# 11 Landscape and Visual

## 11.1 Introduction

This Landscape and Visual Impact Assessment chapter was written by Hayes Ryan, Landscape Architects. The assessment is based on a desktop study and a field survey of the site and receiving environment carried out on 18th and 19th of January 2024, and again on the 12th July 2024. This report is to be read with the accompanying set of verified photomontages in the verified photomontage booklet. At the time of this assessment deciduous trees and vegetation were starting to come into leaf with some vegetation in full leaf and some just breaking dormancy. Visibility was good for the time of year.

The Landscape and Visual Impact Assessment (LVIA), concerns itself with landscape, landscape values, aesthetic and visual amenity and landscape as a resource which provides society with cultural, economic, and environmental benefits. Landscape has come to be defined according to the European Landscape Convention as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'.

The assessment is informed by EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports[1], 2022 and the methodology prescribed in the Guidelines for Landscape and Visual Impact Assessment, 3rd edition, 2013 (GLVIA) published by the UK Landscape Institute and the Institute for Environmental Management and Assessment.

The EPA sample guidelines analyse landscape from the visual and amenity perspective. Visual effects examine context, character of the view, significance and sensitivity with amenity regarding public access, public amenities, recreation and tourism. Landscape is studied under the headings; Landscape Appearance and Character, Landscape Context, Views and Prospects (in the landscape character area and related areas), and Historical Landscapes.

GLVIA guidelines examine landscape and visual effects in a necessarily interconnected manner but as separate study components.

### 11.1.1 Landscape

The effects on landscape are studied with Landscape Character Assessment (LCA) as the guiding principle. This is concerned with the identification of and assessment of the importance of landscape characteristics, landscape quality and the condition of the landscape. According to the Guidelines for Landscape Visual Impact Assessment (GLVIA)[2], 'Landscape' results from the interplay between the physical, natural and cultural components of our surroundings. Different combinations and spatial distribution of these elements create variations in landscape character. 'Landscape Character Assessment' is how landscape is described. It is the means by which we understand the effects of development on the landscape as a resource.

The impact of the development itself is studied as the impact of the proposals and development on the landscape, whilst 'effect' describes the changes brought about by these impacts e.g., a change to landscape character.

[1]https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf
[2] Landscape Institute and the Institute of Environmental Management and Assessment, 2013 Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA)

### 11.1.2 Visual

The visual assessment aims to assess the extent of visibility of a development, define the sensitivity of receptors and set out the likely perception of viewers and visually sensitive receptors. This is largely to do with views and visual amenity. 'Visual' addresses the effects on specific viewpoints of the Proposed Development as it is experienced by general viewers and those inhabiting the local area. The effect on the views and general visual amenity is assessed. In short, visual assessment is concerned with changes that arise in the composition of available views, the response of people to these changes and the overall effects on the area's visual amenity.

## 11.2 Methodology

### 11.2.1 Baseline Information[3]

The baseline descriptions are required to consider the context of the landscape and views in terms of the proposed location, magnitude and spatial extent of landscape affected as well as current trends in that landscape/view.

Landscape Character Assessment and the character of the relevant views are described and checked against the local condition. The distinguishing characteristics of the landscape/view are examined.

The significance of the landscape or the view is assessed against current designations, significance of the landscape/view locally nationally or internationally. The quality of the landscape or the view is examined as are any legislative protections. The landscape/view is examined for its rarity, its ability to renew itself, uniqueness, and scenic qualities. The landscape/view is considered for its quality, value, designation, and any legislative protections connected to the landscape. The rarity/unique status and condition of the landscape is noted as is its ability to renew itself. Sensitivity relates to the sensitivity of the landscape or view to change.

Landscape assessment of potential landscape effects, involves assessing and classifying the sensitivity of the landscape as a resource and then describing and classifying the magnitude of landscape change which would result from the development. The combination of sensitivity and magnitude of change gives a classification for the significance of the landscape effects. The 'impact' of the development is the action which results in landscape and visual changes. 'Effect' refers to the changes brought about by such an impact. The effect may result in the alteration of the landscape character of the area. 'Effect' is defined as the change or changes resulting from those actions, e.g., a change in landscape character, or changes to the composition, character and quality of views in the receiving environment. This report focusses on these effects. The study considers the area from which the development will be seen and the landscape it is set in. As per the GLVIA the emphasis is on a "reasonable approach which is proportional to the scale and nature of the Proposed Development."[4]

### 11.2.2 Thresholds of Magnitude of Change

A set of viewpoints were studied for the visual section of the report and a general landscape photographic study was conducted to examine and confirm the landscape character, its form and pattern in the area of the Proposed Development.

A large number of viewpoints were initially examined and from this field study a specific set of viewpoints were selected for the visual aspect of the study. Professional judgement as recommended by the GLVIA and establishing a proportionate examination of the area relative to the size of the project has allowed for a thorough visual study.

Various tools, techniques and criteria are used to judge landscape capacity and sensitivity. Thresholds of magnitude of change are established by using such tools. In addition to examining local Landscape Character Assessments (LCA), the field study was conducted to

[3] EPA Table 3.3 Typical Standards of Descriptions of Baseline Data for use in an EIAR
[4] Landscape Institute and Institute of Environmental Management and Assessment, 2013 Guidelines for Landscape and Visual Impact Assessment p 98

establish the magnitude of change to the landscape and views.

Assessment of "significance of landscape effects" requires a review of landscape character assessments at local level, establishing sensitivity against which any predicted change can then be measured. This involves a desk study review of published landscape characterisation studies and assessment of sensitivities for the case in hand.

Field observations are used to confirm decisions to assess landscape character and confirm landscape character against the desk top study. It is also used to assess the appropriateness of the landscape character type for this landscape.

Subjective information on less tangible characteristics is also recorded to inform the impressions or perceptions of the landscape and landscape value.

Ordnance Survey and other published information such as historical maps are also useful in examining the landscape, landscape history and its capacity for change.

The character, quality, scale and value of the landscape is assessed according to the criteria below.

### 11.2.3 Landscape Quality

Landscape quality is primarily a matter of how clearly the distinctive character of a landscape is expressed in an area, and of the state of repair or condition of landscape elements and the integrity and intactness of the landscape. There are three categories of quality ranging from high to medium to low.

**High** – landscapes strong in character or distinctive character, in good condition and very few or no incongruous features. Excellent example of a landscape type.

**Medium** – moderate strength of character and retain many key characteristics. Such a landscape will typically have suffered some decline and is marked by the occasional incongruous feature.

**Low** – landscapes with weak strengths of character, fragmented and/or featuring significant atypical, incongruous or discordant features.

### 11.2.4 Value

The value of a landscape reflects its value to society and in estimating this, the report sets out to establish levels of importance of the potentially affected landscape, aspects of the landscapes that are valued, to whom and for what reason. It refers to the relative value we attach to different landscapes and is the basis for designating or recognising certain highly valued landscapes. The reasons a landscape is valued are many and varied. It can include a landscapes' scenic quality, its tranquillity or its wilderness attributes. It may be highly valued at a national or local level due to conservation reasons or cultural associations.

Landscape value is categorised from high to medium to low.

'**High**' value landscapes covered by a national designation for landscape value and display a high number of locally valued features present or are very highly valued as a landscape for other reasons.

'**Medium**' value landscapes are landscapes not covered by designation for landscape value. These landscapes may have a moderate number of locally valued features present, or they are moderately valued as a landscape for other reasons.

'**Low**' value landscapes are those not covered by a local or national designation for landscape with very few locally valued features present and not locally valued as a landscape for any other reason. A landscape with a low value may be degraded, display numerous incongruous features and have no obvious local association.

Landscape can also be seen to be valued at community level or for intangible reasons can be perceived to be valuable to a particular community. It may be valued for the elements that remain of a finely articulated landscape, with all its associations and connections over time.

### 11.2.5 Landscape Sensitivity

Landscape sensitivity refers to the degree to which a landscape can accommodate change without adverse effects on the landscape or its character. It has regard for the value placed on the landscape at all levels, how it is used, the patterns of the landscape, its sense of enclosure or openness and all of its visual receptors.

The nature and scale of development also reflects on sensitivity. Five categories are used to classify sensitivity.

**Sensitivity Descriptions**

**Very High Areas**; Where the landscape exhibits very strong, positive character with valued elements, features and characteristics that combine to give an experience of unity, richness and harmony. The landscape character is such that its capacity to accommodate change in the form of development is very low. Because of their very high sensitivity these landscapes are subject to protection by designation either nationally or internationally. The priority for such landscapes is the protection of their existing characters from change.

**High Areas**; Where the landscape exhibits strong, positive character with valued elements, features and characteristics. The landscape character has a limited or low capacity to accommodate change in the form of development. Such landscapes are recognised in landscape policy or designations as being of national, regional or county value. The principal objective for the area is the conservation of existing landscape character.

**Medium Areas**; Where the landscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong, or has evidence of alteration, degradation or erosion of elements and characteristics. The landscape character is such that there is some capacity for change in the form of development. These areas may be recognised in landscape policy at local or county level and the principle management objective may be to consolidate landscape character or facilitate appropriate, necessary change.

**Low Areas**; Where the landscape has few valued elements, features or characteristics and the character is weak. The character is such that it has capacity for change; where development would make no significant change or would make a positive change. Such landscapes are generally unrecognised in policy and the principle management objective may be to facilitate change through development, repair, restoration or enhancement.

**Negligible Areas**: Where the landscape exhibits negative character, with no valued elements, features or characteristics. The landscape character is such that its capacity to accommodate change is high; where development would make no significant change or would make a positive change. Such landscapes include derelict industrial lands or extraction sites, as well as sites or areas that are designated for a particular type of development. The principle management objective for the area is to facilitate change in the landscape through development, repair or restoration.

### 11.2.6 Geographical Extent

Having regard to the geographical extent of landscape effects, it is important to iterate the effects which may have an influence on differing scales at landscape level.

The effect at (a) site level will refer to the effect within the site itself and at (b) the level of the immediate setting of the site and (c) at the scale of the landscape type or character area. Some effects may have a geographical extent (d) ranging over several landscape character areas.

### 11.2.7 Loss/No Loss of Landscape Elements

In addition to effects which result in the loss of landscape elements, it is possible to have effects which cause no loss of landscape elements and no removal of existing components but there is an introduction of new elements e.g. buildings which alter the skyline or arise over the tree line. In such a case, scale can be seen to alter the landscape character and quality of visual amenity.

### 11.2.8 Magnitude of Landscape Change

Magnitude of change is a factor of the scale, extent and degree of change imposed on the landscape by a development, with reference to its key elements, features and characteristics (‘landscape receptors’). Five categories are used to classify magnitude of change.

**Description of the Categories of Landscape Change Magnitude**

**Very High:** Change that is large in extent, resulting in the loss of or major alteration to key elements, features or characteristics of the landscape and/or introduction of large elements considered totally uncharacteristic in the context. Such development results in fundamental change to the character of the landscape with a loss of landscape quality and perceived value.

**High Change:** Change that is moderate to large in extent, resulting in major alteration to key elements, features or characteristics of the landscape and/or introduction of large elements considered uncharacteristic in the context. Such development results in change to the character of the landscape.

**Medium Change:** Change that is moderate in extent, resulting in partial loss or alteration to key elements, features or characteristics of the landscape, and/or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development results in change to the character of the landscape but not necessarily reduction in landscape quality and perceived value.

**Low Change**: Change that is moderate or limited in scale, resulting in minor alteration to key elements, features or characteristics of the landscape, and/or introduction of elements that are

not uncharacteristic in the context. Such development results in minor change to the character of the landscape and no reduction in landscape quality and perceived value.

**Negligible Change**: Change that is limited in scale, resulting in no alteration to key elements features or characteristics of the landscape, and/or introduction of elements that are characteristic of the context. Such development results in no change to the landscape character, its quality or perceived value.

### 11.2.9 Probability of Effects

Likely or probable effects can be described as those which are planned to take place and those which can be reasonably foreseen to be inevitable consequences of the normal construction and operation of the project.

Thus, the probability of the effects is defined as likely and unlikely.

**Likely Effects**; The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.

**Unlikely Effects**; The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.

### 11.2.10 Significance of Effects

To classify the significance of effects, the magnitude of change is measured against the sensitivity of the landscape using the guide in Table 11.1 below. The matrix is only a guide. The assessor also uses professional judgement informed by their expertise and experience to arrive at a classification of significance that is reasonable and justifiable.

**Table 11.1: Guide to Classification of Significance of Landscape and Visual Effects**

| | | Sensitivity : Landscape/View | | | | |
|---|---|---|---|---|---|---|
| | | Very High | High | Medium | Low | Negligible |
| Magnitude of Change : Landscape/View | Very High | Profound | Profound to Very Significant | Very Significant to Significant | Moderate | Slight |
| | High | Profound to Very Significant | Very Significant | Significant | Moderate to Slight | Slight to Not Significant |
| | Medium | Very Significant to Significant | Significant | Moderate | Slight | Not Significant |
| | Low | Moderate | Moderate to Slight | Slight | Not Significant | Imperceptible |
| | Negligible | Slight | Slight to Not Significant | Not Significant | Imperceptible | Imperceptible |

According to EPA guidelines the description of the likely significant effects on both the landscape and visual receptors should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project.'

### 11.2.11 Duration of Effects

The duration of effect is categorised in this report according to the EPA guidelines[5].

- Momentary Effects: Effects lasting from seconds to minutes.
- Brief Effects: Effects lasting less than a day.
- Temporary Effects: Effects lasting less than a year.
- Short-term Effects: Effects lasting one to seven years.
- Medium-term Effects: Effects lasting seven to fifteen years.
- Long-term Effects: Effects lasting fifteen to sixty years.
- Permanent Effects: Effects lasting over sixty years.
- Reversible Effects: Effects that can be undone, for example through remediation or restoration.
- Frequency of Effects: Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually).

### 11.2.12 Environmental Protection Agency Guidelines

The EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, May 2022, describes the significance classifications as follows:

**Imperceptible**: An effect capable of measurement but without significant consequences.

**Not significant**: An effect which causes noticeable changes in the character of the environment but without significant consequences.

**Slight**: An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.

**Moderate**: An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.

**Significant**: An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.

**Very Significant**: An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.

**Profound**: An effect which obliterates sensitive characteristics.

### 11.2.13 Methodology for Visual Effects Assessment

Assessment of visual effects involves identifying a number of key/representative viewpoints in the site's receiving environment, and for each one of these classifying the viewpoint sensitivity

[5] Environmental Protection Agency, 2022 Guidelines on the Information to be contained in Environmental Impact Assessment Reports

and the magnitude of change which would result in the view. These factors are combined to arrive at a classification of significance of the effects on each viewpoint.

#### 11.2.13.1 Susceptibility of the Visual Receptor to Change

This depends on the occupation or activity of the people experiencing the view, and the extent to which their attention is focussed on the views or visual amenity they experience at that location. Visual receptors most susceptible to change include residents at home, people engaged in outdoor recreation focused on the landscape (e.g. trail users), and visitors to heritage or other attractions and places of community congregation where the setting contributes to the experience. Visual receptors less sensitive to change include travellers on road, rail and other transport routes (unless on recognised scenic routes), people engaged in outdoor recreation or sports where the surrounding landscape does not influence the experience, and people in their place of work or shopping where the setting does not influence their experience.

#### 11.2.13.2 Value attached to the view

This depends to a large extent on the subjective opinion of the visual receptor but also on factors such as policy and designations (e.g. scenic routes, protected views), or the view or setting being associated with a heritage asset, visitor attraction or having some other cultural status (e.g. by appearing in arts). Five categories are used to classify a viewpoint's sensitivity.

#### 11.2.13.3 Categories of Viewpoint Sensitivity

**Very High**: (views towards or from a landscape feature or area) that are recognised in policy or otherwise designated as being of national value. The composition, character and quality of the view are such that its capacity for change is very low. The principle management objective for the view is its protection from change.

**High**: Viewpoints that are recognised in policy or otherwise designated as being of value, or viewpoints that are highly valued by people that experience them regularly (such as views from houses or tourist based views focused on the landscape). The composition, character and quality of the view may be such that its capacity for accommodating change may or may not be low. The principle management objective for the view is its protection from change that reduces visual amenity.

**Medium:** Views that may not have features or characteristics that are of particular value, but have no major detracting elements, and which thus provide some visual amenity. These views may have capacity for appropriate change and the principle management objective is to facilitate change to the composition that does not detract from visual amenity, or which enhances it. Such views can be judged to have some scenic quality, which demonstrates some sense of naturalness, tranquillity or some rare element in the view.

**Low**: Views that have no valued feature or characteristic, and where the composition and character are such that there is capacity for change. This category also includes views experienced by people involved in activities with no particular focus on the landscape (e.g. shopping or they are on heavily trafficked routes). The view may make for an attractive backdrop but is not an important element for these activities. For such views the principle management objective is to facilitate change that does not detract from visual amenity or enhances it.

**Negligible**: Views that have no valued feature or characteristic, or in which the composition may be unsightly (e.g. in derelict landscapes). For such views the principle management objective is to facilitate change that repairs, restores or enhances visual amenity. Such viewpoints reflect users whose activity has no focus on the landscape or where the view has no relevance to their activity. Such a view may be of poor quality.

### 11.2.14 Magnitude of Change to the View

Classification of the magnitude of change takes into account the size or scale of the intrusion of development into the view (relative to the other elements and features in the composition, i.e. its relative visual dominance), the degree to which it contrasts or integrates with the other elements and the general character of the view, and the way in which the change will be experienced (e.g. in full view, partial or peripheral view, or in glimpses). It also takes into account the geographical extent of the change, as well as the duration and reversibility of the visual effects. Five categories are used to classify magnitude of change to a view:

**Categories of Visual Change - Magnitude of Change Description**

**Very High:** Full or extensive intrusion of the development in the view, or partial intrusion that obstructs valued features or characteristics, or introduction of elements that are completely out of character in the context, to the extent that the development becomes dominant in the composition and defines the character of the view and the visual amenity.

**High**: Extensive intrusion of the development in the view, or partial intrusion that obstructs valued features, or introduction of elements that may be considered uncharacteristic in the context, to the extent that the development becomes co-dominant with other elements in the composition and affects the character of the view and the visual amenity.

**Medium**: Partial intrusion of the development in the view, or introduction of elements that may be prominent but not necessarily uncharacteristic in the context, resulting in change to the composition but not necessarily the character of the view or the visual amenity. Low Minor intrusion of the development into the view, or introduction of elements that are not uncharacteristic in the context, resulting in minor alteration to the composition and character of the view but no change to visual amenity.

**Low**: Minor intrusion of the development into the view or introduction of elements that are uncharacteristic in the context, resulting in minor alteration to the composition and character of the view but no change in visual amenity.

**Negligible**: Barely discernible intrusion of the development into the view, or introduction of elements that are characteristic in the context, resulting in slight change to the composition of the view and no change in visual amenity.

### 11.2.15 Significance of Visual Effects

As for landscape effects, to classify the significance of visual effects, the magnitude of change to the view is measured against the sensitivity of the viewpoint, using the guide in Table 11.1 above.

### 11.2.16 Mitigation Measures

Mitigation Measures for both landscape and visual effects are categorised as;

- **Mitigation by Avoidance**
- **Mitigation by Prevention** e.g. Prevention measures are put in place to prevent the effects of accidental events from giving rise to significant adverse effects.
- **Mitigation by Reduction**; seeks to limit the exposure of the receptor.
- **Reducing the Effect**; This strategy is used for effects which occur over an extensive and undefined area of land view or landscape. The mitigation is often achieved by installing screening between the likely receptors and the source of the effects.
- **Offsetting**; This is a strategy used for dealing with significant adverse effects which cannot be avoided, prevented or reduced. It includes measures to compensate for adverse effects. e.g. planting of new vegetation elsewhere to replace unavoidable loss of similar vegetation.

## 11.3 Baseline Conditions

### 11.3.1 Ordnance Survey Ireland Historical Maps

The following historical maps from Ordnance Survey Ireland were studied to identify the evolution of the landscape in and around the proposed site and to examine it in the context of the landscape and landscape character area as we find it today.

The OSI historical six inch black and white and coloured (first editions) and twenty five inch black and white maps (**Figure 11.1**) show the landscape has not generally changed significantly. The development of the local pig unit and housing are apparent but it is the change in field size that has had the most effect on landscape pattern. Between the mapping of the Historic Six Inch map and the black and white Cassini map (below), the development of the ~~Old~~ Scrouty Road is more apparent. The field pattern as seen in the six inch last edition black and white resembles the pattern we find currently but it is denser with smaller fields. Curvature on the road opposite Fenoagh Church and cemetery infer a landscape relationship with the circular enclosure. As is the case today the field pattern strongly relates to topographical difference.


**Figure11.1: OSI Historic Map 6 inch colour (1837-1842)**

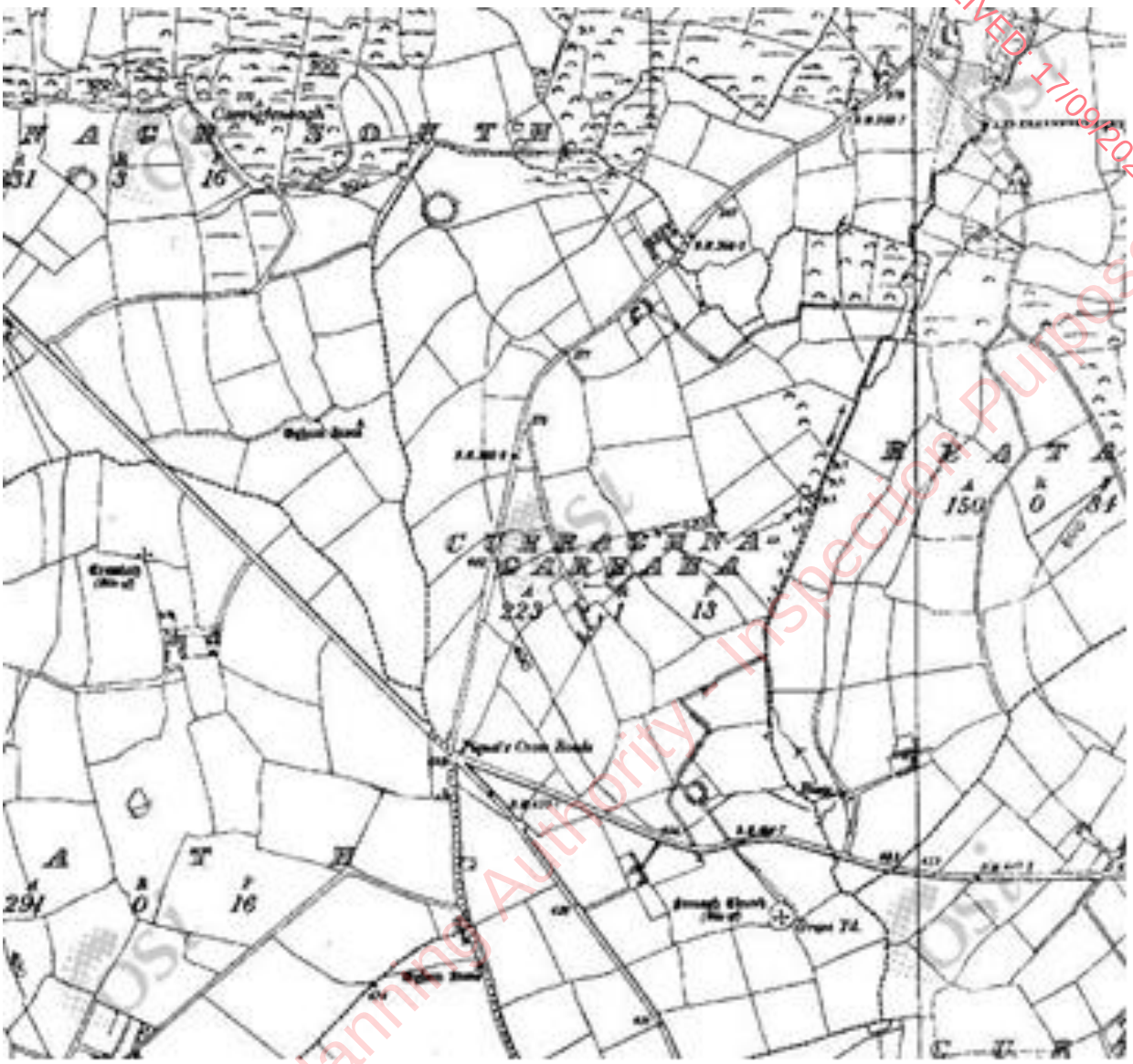


**Figure 11.2: Six inch (last ed.) Black and White Cassini raster mapping dated 1830s to 1930s**

The field boundaries and the drainage pattern concur with the townland boundaries at Curraghnagarraha, Reatagh and Curraghballintlea (Figure 11.3).

Except to facilitate the access road joining the ~~Old~~ Scrouty Road, there will be no effect on the townland boundary hedgerows as a result of the Proposed Development.

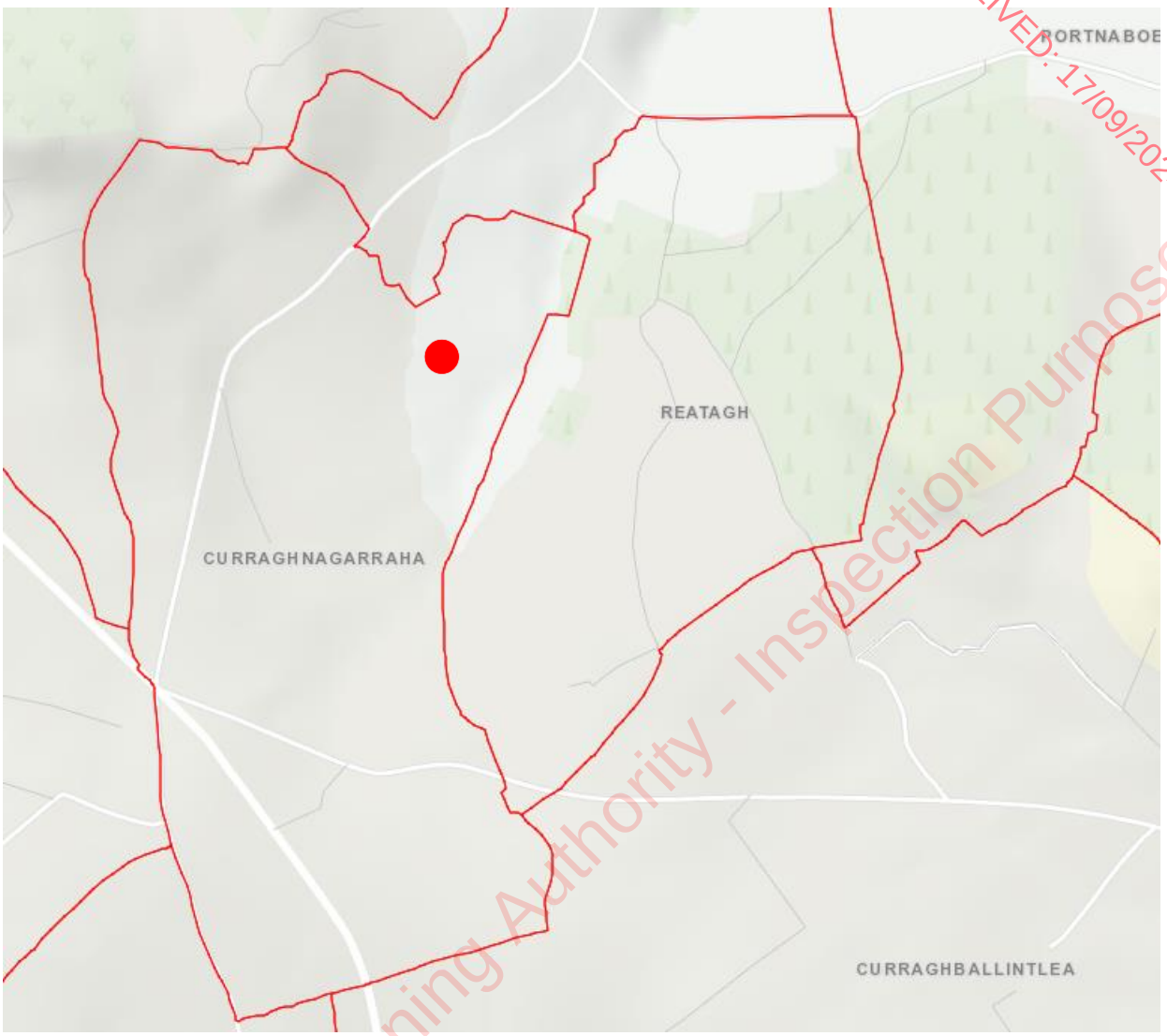



**Figure11 3: Townland boundaries at Curraghnagarraha, Reatagh and Curraghballintlea**

## 11.3.2 Landscape Associations

### Landscape Associations with Arts / Literary / Historical / Mythical Figures or Architecture

The townland of Curraghnagarraha is recorded as Currach na nGarraithe - “Swampy Place of the Gardens.” and “Curraghneg Araghey”. The townland of Reatagh is researched as An Réiteach - “The Cleared Land.”.

Griffiths valuation records Fenoagh graveyard under the names of the Trustees of King and Queen’s College and there is reference to a Fulacht Fia but there are no other historical or artistic influences that relate to landscape in or around the site of the Proposed Development.

## 11.3.3 Waterford City and County Development Plan LCA

Waterford City and County Council commissioned a Landscape Character Assessment (LCA) which is included in the Waterford City and County Development Plan 2022-2028, the details of

which are discussed here below. Landscape character areas influence the description of landscape typology at the site of the Proposed Development. This typological classification describes the landscape around the site of the Proposed Development as type 2 'Farmed Lowlands.

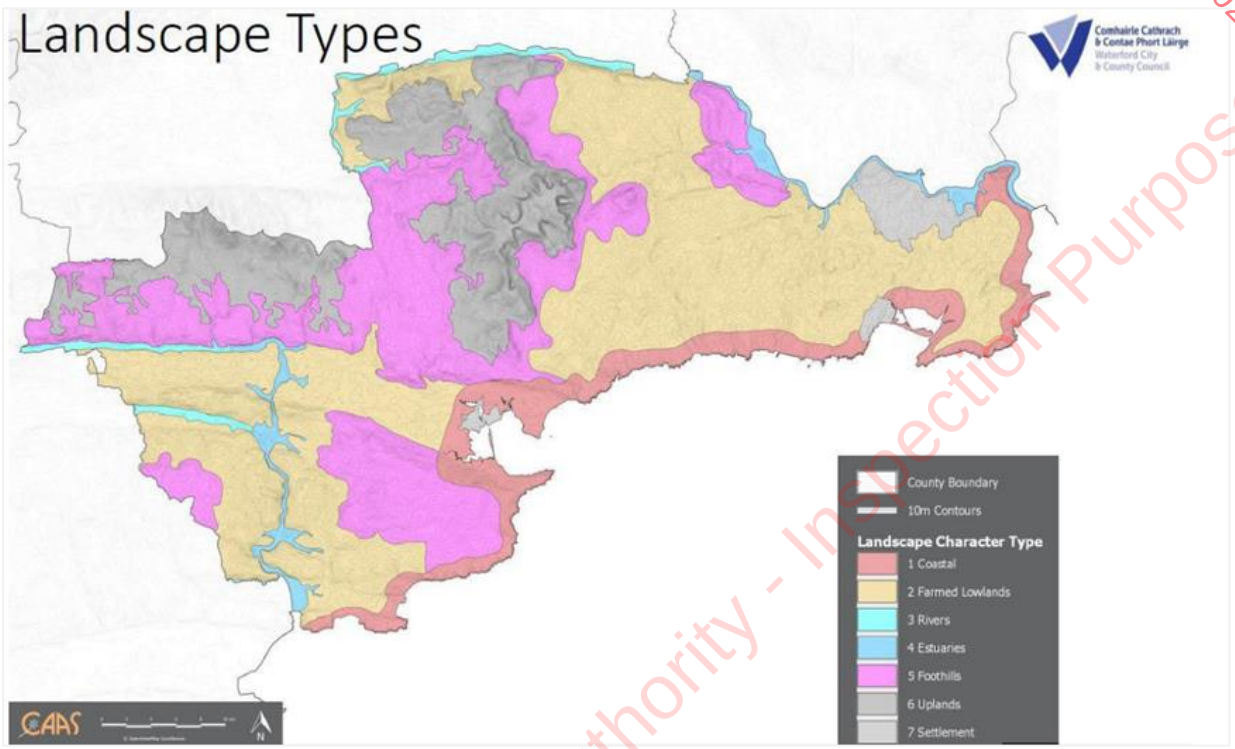



**Figure 11.4: Waterford Landscape Character Assessment**

### 11.3.4 Landscape Character Units

The landscape character as described in the landscape character assessment for Co Waterford is further categorised into smaller landscape character areas or units. The site of the Proposed Development falls into the unit described as 2B, Rathgormuck Lowlands. It falls between Knockaturnory Munsboro (5A) and the Portlaw Foothills (5G). North of the site is the Suir River Corridor Landscape (3B).

The Rathgormack Lowlands, 2A, is similar to the landscape character found around the county. It is a low sensitivity "common character type with a potential to absorb a wide range of new developments". "The majority of the County consists of pasture land with some exceptions" [6]e.g. around the nearby Portlaw.

As iterated it is designated a low sensitivity pastureland. Policy objectives and sensitivities in and around the site of the Proposed Development are guided by this designation of a low sensitivity pastureland. Like much of the county, pastureland is "designated as a landscape of low sensitivity. These areas have potential to absorb a wide range of new developments subject to normal planning and development control procedures. In these areas the Planning Authority will have regard to general restrictions to development such as scenic routes, siting, road setbacks,

[6] https://consult.waterfordcouncil.ie/en/system/files/materials/2264/Appendix-Landscape and Seascape Character Assessment.pdf

road widening plans, parking numbers, road and sewage disposal criteria." [7] [8]

### 11.3.5 Adjacent Landscape Units

The adjacent landscape character unit north of the site, 3B. Suir River Corridor and the banks of the River Suir have a sensitivity class description of 'most sensitive' (Figure 11.5).

To the east and south east of the Proposed Development the broad leaved forest of Portlaw Wood and Curraghmore has a 'High Sensitivity' designation. This means it has "some capacity to absorb a limited range of appropriate new developments while sustaining its character". High sensitivity areas are further prescribed as areas which "have a distinctive, homogenous character, dominated by natural processes. Development in these areas has the potential to create impacts on the appearance and character of an extensive part of the landscape. Applications for development in these areas must demonstrate an awareness of these inherent limitations by having a very high standard of site selection, siting layout, selection of materials and finishes."

Given the sensitivity and proximity of these landscape character units they are examined for intervisibility at selected locations as part of the visual assessment in this report. The River Suir Corridor is most sensitive due to its very distinctive features. It has a low capacity to absorb new development without significant alterations of existing character over an extended area. Portlaw Wood is a high sensitivity landscape. It is described as a distinctive character with some capacity to absorb a limited range of appropriate new developments while sustaining its existing character.


**Figure 11.5: Protected View, Most Sensitive Landscape and Very High Sensitivity Landscape near the site of the Proposed Development (site location in red).**

The landscape sensitivity at the site of the Proposed Development is low. It is close to high sensitivity landscapes and most sensitive landscapes (Figure 11.6).

[7] https://consult.waterfordcouncil.ie/en/system/files/materials/2264/Appendix-Landscape and Seascape Character Assessment.pdf
[8] Landscape Character Units Map A8.2 Waterford County Development Plan 2022-2028


**Figure 11.6: Landscape sensitivity at the site of the Proposed Development (site location in red).**

### 11.3.6 Landscape Character Assessment Policy Objectives

The landscape character assessment included in the current Waterford County Development Plan 2022-2028 is accompanied by the following policy objectives;

### 11.3.7 General Landscape Policies and Objectives WCDP

**WCDP Landscape Policies and Objectives**

**L01 National Landscape Strategy**

We will support provisions of the 2014 National Landscape Strategy and provide for the sustainable management of all of County Waterford's landscapes including archaeological landscapes, waterway corridors, coastal, upland, rural and peri-urban landscapes." This report addresses relevant issues as they relate to landscape in the environs of the Proposed Development.

**L02 Protecting our Landscape and Seascape**

We will protect the landscape and natural assets of the County by ensuring that Proposed Developments do not detrimentally impact on the character, integrity, distinctiveness or scenic value of their area and ensuring that such proposals are not unduly visually obtrusive in the landscape, in particular, in or adjacent to the uplands, along river corridors, coastal or other distinctive landscape character units." The proposals are accompanied by detailed landscape plans and recommendations which will optimise the landscape protections. This report also examines the visual impact from sensitive landscape areas.

**L03 Landscape and Seascape Character Assessment**

We will assess all proposals for development outside of our settlements in terms of the 2020 Landscape and Seascape Character Assessment (Appendix 8) and the associated sensitivity of the particular location. We will require a Landscape and Visual Impact Assessment (LVIA) for Proposed Developments with the potential to impact on significant landscape features within the City and County. Proposals for significant development (e.g. renewable energy projects, telecommunications and other infrastructure and the extractive industry) shall be accompanied by a LVIA which includes Zones of Theoretical Visibility (ZTV) which indicate the landscape impact zone within which the Proposed Development may be seen. There will be a presumption against developments which are located on elevated and exposed sites and where the landscape cannot accommodate such development with reasonable and appropriate mitigation.

This report addresses the requirement for LVIA and ZTV and the Proposed Development is not positioned on elevated ground and quite well positioned to take advantage of surrounding topographical protection. The area is not exposed with adjacent commercial forestry surrounding the site of the Proposed Development to the north and east.

**LS04 Scenic Routes and Protected Views**

"We will protect the scenic routes and specified protected views identified in our Landscape Character Assessment (Appendix 8), including views to and from the sea, rivers, landscape features, mountains, landmark structures and urban settlements from inappropriate development that by virtue of design, scale, character or cumulative impact would block or detract from such views."

There are no scenic routes or protected views affected by the Proposed Development.

### 11.3.8 Landscape Value

Waterford City and County Council's Landscape Character Assessment is the tool used to identify valued landscapes. The protected views and sensitive landscapes as outlined above constitutes the main landscape protections for the County.

Other values which are associated with landscape are considered below.

### 11.3.9 Geological Heritage

There are no sites of geological importance relating to the site of the Proposed Development.

### 11.3.10 Wetland

Landscapes with designated wetlands will not be affected by the Proposed Development. The closest is south of Killowen on a bend on the River Suir.

### 11.3.11 Tree Preservation Orders

There are no tree preservation orders on or near the site of the Proposed Development. The closest is Curraghmore, south of the site, west of Portlaw town.

### 11.3.12 Recreation and Tourism

The closest tourism and recreational interests to the site is the pet farm at World of Bounce.

Replacement planting along the proposed sight lines will generate some consolidation of the hedgerow close to the entrance of this facility which, as it matures, will improve the industrialised appearance of the palisade fences, gates and different materials used at the existing entrances. The pet farm is located circa 400m south of the Proposed Development. The existing pig farm certainly influences the landscape character at present and there will be a change to the landscape character experienced here which will lessen in time as the trees and understory planting develop and mature blending the Proposed Development to the coniferous woodland to the north and north east. The contrast in colour and plant materials will be pleasant even though the proposed structures will be alien at first.

The possibility of a loss in visual amenity is examined in detail under the visual section of this report.

### 11.3.13 Designated Amenity Views and Prospects in County Mayo

The scenic viewpoints as listed in the WCDP (Figure 11.7) were examined in relation to the Proposed Development.

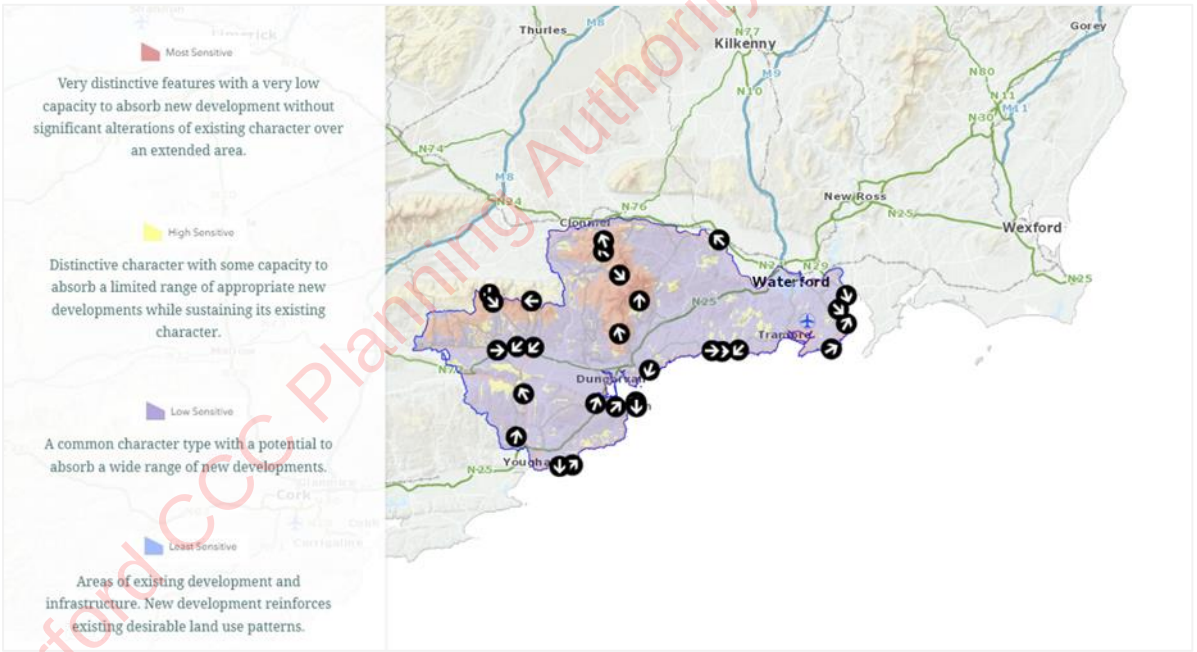



**Figure 11.7: Scenic viewpoints as listed in the WCDP**

The scenic views and trails as listed in the WCDP were also examined (Figure 11.8).

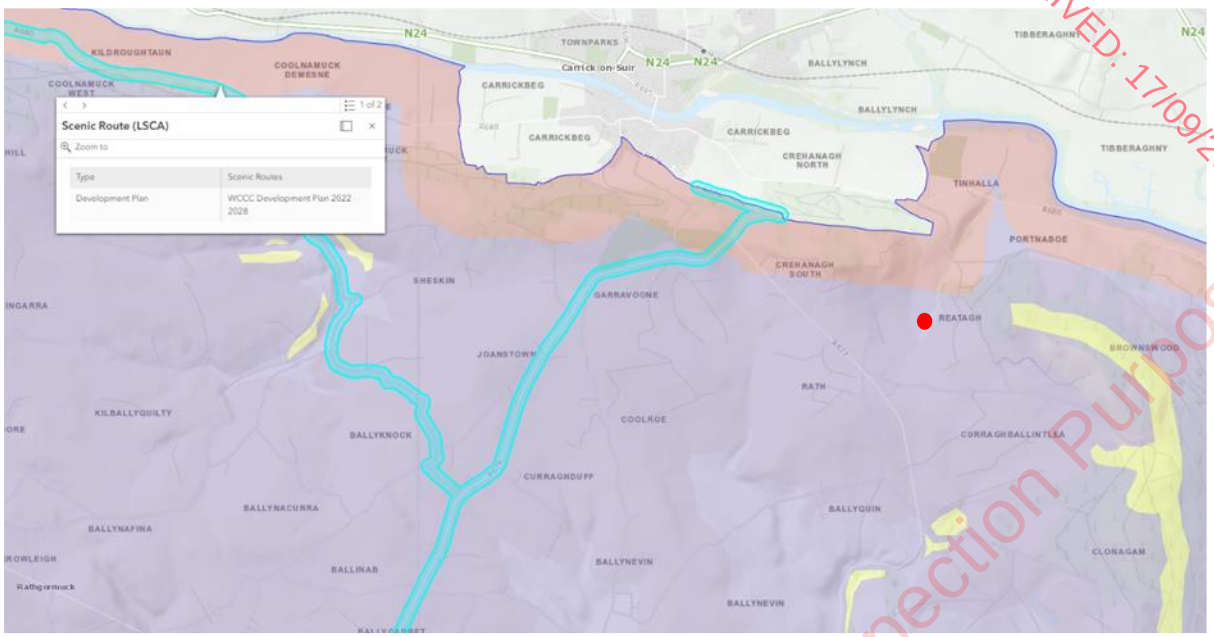



**Figure 11.8: Scenic views and trails as listed in the WCDP**

The closest scenic route to the site of the Proposed Development is described as route 12 ; R680 East from Clonmel to Carrick-on-Suir. Turn south onto third class route to R678 or through Coolnamuck Wood onto R676. This scenic route won't be affected by the Proposed Development.

The closest viewing point with designated protection to the Proposed Development is described as view 3; River Suir viewing N towards Slievenamon. This viewing point will not be affected by the Proposed Development.

Considering highly scenic viewing points, scenic views, and scenic routes it can be seen there will be no effect on any due to the Proposed Development.

### 11.3.14 Natural Heritage

Natural Heritage is examined in this assessment. None of the listed Natura sites (National Parks and Wildlife Service designations) are within the site of the Proposed Development. All the designated areas are at some distance from the Proposed Development and due to distance, intervisibility is also not a concern for these proposals.

There are no (SPA, SAC, NHA or pNHA) within the boundaries or close to the Proposed Development. The River Suir SAC is located 1.6km north of the site.

The National Inventory of Architecture and the local Record of Protected structures are also considered as part of this report. The interaction of archaeology and landscape is also considered in this report as an element of landscape.

**Monuments**

National monuments are considered as they relate to landscape. The Fenough Church site and graveyard is south of the Proposed Development and is examined in this report for intervisibilty in the visual section of this report. The landscape pattern as influenced by the local monuments

will be disrupted. There is an off set of the circular pattern generated from a radial offset at Fenough Graveyard (Figure 11.9). The enclosed small field pattern aroung the burnt mound close to the proposed site entrance is already degraded.

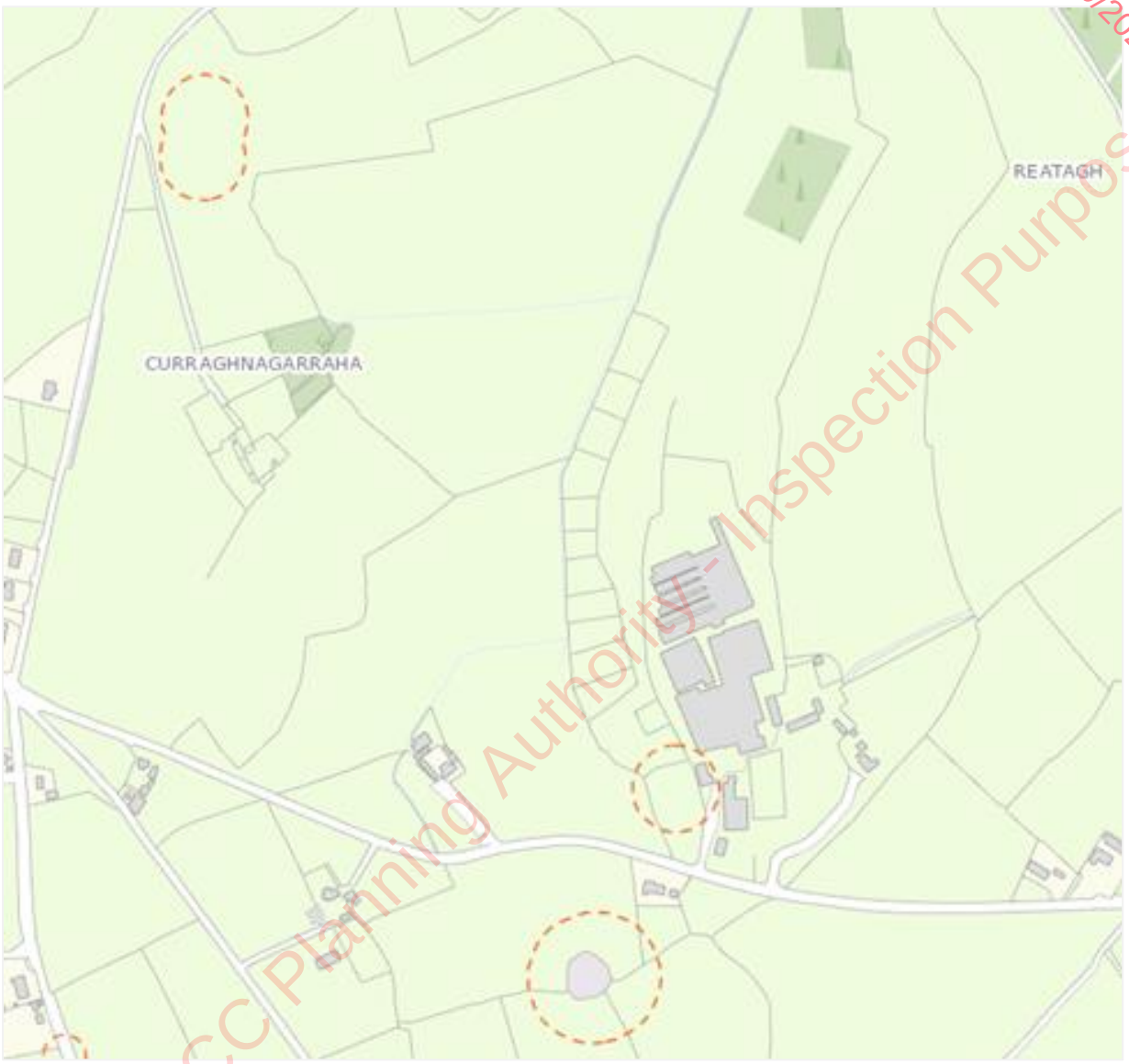



**Figure 11.9: Local Monuments**

### 11.3.15 Green Infrastructure

Green infrastructure is examined in this report. The following policies and objectives are examined from the landscape and visual perspective.

**BGI 01** Managing Blue Green Assets. To conserve, manage and enhance the natural heritage, biodiversity, landscape and environment of Waterford, recognition of its importance as a non-renewal resource and as a natural asset for health and wellbeing of our communities.

**BGI 02** Enhancing the role of BGI To establish BGI as a key component in the planning process and designing the future for Waterford so that environmental resilience is achieved through implementation of this plan.

The proposals ensure as much as possible the visual amenity value of green infrastructure is improved and increased in the area.

The landscape proposals submitted with as part of the overall development proposals ensures that there is increased biological connection through the hedgerow network by increasing the amount of native and naturalised hedgerow and trees in the footprint of the Proposed Development.

The Proposed Development will aid and assist with the objectives of decarbonisation whilst the increased planting proposed will ensure that there is a greater potential at the site to absorb carbon and increase the potential as the plant material matures to increase habitat connectivity and local landscape ecological gain.

### 11.3.16 Landscape Character Type

As iterated, a landscape character assessment has been carried out for County Waterford. This landscape character assessment has made a typological classification of the landscapes in the county. For the site of the Proposed Development the classification is 'Farmed Lowlands'.

The interaction of archaeology and topography influence landscape character radiating out from Fenough (church and graveyard). The influence on landscape pattern is evident in the curvature of the Old Scrouty road and related field pattern. The landscape around the burnt mound is quite degraded and the rectangular field pattern is unclear in its current format.

The field boundaries are generally defined by good quality hedgerows and this defines the field pattern in a matrix that includes woodland and commercial forestry in softly rolling to undulating landscape form. The quality of the hedgerow is variable along the ~~Old~~ Scrouty Road and particularly weak near the existing entrance to the pig farm. Native and naturalised hedgerow has been replaced on both sides of the road. Coniferous Leyland hedge, poplar, brick and concrete entrances and industrial palisade fences are at odds with the landscape character which is more refined and better articulated in the traditional hedgerows. The increase in the field size over time has weakened the character of the enclosed field system, however the pattern remains and townland boundaries defined by hedgerows and drainage as iterated are still intact. Commercial forestry evident in this landscape is established and blends softly to the edge of the field pattern from higher slopes.

The Proposed Development is within the pattern of the existing field boundaries and there is no loss of the pattern but some loss of segments of hedgerow to allow for the access road and sight lines.

Tranquillity in the overall landscape character is apparent away from the road network and on higher ground and variably along the ~~Old~~ Scrouty Road.

### 11.3.17 Potential Capacity/ Recommendations

Landscape capacity is regarded as the ability of a landscape to visually absorb change and accommodate different types of development. Landscape capacity is addressed in WCDP;

"landscape of low sensitivity…(has) potential to absorb a wide range of new developments subject to normal planning and development control procedures. In these areas the Planning Authority will have regard to general restrictions to development such as scenic routes, siting, road setbacks, road widening plans, parking numbers, road and sewage disposal criteria."

If, following the methodology, we regard that landscapes of low sensitivity have capacity for change; where development would make no significant change or would make a positive change. However landscapes of low sensitivity are also regarded as landscapes where the principle management objective may be to facilitate change through development, repair, restoration or enhancement. In the case of the landscape around Curraghnagarraha, Reatagh and Curraghballintlea at the site of the Proposed Development, this is partially true as there is a contrast between a fine well maintained hedgerow pattern in a rolling landscape and incongruent elements. Development in this case could be regarded as welcome as the landscape proposals will address some of the existing incongruities whilst simultaneously having a significant change in the landscape character.

The enclosing topography, screening vegetation and the presence of the existing pig units, offer a high potential to absorb new development. The area also has good capacity to support new vegetation e.g. trees, tall hedges etc.

## 11.4 Characteristics of the Proposed Development

The applicants, Mr James Foran and Nephin Renewable Gas - Reatagh Ltd., propose to develop an Anaerobic Digestion Facility. The site will be located in the townland of Curraghnagarraha, Reatagh, and Curraghballintlea, Co. Waterford.

The development will consist of the following:

- Construction of 3 no. digesters (c. 15.5m in height), 2 no. digestate storage structures (c. 15.5m and 12m in height), 4 no. pump houses (c. 2.59m in height), a liquid feed tank (c. 4m in height), located in the northeastern section of the site.
- Construction of 4 no. pasteurisation tanks (each c. 6m in height), a post pasteurisation cooling tank (c. 4m in height) and pre fertiliser manufacturing tank (c. 4m in height) located in the centre of the site.
- Construction of a part single-storey and part two-storey reception hall (with a gross floor area (GFA) of c. 2,113 sq.m and an overall height of c. 16.5m) to accommodate reception and storage areas, a laboratory, panel room, tool store, workshop, located in the northwestern section of the site.
- Construction of a single-storey solid digestate storage and a nutrient recovery building (with a GFA of c. 880 sq.m and an overall height of c. 12.4m) located to the south of the reception hall, in the central section of the site.
- Odour abatement plant and equipment and a fuel tank will be provided to the south of the solid digestate storage and nutrient recovery building.
- 2 no. $CO_2$ tanks (c. 10.7m in height), a $CO_2$ loading pump (c. 2.5m in height), $CO_2$ auxiliaries (c. 2.6m in height), $CO_2$ liqueufactor (c. 8.2m in height), a $CO_2$ compressor (c. 5.9m in height), a $CO_2$ pre-treatment skid (c. 3.5m in height), and associated plant including a backup boiler / biomethane boiler and a Compressed Natural Gas compression unit / biogas compression system located in the southern portion of the site.
- A $H_2S$ washing tower (c. 7.8m in height), a biogas treatment skid (c. 4.1m in height), a combined heat and power (CHP) unit and panel room (c. 10m in height), a biogas compression system, a biogas upgrading module, and an emergency biogas flare (c. 11.3m in height), also located within the southern section of the site.
- Construction of a two-storey office and administration building with an overall height of c. 8.5m and a GFA of c. 272sq.m, located within the western area of the site, adjacent to the main site access.

- Construction of a grid injection unit (c. 2.75m in height) within a fenced compound, an ESB substation (c. 3.4m in height and a GFA of c. 23.5 sq.m), and 2 no. propane tanks located in the south-western portion of the site.
- Alterations to the existing public road (c. 475m to the south of the main site area) including provision of boundary setbacks and replacement planting, providing a new site entrance and access road to serve the development.
- Associated and ancillary works including parking (6 no. standard, 3 no. EV and 1 no. disabled parking spaces and bike storage for 10 no. bikes), a weighbridge, solar PV arrays at roof level, wastewater treatment equipment, bunding and surface treatments, attenuation pond, boundary treatments, lighting, services, lightning protection masts, drainage, landscaping, and all associated and ancillary works.
-

### 11.4.1 Site Location

The Proposed Development site is located in the townlands of Curraghnagarraha, Reatagh, and Curraghballintlea, Co. Waterford, approximately 2.9km southeast of the town of Carrick-on-Suir, Co. Tipperary (Figure 11.10).


**Figure 11.10: Site Location**

The site is characterised as rolling to gently undulating. A peak in the site topography, 107m is situated along the west boundary of the site with a gradual gradient to the east. The site topography falls to 104m AOD at the west and falls to 96m AOD along the eastern boundary. A small stream occurs adjacent to the eastern site boundary.

The proposed site entrance and access road location has an existing topography of 122m AOD, sloping from south to north from 122m AOD to 103m AOD at the main site.

A dropped bund will assist the topography absorb the development. Screen planting will generate a woodland effect which in time will appear as a native woodland copse in the local landscape. The site is accessed from the ~~Old~~ Scrouty Road.

### 11.4.2 Landscape Character and Sensitivity

This landscape is assessed for its sensitivity. At the site of the Proposed Development the landscape is not designated as nationally, internationally or locally as a significant landscape. The landscape sensitivity for this landscape character unit (Rathgormuck Lowlands) has been assessed as low. The presence of the large pig unit shapes the character of the landscape although it is well set in its current location benefitting from forestry descending to the edge of the farm.

The example of ~~agricultural/~~renewable energy development represented by the Proposed Development, is likely to be widely conceived as appropriate unless siting and design are poor. Good efforts to design a rurally appropriate facility and integrate it into its landscape context have been made in the landscape proposals with a good response to the topographical levels of the overall facility in the iterative design process. The concrete bunds are screened and every effort to integrate the digesters into the surrounding farmland and landscape has been made softening their appearance with planting and colour selection.

The sensitivity for this landscape has been described as **low** in the landscape character assessment, however at the townland scale the finding is mixed and whilst there are certainly degraded aspects of the landscape apparent and commercial forestry influences the adjacent landscape, it would not be correct to say the landscape has few valued elements or that the landscape character is weak. The enlargement of the field system and the removal of internal field boundaries has weakened the landscape character over time but generally the landscape pattern has remained. The alteration of the character near the site of the Proposed Development along the ~~Old~~ Scrouty Road has potential for improvement. While low sensitivity landscape will facilitate change through repair restoration and enhancement , there are still a lot of elements in this landscape which will require protection. The remaining hedgerow system, the gentle slopes and hedgerow trees are important in defining the landscape character. The field pattern as previously described around the burnt mound is already degraded though a radial pattern emanating from the graveyard is partially intact.

Therefore, although the ranking is low for this landscape's sensitivity, it is partially only fully described according to the definition below and merits as much protection as can be afforded.

**Low Areas**; Where the landscape has few valued elements, features or characteristics and the character is weak. The character is such that it has capacity for change; where development would make no significant change or would make a positive change. Such landscapes are generally unrecognised in policy and the principle management objective may be to facilitate change through development, repair, restoration or enhancement

## 11.5 Predicted Impacts

### 11.5.1 Landscape Construction Phase

The changes to the landscape will occur during the construction stage. There will be a new scale introduced into the landscape. The presence of the existing pig units and associated infrastructure near the site of the Proposed Development reduces the sensitivity of the existing landscape to change. The opportunity to restore elements of the landscape character on the public road will slightly improve the landscape character of the area. There will be some loss of hedgerow as a landscape element. The proposed access road will punctuate the hedgerow but the main loss of hedgerow as an element will be to facilitate the provision of sight lines along the ~~Old~~ Scrouty Road. The quality of the plant material here is already compromised so replacing this with a traditional native hedgerow will be an improvement in materiality. The elemental loss has more to do with the form and shape of the segment being removed and its curvature as it relates to the local topography radiating from the archaeological element at Fenough graveyard. The soils and topographical adjustment will work with the existing topography in the area. Any soil disturbance or overload is to be utilised onsite as far as practicable. The proposals are accompanied by a landscape masterplan indicating how the development is to be integrated into the surrounding landscape.

This will achieve ~~in protecting~~the protection of the existing landscape character and reinforce it somewhat. The landscape will appear to combine pasture lands with the Proposed Development and the existing pig unit. The soils and sheltered nature of the site will support the trees, understory and hedgerow as selected in the landscape masterplan which will screen the Proposed Development.

#### 11.5.1.1 Magnitude of Change

During the construction phase there will be activity at the site of the Proposed Development.

Machinery travelling to and from the site, site compounds and storage facilities as well as lighting and other construction aids will have an impact on the landscape in the short term.

During the construction process hedgerow will need to be punctuated and sight lines created but the overall field pattern will remain intact so there is a loss of landscape elements.

The hedgerow to be removed on the ~~Old~~ Scrouty Road follows a curved alignment. The curvature relates approximately to the radius of the nearby Fenough cemetery and its circular enclosure. As mentioned, the field pattern around the burnt mound has already been disrupted. The hedgerow is being replaced with a better more appropriate hedgerow species mix. However, the curve while it remains as a low lying earthwork homage to the original hedgerow location, is dominated by a sharper clean line of the proposed replacement hedgerow.

Landscape character will be affected by the change in land use resulting on the site of the Proposed Development, even though it is contained within the existing field pattern. The change experienced to the landscape will be due to the introduction and scale of the components of the Proposed Development.

This development will be in place for more than 15 years which constitutes a long term change (15 and 60 years as per the EPA guidelines).

The geographical extent will be confined largely within the surrounding topography and hedgerow system. Forestry and slopes will also contribute to enclosing the Proposed Development.

The scale of change will be due to the digestion tanks and their contrast in form to other agricultural buildings and ~~its~~the development's difference from the agricultural character of surrounding fields. The size of the Proposed Development is greater in scale than experienced hitherto at a local level.

The scale and form of the Proposed Development will have a noticeable influence on the landscape within and near the site and incongruity will result directly following construction.

There will be no effect on the greater landscape character area and the magnitude of change will not affect the landscape in its geographical extent.

The proposed palisade fencing and gates will appear industrial at the construction phase.

The reversibility of the development is not considered for the construction phase. The development along with the existing pig farm will result in an increase in the extent of the agro-industrial landscape.

The overall magnitude of change will be '**medium**'. This is in line with the description of medium landscape change which is moderate in extent with the introduction of elements that may be prominent but "not necessarily substantially uncharacteristic in the context. Such development results in change to the character of the landscape but not necessarily reduction in landscape quality and perceived value.

#### 11.5.1.2 Significance of Effects

Setting a medium magnitude of change against low landscape sensitivity gives a significance of effects that is categorised as '**Slight**' according to the matrix in Table 11.1. This aligns with the expectations for slight significance of effects as outlined in the methodology above.

Landscape Sensitivity: **Low**

Magnitude of Change: **Medium**

Setting a low landscape sensitivity against a medium magnitude of change gives a '**slight'** rating for significance of effects at the construction phase of the Proposed Development.

Significance of effects: **Slight**

An effect which causes noticeable changes in the character of the environment without affecting its sensitivities. In the absence of mitigation, the effect will be adverse and long term.

### 11.5.2 Landscape Operational Phase

There will be no change to the landscape form or structures placed therein from the construction phase as the facility becomes operational. There is an expected slight increase in traffic at the facility. As part of the landscape proposals it is recommended that there will be a significant mixed native and naturalised tree planting wrapping around the facility. Considering the likelihood of the landscape design proposals integrating the facility into the landscape and mitigating the effect of the Proposed Development on the landscape at the operational phase it is likely the magnitude of change will be medium to slight. This is considering landscape

character over the first ten years of the operational life of the facility. After this the maturing trees will add a welcome element of landscape diversity to the landscape character.

This will screen but will not hide the scale and form of the structures and add trees to the overall landscape which will blend very well and soften somewhat the edge of the existing commercial forestry in the landscape locally. It will increase the long term permanent visual and amenity value native and naturalised trees lend to the landscape at a local level.
In this way, the operational phase of the Proposed Development presents an opportunity to make a positive contribution to landscape diversity.

The sight lines realignment has provided for some new hedgerow to replace the palisade fencing and a brick and concrete road boundary which will mature over the operational phase of the project. The addition of a screening hedgerow softening the appearance of the industrial palisade fencing will contribute positively to landscape character. Maturing trees will make a positive contribution to the landscape also. The replacement hedgerow on the southern sight line although sharp will have matured during the operational phase.

The planting will envelope the Proposed Development in screening in line with the landscape character of the area. The landscape sensitivity is not changed from the construction phase but the magnitude of change will be lower as the landscape proposals start to establish and grow. In the short to medium term the positive visual impact of the trees and understory development will reduce the magnitude of change experienced at landscape level. The scale of the Proposed Development will warrant a magnitude of change rating that is medium to low.

Landscape Sensitivity: **Low**

Magnitude of Change: **Medium**

Setting a low landscape sensitivity against a medium magnitude of change gives a **'slight'** rating for significance of effects at the operational phase of the Proposed Development.

Significance of effects: **Slight**

In the absence of mitigation, the effect will be adverse and long term.

### 11.5.3 Visual Assessment

In conducting the visual assessment for the Proposed Development, issues relating to views and viewpoints were considered including the amount of time over which a view would be experienced, the angle of the view and whether views would be full, partial or glimpsed. The distance from the Proposed Development was considered and the extent of the area over which the proposed works would be visible. Again, as for the landscape effect, the duration of the visual impact was considered. The duration of the visual effects is considered as appropriate. As per EPA guidelines, duration of effects is categorised as follows.

**Short-term Effects**: Effects lasting one to seven years

**Medium-term Effect**s: Effects lasting seven to fifteen years

**Long-term Effects**: Effects lasting fifteen to sixty years

**Permanent Effects**: Effects lasting over sixty years

As described in Table 11.1 above, the magnitude of change is judged according to a set of criteria with results ranging from very high to negligible. Judgements are made based on the size of the proposed works and the geographical extent of the viewpoints. Consideration is also given to duration of effects as outlined above. In choosing the viewpoints to be assessed the scale at which the Proposed Development will have influence was considered and this is considered within the magnitude of change as assessed. The sensitivity of each view is adjudged taking into consideration other factors apart from value and recognised designations. These include the susceptibility of the viewers, panoramas, frequency of visits, features and rarity of the view and the intact nature of the landscape being viewed. Sensory experiences of place, tranquillity, history, nature and awe also factor into viewpoint sensitivity. A comprehensive assessment was made of potential viewpoints. These were then distilled down to a set of viewpoints which are the subject of the verified photomontage study. The accompanying verified photomontage booklet is to be read in conjunction with this report. In making these assessments, topography, site location, hedgerows systems, woodlands, and residences were considered as well as designated sensitivities and landscape as a resource for visual amenity, recreation, culture and tourism.

### 11.5.4 Visual Impact – Construction Phase

The selected viewpoints were assessed, and this is summarised in Table 11.2 below. The sensitivity at each viewpoint is set against the magnitude of change to arrive at a significance of effects as outlined in Table 11.1 above. Again, the sensitivity of each viewpoint is set against the magnitude of change to that view to arrive at a significance of effects at each viewpoint. The matrix is not solely relied on and where appropriate professional judgement and experience are exercised.

#### 11.5.4.1 Initial Field Study

The area around Curraghnagarraha, Reatagh and Curraghballintlea was visited on 7th February 2024 and 2nd July 2024 for assessment and viewpoint appraisal and again on 11th July 2024 for photography for verified photomontage production. The visual impact assessment is to be read with the 3Dimensional, verified photomontage booklet which accompanies this report. The site location and its hinterland were examined.

A Zone of Theoretical Visibility (ZTV) (Figure 11.11) informed the areas examined. The ZTV is computer generated and takes no account of natural land surface cover woodlands trees forests etc and so presents the worst case scenario. The area north of the River Suir was examined for likely effects. The focus was then turned to the ZTV area around the site of the Proposed Development.

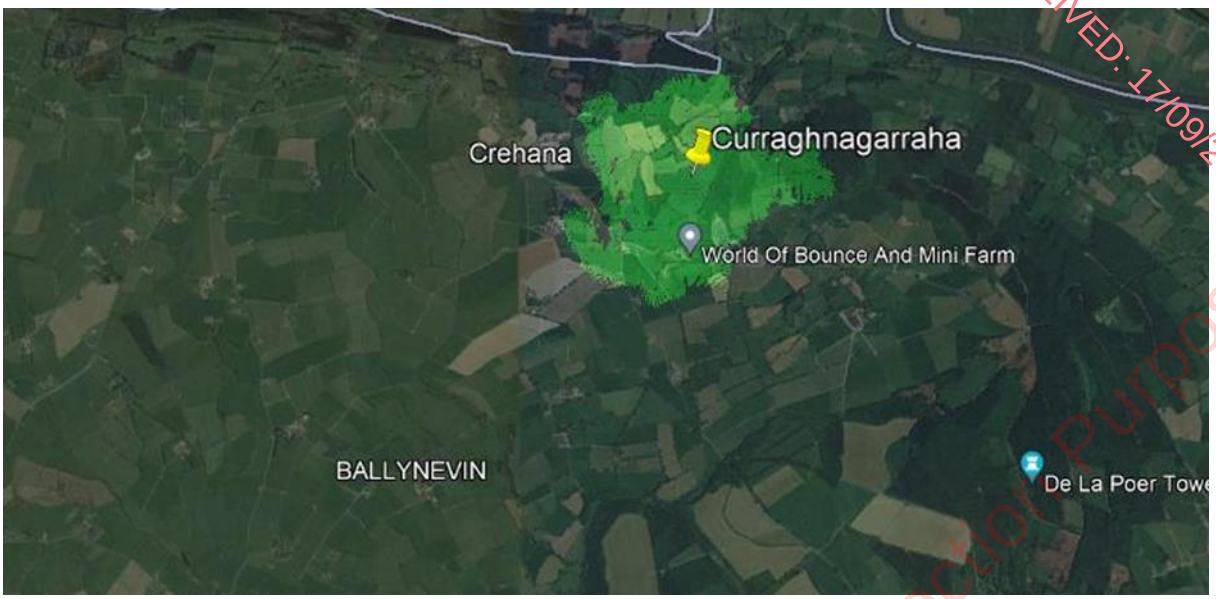



**Figure 11.11: ZTV surrounding the site of the Proposed Development**

Taking topography and vegetative cover into consideration, an inventory of viewpoints was selected. The areas were visited and studied from publicly accessible areas. Upon establishing the location of likely representative viewpoint receptors, each was revisited and an assessment with respect to viewpoint sensitivity and the likely magnitude of change to this view due to the Proposed Development was made. The verified photomontages of these views examine the extent of any visual impact or loss of visual amenity at these viewpoints. A further long distance viewpoint was selected to assess intervisibility and the effect on trail users and a high sensitivity landscape near a woodland clearing at Portlaw Wood.

On the occasion of the initial field studies, conditions were good for the time of year. Deciduous trees and hedgerows were still dormant in February whilst in July all trees and hedgerows were in full leaf.

### 11.5.4.2 Visual Impact - Construction Phase

These views, View Point 1-6, are assessed in detail at the construction stage and at the operational phase. The accompanying verified photomontage booklet prepared by 3Dimensional, gives a clear indication of the magnitude of change at each of these viewpoints.

All viewpoints are taken from publicly accessible areas. All have been accorded ‘high’ receptor sensitivity which as iterated in the methodology above, is defined for viewpoints “that are recognised in policy or otherwise designated as being of value, or viewpoints that are highly valued by people that experience them regularly (such as views from houses or tourist based views focused on the landscape). The composition, character and quality of the view may be such that its capacity for accommodating change may or may not be low. The principle management objective for the view is its protection from change that reduces visual amenity.”

At the construction phase the placing of the structures at a lower base ground level helps partially absorb them into the topography. The objectives of the landscape plan to protect the landscape and views from change that reduces visual amenity cannot be realised at the construction phase but will make a ~~great~~ positive difference during the operational phase when the plant material starts to establish and mature.

**Table 11.2: Predicted Visual Impacts on Selected Viewpoints Assessed – Construction Phase**

| Viewpoint No. | Location | Sensitivity | Magnitude of Change | Significance of Effects | Nature of effects |
|---|---|---|---|---|---|
| VP1 | Tinahalla | High | Negligible | Slight to Not Significant | Neutral |
| VP2 | Curraghnagarraha | High | Medium | Significant | Negative |
| VP3 | Curraghnagarraha | High | Medium | Significant | Negative |
| VP4 | Curraghnagarraha | High | Medium | Significant | Negative |
| VP5 | Reatagh | High | Negligible | Slight to Not Significant | Neutral |
| VP6 | Portlaw Wood | High | Negligible | Slight to Not Significant | Neutral |

**View Point 1**

This view examines the intervisibility between an area included in the WCDP described as having a landscape sensitivity as 'most sensitive'. For this reason and given there are some residential receptors relatively near the viewpoint, this view has been accorded a high sensitivity rating.

The topography and the mature trees and forestry will completely shield the view from the Proposed Development. The magnitude of change at this viewpoint is **'negligible'**. Setting a **'negligible'** magnitude of change against **'high'** viewpoint sensitivity as set out in Table 11.1 above, gives a significance of effects that is rated as '**Slight to not Significant'.** Because there is no intervisibility the rating **'not significant'** is more appropriate.

**View Point 2**

Road users, pedestrians, cyclists and motorists will have a short lived fleeting glimpse of this view and are accorded a low rating for sensitivity. However, residential viewers rely more on the view for visual amenity and are therefore accorded a '**high**' viewpoint sensitivity. The landscape affords integration of the structures. This view shows a '**medium**' magnitude of change at this viewpoint due to the impact of the Proposed Development. The gentle undulations of the topography protect the view to a large extent. Setting a **'medium'** magnitude of change against **'high'** viewpoint sensitivity as set out in Table 11.1 above, gives a significance of effects that is rated as '**Significant'**.

**View Point 3**

This viewpoint represents residential receptors and local road users. There are no designations attached to this view or vistas panoramas or important routes. Given the sensitivity of residential receptors, this view has been accorded a '**high**' viewpoint sensitivity. Road users, pedestrians, cyclists and motorists have a low viewer sensitivity as this view will only be experienced in a fleeting manner.

There will be no real loss of elements in this view but the form shape and scale of the proposals will be apparent at the construction stage. There will be some loss of a sense of

place and a change to the view focus in the short to medium term. This will reverse over time as screening trees and a young woodland establish themselves in the landscape. The magnitude of change to this view will be '**medium'.** The impact of the landscape proposals is not considered for the construction stage as growth will not be effective until the Proposed Development is at the operational phase. Setting a '**high**' viewpoint sensitivity against a '**medium'** magnitude of change to the viewpoint, results in a significance of effects that is rated as **'significant'** as outlined in Table 11.1 above. The duration of the effects will be short to medium term and the nature of the effects will be adverse.

**View Point 4**

This viewpoint represents a residential receptor and intervisibility from the archaeological feature Fenough Church. It is the closest viewpoint examined to the Proposed Development. The view has however, been accorded a '**high'** viewpoint sensitivity to account for a residential receptor and archaeological intervisibility.

The form shape and scale of the proposals will be apparent at the construction stage. There will be some loss of a sense of place and a change to the view focus in the short to medium term. This will reverse considerably over time as screening trees and new hedgerow establish themselves in the landscape. The magnitude of change to this view will be '**medium'.** The impact of the landscape proposals is not considered for the construction stage as growth will not be effective until the Proposed Development is at the operational phase. Setting a '**high**' viewpoint sensitivity against a '**medium'** magnitude of change to the viewpoint, results in a significance of effects that is rated as **'significant'** as outlined in Table 11.1 above. The duration of the effects will be short to medium term and the nature of the effects will be adverse.

**View Point 5**

This viewpoint represents local residences and is taken from higher ground overlooking the site of the Proposed Development. There is a good sense of place in this view which will not be affected in any way by the proposals. Residential receptors are a sensitive group and are accorded a '**high**' viewer sensitivity.

The Proposed Development won't be seen during the construction stage and the entire facility is well shielded due to topography and vegetative cover. The magnitude of change attributed to this view is '**negligible**'. Setting a '**high**' viewpoint sensitivity against a '**negligible**' magnitude of change to the viewpoint, results in a significance of effects that is rated as **'slight to not significant'** as outlined in Table 11.1 above. Having regard for the verified photomontage for viewpoint 5 '**not significant**' is the appropriate rating.

**View Point 6**

This viewpoint represents trail users, hikers and examines the intervisibility between the high sensitivity landscape at Portlaw Wood. It is a long range viewpoint considered given the significance of the area for walking and the interconnected nature of the trails in a high sensitivity landscape. Walking and hiking in this area is dependent on the landscape and views as a resource. There are no listed vistas panoramas or views across this viewing point. Neither are there any listed touring routes but the proximity of the looped trail is considered. The landscape in this view is intact with some elements of large agro-industrial units apparent. The

Proposed Development is just apparent in the view but is at such a distance and so well shielded by topography trees woodland and forestry it is barely noticeable.

Recreational viewers rely on the view for visual amenity and are therefore accorded a '**high**' viewpoint sensitivity. This level of sensitivity is also appropriate given the intervisibility being examined between the high sensitivity landscape and the Proposed Development. The verified photomontage for this view shows a '**negligible**' magnitude of change at this viewpoint due to the impact of the Proposed Development. Setting a **'negligible'** magnitude of change against **'high'** viewpoint sensitivity as set out in Table 11.1 above, gives a significance of effects that is rated as '**Slight to not Significant'**.

### 11.5.5 Visual Impact – Operational Phase

The operational phase of the Proposed Development will not have any additional large impacts on visual receptors. There will be no change to structures in the views from the construction phase. There will be more vehicular movement into and out of the facility affecting mainly viewpoints 3 and 4. There are specific considerations at each viewpoint which are addressed here below.

As part of the landscape and mitigation measures long term changes to the landscape are taken into consideration over the life of the project. The ability of the landscape proposals to not only mitigate but improve the quality of the views in line with landscape character over time is factored in at the operational stage of the Proposed Development. The landscape measures are considered here during the operational phase of the project when hedgerow development and tree growth will make a considerable contribution to protecting visual amenity. The species, plant specifications optimum growth rates and establishment time is considered.

The selected viewpoints were assessed as for the construction phase above, and this is summarised as outlined in Table 11.3 below. The sensitivity at each viewpoint is set against the magnitude of change to arrive at a significance of effects as outlined in Table 11.1 above. As for the construction phase the sensitivity of each viewpoint is set against the magnitude of change to that view. The magnitude of change is set against the viewpoint sensitivity to arrive at a significance of effects at each viewpoint. The matrix is not over relied on and professional judgement and experience is employed to rate the viewpoints.

The operational phase of the project gives an opportunity to the developer to future proof the visual amenity afforded by tree planting and hedgerow amelioration. The operational period will coincide with the establishment of trees and hedgerows which will buffer the key areas around the structures and soften the security palisade fencing. It is estimated that there will be effective screening in the short to medium term approximately seven to ten years with the ameliorating effect of the landscape proposals increasing each year. Many of the tree species will live for more than 100 years having a permanent positive impact on the views. There is good evidence from local hedgerow trees and hedgerows that the soils and conditions will be able to support screening. Wetter areas will have no trouble supporting *Alnus glutinosa.*

Maintenance standards for hedgerows will necessarily need to be of a very high quality, with hedgerow structure being renewed by laying and infilling native species where necessary. All this plant material as well as the trees specified to be sourced and propagated as locally as possible. This material is to be disease free. It is recommended that hedgerows are to be rejuvenated over a period of time with opposite sides layed on alternate years. There is also an opportunity during the operational period to repair localised damage to hedgerows and infill with quicks as required. The local style of hedgerow laying to be adhered to. By maintaining the

hedgerows to stock proof standards in the traditional manner and allowing hedgerow trees to emerge in the hedgerows, visual amenity is protected and improved. Replacing ash as it dies out in the hedgerow over the operational period with other climax tree species like oak will protect visual amenity and biodiversity in the long term.

**Table 11.3: Predicted Visual Impacts on Selected Viewpoints Assessed – Operational Phase**

| *Viewpoint No.* | Location | Sensitivity | Magnitude of Change | Significance of Effects | Nature of effects |
|---|---|---|---|---|---|
| *VP1* | Tinahalla | High | Negligible | Slight to Not Significant | Neutral |
| *VP2* | Curraghnagarraha | High | Low | Moderate to Slight | Negative |
| *VP3* | Curraghnagarraha | High | Low | Moderate to Slight | Negative |
| *VP4* | Curraghnagarraha | High | Low | Moderate to Slight | Negative |
| *VP5* | Reatagh | High | Negligible | Slight to Not Significant | Neutral |
| *VP6* | Portlaw Wood | High | Negligible | Slight to Not Significant | Neutral |

**View Point 1**

This view examines the intervisibility between an area included in the WCDP described as having a landscape sensitivity as 'most sensitive'. For this reason and given there are some residential receptors relatively near the viewpoint, this view has been accorded a high sensitivity rating. There is no change between the operational and construction phase at this viewpoint.

As for the construction phase, topography and the mature trees and forestry will completely shield the view from the Proposed Development. The magnitude of change at this viewpoint is **'negligible'**. Setting a **'negligible'** magnitude of change against **'high'** viewpoint sensitivity as set out in Table 11.1 above, gives a significance of effects that is rated as '**slight to not Significant'.** Because there is no intervisibility the rating **'not significant'** is more appropriate.

**View Point 2**

The development of the hedgerows trees and screening will greatly negate the effect of the structures in the landscape at this viewpoint. Road users, pedestrians, cyclists and motorists will have a short lived fleeting glimpse of this view and are accorded a low rating for sensitivity. Nearby, residential receptors are considered at this viewpoint and are accorded a '**high**' viewpoint sensitivity. The verified photomontage for this view shows a '**low**' magnitude of change at this viewpoint due to the impact of the Proposed Development. The gentle undulations of the topography protect the view to a large extent. Setting a **'low'** magnitude of change against **'high'** viewpoint sensitivity as set out in Table 11.1 above, gives a significance of effects that is rated as '**moderate to slight'**.

**View Point 3**

This viewpoint represents residential receptors and local road users. There are no designations attached to this view or vistas panoramas or important routes. Given the sensitivity of residential receptors, this view has been accorded a '**high**' viewpoint sensitivity. Road users, pedestrians, cyclists and motorists have a low viewer sensitivity as this view will only be experienced in a fleeting manner. There will be no real loss of elements in this view but the form shape and scale of the proposals will be apparent at the construction stage. There will be some loss of a sense of place and a change to the view focus in the short to medium term but during the operational phase there will also be a good development in the screening, trees and hedgerows surrounding the Proposed Development. This will mitigate the effect on the view which will be experienced at the construction stage. There will be some experience of vehicular movement in the view during the operational phase of the development. The magnitude of change to this view will be '**low'.** Setting a '**high**' viewpoint sensitivity against a '**low'** magnitude of change to the viewpoint, results in a significance of effects that is rated as **'moderate to slight'** as outlined in Table 11.1 above. The effects will continue to diminish in the medium to long term.

**View Point 4**

This viewpoint represents a residential receptor, the World of Bounce pet farm and intervisibility from the archaeological feature Fenough Church. It is the closest viewpoint examined to the Proposed Development. The view has, been accorded a '**high'** viewer sensitivity to account for a residential and recreational receptor and archaeological intervisibility.

The form shape and scale of the proposals will be apparent but will settle better into the view with the development and growth of trees, screen planting and hedgerow thickening and maintenance. During the operational phase the growing trees, hedgerows and screen planting will soften the structures in this view. There will be more activity on a proposed access road during the operational stage. The magnitude of change to this view will be '**low',** which set against a high viewpoint sensitivity results in a significance of effects that is rated as **'moderate to slight'** as outlined in Table 11.1 above. The specified trees, hedgerows and screening will continue to ameliorate the view adding diversity and protecting visual amenity in the medium to long term.

**View Point 5**

This viewpoint represents local residences and is taken from higher ground overlooking the site of the Proposed Development. There is a good sense of place in this view which will not be affected in any way by the proposals. There will be no difference between the magnitude of change at the construction stage and the operational stage of the Proposed Development. Residential receptors are a sensitive group and are accorded a '**high**' viewer sensitivity. The Proposed Development won't be seen during the construction stage and the entire facility is well shielded due to topography and vegetative cover. The magnitude of change attributed to this view is '**negligible**'. Setting a '**high**' viewpoint sensitivity against a '**negligible**' magnitude of change to the viewpoint, results in a significance of effects that is rated as **'slight to not significant'** as outlined in Table 11.1 above. Having regard for the verified photomontage for viewpoint 5 '**not significant**' is the appropriate rating.

**View Point 6**

This viewpoint represents trail users, hikers and examines the intervisibility between the high sensitivity landscape at Portlaw Wood. It is a long range viewpoint considered given the

significance of the area for walking and the interconnected nature of the trails in a high sensitivity landscape. Walking and hiking in this area is dependent on the landscape and views as a resource. There are no listed vistas panoramas or views across this viewing point. Neither are there any listed touring routes but the proximity of the looped trail is considered. The landscape in this view is intact with some elements of large agro-industrial units apparent. The Proposed Development is just apparent in the view but is at such a distance and so well shielded by topography trees woodland and forestry it is barely noticeable.

Recreational viewers rely on the view for visual amenity and are therefore accorded a '**high**' viewpoint sensitivity. This level of sensitivity is also appropriate given the intervisibility being examined between the high sensitivity landscape and the Proposed Development. The verified photomontage for this view shows a '**negligible**' magnitude of change at this viewpoint due to the impact of the Proposed Development. Setting a **'negligible'** magnitude of change against **'high'** viewpoint sensitivity as set out in Table 11.1 above, gives a significance of effects that is rated as '**Slight to not Significant'**.

### 11.5.6 'Do Nothing' Scenario

It is likely that the pig unit will continue to expand, with the slurry continuing to be land spread. The pig farm and it structures will have a landscape and visual impact at similar viewpoints as indicated in this report. Trends in the existing environment will indicate that field size may increase over the coming years and this could result in the further loss of hedgerow field boundaries.

There would be no visual or landscape impact experienced at the construction phase due to the construction of the site or its structures.

### 11.5.7 Cumulative Impact

The cumulative impact of the Proposed Development with the preexisting pig unit and accompanying infrastructure is already largely considered for both landscape and visual receptors. There are no other known proposals of a similar nature planned for this area. The significance of effects will therefore be no greater on the landscape or visual receptors than as assessed above. The landscape sensitivity is still rated as **low** whilst the magnitude of change will be **medium.** The significance of effects for the cumulative impact of the Proposed Development will be **slight** as assessed according to the matrix as set out in Table 11.1 above. The duration of the impact will be long term with the mitigating effect of the landscape proposals reducing the effect as time goes by.

## 11.6 Mitigation Measures

The following landscape protection and landscape impact mitigation measures should be put in place to avoid, eliminate or minimise any potential landscape and visual impact associated with the construction of the Proposed Development.

- Any area of site subject to soil disturbance is to be repaired, the soil reworked into the site, recontoured and modelled. Matching sod/seed sown to blend the topography back into the rural landscape.
- All construction materials, fill, gravel, etc to be removed from the site and surrounding fields once the works are complete.
- An irrigation plan to be put in place to allow for establishment of plantings with irrigation water source to be identified prior to the spring of the first year of planting. A plan to irrigate in hot weather and as required to be put in place especially for the first two years after planting. Recovered process water may be used.

**Avoidance Prevention Reduction and Offsetting**

Mitigation is discussed below as a measure of avoidance, prevention, reduction and offsetting of impacts and effects. The positioning of the digestion tanks into the topography by retaining the bunds and sloping the access into the site of the Proposed Development has prevented the structures breaking the skyline at specific viewpoints and reduced its impact. Other measures include;

**Disease**

- The avoidance of *Fraxinus excelsior*, ash, in any infill planting in the hedgerow system will not only protect existing landscape trees from the biologically infectious chalara disease, but it will also protect the local habitats that ash supports for as long as possible, by avoiding this biosecurity risk.

- Any plant materials brought on site to bulk out the plantings during the operational phase of the project to be disease free, to at a minimum hold all relevant plant passports and preferably be sourced field grown and inspected at source prior to planting. This is to avoid spreading potential infections to local populations. All trees and shrubs will conform to the specification for nursery stock as set out in British Standard 3936 Parts 1 (1992) and 4 (1984). Advanced Nursery stock trees if used in tree planting shall conform to BS 5236.

**Topsoil**

- Avoid bringing any additional topsoil on site. Use local soil to make localised repairs. Where additional topsoil is required use from a matching source as local as possible to the Proposed Development. Do not mix topsoil and sub soil during construction. Identify storage area where soils are to be stored separately until they are reworked into the soil.

**Invasive Species**

- Avoid spreading or bringing invasive plant species onsite in soil or plant materials. Soil and plant material hygiene to be observed and plant, boots, tools and equipment to be clean before being brought on site. All involved at the construction stage to be made aware of this prior to coming on site.

Invasive Alien Plant Species include;

- Japanese knotweed *Fallopia japonica*
- Giant knotweed *Fallopia sachalinensis*
- Bohemian knotweed *Fallopia x bohemica*
- Himalayan knotweed *Persicaria wallichii*
- Old man's beard *Clematis vitalba*
- Winter heliotrope *Petasites fragrans*
- Garden Yellow Archangel *Lamiastrum galeobdolon ssp argentatum*

Of these, knotweed is most likely to be problematic if introduced onsite.

- Palisade fencing is to be softened by placing new hedgerow and hedgerow trees on the boundary line with the security fencing tucked inside. This reduces the effect of industrial items on landscape character in rural areas.

- All hedgerows and hedgerow trees to be protected during the construction process with a root protection zone established outside the dripline of the trees and hedges whichever is greater, prior to the commencement of construction . No root systems to be trenched severed or cut and there is to be no piling of building materials, soil, plant, containers or any loading material on the protected root zone during construction. All parties involved in the construction process to be made aware of this avoidance measure. No unnecessary damage is to occur to the existing tree and hedgerow complex during construction or afterwards during operations.

- Planting specifications to be overseen by a qualified landscape architect during the construction and operational period as required.

**Reinforcing landscape**

- Stone walls are in good condition and it is recommended that they receive local repairs with any damage received during construction to be repaired in the traditional manner. Repairs are not to be carried out using heavy machinery but rather in the manner of traditional hand worked stone walls.

- All plantings to be properly executed and irrigated with correct amounts of fertiliser and pruning given to ensure plant health and vigour.

**Landscape Maintenance and Management Plan**

- A landscape management plan is to be produced and ready post construction so that all new and existing planting, hedgerows, and trees will be immediately cared for and promptly maintained. This plan along with any necessary method statements to be produced during the operational phase of the planting by a qualified landscape architect.

- Landscape maintenance and management plans ought to remain in place until all plantings are fully established and during the life of the Anaerobic Digestion Facility. The aim of the plan is to continue to ensure landscape character is maintained as well as biodiversity and habitat protection.

- A landscape maintenance and management plan will include a small woodland/hedgerow management plan and will address appropriate hedgerow cutting, timing of operations, protection of hedgerow habitats, address irrigation of newly planted trees or infill plants,

accessing water, pruning, weeding, fertilising, trimming, management of dead and diseased wood, and general maintenance. Any areas requiring artificial shelterbelt to help them establish are to be identified at the outset after planting is commenced. Plant establishment to be provided for appropriately. All amelioration as required for good plant establishment to be tailored to the plants, trees and hedgerows to satisfy their growing needs.

- The mitigation measures as outlined are conducted throughout the life of the operation.
- Periodically the landscape maintenance and management plans to be reviewed to ensure growth, screen establishment and general appearance of the site is fulfilling its original intent.
- Hedgerow maintenance and laying are to occur outside of the nesting season and where hedgerows are weak and require significant work to rejuvenate the hedgerows.

## 11.7 Interactions and Cumulative Impact

Other environmental impacts which will interact with landscape and visual impacts in the case of this Proposed Development are Biodiversity and Archaeology.

### 11.7.1 Biodiversity and Carbon Absorption

Biodiversity, both floral and faunal will benefit from tree planting and tree maintenance and the use of native and naturalised species as prescribed in the planting mix. There will also be a pollinator benefit from the hedgerow specifications, increasing the habitats for bees and other pollinating insects. Adding native and naturalised trees to the landscape has a generalised effect of increasing habitat size and habitat connectivity in the area. It adds to the corridors which connect hedgerows, woodlands and habitats to each other.

The avoidance of *Fraxinus excelsior*, in the planting plan species mix will not only protect existing landscape trees from the biologically infectious chalara disease, but it will also protect the local habitats that ash supports for as long as possible, by avoiding this biosecurity risk. Avoiding infectious plant diseases in plant selection will also prevent spreading disease to local tree stands.

The emphasis on disease resistant, resilient screening trees of native and naturalised provenance which will incorporate alternative climax species to ash will ensure a good addition to the local biodiversity. The requirement to use locally sourced and propagated, native and naturalised plant material will decrease the chances of introducing disease to the system. Planning to add climax trees like oak to the planting specification ensures the schedule of planting is maximising its capacity as a carbon absorptive sink. This service will continue in permanently i.e. for a period of greater than 60 years.

### 11.7.2 Interaction of the LVIA with Archaeology

There is a slight landscape relationship with the nearby Fenough church and graveyard as expressed in the curvature of the landscape pattern along Old Scrouty Road. Site intervisibility is examined in the visual section of the report above from Viewpoint 4.

Acknowledging the sensitivity of archaeological features in the landscape these viewpoints were accorded a high viewpoint sensitivity in the assessment. By the operational phase the view from Viewpoint 4 is expected to have a '**moderate to slight**' significance of effects with maturing hedgerow and trees predicted to significantly screen the proposed facility.

The landscape pattern around the burnt mound (as listed in the archaeological report WA003033) is already degraded and the linear small field pattern is very weak. From a landscape perspective the Proposed Development will have little effect on this element of landscape.

### 11.7.3 Residual Impacts

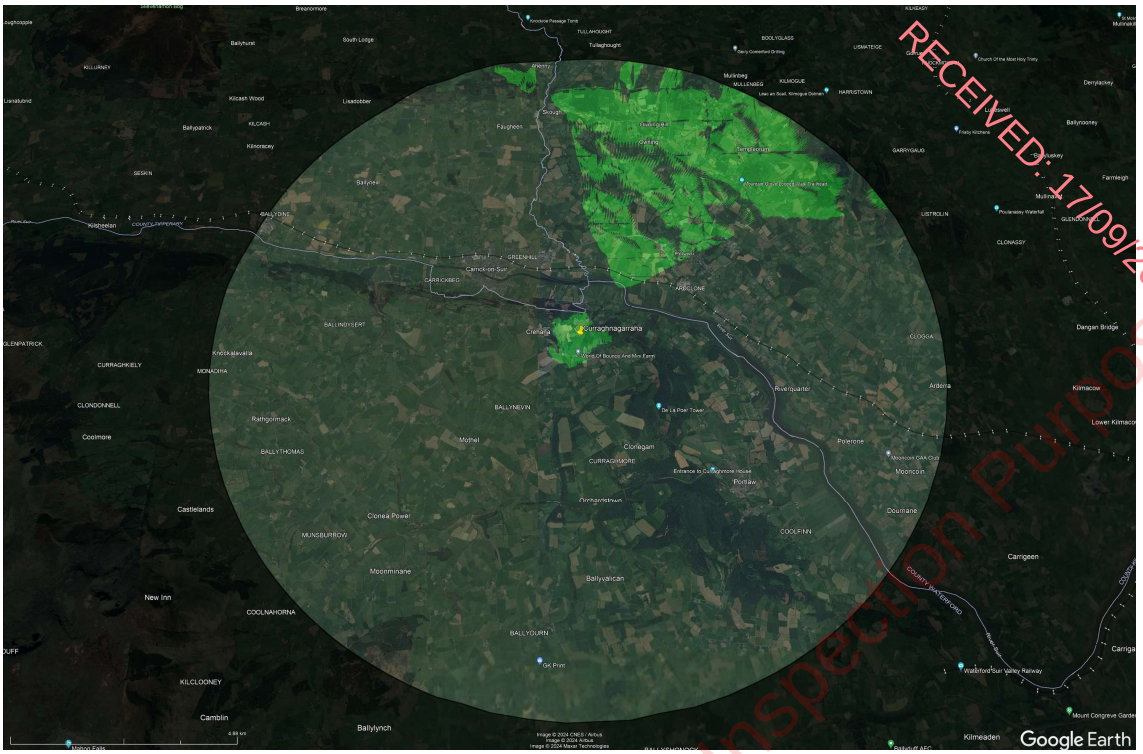
Once all mitigation measures have been implemented and there is ongoing care provided to the landscape tree planting and hedgerows over the life of the project, the Proposed Development will not be hidden but it will be effectively screened.

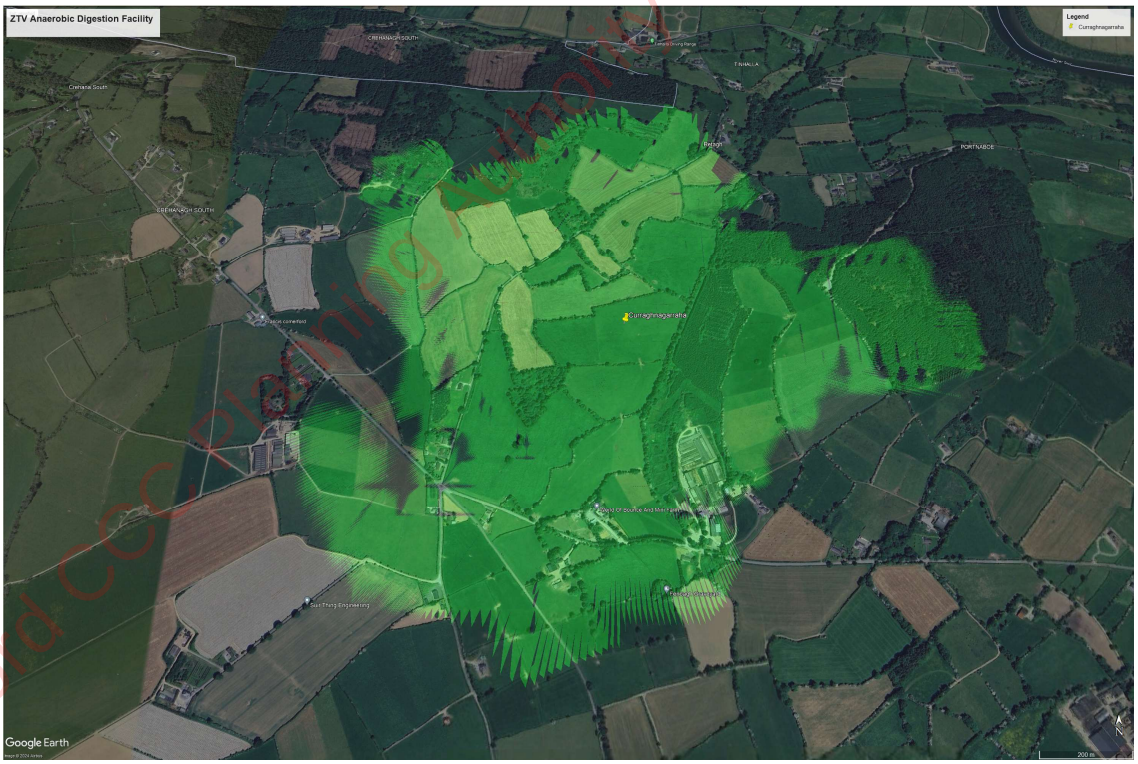
Viewpoints 2, 3 and 4 will experience a view of the proposals diminishing consistently in the medium to long term.

## References


- Environmental Protection Agency, 2022. Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports
- Landscape Institute and the Institute of Environmental Management and Assessment, 2013 Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA)
- Waterford County Council LCA, Landscape Character Appraisal Waterford County Development Plan 2022-2028
- Waterford City and County Development Plan 2022-2028
- Power, Rev. Cannon P., D. LITT. M.R.1.A.(1952) *THE PLACE-NAMES OF DECIES*, 2nd Ed., Cork University Press, Oxford: B. H. Blackwell, Ltd.

## Appendix 11.1: ZTV




Zone of theoretical visibility (ZTV)Anaerobic Digestion Facility, Curraghnagarraha, Retagh

## Appendix 11.2: Field Survey Photoset