavily influenced by the corridor of the Mill River, which is one of the principal watercourses in relation to the site. The Mill River flows to the west and is situated less than c. 400m north of the site. A small tributary of the Mill River flows immediately north and east of the site before merging with the Mill River some 400m north of the site. The Maragh River is also located in the eastern extent of the study area and is located less than c. 300m east of the site at its nearest point. In terms of landform, the study area is characterised by rolling lands and some more elevated upland areas situated in the southern half of the 2km study extent. Indeed, the Inishowen peninsula is characterised by remote elevated uplands cloaked in broad areas of Moorland. The site itself is located around the 90-100m contours and is surrounded by rolling lands, whilst the most prominent landform in relation to the site is Mouldy Hill, the summit of which is contained just over 2km southwest of the site.



Figure 13-5: Immediate landscape context of the site.

13.4.1.2 Vegetation and Land Use

Whilst the study area comprises a mix of land uses, the predominant land use is that of pastoral farmland bound by networks of mixed hedgerow vegetation. The study area also comprises some notable areas of commercial conifer forestry, which contains the majority of the subject site. Extensive areas of moorland are also noted in the elevated parts of the study area to the south and east. In terms of the immediate context of the site, one of the more notable single land uses is that of the existing Trillick 110kV substation, whilst a large quarry facility is contained in the western periphery of the study area.



13.4.1.3 Centres of Population and Housing

Whilst the study area does not comprise any notable settlements, it is heavily influenced by the settlement of Buncrana, the outskirts of which are located just over 2km west of the site. Indeed, due to the sites near the distance to this medium-sized settlement, there is a notable agglomeration of rural residential dwellings within the western extent of the study area. Otherwise, the study area generally comprises small linear clusters of dwellings and isolated farmsteads.

13.4.1.4 Transport Routes

There are no major transport routes within the study area. Instead, the study area comprises a network of interconnecting local roads, the nearest of which passes directly south and west of the main site compound. The nearest major route to the site is the R238 which skirts along the coastline some 2.5km west of the site at its nearest point.

13.4.1.5 Tourism, Heritage and Public Amenities

Whilst the wider landscape has some notable tourism and amenity assets, much of which are associated with its coastal location, the site and study area are not highly synonymous with recreation or tourism.

13.4.2 Visual Baseline

Only those parts of the receiving environment that potentially afford views of the proposed development are of concern to this section of the assessment. A computer-generated Zone of Theoretical Visibility (ZTV) map has been prepared to illustrate where the proposed development is potentially visible from. The ZTV map is based solely on terrain data (bare ground visibility), and ignores features such as trees, hedges or buildings, which may screen views. Given the complex vegetation patterns within this landscape, the main value of this form of ZTV mapping is to determine those parts of the landscape from which the proposed development will definitely not be visible, due to terrain screening within the 2km study area.

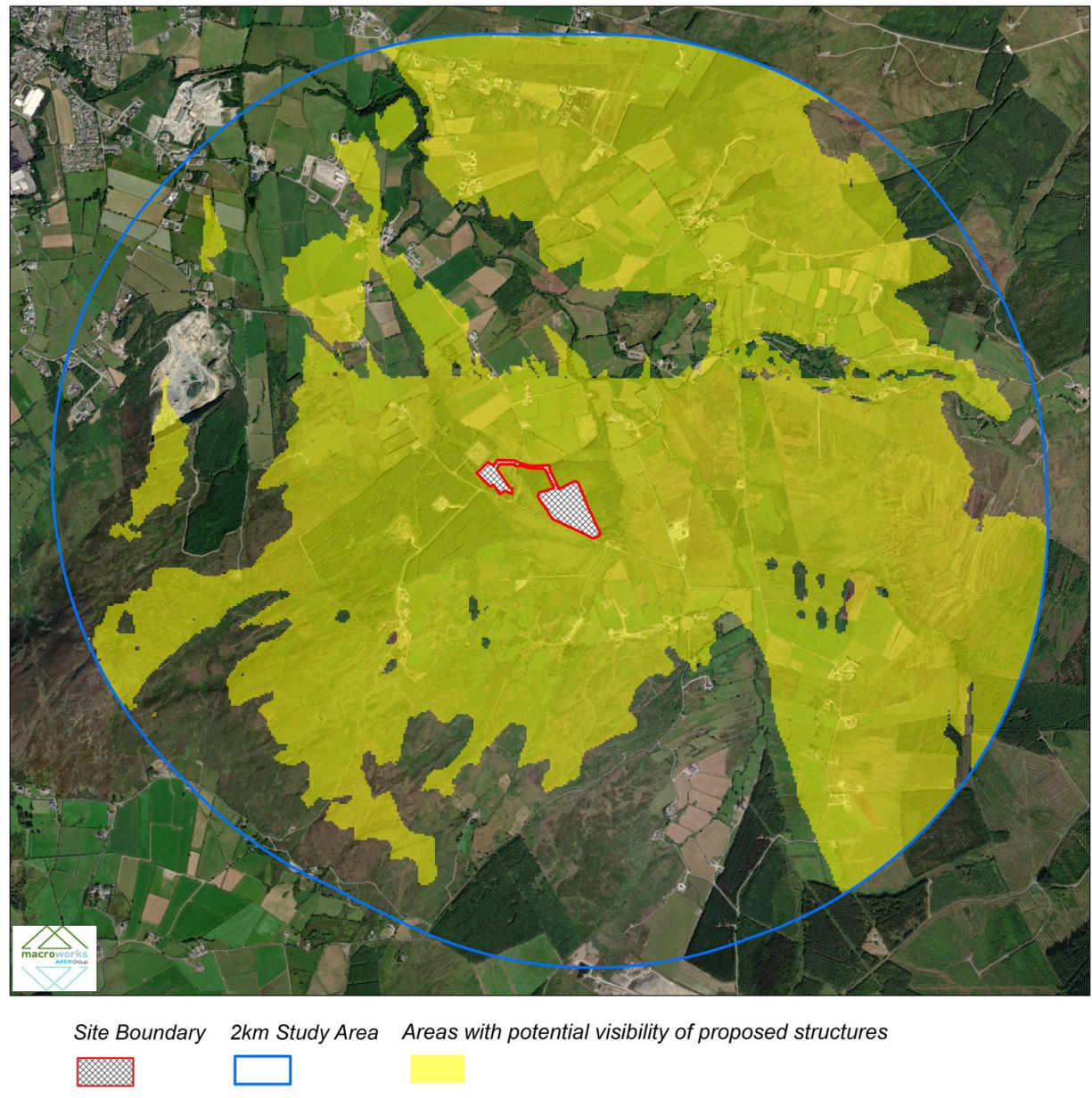


Figure 13-6: Standard (bare-ground) Zone of Theoretical Visibility Map

The following key points are illustrated by the 'bare-ground ZTV map (see Figure 13-6 above):

- As the proposed development sits within a low, broad valley surrounded by more elevated terrain, much of the immediate site context has the potential for visibility of the proposed development.
- Visibility will be eliminated in the wider southern periphery of the study area due to the rolling upland hills and ridges located here.
- The western periphery of the study area will also be screened from the proposed development by the rolling foothills of Mouldy Hill, located just over 1km west of the site.
- A notable section of the Mill River corridor will also be screened from the proposed development due to locally rolling lands north and northwest of the site.



The most important point to make in respect of this ‘bare-ground’ ZTV map is that it is theoretical. The proposed energy storage containers will not rise more than 3m above the underlying terrain and will therefore be considerably screened by surrounding existing woodland, intervening hedgerow vegetation, trees and numerous buildings, walls and embankments scattered throughout the study area, resulting in a much lesser degree of actual visibility.

It is important to note that the ZTV does not account for the larger proposed structures in the substation such as the proposed lightning masts. Whilst these structure will rise to a max height of c. 17m, these larger elements comprise a slender built form and will not be prominently visibility, even in the immediate surrounds of the development where existing electricity transmission infrastructure is already located. Thus, it is not considered that partial views of these structure, which are typically viewed against the sky with a very low degree of visual contrast, will generate any notable visual effects.

13.4.2.1 Identification of Viewshed Reference Points as a Basis for Assessment

Viewshed Reference Points (VRP’s) are the locations used to study the visual impacts of a proposed development in detail. It is not warranted to include each and every location that provides a view of a development as this would result in an unwieldy report and make it extremely difficult to draw out the key impacts arising from the proposed development. Instead, the selected viewpoints are intended to reflect a range of different receptor types, distances and angles. The visual impact of a proposed development is assessed by Macro Works using up to 6 no. categories of receptor type as listed below:

- Key Views (from features of national or international importance) (KV);
- Designated Scenic Routes and Views (SR/SV);
- Local Community views (LCV);
- Centres of Population (CP);
- Major Routes (MR);
- Amenity and heritage features (AH).

VRP’s might be relevant to more than one category and this makes them even more valid for inclusion in the assessment. The receptors that are intended to be represented by a particular VRP are listed at the beginning of each viewpoint appraisal. The Viewshed Reference Points selected in this instance are set out in the Table 13-6 and Figure 13-7 below.

Table 13-6: Outline Description of Selected Viewshed Reference Points (VRPs)

VRP No.	Location	Representative of	Direction of view
VP1	Local road intersection at Hill Head (Trillick) northwest of site	LCV	SE
VP2	L1781 local road at Tullydush Lower	LCV	SW
VP3	Local road at Trillick northwest of site	LCV	S
VP4	Local road at Trillick west of site	LCV	SE
VP5	Local road at Ballynahone east of site	LCV	W
VP6	Local road at Ballynahone southeast of site	LCV	NW



Viewpoint Locations

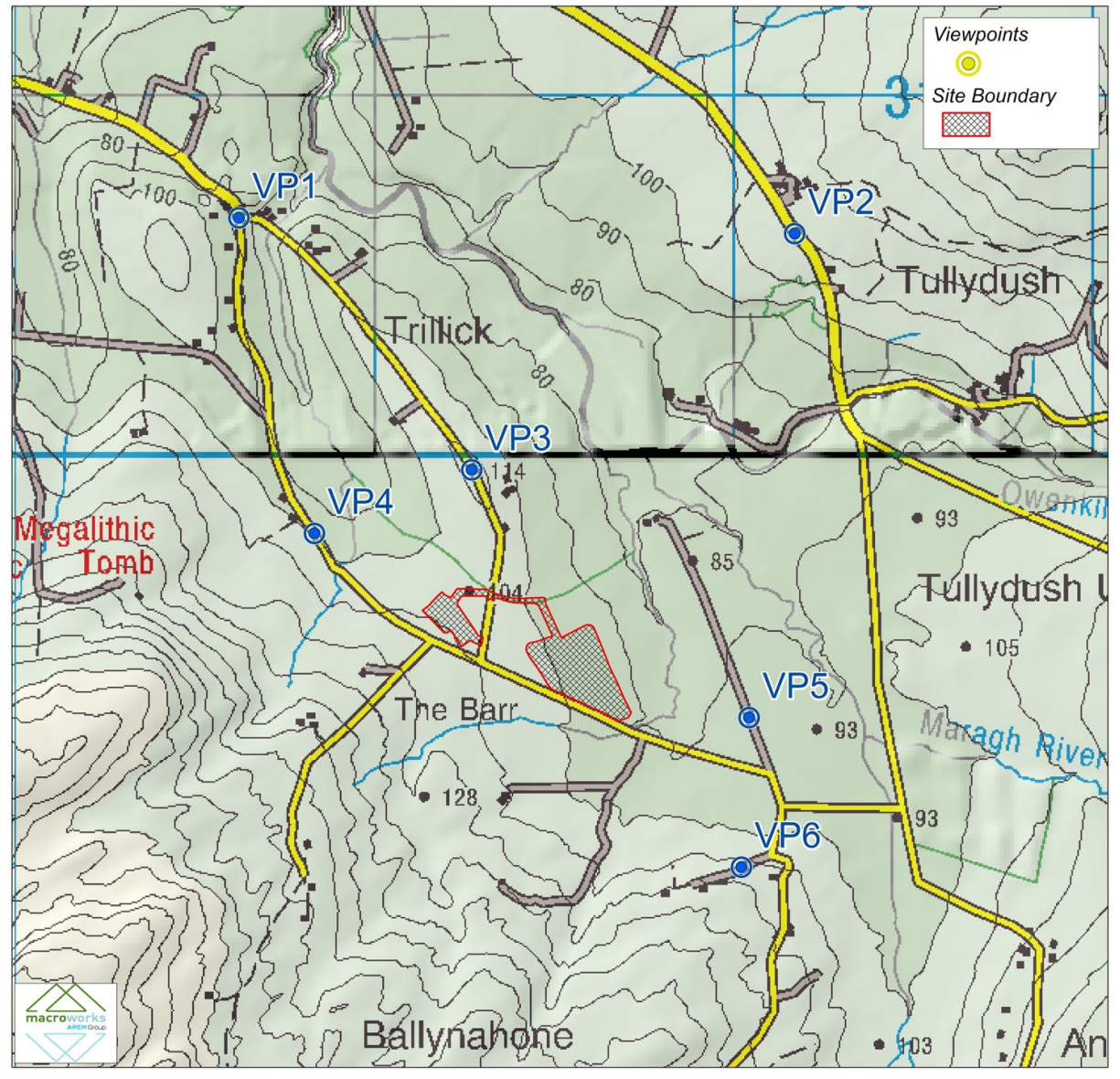


Figure 13-7: Viewpoint location map

13.5 Mitigation Measures

The main mitigation by avoidance measure in this instance is the siting of the proposed development in a robust part of the surrounding landscape that avails of a high degree of screening in the form of surrounding conifer woodland. It is also located in the immediate vicinity of the existing Trillick 110kV substation and overhead cable corridors, which it is thematically linked with. Indeed, the proposed development represents the intensification of electrical infrastructure in this context as opposed to the introduction of a new and unfamiliar development type.



Furthermore, it is proposed to retain a band of existing conifer woodland along the site's perimeter to ensure that the proposed development will be heavily screened from some of the nearest surrounding receptors. In addition to protecting and retaining existing boundary vegetation, it is proposed to include a native woodland thicket (c. 3350 sqm) along the proposed 'cut and fill' embankments along the proposed main site compound. This native thicket/woodland mix will be provided in the form of high canopy (dominants) species, low canopy (sub-dominant) species, understory and fringe (higher shrubs) species and understory and edge (lower shrub) species, and will comprise a mix of advanced nursery stock and whip planting of local provenance. The proposed planting will be allowed to grow out to reach maturity, resulting in a dense and consistent vegetative screen along the site's boundary.

The proposed planting will be native stock and selected in line with the All Ireland Pollinator Plan to bolster the local biodiversity value of the site. All landscaping measures are outlined on the landscape mitigation plan - refer to drawing LD.BLLNHNE 1.1.

13.6 Impact Assessment

13.6.1 Do-nothing Scenario

The 'do-nothing' impact refers to the non-implementation of the proposed development. The primary effect of this would be that the impacts and effects identified would not directly occur. In this regard the following issues are relevant. The site, which is currently contained in conifer forest would likely establish further and eventually be harvested for timber. It is likely that further application for additional electrical infrastructure developments could be submitted in the surrounding area due to its near distance to the existing 110kV substation.

13.6.2 Assessment of Receptor Sensitivity - Landscape

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

This is a robust landscape context located along the Inishowen peninsula in north County Donegal. It is a distinctive part of the country, mainly associated with its scenic coastal areas and extensive uplands. At a more local level, the study area is located in a relatively robust and partially modified part of Donegal, where the principal land use is pastoral farmland. The site is also predominately characterised by existing commercial conifer forestry, whilst the existing Trillick 110kV substation is one of the more notable single land uses within the immediate context of the site. Although, the surrounding lands are backdropped by elevated uplands and present with some sense of scenic amenity, the study area does not comprise and protected views and is primarily contained within an 'Moderate Scenic Amenity' designations in the current Donegal county development plan. Notably, this is the lowest scenic amenity designation within County Donegal and is generally associated with more robust and modified landscape areas. Several wind energy developments also backdrop views oriented to the north from some locally elevated parts of the study area.

In terms of landscape character, the study area is contained across LCA 'Buncrana Coast' and LCA 'Scalp Mountain'. Although the site is contained within the LCA 'Buncrana Coast', it is more strongly associated with LCA 'Scalp Mountain' as the coastline has a limited influence on this partially contained setting.

Therefore, on balance of these factors and in accordance with the criteria outlined in **Table 13-1**, the landscape sensitivity is deemed to be Medium, with localised areas of higher and lower sensitivity



13.6.3 Assessment of Receptor Sensitivity - Visual

The study area generally presents as a rolling transitional rural landscape that has some sense of scenic amenity but at a more local level. Whilst wider parts of the Inishowen peninsula are considered highly distinctive and susceptible to change, the site and study area are more robust in nature and are influenced by an array of anthropogenic features and development types, including existing wind energy development, local industry, electrical infrastructure development and the mineral extraction industry. There are no designated scenic views within the study area, reinforcing the robust and less distinctive nature of this part of Donegal. Nevertheless, there are some pleasant views afforded within the study area from locally elevated lands across the rolling surrounding terrain. Indeed, some more open upland areas are visible in the distance and are often cloaked in extensive areas of mountain moorland. Views of the working agricultural landscape are generally pleasant in terms of its rolling pastoral aesthetic and 'green', settled working character. The network of hedgerows and vegetation throughout it contributes to some sense of naturalness and, combined with its undulating topography, generates a sense of containment in many locations. However, whilst a pleasant pastoral aesthetic is noted throughout some parts of the study area, as noted above, the surrounding local and wider landscape is also influenced by an array of anthropogenic features. Overall, the sensitivity of visual receptors within this working transitional landscape context tends to range between Medium and Medium-low, with those of a Medium sensitivity representing more open expansive views across the wider landscape.

Key differentials in terms of visual receptor sensitivity relate to the occupation of the visual receptor and whether views of the surrounding landscape are an inherent part of the experience. Static residential receptors are considered generally more susceptible to changes in views over those where views are experienced transiently by those travelling through the landscape, particularly on major transport routes where road infrastructure and traffic volume draw from visual amenity. Likewise, receptors located in closer proximity to the site are considered more susceptible to changes in views over those where views are experienced at a distance.

On the basis of the site-specific factors outlined above and in accordance with the general visual receptor sensitivity considerations contained in the methodology Section **Error! Reference source not found.**, visual receptor sensitivity judgement are provided for each representative viewpoint in the table below.

13.6.4 Magnitude of Landscape Effects - Construction Stage

During the construction stage, there will be construction-related activity within and around the site, and nearby approach roads. This will include, but is not limited to:

- Site preparation works and groundwork operations;
- Removal of existing vegetation/landcover;
- Some notable physical landscape effects due to the terracing of the site and surrounding areas of cut and fill.
- Localised foundation work including the installation of underground services;
- HGVs transporting materials to and from the site;
- Movement of heavy machinery on-site;
- Temporary storage of demolition debris / construction materials on-site;
- Security fencing/hoarding and site lighting.

The physical impacts on the site's land cover will be long-term; however, these effects are fully reversible.



There will be impacts on the study area's character due to the intensity of movement and clutter of temporary structures associated with the construction works. Still, these are likely to be relatively minor and will predominately occur during typical working hours.

The primary impacts at this location are deemed to be those associated with the earthworks and site clearance. In particular, the instance a notable area of existing woodland will be felled and removed from the site. The site will then be levelled by creating a flat terrace and surrounding cut and fill embankments. Although there will be some notable areas of vegetation clearance and earthworks, it is proposed to retain an area of existing woodland along the boundary of the site, which will partially screen and soften some of the construction stage works from surrounding receptors, which diminishes the potential perceived effect on the surrounding landscape character. Construction stage impacts will be 'short-term' in duration (i.e. approximately 12-months) and will be localised within the immediate site context and along approach roads to the site.

On the basis of the reasons outlined above, the magnitude of construction stage landscape effects is deemed to be Medium within the immediate surrounds of the site, however, this quickly reduces to Low/Low-negligible in the wider surrounds of the study area where visibility of construction activity is likely to be very limited. In combination with the Medium landscape sensitivity designation outlined above, the significance of construction stage impacts is deemed to be Moderate at the site and its immediate context, however this quickly reduces to Slight and Imperceptible within the wider study area. The quality of the construction stage effects will be Negative.

13.6.5 Magnitude of Visual Effects - Construction Stage

During construction, the main visual impacts will arise from frequent heavy vehicle movements and worker vehicles travelling to and from the site and using the site entrance. In addition, there will be construction machinery on site, which may rise above intervening vegetation and buildings. There will also be stockpiles of stripped topsoil and construction materials awaiting use. However, aside from the site's immediate vicinity, a large part of this temporary activity within the site will remain screened and partially screened from view by the surrounding mature woodland that will be retained and protected. Furthermore, construction-related activity is 'short-term' and will cease once the development becomes fully operational. Thus, construction stage impacts are likely to result in a visual effect no greater than High-medium and Medium in the site's immediate surroundings.

Coupled with the Medium and Medium-low visual receptor sensitivities in the near surrounds of the site, the construction stage visual impacts in the immediate vicinity of the site will be no greater than Moderate in the immediate context and will reduce considerably beyond the immediate site context where the proposed development will be heavily screened by the surrounding existing woodland that will be retained. As a result, construction stage visual impacts are not considered to be significant.

13.6.6 Magnitude of Landscape Effects - Operational Stage

Whilst the proposed development will have a notably physical impact following construction and will result in a notable removal of existing conifer forest, its potential to impact on the local landscape character is limited as it will be heavily screened by the surrounding existing mature woodland, which will be supplemented with additional native woodland planting to form a dense consistent screen around the site.



With regard to the landscape character of the site and study area, it is influenced by the existing Trillick 110kV substation and its overhead cable corridors located immediately adjacent to the site. Indeed, due to its clear associations with the existing substation development, the proposed LDES will represent the intensification of an existing established land use, as opposed to the introduction of a new and unfamiliar one. In terms of the character of the wider surrounding landscape, it is heavily influenced by working transitional land uses such as pastoral farmland and areas of commercial conifer forestry, whilst other highly anthropogenic developments, such as existing wind energy development and the mineral extraction industry, influenced the wider landscape context.

Following the establishment of the proposed perimeter landscape mitigation measures, the intensification of electrical infrastructure development will be well assimilated into the existing landscape context. Whilst there will likely be some residual visibility of the proposed development, which relates to the taller electrical infrastructure development within the proposed substation compound that has the potential to present above the surrounding mature woodland, the full extent of the LDES development is unlikely to be readily discernible aside from some locally elevated lands when views into the main site compound have the potential to be afforded. The constructed elements within the LDES compound will not rise above c. 4m and include the proposed battery storage containers (c. 3m high), the proposed noise barrier (c. 4m high) and other ancillary constructed features. Nevertheless, even from locally elevated locations throughout the study area, where some residual visibility of the development is afforded, the proposed internal planting will heavily diminish the overall perceived scale and intensity of the development on the surrounding landscape. In terms of the substation, the tallest features relate to the proposed lightning masts, which rise to a max height of 18m. Nonetheless, these are slender structures and will have a very limited visual presence throughout the study area. Indeed, the majority of the built features in the substation compound will be entirely screened by the surrounding dense conifer forest, which limits the proposed substation from generating any notable impacts on the surrounding landscape character. Therefore, the magnitude of impact is deemed Medium-Low.

With reference to the significance matrix (**Error! Reference source not found.**) above, the Medium landscape sensitivity judgement attributed to the study area, coupled with a Medium-Low magnitude of landscape impact in the immediate vicinity of the site (<500m) is considered to result in an overall significance of effect no greater than Moderate-slight, with the remainder of the 2km study area likely to experience a residual significance of effect of Slight and Imperceptible.

13.6.7 Magnitude of Visual Effects - Operational Stage

The assessment of visual impacts at each of the selected viewpoints is aided by photomontages of the proposed development (see Appendix 10). Photomontages are a 'photo-real' depiction of the scheme within the view utilising a rendered three-dimensional model of the development, which has been geo-referenced to allow accurate placement and scale. For each viewpoint, the following images have been produced;

- Existing view;
- Outline view (yellow outline showing the extent of the proposed LDES and the proposed substation including all associated overground works overlaid on the photograph);
- Montage view
- Montage view with mitigation established.



VP No	Existing View	VP Sensitivity	Visual Impact (Pre & Post Mitigation)	Pre-mitigation Significance/ Quality/ Duration of Impact	Post-mitigation Significance / Quality / Duration of Impact
VP1	Local road intersection at Hill Head (Trillick) northwest of site - This is a pleasant view from a local road intersection in the townland of Trillick. The depicted view is oriented across a nearby brief valley cloaked in pastoral farmland. In the distance, the view to the southeast is partially contained by a broad area of conifer forestry, whilst further in the distance to the east, the view is contained by a broad elevated upland ridge.	Medium	The proposed development will be almost entirely screened in this open viewing aspect. There is potential to afford a brief view of the proposed lightning masts, however, even if briefly viewed from here, the slender lightning mast structures will have no effect on the visual amenity of this scene. Thus, the magnitude of visual effect is deemed Negligible.	Imperceptible / Neutral / Medium-term	Imperceptible / Neutral / Long-term
VP2	L1781 local road at Tullydush Lower - This is a pleasant open view afforded through a tree-lined hedgerow along the L1781 local road at Tullydush. The depicted view extends across sloping terrain towards a broad valley cloaked in surrounding pastoral fields and intervening vegetation. The view is contained in the distance by Mouldy Hill, which is carpeted in extensive areas of conifer forestry.	Medium	The proposed development will be visible here in the centre of a dense area of conifer forest at a distance of some c. 1.3km to the southeast. Whilst the main LDES compound is heavily screened from here, the strict linear nature and built form of the proposed battery storage cabins will contrast here against the more organic forms of the surrounding woodland and intervening vegetation. Indeed the built form of the development amongst the conifer forest has the potential to draw the eye here and will result in a slight increase the intensity of built development in this view.	Slight-imperceptible/ Negative / Medium-term	Slight-Imperceptible / Negative / Long-term



VP No	Existing View	VP Sensitivity	Visual Impact (Pre & Post Mitigation)	Pre-mitigation Significance/ Quality/ Duration of Impact	Post-mitigation Significance / Quality / Duration of Impact
			<p>A brief view of the taller substation structures, such as the lightning masts, also has the potential to be viewed from here, albeit due to their slender structure that will have a minimal visual presence. Overall, the magnitude of visual effect is deemed Low-negligible.</p> <p>Once the proposed mitigation screen planting has fully established, the proposed LDES compound will be further screened and softened with the internal hedgerow planting, further reducing the perceived visual mass of the proposed development. Indeed, once all the proposed mitigation screen planting has fully established, the proposed development will be well assimilated within the existing surrounds of the conifer forest. Overall, the magnitude of effect will remain Low-negligible.</p>		
VP3	<p>Local road at Trillick northwest of site - This is a locally elevated view afforded from a local road in the townland of Trillick. The depicted view is oriented to the south across sloping terrain where the middle-distant landscape context is partially contained by a dense area of conifer forest. In the distance, the view is contained by Scalp Mountain and a series of other distant rolling ridges.</p>	Medium	<p>The proposed development will only be briefly visible even from this near distance of just over c. 400m. The proposed LDES compound will be well contained here by the existing retained conifer woodland that surrounds the site. The proposed lighting masts will also be visible rising above the dense layers of conifer woodland, albeit due to their slender structure, they will have a very limited visual presence.</p>	<p>Slight-imperceptible / Negative / Medium-term</p>	<p>Slight-Imperceptible / Negative / Long-term</p>



VP No	Existing View	VP Sensitivity	Visual Impact (Pre & Post Mitigation)	Pre-mitigation Significance/ Quality/ Duration of Impact	Post-mitigation Significance / Quality / Duration of Impact
			<p>Overall, the proposed development will result in a very minor intensification of built development in this landscape context and will have very little notable effect on the visual amenity of this scene. Thus, the magnitude of effect is deemed Low-negligible.</p> <p>The proposed mitigation screen planting will have a limited effect from this landscape context, and thus, the residual magnitude of effect is deemed Low-negligible.</p>		
VP4	Local road at Trillick west of site - This is a contained viewing aspect afforded from a local road at Trillick. The depicted view is oriented to the southeast and represents surrounding local community receptors. A dense conifer woodland truncates the view at a near distance.	Medium-low	The proposed development will be entirely screened in this view from the dense conifer forest located immediately to the southeast of the view. Thus, the magnitude of effect is deemed Negligible by default.	Imperceptible / Neutral / Medium-term	Imperceptible / Neutral / Long-term
VP5	Local road at Ballynahone east of site - This is a view afforded from a local road laneway in the townland of Ballynahone that is representative of local community receptors to the east of the site. The view is oriented to the west and is partially truncated by the nearby conifer woodland. A more open view is afforded across the wider landscape to the north, whilst the view to the west is contained by Mouldy Hill.	Medium-low	The proposed development will be visible here to the west, where a notable area of existing conifer woodland has been removed. The proposed LDES compound, comprising a flat terrace, will be visible beyond the existing boundary vegetation which is to be retained and protected. The proposed built tones, textures and highly anthropogenic forms will contrast here with the surrounding organic forms and verdant tones and textures of the boundary conifer forest and surrounding landscape.	Slight / Negative / Medium-term	Slight-imperceptible / Negative / Long-term



VP No	Existing View	VP Sensitivity	Visual Impact (Pre & Post Mitigation)	Pre-mitigation Significance/ Quality/ Duration of Impact	Post-mitigation Significance / Quality / Duration of Impact
			<p>Although the proposed development has the potential to draw the eye here, it is contained within a boundary of the existing conifer woodland and does not break the vegetated skyline. The proposed substation development will not be visible from here. Overall, the proposed development represents an increase in the quantum of built development in this view, and thus, the pre-mitigation magnitude of effect is deemed Low.</p> <p>Once the proposed mitigation screen planting has fully established, the proposed LDES compound will be heavily screened. The proposed additional layer of native surrounding woodland will result in a dense, consistent band of screening surrounding the site. Nevertheless, there is still potential to afford glimpse views of the proposed battery containers through small gaps in the proposed vegetation. On balance of the above reasons, the residual magnitude of effect will reduce to Low-negligible once the proposed mitigation screen planting has fully established.</p>		



VP No	Existing View	VP Sensitivity	Visual Impact (Pre & Post Mitigation)	Pre-mitigation Significance/ Quality/ Duration of Impact	Post-mitigation Significance / Quality / Duration of Impact
VP6	<p>Local road at Ballynahone southeast of site - This is a locally elevated view afforded from a cluster of residential dwellings located in the townland of Ballynahone. The depicted view is oriented to the north across a landscape cloaked in a mix of farmland, blocks of commercial conifer forestry and intervening vegetation. The view is contained in the distance by rolling upland cloaked in a mix of conifer forestry and broad areas of moorland. Existing wind farm developments are also visible throughout the background of the view.</p>	Medium	<p>The proposed LDES compound will be briefly and partially visible in the middle ground of the view contained within the existing area of the conifer forest. Indeed, whilst a notable area of conifer forest will be removed to facilitate the proposed site compound, the retention of boundary vegetation will serve to soften and heavily screen the built aspects of the development, reducing its perceived scale and massing. Overall, the proposed development will only be briefly visible here and will result in a marginal increase in the intensity of built development in this landscape setting. On balance, the magnitude of visual effect is deemed Low-negligible.</p> <p>The proposed mitigation screen planting will have limited effect from here, and thus, the residual effect remains Low-negligible.</p>	<p>Slight-imperceptible / Negative / Medium-term</p>	<p>Slight-imperceptible / Negative / Long-term</p>



13.6.8 Monitoring

13.6.8.1 *Construction Phase*

Landscape tender drawings and specifications will be produced to ensure that the landscape work is implemented in accordance with best practice. This document will include tree work procedures, soil handling, planting and maintenance. The contract works will be supervised by a suitably qualified landscape architect.

The planting works will be undertaken in the next available planting season after completion of the main civil engineering and building work.

All tree protection requirements will be installed on commencement of the development and removed on a phased basis as stages of the development are completed.

13.6.8.2 *Operational Phase*

This will consist of weed control, replacement planting, pruning etc. All landscape works will be in an establishment phase for the initial three years from planting. All works will be monitored on an ongoing basis to ensure the quality of the development is maintained.

13.7 **Conclusions**

In terms of landscape impacts, the proposed development will have a direct physical impact on the site's land cover, which is currently cloaked in dense conifer woodland. There will be some notable direct physical impacts which will result in a considerable area of woodland being cleared and the site being levelled into two flat terraces to facilitate the proposed site compound. There will also be some localised excavations to facilitate aspects of the proposed substation and the retaining structure that separates the two terraces.

In terms of landscape character, the central study area is characterised by working land uses such as pastoral farmland and areas of commercial conifer forestry, whilst other notable highly anthropogenic land uses include the existing Trillick 110kV substation and an existing quarry located to the west of the site. The wider landscape is also influenced by existing wind energy development, which often backdrops broader views afforded within the study area. In terms of landscape designations, the working and robust nature of this landscape context is reflected by the Moderate Scenic Amenity (MSA) designation that contains the site and much of the study area, which is the lowest of three classifications outlined in the current Donegal County Development Plan.

Overall, the residual significance of operational stage landscape effect was deemed Moderate-slight and the quality of effect was deemed Negative.

Visual impacts were assessed at six viewpoint locations, representing various viewing distances, angles and receptor types. Whilst this is a robust working transitional context, there are some increased areas of sensitivity within the study area due to the rolling nature of the terrain that affords some broad, pleasant views across the intervening landscape and towards distant uplands. Nonetheless, there are no protected views within the study area or any highly susceptible recreational, heritage or tourism receptors. Thus, the sensitivity of receptors within the study area ranged between Medium-low to Medium.

The residual significance of visual effect ranged between Slight-imperceptible and Imperceptible, highlighting the heavily contained nature of the site, which will be further screened by the proposed landscaping strategy. Indeed, the dense existing conifer plantation that encloses the site serves as a visual barrier for most of the nearest surrounding receptors, with only glimpse views of the proposed batter containers ever afforded.



Overall, it is considered that the proposed development is a suitably sited and scaled development that is well assimilated into the existing landscape context as a result of the surrounding retained existing conifer forest and the proposed landscape planting.

13.7.1 Overall Significance of Effect

Based on the landscape and visual impact judgements provided throughout this LVIA, the proposed LDES development and proposed substation are not considered to give rise to any significant residual impacts. Instead, landscape impacts are not considered to exceed 'Moderate-slight' significance, even in the immediate context of the site and residual visual impacts are not considered to exceed 'Slight-imperceptible' significance. In the context of this development, it is considered that these moderate to low level residual impacts represent an acceptable impact on the receiving working transitional landscape.

13.8 References

Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) publication entitled Guidelines for Landscape and Visual Impact Assessment, 2013 (GLVIA3);

Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022); and

'Photography and Photomontage in Landscape and Visual Impact Assessment', Landscape Institute Technical Guidance Note 06/2019.



14. CONCLUSION

This Planning and Environmental Report has been prepared to accompany a planning application to Donegal County Council for the proposed Ballynahone Long Duration Energy Storage (LDES) facility in the townland of Ballynahone near Buncrana, County Donegal. The planning application is for permission for the proposed LDES Facility from Donegal County Council under section 34 of the Planning and Development Act 2000 (as amended) (PDA).

The purpose of the LDES facility will be to provide long duration energy storage to support the penetration of renewable energy generation onto the national grid. The Project includes an 'under the fence' (UTF) transformer compound adjacent to the existing Trillick 110 kV network sub-station.

This report sets out the key characteristics of the proposed development outlining the construction, operational and decommissioning stages of the proposed development, describes the potential environmental impact of the proposed development and mitigation measures where necessary.

The design of the proposed development has taken into consideration the detailed appraisals, as set-out in this report, together with feedback from consultation undertaken with Donegal County Council and other relevant stakeholders as described in Section 4.

A pre-application consultation submission was made to An Bord Pleanála to determine whether the proposed Transformer Compound and under the fence connection to the existing Trillick 110 kV substation should be considered as Strategic Infrastructure Development in accordance with section 182A of the Planning and Development Act. An Bord Pleanála determined that this element of the proposed development did not fall within the scope of Section 182A of the Act, and that a planning application should be made directly to Donegal County Council.

An EIA Screening assessment was carried out as described in Section 5 of this report in accordance with the Planning and Development Regulations 2001 (as amended). In summary, no significant adverse impacts to the receiving environment will arise as a result of the proposed project and it is submitted that sub-threshold EIA is not required for the project due to the project's limited impact on the receiving environment with respect to Schedule 7 of the Planning and Development Regulations 2001 (as amended), Annex II of the EIA Directive and the screening checklist provided in the EC guidance document for EIA Screening, as set out in this document.

Detailed environmental assessments of the proposed development were carried out as described in Sections 6 through 13. Based on all available information, and taking account of the scale, nature and location of the proposed project, no significant adverse effects to the receiving environment will arise as a result of the proposed development.

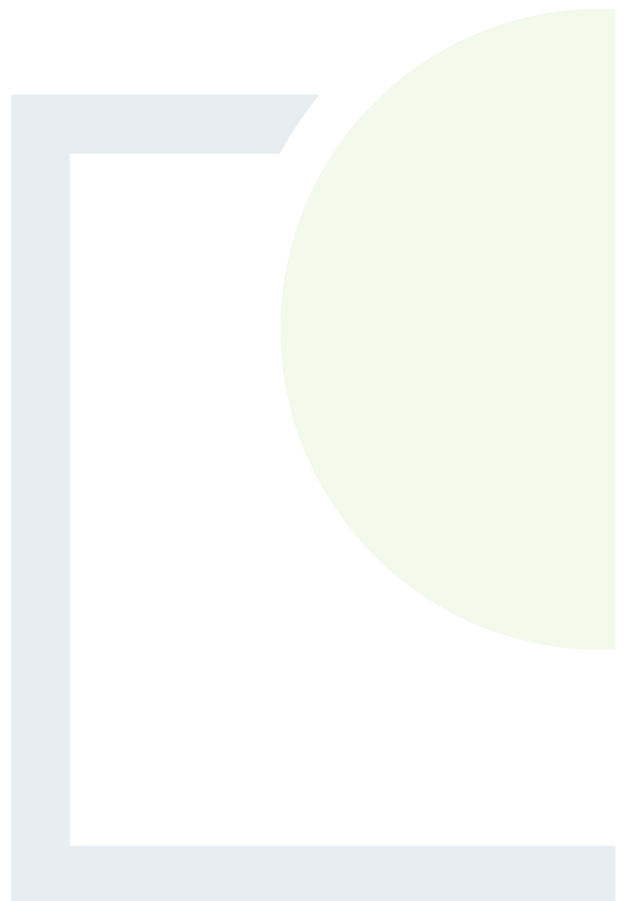
From the above we consider that the proposed development will contribute positively to the realisation of the Donegal County Development Plan policies and objectives, and it will contribute to fulfilling national energy targets and objectives by supporting the penetration of renewable energy generation onto the national grid. The proposed development will not have a significant adverse effect on the environment and is in accordance with the proper planning and sustainable development of the area.



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 1

Technology and Compliance
Overview

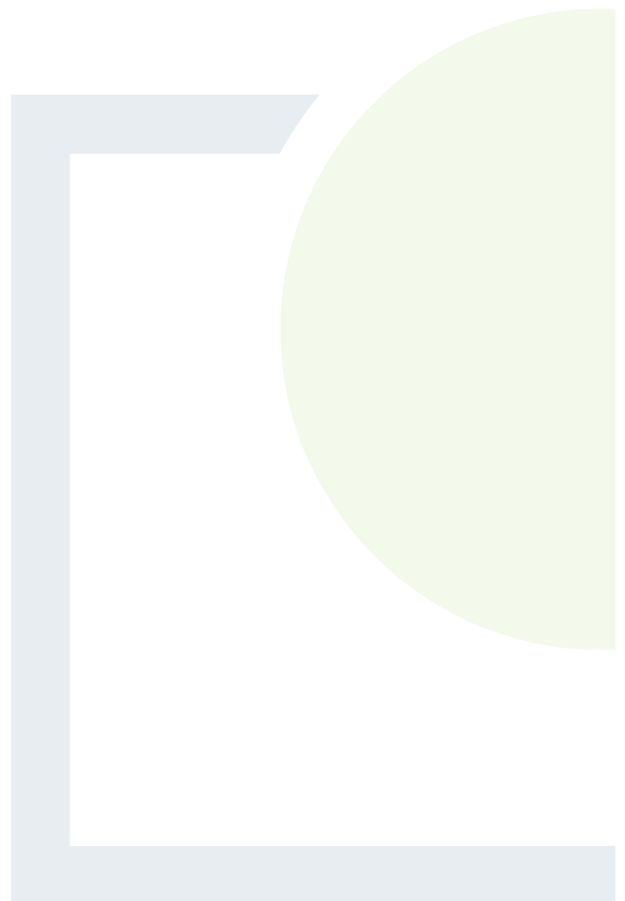




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 2

Uisce Eireann letter of
Confirmation of Feasibility for
Mains Water Connection

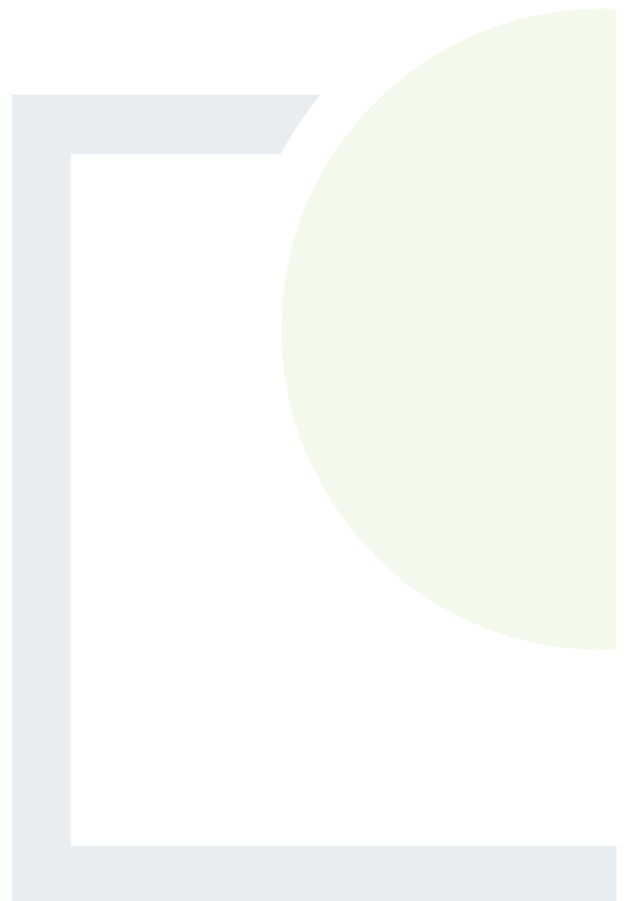




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 3

Construction and
Environmental Management
Plan

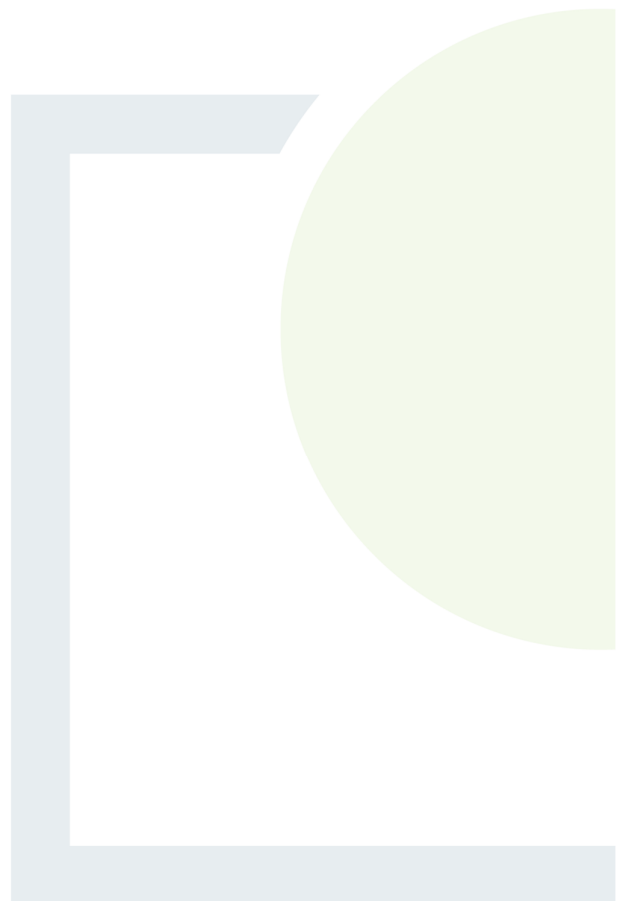




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 4

Planning Statement Report

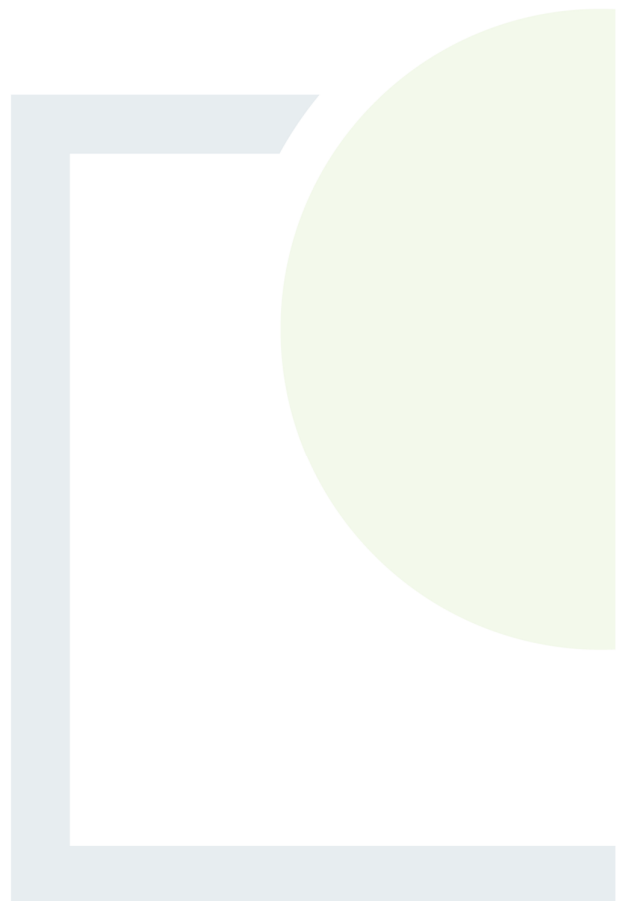




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 5

S182A Letter of Confirmation
from An Bord Pleanála

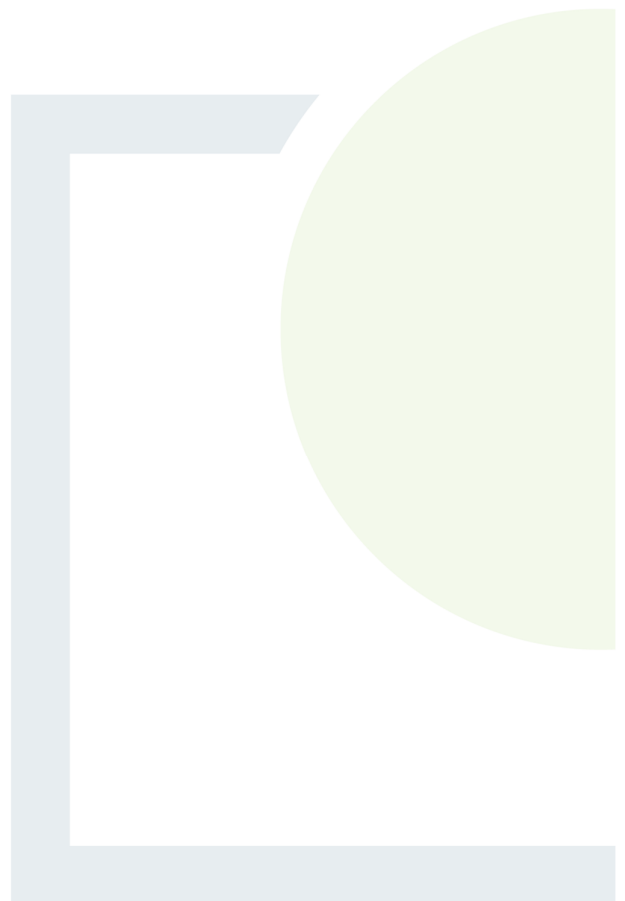




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 6

Community Report

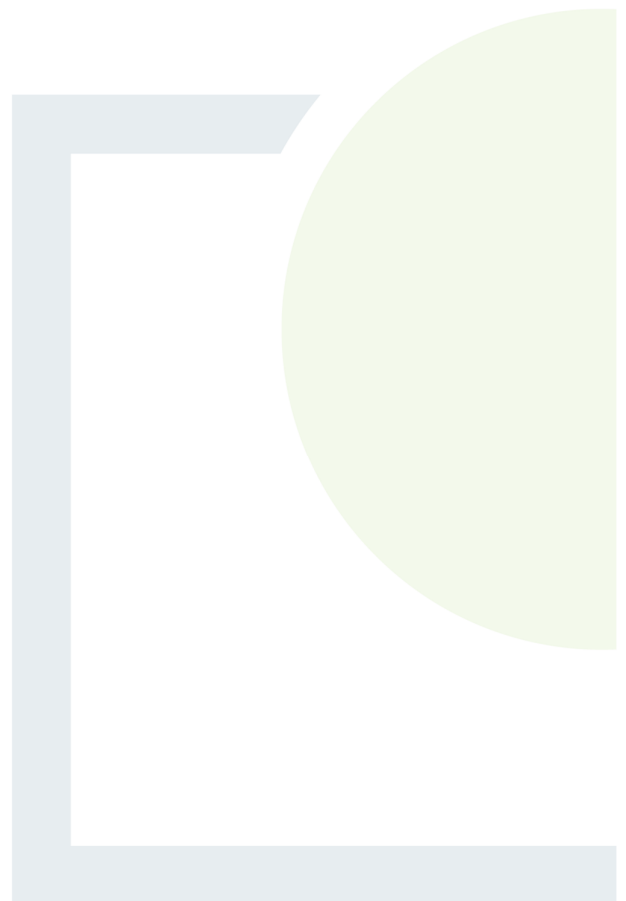




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 7

Ecological Impact Assessment
Report

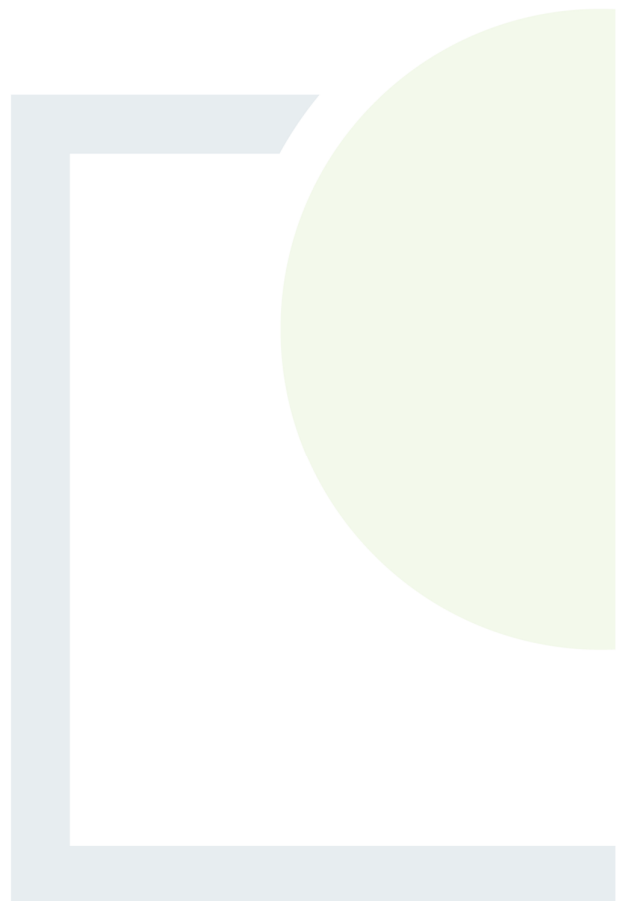




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 8

Appropriate Assessment
Screening Report

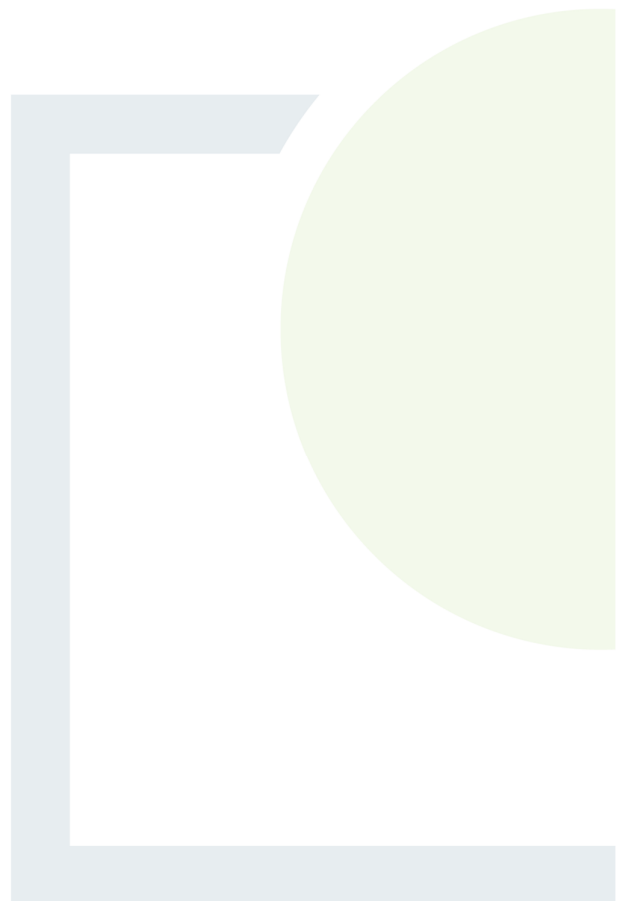




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 9

Cultural Heritage Impact
Assessment Report

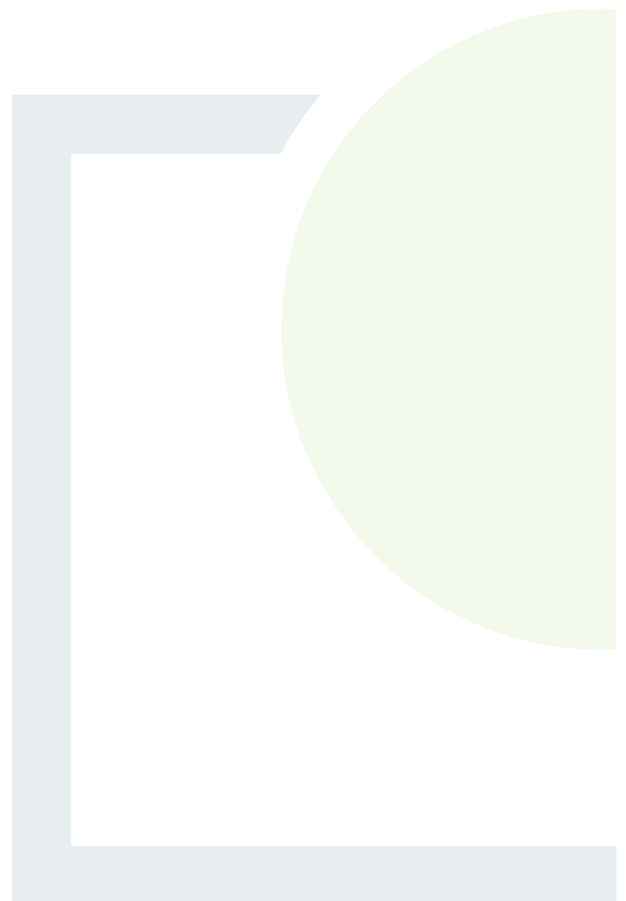




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 10

LVIA Figures and
Photomontages

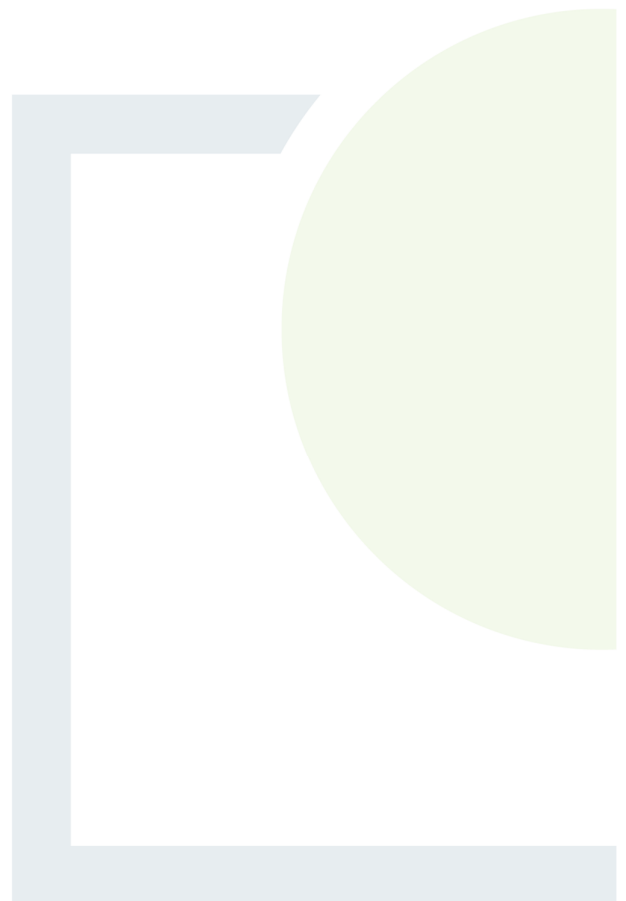




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 11

Trial Pit Logs





**CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING**

www.fehilytimoney.ie

 **Cork**

 **Dublin**

 **Carlow**

