

# Landscape and Visual Impact Assessment.

**Killymallaght Energy Storage System, Trench Road,  
Disertowen, Co. Derry/Londonderry**

On behalf of RES.

Date: 12/06/2024 | Pegasus Ref: P23-2714

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# 1. Introduction.

## Terms of Reference

- 1.1. Pegasus Group has been instructed by RES Ltd. (the applicant), to undertake a Landscape and Visual Impact Assessment in relation to a proposed battery energy storage scheme (BESS) on land close to the Killymallaght substation, in the townland of Disertowen, approximately 2.5km southeast of Newbuildings, Co. Derry/Londonderry. (the site).
- 1.2. This LVIA will consider existing landscape and visual receptors in the study area, these include:
  - Physical landscape resources;
  - Landscape character; and
  - Views and visual amenity experienced by residents, recreational users (including visitors and tourists) and road users.
- 1.3. Principles and good practice for undertaking landscape and visual impact assessment are set out in the Landscape Institute (LI) and the Institute of Environmental Management (IEMA) Guidelines for Landscape and Visual Impact Assessment, Third Edition (2013)<sup>1</sup> (GLVIA3). The detailed methodology used is set out in **Appendix A**.
- 1.4. The scope of this LVIA has included early consideration of constraints and opportunities for the site and its local landscape context. This has been used to inform the current proposed Landscape Masterplan for the proposed development which, consequently, incorporates a 'landscape and ecologically led' approach to design and mitigation.
- 1.5. The proposed Landscape Masterplan for the proposed development, including proposed landscape and visual mitigation measures, is included as **Appendix B**.

## Site Overview

- 1.6. The site comprises a single field of agricultural grazing land, ca. 3.88 hectares (ha), with the access to the site proposed from its south-eastern edge, off Trench Road (refer to **Figure 1, Site Location Plan**).
- 1.7. The site lies within the administrative area of Derry City and Strabane District Council (DCS DC).
- 1.8. Additional information and a more detailed description on the physical components, landscape character and visual amenity of the site and study area are set out in later sections of this LVIA.

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<sup>1</sup> Landscape Institute and Institute of Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment, 3rd Edition*

## 2. Approach and Methodology

### Overview

- 2.1. The approach and methodology used for this report has been developed using best practice guidance, as set out in the following documents:
- Landscape Institute and Institute of Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment, 3rd Edition*;
  - Natural England (2014) *An Approach to Landscape Character Assessment*;
  - Landscape Institute (2019) *Technical Guidance Note O6/19: Visual Representation of Development Proposals*; and
  - Landscape Institute (2021) *Technical Guidance Note O2/21: Assessing Landscape Value Outside National Designations*.
- 2.2. Use has also been made of additional sources of data and information, such as published character assessments, aerial imagery (Google Earth), and Ordnance Survey (OS) base mapping. These are referenced in the relevant sections of the baseline information.
- 2.3. Supporting plans and figures have also been produced as part of this LVIA and are included as **Figures 1 to 6**.

### Study Area

- 2.4. The study area for this LVIA covers an approximate 3km radius from the application site.
- 2.5. Locations slightly beyond 3km have considered to the north-west of the site (and north-west of the River Foyle) as these areas include some local rights of way and a historic park and gardens (off Ballougry Road).
- 2.6. The boundary of the Sperrin National Landscape (formally Area of Outstanding Natural Beauty, AONB) is located over ca. 5.5km to the south-east of the site (refer to **Figure 2**). Although views to the site and proposed development would be only limited, this area has been considered in the initial stages of the LVIA to ensure that long distance views from the National Landscape are addressed.
- 2.7. However, following an initial review as part of the early stages of the LVIA, views to the site from these more distant designated landscape areas were restricted, and any potential impacts would not likely give rise to significant effects. Consequently, this area is excluded from the later, more detailed stages of the LVIA, and the main focus of the detailed assessment applies a radius of ca. 2km from the application site.

### Level of Assessment

- 2.8. Principles and good practice for undertaking landscape and visual impact assessment are set out in GLVIA3.

- 2.9. GLVIA3 acknowledges that landscape and visual impact assessment (LVIA) can be carried out either as a standalone assessment or as part of a broader EIA. GLVIA3 notes that the overall principles and core steps in the process are the same but that there are specific procedures in EIA with which an LVIA that sits within an EIA must comply.
- 2.10. This assessment has been prepared as a detailed LVIA and addresses matters of individual landscape resources, landscape character areas, and visual amenity (including the use of representative viewpoints). The LVIA also considers the interaction between landscape character and views in relation to physical components of the landscape. The LVIA draws on professional judgement in relation to sensitivity of receptors (both landscape and visual), the nature of impacts and consequential likely effects. This process informs judgements on a landscape mitigation strategy which will avoid, reduce, or remedy adverse impacts.
- 2.11. Landscape features and elements provide the physical environment for flora and fauna and the associated importance of biodiversity assets. This LVIA does not consider the value, susceptibility or importance on ecology and biodiversity, nor does it consider impacts from an ecological stance.
- 2.12. Heritage assets such as Scheduled Monuments (SMs), Listed Buildings (LBs) and Conservation Areas (CAs) all contribute to the overall present-day landscape character, context and setting of an area. These aspects have been given consideration in the LVIA in terms of physical landscape resources (for example trees and hedgerows) and landscape character. However, this LVIA does not address the historic significance, importance or potential impacts on heritage assets and designations; these assets are assessed in the context of landscape and visual matters only.

## **Night-Time Impacts/Lighting Impacts**

- 2.13. At Paragraph 6.12, GLVIA3 notes that for some types of development, the visual effects of lighting may be an issue, and in such cases, it may be important to carry out night-time 'darkness' surveys of the existing conditions in order to address the potential effects of lighting.
- 2.14. The proposed development would not require illumination during the hours of darkness during normal operations. Any illumination would relate only to emergency (maintenance) situations, with the resulting effects being very limited in extent and duration. Further assessment of night-time impacts and lighting is not therefore considered necessary.

## **Collating Baseline Information**

- 2.15. To capture a comprehensive description of the baseline position for landscape and visual receptors, information has been collated using a process of desk study and field survey work.
- 2.16. The desk study includes reference to published landscape character studies and other published policy documents relevant to landscape and visual matters, such as OS 1:25,000 base mapping, other base mapping and aerial imagery.
- 2.17. Field survey work was completed during March 2024. A series of representative photographs were taken with a full-frame digital SLR camera with a 50mm fixed focal length lens, set at approximately 1.7 metres Above Ground Level (AGL). These are presented as a series of

viewpoints and have been used to inform both the landscape and, separately, visual assessment work.

- 2.18. The field survey and viewpoint photography were undertaken in early March when the majority of deciduous vegetation had lost most of its leaf cover and prior to the onset of spring. Consequently, the viewpoints effectively illustrate a worst-case scenario in terms of potential visibility of the proposed development. Where appropriate, consideration has also been given to the potential for reduced visibility during the summer months when deciduous vegetation is in full leaf.

## **Consideration of Effects**

- 2.19. Having established the relevant baseline position, the LVIA process then identifies landscape receptors and visual receptors, and considers their specific sensitivity to development of the type proposed. The LVIA then identifies the nature and magnitude of potential impacts, and consequently the likely scale of effect that would arise from the proposed development on the identified landscape and visual receptors.
- 2.20. Effects are considered at Year 1 (post-construction) and Year 15 (once the proposed mitigation has had time to develop and grow, becoming a discernible part of the local landscape pattern). Construction phase effects are generally not considered separately in detail as their short-term temporary nature means that construction phase effects would not exceed the operational effects in magnitude or scale.

### 3. Designations and Planning Policy Context

- 3.1. This section sets out an overview of planning designation relevant to landscape and visual matters, and of planning policy where this is relevant to the character and appearance of the landscape and/or views and visual amenity.

#### Landscape Related Designations

- 3.2. The site is not located in an area included in a statutory landscape designation at the national or local level (refer to **Figure 2, Planning Designations**).
- 3.3. Landscape designations in NI which identify areas of high landscape quality include Areas of Outstanding Natural Beauty (recently renamed as 'National Landscapes'). There are nine AONBs in the region and these include 75% of the regions coastline. Closest to the site is the Sperrin NL, nearly 5km to the south-east of the site. Other areas of 'High Scenic Value/High Landscape Importance' are of 'Regional Importance' and designated in Development Plans, however the site and surrounding landscape are not defined as such.
- 3.4. In the local landscape context surrounding the site there are numerous 'Sites and Monuments' and 'Listed Buildings' throughout the area.
- 3.5. Whilst woodland blocks and tree belts are scattered across the landscape, ca. 1km to the east/north-east of the site an area of woodland close to Carnafarn is a designated priority woodland habitat.
- 3.6. To the west of the River Foyle, an area is designated as a 'Historic Park and Garden', located between Balloughy Road and Mullenan Road and, whilst this is over ca. 7km to the west of the site, there remains some potential inter-visibility with the site/proposed development.

#### Policy Relevant to Landscape and Visual Matters

##### European Landscape Framework

- 3.7. The European Landscape Convention (ELC) promotes the protection, management and planning of European landscapes. The ELC was adopted on 20 October 2000 and came into force on 1 March 2004. It defines landscape as:
- 3.8. *"...an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors)."*
- 3.9. This definition is important in that it focuses on landscape as a resource in its own right and moves beyond the idea that landscapes are only a matter of aesthetics and visual amenity.

##### Northern Ireland Planning System

- 3.10. Responsibility for planning in Northern Ireland is shared between the Department for Infrastructure (DFI) and the eleven local councils; with reference to the site, Derry City and Strabane District Council (DCSDC). Whilst the DFI is responsible for setting planning legislation and regional planning policy, DCSDC are responsible for preparing local development planning polices.

- 3.11. The following sections set out a brief context and summary of those regional and local policies relevant to landscape and visual matters.

DFI Regional Development Strategy 2035 (2010)

- 3.12. The purpose of the Regional Development Strategy (RDS) is to provide 'an overarching strategic planning framework to facilitate and guide the public and private sectors. The RDS notes that it complements other department's strategies with a spatial perspective.
- 3.13. In defining the vision and aims, the RDS refers to landscape in the context of 'protecting and enhancing the environment for its own sake', stating that<sup>2</sup>:

***"Protecting the environment is essential for enhancing the quality of life of current and future generations. Northern Ireland's environment is one of its greatest assets, with its stunning landscapes, an outstanding coastline, a complex variety of wildlife and a rich built and cultural heritage for the ecosystem services it provides, and its sense of place and history for all."***

- 3.14. In setting strategic guidance, the RDS addresses the 'Natural Environment', considering landscape in Regional Guidance policy RG11 'Conserve, protect and, where possible, enhance our built heritage and our natural environment', which states that<sup>3</sup>:

***"Recognise and promote the conservation of local identity and distinctive landscape character. Landscape character is what makes an area unique. It is defined as "a distinct, recognisable and consistent pattern of elements, be it natural (soil, landform) and/or human (for example settlement and development) in the landscape that makes one landscape different from another, rather than better or worse". We can only make informed and responsible decisions on the management and planning of sustainable future landscapes if we pay proper regard to their existing character. By understanding how places differ we can also ensure that future development is well situated, sensitive to its location, and contributes to environmental, social and economic objectives. The Northern Ireland Landscape Character Assessment 2000 provides valuable guidance on local landscape character and scenic quality."***

***Conserve, protect and where possible enhance areas recognised for their landscape quality. Protected landscapes should continue to be managed through a partnership approach involving central and local government and the local communities."***

***Protect designated areas of countryside from inappropriate development (either directly or indirectly) and continue to assess areas for designation. Designating special areas for protection is an effective way of ensuring our wildlife and natural landscapes retain their individual characteristics. Some areas are deemed of such importance that they are formally designated under various pieces of national and international legislation."***

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<sup>2</sup> Regional Development Strategy 2035, page 20, paragraph 2.10

<sup>3</sup> Regional Development Strategy 2035, pages 51 and 52, paragraph 3.31



- 3.15. In the context of the RDS policies, it should be noted that ‘landscape character guidance’ has been referenced as part of this LVIA (and used to inform the approach to landscape and visual mitigation) and that the site is not located within a designated landscape.

DFI Strategic Planning Policy Statement (2015)

- 3.16. The Strategic Planning Policy Statement<sup>4</sup> (SPPS) consolidates some twenty separate policy publications into one document and provides the core planning principles to underpin delivery of the two-tier planning system. The provisions of the SPPS must be taken into account in the preparation of Local Development Plans, and are also material to all decisions on individual planning applications and appeals.
- 3.17. The SPPS sets out ‘core planning principles’ which include reference to ‘Supporting Good Design and Positive Place-Making’ and ‘Good Design’. This section of the SPPS states that<sup>5</sup>:

***“Design involves shaping how all elements of the built and natural environment relate to each other through the construction of new buildings, restoration and redevelopment of historic buildings, creation of public spaces and environmental improvements.***

***Good design identifies and makes positive use of the assets of a site and the characteristics of its surroundings to determine the most appropriate form of development***

***Design is an important material consideration in the assessment of all proposals and good design should be the aim of all those involved in the planning process and must be encouraged across the region. Particular weight should be given to the impact of development on existing buildings, especially listed buildings, monuments in state care and scheduled monuments, and on the character of areas recognised for their landscape or townscape value, such as Areas of Outstanding Natural Beauty, Conservation Areas, Areas of Townscape Character and Areas of Special Archaeological Interest...”***

- 3.18. Going on to state:

***“All proposals for development in the countryside must be sited and designed to integrate sympathetically with their surroundings, including the natural topography, and to meet other planning policy and environmental considerations, including the policy approach to cluster, consolidate and group new development with existing established buildings.”***

- 3.19. In relation to ‘Preserving and Improving the Built and Natural Environment’ the SPPS states that<sup>6</sup>:

***“The quality of our local environment is world renowned. Its exceptional quality provides an important contribution to our sense of place, history and cultural identity. Our region has a rich and diverse archaeological and built heritage as well as a distinctive and beautiful landscape.”***

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<sup>4</sup> Strategic Planning Policy Statement, DfI, 28 Sept 2015

<sup>5</sup> Strategic Planning Policy Statement, page 19, paragraphs 4.24 to 4.26 and 4.30

<sup>6</sup> Strategic Planning Policy Statement, page 22, paragraphs 4.37

3.20. The layout of the proposed development has been considered with regard to landscape and visual matters and these, along with other environmental topics, have influenced both the design of the scheme as well as the mitigation included as an inherent part of the proposed development.

3.21. Section 6 of the SPPS addresses 'Archaeology and Built Heritage', however, is pertinent to landscape and visual matters, stating that<sup>7</sup>:

***"In all circumstances proposals for development in the countryside must be sited and designed to integrate sympathetically with their surroundings, must not have an adverse impact on the rural character of the area, and meet other planning and environmental considerations..."***

3.22. In later sections the SPPS refers back to the Regional Development Strategy 2035 (RDS) and the regional guidance in respect of the need to conserve, protect and where possible enhance the natural environment. The SPPS reiterates the regional strategic objectives for natural heritage, stating these as<sup>8</sup>:

***"- protect, conserve, enhance and restore the abundance, quality, diversity and distinctiveness of the region's natural heritage***

***- further sustainable development by ensuring that natural heritage and associated diversity is conserved and enhanced as an integral part of social, economic and environmental development***

***- assist in meeting international (including European), national and local responsibilities and obligations in the protection and enhancement of the natural heritage"***

3.23. Renewable Energy is specifically addressed in the SPPS, where it states that<sup>9</sup>:

***"The aim of the SPPS in relation to renewable energy is to facilitate the siting of renewable energy generating facilities in appropriate locations within the built and natural environment in order to achieve Northern Ireland's renewable energy targets and to realise the benefits of renewable energy without compromising other environmental assets of acknowledged importance.***

***The regional strategic objectives for renewable energy are to:***

***- ensure that the environmental, landscape, visual and amenity impacts associated with or arising from renewable energy development are adequately addressed;***

***- ensure adequate protection of the region's built, natural, and cultural heritage features"***

3.24. The SPPG goes on to state that<sup>10</sup>

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<sup>7</sup> Strategic Planning Policy Statement, page 55, paragraphs 6.77

<sup>8</sup> Strategic Planning Policy Statement, page 80, paragraphs 6.172

<sup>9</sup> Strategic Planning Policy Statement, page 90, paragraphs 6.218 and 6.219

<sup>10</sup> Strategic Planning Policy Statement, page 91, paragraphs 6.224

***“Development that generates energy from renewable resources will be permitted where the proposal and any associated buildings and infrastructure, will not result in an unacceptable adverse impact on the following planning considerations:***

- public safety, human health, or residential amenity;***
- visual amenity and landscape character;***
- biodiversity, nature conservation or built heritage interests;***
- local natural resources, such as air quality, water quality or quantity; and,***
- public access to the countryside.”***

3.25. This LVIA addresses the potential landscape and visual impacts of the proposed development however, notwithstanding some level of localised impact, the proposed development includes a scheme of mitigation as an inherent part of the proposal which intends to avoid or minimise impacts to an acceptable level.

#### **Local Development Planning Policy**

The Derry Area Plan 2011 (May 2000)

- 3.26. The Derry Area Plan 2011 is a Development Plan prepared by the Planning Service, an agency within the Department of the Environment under the provisions of Part III of the Planning (NI) Order 1991.
- 3.27. In respect of countryside, the DAP includes a proposal for Green Belt and Countryside Policy Areas. Proposal COU 1 states that:
- “The Department designates a Green Belt around Londonderry and Countryside Policy Areas at (a) Bonds Glen/Ness Woods/Ervey Woods and (b) the Foyle Estuary.”*
- 3.28. The site is not located in an area defined by the Countryside policy. Although the site is within the Green Belt (just on the fringe) it is important to note that Green Belt is a spatial planning designation, and not a designation related to landscape condition or value.
- 3.29. Other DAP policies relevant to landscape and visual matters are summarised in the following table.

*Table 1: Relevant Policies within the Derry Area Plan 2011*

<b>Policy Ref</b>	<b>Proposal</b>
ENV 1 Areas of High Scenic Value (AoHSV)	<p>The proposal for the policy states that:</p> <p><i>“The Department defines Areas of High Scenic Value on both banks of the Foyle north and south of the City and the Faughan Valley south east of Drumahoe to Burntollet Bridge. The quality, character and importance of the AoHSV derives from a combination of the following factors:</i></p> <ul style="list-style-type: none"> <li><i>- the contribution they make to the setting of the City;</i></li> </ul>

Policy Ref	Proposal
	<ul style="list-style-type: none"> <li>- their relatively unspoilt nature and their relationship with the Rivers Foyle and Faughan in providing an attractive setting for the enjoyment of the rivers;</li> <li>- their proximity to the urban area and their contribution in providing a high quality environmental image along the major approach roads to the City; and</li> <li>- their intrinsic landscape quality based on the inter-relationship between river, riverbank, large country houses, many of considerable historic character set in mature parkland/woodland and well maintained agricultural land uses.</li> </ul> <p>The subsequent policy states that:</p> <p><i>"Proposals for development which would adversely affect or change either the quality or character of the landscape within the Areas of High Scenic Value will not normally be permitted."</i></p>
Policy ENV 6 Trees and Woodland	<p>The policy states that:</p> <p><i>"In order to protect the amenity value of trees and woodland the Department will where appropriate:</i></p> <ul style="list-style-type: none"> <li>- make Tree Preservation Orders on woodlands, groups of trees and individual specimens which contribute to the visual amenities and character of the surrounding area;</li> <li>- require the retention of trees and hedgerows in development proposals wherever possible; and</li> <li>- encourage the proper and beneficial management of trees and woodland."</li> </ul>
Policy ENV 7 Retention of Trees and Hedges and Landscape Requirements	<p>The policy states that:</p> <p><i>"Development proposals will be expected to take account of existing trees and hedges which in the interests of visual amenity or wildlife habitat should be retained. Proposals will be expected to provide appropriate landscaping as an integral part of the design."</i></p>

Emerging policy - Local Development Plan (LDP) draft Plan Strategy (2019)

- 3.30. The Independent Examination (IE) hearing sessions into the Local Development Plan (LDP) draft Plan Strategy were concluded in late 2023, with subsequent Independent examination recently completed in May 2024. Current updates suggest that, subject to modifications, the adoption of the LDP could take place by late 2024/early 2025.
- 3.31. The draft LDP addresses the 'Environment' in part E of the document. This notes states that, in respect of a hierarchy of landscape designations, 'Local Landscape Policy Areas' (LLPAs) will be finalised at the LPP stage, and that the policy in respect of LLPA's is being introduced to set future plan strategy in relation to use of these to replace the existing Areas of Local Nature Conservation and Amenity Importance (AoLNCAI) in the current DAP.



- 3.32. Once the LLPAs are defined, relevant policy includes Policy NE8 of the LDP draft Plan Strategy 'Development within Local Landscape Policy Areas' which states that<sup>11</sup>:

***"Planning permission will be granted for those development proposals within or adjoining an LLPA where it is demonstrated that they do not adversely impact on the LLPAs intrinsic landscape character, visual amenity, and environmental and historic value."***

- 3.33. This policy is informed by submission documents and evidence base, EVB 6b: Landscape & Seascape Character Review (December 2019) and evidence base paper EVB 21, Natural Environment.

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<sup>11</sup> DCSDC, Local Development Plan 2032, draft Plan Strategy, page 235, paragraph 21.12

## 4. Landscape and Visual Baseline

- 4.1. The following section describes the individual components of the physical landscape that are present in the study area. These have been described to establish an understanding of the specific landscape baseline, including individual elements and more distinctive features, which together contribute to landscape character.
- 4.2. The landscape character and physical landscape features and elements are shown in some of the viewpoint photographs (refer to **Figure 6**).

### Physical Landscape Resources

#### Topography and Landform

- 4.3. The site is located toward the top of a localised rolling hill. The overall topography of the site falls from ca. +109m Above Ordnance Datum (AOD) in its western/south-western corner, across a gradual and even slope down to ca. +105m AOD and ca. +100m AOD in its north-western and north-eastern corners respectively. Beyond the site, the crest of the localised hill extends south-west into the adjacent field and topography generally falls to the north-west (toward the Foyle Valley) and south-east (into the Burngibbagh valley).
- 4.4. The site is located in an area of intermediate topography, defined by a series of variable, low rolling and connected hills aligned broadly on a north-east to south-west orientation (refer to **Figure 3, Topography**). To the west of this, the landform falls generally to the floodplain and river corridor of the River Foyle; to the east the landform rises more considerably to a series of steeper slopes and higher hills that form part of the foothills to the Sperrin mountains (the Sperrins themselves located further south-east). The overall topographical character is one of a complex series of interlocking hills and valleys, tending to be framed either by the Foyle valley or the Sperrin foothills.

#### Hydrology and Water Features

- 4.5. There are no water features apparent on site.
- 4.6. The Burngibbagh watercourse flows to the south-east of the site, through the localised valley between the site and the Sperrin foothills. To the north-west is the major watercourse of the River Foyle. Other minor tributaries and drainage ditches cross the wider landscape but are not overly prominent in respect of landscape character.

#### Land Use

- 4.7. The site is used for agriculture, currently forming an area of rough grassland/grazing.
- 4.8. The surrounding landscape is predominantly farmland (mainly pastoral but with occasional arable enclosures scattered across the area). Farmsteads are notable, but also scattered through the local landscape context and include a mix of building types, including some larger utilitarian barn structures as well as some smaller scale more traditional building types. Slightly further afield, wind energy is a notable land use, mainly related to the prominence of the wind turbines in the landscape which highlights the parts of the landscape being utilised for this. A small sub-station is located to the east of the site, set lower within the valley, between Killymallaght Road and Disertowan Road.

## **Vegetation Patterns**

- 4.9. In respect of the site, this forms a single enclosure with a straightforward pattern of field boundary hedgerows. This includes more continuous and dense hedgerows along its northern and western boundaries, but the southern boundary is a weaker over-managed hedgerow. To eastern boundary, defined also by the route of Trench Road, comprises a post and wire mesh fence, however reference to previous photography from the route ('google streetview') suggests that this was also previously a hedge, but this was since removed in relation to highway works along Trench Road. Occasional hedgerow trees are present but infrequent and a small patch of scrub has developed in the south-western corner of the site.
- 4.10. In the surrounding landscape, vegetation patterns are associated with the agricultural landscape and mosaic of small to medium scale, irregular planned field pattern. Hedgerow trees, shelter belts and ore substantial woodland blocks are present, but quite scattered. This gives some sense of tree and woodland cover but this can be sporadic. More extensive belts of linear trees and woodland are present, mainly related to small tributary streams, localised smalls cale valleys and also, more extensive, the route of the former railway which cuts across the landscape to the west and north of the site.

## **Public Access**

- 4.11. There is no formal public access to the site, nor to the landscape immediately surrounding the site. Access is restricted to the local road network and access tracks in this part of the landscape.
- 4.12. In the wider landscape there are few public rights of way. Some formal sports grounds offer recreational access within the context of the landscape (albeit for the sport, and not specifically the landscape), these include cricket grounds at Creevedonnell to the east and at Magheramason to the west. Formal public rights of way are present to the west of the River Foyle, providing an access route between Mullenan Road (A40) and Balloughy Road, proceeding downslope toward the river corridor and then running along the western side of the river further north up toward Letterkenny Road (refer to Figure 4, ZTV, Viewpoint Locations and PROW).

## **Development and Transport Infrastructure**

- 4.13. The site and its immediate environs are predominantly rural in character, however the area is traversed by a network of minor and some major roads.
- 4.14. Settlement pattern around the site is limited to more isolated farmsteads and dwellings. In the landscape generally, settlement pattern is defined by a similar pattern of scattered farmsteads and dwellings, often forming clusters of development in relation to the locations of small villages; in these instances built form tends to be loosely clustered rather than consolidated. To the north-west of the site Newbuildings represents a more consolidated and defined suburban area.

## **Landscape Character**

- 4.15. Reference has been made to published guidance on landscape character for the area (refer to **Figure 4, Landscape Character**).

- 4.16. Landscape character for the area is defined by published guidance at a regional level and local level.

### **Regional Landscape Character Assessment**

- 4.17. At the broader regional scale, the site is located on the boundary between LCA 6 'The Foyle Valley' and LCA 8 'North Sperrin Hills and Valleys'<sup>12</sup>.
- 4.18. Boundaries between landscape character areas are rarely definitive or drawn against specific boundary features, but instead tend to reflect a transition between two areas of landscape character. This can often, although not always, reflect a slightly weaker representation of a given landscape character area, as the key characteristics sit between one and another area.
- 4.19. This is acknowledged by the Northern Ireland Regional Landscape Character Assessment, which states that:

***"The boundaries between character areas should not be interpreted as sudden changes from one landscape to another. Rather, the boundary lines on the maps indicate the location of broad transitional zones between different landscapes. There are instances where these may be relatively abrupt, for example along a very distinctive landform. However, in most cases the chosen boundary reflects a gradual change from one landscape character area to another."***

- 4.20. This is something relevant to the site, where landscape character defined at a more local level defines a landscape character area which the site is located centrally within. This suggests that in terms of the regional level assessment the site is located on the fringes of each LCA rather than the core area.
- 4.21. The web-based landscape character assessment details set out a brief description and key characteristics for the various LCA's.
- 4.22. The guidance describes LCA 6 'The Foyle Valley' area as follows:

***"The Foyle Valley comprises a broad valley running north from the hills of the Sperrins. The River Foyle forms the Irish border in this location, although the valley character continues across the boundary, and this RLCA represents only the eastern half of this valley."***

- 4.23. For LCA 8 'North Sperrin Hills and Valleys', the guidance describes this as:

***"The North Sperrin Hills and Roe Valley is characterised by the series of varied hills and valleys which cover the area between the Foyle Valley in the west and the Binevenagh Ridge to the east. The landscape is interspersed with streams that flow from the Sperrins through steep, narrow valleys that become broader to the north. Many of the upper valleys are wooded, with limited settlement. Small villages are located lower down, with an increase in settlement towards the north. A patchwork of small fields and dense broadleaf tree cover lines these valleys. To the east, the valley of the River Roe is shallow and broader by comparison, and is dominated by the basalt hills to its east. This***

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<sup>12</sup> <https://daerani.maps.arcgis.com/apps/MapJournal/index.html?appid=3fdf82b3e41e44a1bb86a542dfb67d97>



**more open settled landscape moves gradually from upland character to an open pastoral valley with limited tree cover and man-made embankments.”**

- 4.24. Key characteristics for the two RLCA’s are summarised in the following table. Emphasis is added for those key characteristics which are most relevant to the site and its immediate landscape context.

Table 2: Summary of RLCA Key Characteristics

RLCA	Key characteristics
LCA 6 ‘The Foyle Valley’	<p><b>Mainly flat valley floor with gently undulating side slopes, bounded by the Sperrin Hills and River Foyle on either side, becoming more markedly steeper to the east.</b></p> <p>Areas of conifer forests are found on the higher slopes particularly on Bessy Bell and Owenreagh Hill to the south and east respectively.</p> <p>On the lower lands towards the valley floor there are important mixed and broadleaf forests including oak woods such as Prehen Wood.</p> <p><b>Widespread regular field pattern which becomes more enclosed extending towards the lower hills of the Sperrins to the east.</b></p> <p>Embanked course of the River Foyle, forming broad alluvial areas of high-quality farmland.</p> <p><b>The main transport routes follow the course of the river valley south from the city of Derry/Londonderry to Strabane and beyond.</b></p> <p><b>A settled landscape with increasing rurality further south but limited tranquillity due to transport routes, gravel quarrying and a series of riverside villages and towns.</b></p> <p>Derry/Londonderry is Northern Ireland’s ‘Maiden City’, with a multi-layered history. Its landscape setting on the banks of the Foyle is essential to its appreciation; the city is arranged around the river, and flanked by deciduous woodland.</p>
LCA 8 ‘North Sperrin Hills and Valleys’	<p>Southern part of the RLCA is defined by lower foothills of the Sperrins where steeper narrower valleys have been formed by the fast running streams in the area.</p> <p>In the north the upland areas of the Loughermore Hills convey a sense of isolated moorland interspersed with coniferous plantations and bog land.</p> <p><b>In contrast to the higher numbers of small settlements nestled in the valleys, the upland areas are sparsely populated, with small holdings towards the upland margins.</b></p> <p><b>The summits of the hills throughout the RLCA are for the most part rounded, becoming slightly broader and plateau-like across the Loughermore area.</b></p>

RLCA	Key characteristics
	<p><i>The meandering River Roe flows through a moderately broad valley where the floodplain field pattern changes from small marginal plots in the upper valley to large, geometric fields downstream. Hedgerows are prevalent throughout the valley though there are few trees and little enclosure.</i></p> <p><b><i>Other valleys are narrower and more wooded, such as the Burntollet and River Faughan, which have an intimate character.</i></b></p> <p><i>Country parks in the area provide recreational access to the countryside.</i></p>

### Northern Ireland Landscape Character Assessment (2000)

- 4.25. At the more local level, landscape character is defined by the ‘Northern Ireland Landscape Character Assessment’. The site is located in an area defined by the guidance as LCA 31 ‘Burngibbagh and Drumahoe’ (refer to **Appendix C** for full extract).
- 4.26. Key characteristics of the LCA are defined by the guidance as follows:
- linear valley system with a strong NE–SW alignment;
  - valley has a flat floor and is enclosed by broad, rounded ridges;
  - hedgerows enclosing pastures form a strong, geometric pattern on the valley sides, with small areas of open moorland capping some summits;
  - pylons lines are a dominant landscape element, particularly to the north; and
  - built development concentrated in centre of valley, near Drumahoe.
- 4.27. The LCA sets out a brief description of ‘Landscape Condition and Sensitivity to Change’, noting issues related to hedgerow loss, some sand and gravel extraction and pylons which detract from the rural quality of parts of the valley. In respect of the Burngibbagh section of the valley (i.e. to the south–east of the site), the southern section is described as being sensitive due to its relatively undeveloped nature, and that ‘its secluded, rural character could easily be diminished if the tree cover and hedgerow network was decreased due to built development, mineral extraction, farm expansion etc.’.
- 4.28. Note that the proposed development does not propose to remove the hedgerow field boundaries around the site, but the landscape proposals included for mitigation will reinstate hedgerow along Trench Road and also introduce further landscape planting of trees and scrub.
- 4.29. The LCA guidance sets out a series of principles related to accommodating new development, those related more to the area of the site are summarised as follows:
- The Burngibbagh valley system is quite separate [from Londonderry] and it would not be appropriate for development to spread over the ridgetop and into the valley of the lower Faughan;

- further development can be accommodated in the Drumahoe area, where the valley broadens to form a natural bowl shape. However, the valley is relatively open at this point and any built development should be associated with extensive planting, using native species, to integrate it with the surrounding landform
  - development within the Burngibbagh valley to the south could disrupt its secluded, unspoilt character
- 4.30. The published landscape character assessments are considered to accurately reflect the landscapes of the site and its environs and, subject to some specific issues raised in respect of potential development in the landscape, there remains potential to bring development forward in a manner which is consistent with, and minimises impacts upon, landscape character.

## Visual Baseline

- 4.31. This section provides a description of the nature and extent of the existing views to and from the site, and within the surrounding area more generally. Where relevant, it also includes reference to specific locations that will potentially be subject to impacts as a result of the proposed development of the site.

## Visual Envelope

- 4.32. The visual envelope is the area of landscape from which a site or proposed development will potentially be visible. It accounts for general judgements on the theoretical visibility of a site or proposed development and sets a broad context for the study area within which to address landscape and visual impacts. The extent of a visual envelope will be influenced by the physical landscape components of an area, such as hedgerows, woodlands or buildings and can also be influenced by distance from a site.
- 4.33. A computer generated screened ZTV has been produced for the site (see **Figure 5: ZTV, Viewpoint Locations and PROW**); this is based on the height of the development as shown on the layout plan, and accounts for some degree of screening by existing built form and vegetation.
- 4.34. Although the ZTV represents a 'screened' scenario, the OS data sources only tend to include substantial blocks of trees and woodland. Much of the existing green infrastructure around the site forms a 'layering effect', with the screening effects of lower level vegetation (such as hedgerows and shrub/scrub vegetation) and smaller areas of tree cover combining with drystone walls and very small-scale changes in topography to reduce visibility of low level development of the type proposed. Such effects are not modelled in the ZTV, and consequently, overall screening is underestimated and the ZTV represents a 'worst-case scenario'.
- 4.35. Based on the ZTV and informed by subsequent site survey and observations from the field work, the visual envelope is consistent with the theoretical visibility of the proposed development (refer to **Figure 4, ZTV, Viewpoint Locations and PROW**) and extends east up to the Sperrin foothills, south and north to areas of relative high ground and to the west across the valley of the River Foyle. The nature of topography and vegetation contributes to a great deal of variation within this, with large parts of the landscape excluded from the visual envelope due to the series of valleys and hills.



- 4.36. The ZTV does not allow for the screening effects of any proposed planting included as mitigation within the proposed development.

#### **Selection of Representative Viewpoints**

- 4.37. The ZTV for the proposed development was used to guide the selection of representative viewpoints for the visual assessment.
- 4.38. The 20 selected viewpoints are not intended to cover every possible view, but rather are representative of a range of receptor types from various directions and distances from the site boundary.
- 4.39. Field survey work was completed during March 2024. A series of representative photographs were taken with a full-frame digital SLR camera with a 50mm fixed focal length lens, set at approximately 1.7 metres Above Ground Level (AGL).
- 4.40. The field survey was undertaken in late winter, when deciduous vegetation generally had limited remaining leaf cover. It is therefore likely that the visibility of the site may be reduced during the summer months when such deciduous vegetation is in full leaf.

## 5. Proposed Development and Landscape Strategy

### Proposed development

- 5.1. The proposed development comprises a battery energy storage system (BESS) together with associated equipment and infrastructure. The proposed development comprises the following:
- battery units housed in shipping containers;
  - power conversion systems;
  - BESS substation;
  - DNO substation;
  - miscellaneous other items of electrical infrastructure;
  - boundary fencing (weldmesh or acoustic fencing) around the edge of the site, with access gates into the site;
  - access track off Trench Road, to the south-west;
  - a pole-mounted CCTV and emergency lighting system located at strategic points around the site;
  - earthworks to create a practical development platform – partly sunken into the landform – and to create necessary acoustic and visual screening bunds; and
  - attenuation basins in the northern parts of the site; and
  - landscape planting and habitat enhancement in respect of landscape and ecological mitigation.
- 5.2. The ground surface within the security fence is likely to be stone or asphalt (or a combination of the two), although this will not be readily visible due to the location of the site, earthworks to accommodate the development platform and screening bund and also the limited locations which have views into the ground plane of the site.

### Likely Causes of Impact

#### Causes of Temporary Impact during Construction

- 5.3. The temporary construction works which may give rise to impacts on landscape and visual receptors are as follows:
- installation of tree and hedgerow protection fencing where required;
  - movement of vehicles bring materials and equipment onto the site;
  - presence and movement of construction vehicles and plant within the site;

- presence of construction compounds, site offices and welfare facilities;
- earthworks related to formation of the development platform, screening bund and attenuation areas;
- temporary construction lighting (very limited);
- construction of the proposed access tracks;
- installation of fencing and CCTV system;
- installation of battery units and other infrastructure/services;
- installation and planting of the proposed landscape mitigation measures (see below).

- 5.4. The construction phase would give rise to short-term landscape and visual effects. The construction phase effects would be distinct to the operational effects as they would include more activity on site (the operational phase having relatively low activity associated with it). Further information is contained elsewhere in the application documentation.
- 5.5. The construction-phase landscape and visual effects arising from the proposed development would be a secondary consideration to its 40-year long-term operational effects, which are the focus of the assessment contained in Section 6 of this report.
- 5.6. The short-term, temporary nature of construction impacts means that construction phase effects would not exceed the operational effects in magnitude or scale. The principal effects of the development would relate to the operational phase, and construction phase effects are given no further specific consideration in this assessment.

#### **Causes of Impact at Completion**

- 5.7. The permanent components of the proposed development which may give rise to impacts on landscape and visual receptors are as follows:
- the new elements within the site, such as containerised batteries, sub-stations and other infrastructure, fencing, and CCTV cameras;
  - stoned access tracks and hardstanding areas;
  - permanent earthworks in respect of the proposed screening bund and attenuation areas; and
  - changes to land use and pattern through the replacement of the agricultural enclosure with the electricity infrastructure, species-rich grassland, and native trees and shrubs.
- 5.8. The subsequent assessment of impacts and effects of these elements are considered at completion (Year 1) but also at Year 15, when any landscape planting has established and is more likely to be performing its intended function.

## Landscape Mitigation Measures

- 5.9. The LVIA process has identified a number of potential receptors within the environs to the site which may be subject to discernible adverse effects as a result of the proposed development.
- 5.10. In respect of physical landscape impacts, these are limited to the site. For landscape character, the perception of physical landscape changes is relatively limited given the scale of the wider landscape and defined LCA's, however there is scope to address landscape character in term of mitigation. For visual receptors, the visual envelope (as demonstrated by the ZTV) is potentially wide reaching, although the scale of impact will vary considerably.
- 5.11. Main visual receptor groups that will potentially be subject to visual impacts and effects include:
- Areas to the west of the site (some local, some more distant along the River Foyle valley) which would potentially see the proposed development situated on the localised hill and above the horizon (against a backdrop of the upland landscape of the Sperrin foothills);
  - Areas to the north of the site (including the hillsides around Kittybane, Gortinure and Warbleshinny) where there are some potential direct views into the ground plane of the site, albeit more distant and slightly screened by existing vegetation);
  - Areas to the east of the site (including areas at Carnafarn and Curryfree), which also have more direct views across the whole field enclosure of the site and into its ground plane; and
  - Areas immediately adjacent to the site (along Trench Road) which have direct and near distance views into the site.
- 5.12. The early layout designs for the proposed development have been refined following initial appraisal and subsequent input in respect of landscape and visual matters This has ensured the inclusion of a series of design interventions to influence the layout and incorporate landscape and visual mitigation. Consequently, landscape mitigation measures form an inherent part of the final layout of the proposed development (as illustrated in **Appendix B, Illustrative Landscape Masterplan**). These include:
- existing field boundary vegetation, such as hedgerows and hedgerow trees, would be retained and enhanced through additional planting and improved management to maximise their landscape (screening) and biodiversity benefits;
  - the south-western boundary would include hedgerow planting along its length, reinstating the hedgerow which has been removed previously (consequently reinforcing the field pattern and contributing to the green infrastructure network)
  - the proposed access track has been routed around the western side of the BESS area, freeing up space to the east of the BESS area to accommodate earthworks and planting for screening;

- the south-western edge of the site includes a substantial area of tree planting to create a shelter belt of trees and woodland which both contribute to the pattern of vegetation in the local landscape whilst also providing screening;
- earthworks proposals include the formation of a practical development platform which is lowered slightly into the contours of the site, resulting cut and fill can accommodate the creating of a screening bund to the south-east, east and north-east of the BESS area so provide screening. Detailing of the earth mounding can, in due course, include a steeper inner face, so that the outer face can be graded into existing contours in a more naturalistic manner;
- proposed scrub planting across the earth mounding will add further to screening whilst also contributing to BGN; and
- remaining grassland areas will be subject to a programme of enhancement through seeding with appropriate grassland mixes, also contributing to BNG.

5.13. As well as providing the intended filtering and screening of views towards the proposed development, the proposed landscape planting is also consistent with the local landscape character and vegetation patterns.



## 6. Assessment of Landscape Effects

### Overview of Landscape Effects

- 6.1. Landscape sensitivity is a term applied to specific receptors, combining judgements on the value related to a landscape (i.e. the receptor) with the susceptibility of the landscape to the specific type of change proposed. Receptors can include specific landscape elements or features or may be judged at a wider scale and include landscape character parcels, types or areas.
- 6.2. As advocated in the GLVIA3, professional judgement is used to balance analysis of value and susceptibility in order to determine sensitivity. Each of these aspects of the analysis will vary subject to the scale and detail of the assessment.
- 6.3. The landscape character of the study area is documented at regional and local levels. The findings of these studies represent a generally consistent analysis of landscape character and this has been supported by an analysis of the local landscape character of the site and its local landscape context.
- 6.4. This assessment of landscape effects focuses on the areas of landscape character which are defined by the Northern Ireland Landscape Character Assessment (2000) as LCA 31 'Burngibbagh and Drumahoe'.
- 6.5. The assessment of landscape effects is then also applied at a more refined level to consider judgements based on the landscape character of 'the site and its local landscape context'.

### Landscape Sensitivity

- 6.6. In order to inform judgements on value and susceptibility the following section refers to the baseline information (Section 3) and additional consideration of the local character in relation to the site and its local landscape context. These judgements are then carried through to the analysis of landscape sensitivity.

### Landscape Value

- 6.7. In LVIA, landscape value is the value attached to a potentially affected landscape. It is relative in relation to the different stakeholders and different parts of society that use or experience a landscape.
- 6.8. Landscape value is not solely indicated by the presence of formal designations and a range of factors influence landscape value.
- 6.9. The GLVIA3 sets out a range of factors that can help in the identification of landscape value and these concepts have been expanded in the later LI TGN 02/21 .
- 6.10. Whilst these have become commonly accepted, it is important to place them in the relevant context that the GLVIA3 is guidance and that its principles have to be adopted into a formal methodology by practitioners.
- 6.11. The criteria for determining landscape value as set out in the methodology (refer to **Appendix A**) accord with those presented in the GLVIA3 and LI TGN 02/21.

- 6.12. Landscape value will vary in response to the specific landscape that is being considered, even where a landscape is included in the boundaries of a formal designation.
- 6.13. This section determines the value of the defined LCA (and local landscape context) relevant to the site and study area. The considerations and professional judgements used in determining value are summarised in the following tables (with reference to GLVIA3, page 84, Box 5.1 and to LI TGN O2/21).
- 6.14. The summary analysis includes reference to the relevant baseline information included in published guidance and as part of this LVIA.

*Table 3: Determining Landscape Value*

Considerations	LCA 31 'Burgibbagh and Drumahoe'
Natural and cultural heritage interests (i.e. ecological, geological or heritage matters)	Scattered listed buildings and sites and monuments through the wider LCA, but tending to be concentrated closer to settlement areas and less frequent deeper into the rural landscape. More limited closer to the site.
Landscape condition of individual elements or overall structure	Extensive agricultural land of consistent scale and pattern, albeit noted as a 'busy' landscape' given the pattern of the road network and frequency of settled, but scattered, dwellings and farmsteads. Mixed condition of vegetation patterns also, with some fragmented and patchy hedgerows whilst others more consistent and better maintained. On site and close by, some evidence of fragmented poor condition hedgerows along with removed hedgerow boundaries, plus some detracting features in respect of win turbines, overhead power lines and smaller scale sub-stations.
Landscape associations	No known associations which present a distinction in the wider landscape. Some esoteric influences at a local level. Influences such as older churches and ruins monuments are noted in published guidance
Distinctiveness and sense of place	Predominantly a rural area of consistent character but notable distinct from the wider river corridor and valley to the north and the rising upland hills to the south/east. In itself the unity of topography and land use presents some distinctiveness, but this tends to be equally influenced by surrounding landscape character types as much as the LCA itself. Some reference to local landmarks around the site but but these include both natural and man made features.
Recreational opportunities in the landscape context	Limit opportunities for recreation in the countryside other than from the local network of roads, which can be narrow in nature and relatively well-trafficked.
Perceptual aspects (in respect of scenic/visual quality)	Moderate to high degree of scenic quality given the wider extent and consistency of agricultural land set across the rolling topography of hills and valleys. Historic field patterns and associated green infrastructure, plus the backdrop of the upland hills from many locations.
Perceptual aspects (in respect of wildness and tranquillity)	Not a true tranquil or wild landscape given the extensive agricultural land uses and associated scattered settlement pattern of farmstead and dwellings, but some relative remoteness, particularly from locations where larger settlements such as Newbuildings are perceptibly, distinguishing between the larger settlements and landscape surrounding these. Lower levels of relative tranquillity in respect of the site, given the proximity to Trench Road, the comms mas and farmstead to the west and the close proximity of wind turbines to the east.
Landscape function	Wider landscape context of the LCA functions as a transitional landscape between the River Foyle valley and the upland hills of the Sperrin foothills. What results is a belt of undulating and complex hills and valleys characterised by a consistent

	agricultural land use and scattered settlement/transport pattern. The site and its local landscape context forms a small and consistent part of the overall function, but is not essential to it, as it is the larger scale of the transitional area which defines the transition.
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- 6.15. On balance the wider landscape context of 'LCA 31 'Burngibbagh and Drumahoe' is determined to be of **medium value** in landscape terms.
- 6.16. The landscape character of the site in its local landscape context is considered to be of **medium value** in landscape terms.

**Landscape Susceptibility**

- 6.17. In LVIA, landscape susceptibility is the ability of a landscape to accommodate change without undue consequences for the maintenance of the baseline situation.
- 6.18. Different types of development can affect landscapes in different ways and consequently landscape susceptibility is specific to the type of development proposed (i.e. residential).
- 6.19. This section determines the susceptibility with the considerations and professional judgements used summarised in the following tables.

*Table 4: Determining Landscape Susceptibility*

Considerations	LCA 31 'Burngibbagh and Drumahoe'
Scale of enclosure	The wider LCA is a larger scale landscape formed of a consistent pattern of small to mediums cale enclosures. Notwithstanding their appearance or capacity issues, BESS proposals are relatively small scale in themselves in respect of structure heights and footprints, and can consequently be accommodated in the pattern and scale of the landscape. Furthermore, existing green infrastructure, including the network of hedgerows combines with topography to add to capacity in different parts of the wider LCA. At a site level, the scale and pattern of the landscape is consistent with the wider LCA. Topography varies and is subservient to the larger range of upland hills of the Sperrin foothills but forms an intermediate range of hills which overlook the valley of the River Foyle..
Nature of land use	An LCA dominated by the agricultural mosaic, including settlement in the form of scattered farmsteads and dwellings. Farmsteads can be larger scale and include more utilitarian agricultural buildings as well as those which reflect a more traditional form. Renewable and infrastructure development is present in the wider context in the form of wind turbines, overhead power lines and a substation, but the latter (which is more akin to BESS) is not prominent in the landscape.
Nature of existing elements and features	Existing agricultural land use on site is extensively represented in across the LCA and not considered to be susceptible to development. Green infrastructure in the form of hedgerows and tree belt sis more susceptible, as loss would disrupt the scale and pattern. Farmsteads scattered across the landscape provide some context for more sporadic and slightly larger footprints of built form by comparison to the smaller clusters of residential development.

- 6.20. On balance, the wider landscape context of LCA 31 'Burngibbagh and Drumahoe' is considered to be of **medium susceptibility** in landscape terms.

6.21. The local landscape character of the site and its local landscape context is considered to be of **medium susceptibility** in landscape terms.

**Overall Landscape Sensitivity**

- 6.22. The following conclusions on sensitivity are based on the detailed description and justification presented in the previous sections, balancing the professional judgements on value and susceptibility.
- 6.23. In drawing together judgements on landscape value and susceptibility in respect of landscape sensitivity, higher levels of landscape sensitivity will occur where landscape value and landscape susceptibility are toward the upper end of the scale.
- 6.24. Lower levels of sensitivity will occur where value and susceptibility are toward the lower end of the scale.
- 6.25. More central levels of sensitivity will occur where one component is toward the higher end of the scale whilst one is toward the lower.
- 6.26. It is important to note that there are graduations within the process which are not clear cut, and professional judgment is used to balance these and determine an overall judgement on sensitivity.

*Table 5: Determining Landscape Sensitivity*

Landscape character	Value	Susceptibility	Judgement on sensitivity
LCA 31 'Burgibbagh and Drumahoe'	Medium	Medium	Medium
Site and its local landscape context	Medium	Medium	Medium

6.27. Following a review of the types of impact on physical landscape resources, the conclusions on landscape sensitivity (as determined in this LVIA) are then taken forward to address the impact and effect on landscape character.

**Landscape Impacts**

6.28. The following section describes the predicted changes to the physical landscape elements and features on the site that will give rise to the subsequent perceived changes in landscape character.

**Impacts on Physical Landscape Resources**

6.29. Impacts during the construction period will relate to the initial accommodation works and subsequent emerging construction process. This will include preparing the site for

construction (fences, compounds etc) along with any limited vegetation clearance required for the formation of the site access. Construction of site access will also follow.

- 6.30. Within the site construction activity will relate to the initial ground clearance (albeit limited due to the existing grazing land use) and earthworks. Despite the changes on site, vegetation (and hedgerow) loss is minimal and the overall scale and pattern of the field and the hedgerow network will be maintained, (and consequently reflective of the scale and pattern of the local landscape being also maintained). Earthworks will be more substantial in the short term, but on completion will quickly be assimilated into the existing landscape context, given the opportunity for detailed matters to grade the earthworks bund into the existing contours in a more naturalistic manner – furthermore, planting across the bund will further screen and assimilate the earthworks once established.
- 6.31. The emerging built form of the proposed BESS will be a permanent component on completion, however during the construction period these impacts will be temporary and transient.
- 6.32. Subject to timing and phasing, final landscape proposals will be implemented in the remaining parts of the site, and these will have an immediate influence in the short term, albeit the newly implemented landscape works will not be fully established.
- 6.33. Impacts at completion are concerned with the long-term alteration in the landscape from the current undeveloped context of the site to the future scenario of the proposed development.
- 6.34. The built form of the BESS will be complete and will be a permanent component in the landscape. At completion, based on the proposed retention of vegetation along with the additional landscape planting, the proposed development will be set within an initial framework of mature vegetation that extends around the boundaries of the site to the west and south, with other landscape planting implemented as part of proposed development, yet to become fully established. In particular this will be along the south-western and eastern parts of the site.
- 6.35. In the long term, impacts remain associated with the presence of the BESS, but are also associated with the influence of mitigation measures on landscape character. This establishes the changes to landscape character as a result of built aspects of the development but with proposed mitigation measures ‘fully established’ and performing their intended function.
- 6.36. In the context of the site and the proposed BESS, physical landscape impacts are considered to be limited to those on site.
- 6.37. Some discreet localised earthworks related to the creation of practical development platforms and for the development envelope and for the attenuation area will be required, however the overall profile of the landform will remain apparent.
- 6.38. Overall, the physical landscape impacts are considered to be direct, will be limited to the extent of the site (aside from the minor changes to Trench Road for access) and will affect only a very small proportion of the wider extent of LCA 31 ‘Burngibbagh and Drumahoe’.
- 6.39. These judgements are specific to the ‘physical’ components of the landscape. Judgements in terms of how the components function together, and the consequence of those changes and

impacts in respect of how they contribute to the character and appearance of the area, is addressed in terms of the 'effects on landscape character'.

## **Landscape Character Effects**

- 6.40. The likely landscape impacts described above will be concerned with the physical changes to the site and the loss, or potential loss, of physical elements and features.
- 6.41. In the context of those physical impacts, the following sections set out an assessment of the likely landscape effects on landscape character.

### **Appraisal of Landscape Character Impacts**

- 6.42. Aside from the physical changes to the agricultural land use – along with introduction of the BESS facility and associated infrastructure – the landscape impacts will be concerned with the perception of these changes and subsequent impact on the character and appearance of the landscape.
- 6.43. BESS development is not currently present 'on site' or in the surrounding landscape, however there is some context for renewable development in terms of the larger more prominent wind turbines, as well as the smaller scale power infrastructure of the sub-station off Killymallaght Road.
- 6.44. The changes to the physical landscape resources are limited to the site, and limited to the landform (cut and fill to achieve a development platform and create screening bunds/attenuation) and land use (with part of the site given over to BESS infrastructure and the remaining parts altered from agricultural to landscape mitigation).
- 6.45. The impacts on landform will not be of a sufficient scale to alter the overall profile of the localised hill, nor would the change in land use form a notable disturbance to the wider pattern of agricultural use.
- 6.46. In the short term, there is some consistency with the more utilitarian character of larger, modern and utilitarian agricultural farmstead and buildings which are present throughout the landscape (including close to the site to the west – which is a prominent component of views from this direction). Mitigation inherent in the proposed development will reduce the influence of this over a relatively short timescale. It's important to note that the proposed development is not limited to the adverse impacts of the built elements of the BESS and its infrastructure, but also include positive elements in respect of the contribution to landscape character in the form of hedgerow, tree belts, scrub planting and wildflower grasslands.
- 6.47. On balance, the site is a single and relatively ordinary part of a wider landscape character area which, where this has characteristics which contribute to its value, these are derived from the sum of its parts across the wider area and larger scale, not from the inherent characteristics of the site in isolation.
- 6.48. Notwithstanding changes (and impacts) at the site level, the proposed development would not disrupt the overall perception, understanding and appreciation of the wider landscape, to the point where it would be of detriment to its character.

### Significance of Landscape Character Effects

- 6.49. Overall, notwithstanding the outline nature of the application, the masterplan for the proposed development has adopted a positive approach in landscape and visual terms.
- 6.50. Considering the analysis presented in previous sections (including reference to the baseline information, incorporated mitigation and consideration of impacts) the overall assessment of effects on landscape character is set out in the following table.
- 6.51. This accounts for the significance of effect at completion of the proposed development, and also a separate assessment of the proposed development after 15 years, when the mitigation proposals are likely to be fully established and performing their intended function (e.g. new landscape planting and screening).

*Table 6: Assessment of Landscape Effects*

Landscape character	Sensitivity	Magnitude of impact		Significance of effect
LCA 31 'Burngibbagh and Drumahoe'	Medium	Completion	Negligible	Negligible adverse
		Year 15	Neutral to negligible	Neutral
Site and its local landscape context	Medium	Completion	Medium	Moderate adverse
		Year 15	Low	Minor adverse

- 6.52. The landscape of the site and its environs is undesignated at either national/statutory or local/non-statutory levels.
- 6.53. The highest level of impact and effect is that at completion related to the site in its local landscape context (i.e. 'moderate adverse').
- 6.54. This relates to the physical change in the agricultural land use of the site to that of the proposed development, and reflects the perception of the changes at a site level from the local landscape. However, this is a highly localised effect and limited to the site, with the surrounding landscape context remaining in-tact.
- 6.55. Accounting for mitigation and the influence of landscape planting becoming established over time, the mitigation successfully reduces the effect (i.e. to 'minor adverse') given that the proposed development will become assimilated into the landscape and screened by the proposed earthworks and landscape planting, particularly as these become established.
- 6.56. Overall, this level of impact and effect in terms of the landscape character, particularly given the limited context and containment of the site, is not considered to be significant overall.

## 7. Assessment of Visual Effects

### Overview of Visual Sensitivity

- 7.1. The sensitivity of a visual receptor is a function of the value attached to a particular view balanced with the susceptibility of the visual receptor to changes in a view and/or visual amenity.
- 7.2. The assessment of visual effects considers the receptor at a location, selected as a point that is either particularly representative of a visual experience or where it is the worst-case scenario of a view (for example, a more elevated location at an open point of a PROW, rather than somewhere enclosed by vegetation, even if the route is predominantly enclosed by vegetation).
- 7.3. The criteria for the sensitivity of visual receptors are set out in the detailed methodology (refer to **Appendix A**).
- 7.4. For the purposes of this LVIA, residential receptors and users of Public Rights of Way (PROW) are considered to have a high visual sensitivity. In all cases they were considered to have a high susceptibility to change in their views and that these views were of a high value. It is worth noting that there are very few rights of way in the landscape of the study area and, as such, access to the countryside is limited to the local road network.
- 7.5. Users of the local road network, where the focus of the activity is travel, rather than specifically the view, are considered to have medium sensitivity, which is a combination of a medium susceptibility and medium value associated with the views from these routes.
- 7.6. There is no right to the view, however residential receptors are a relevant consideration. The settlement pattern of the study area is such that properties tend to be situated in isolation or in smaller clusters at points across the landscape. Where relevant, views are taken from the local road network (due to access issues) but these are considered to address potential impacts for those related residential receptors.

### Visual Impacts

- 7.7. Visual impacts are considered separately to landscape impacts. For landscape impacts it is necessary to understand the combination of direct and indirect impacts on the landscape resources potentially affected by a proposed development and therefore it is possible to provide a description and overview of the key impacts that are likely to affect the study area.
- 7.8. However, for visual receptors it is necessary to understand the specific, direct impacts on each view. Therefore, the causes of impact are considered on the basis of individual receptors and are set out in the following sections as an integral part of the assessment of visual effects.

### Visual Effects

- 7.9. Detailed assessment is set out in respect of individual viewpoint locations, set out on the viewpoint photograph sheets (refer to Figure 6, Viewpoint Photographs 1 to 20).



7.10. The following section summarises the main visual effects which are likely to be generated by the proposed development. This includes reference to the likely scale of effect on specific visual receptors.

Table 7: Summary of Visual Effects

Viewpoint	Sensitivity	Completion Year 1		Year 15	
		Magnitude of impact	Significance of effect	Magnitude of impact	Significance of effect
1. View looking west, from Trench Road adjacent to the north-eastern corner of the site	Medium	High	Moderate to major adverse	Medium	Moderate adverse
2. View looking north, from Trench Road adjacent to the south-eastern corner of the site	Medium	Low	Minor adverse	Nil	Neutral
3. View looking north, from the junction of Trench Road and Disertowen Road (south of the site)	Medium	Low	Minor adverse	Nil	Neutral
4. View looking east, from Disertowen Road (west of the site)	Medium	Negligible to low	Negligible to minor adverse	Nil	Neutral
5. View looking north-east, from Drumcraig Road, south of Drumagore	Medium	Negligible	Negligible adverse	Nil	Nil
6. View looking north/north-east, from Duncastle Road (B48) close to Berryhill	Medium/high (accounting for nearby residential dwellings)	Negligible	Neutral	Negligible	Neutral
7. View looking north, from Killymallaght Road, close to Killymallaght	Medium/high (accounting for nearby residential dwellings)	Negligible to low	Negligible to minor adverse	Negligible	Neutral
8. View looking north-west, from Curryfree Road, south of Curryfree Hill	Medium	Low to medium	Moderate adverse	Negligible	Negligible to minor adverse
9. View looking north-west, from Curryfree Road at the junction with Rushall Road	Medium/high (accounting for nearby residential dwellings)	Low to medium	Moderate adverse	Negligible	Negligible to minor adverse
10. View looking west, from Curryfree Road, just west of	Medium/high (accounting for nearby	Low to medium	Moderate adverse	Negligible	Negligible to minor adverse

Creevedonnell Cricket Club	residential dwellings)				
11. View looking south-west, from Rushall Road, at Gortgranagh	Medium/high (accounting for nearby residential dwellings)	Negligible to low	Minor adverse	Negligible	Neutral
12. View looking south, from Gortinure Road, just west of Warbleshinny	Medium/high (accounting for nearby residential dwellings)	Negligible	Negligible to minor adverse	Nil	Nil
13. View looking south, from Kittybane Road, north of Gortinure	Medium	Negligible	Negligible to minor adverse	Nil	Nil
14. View looking south-east, from Duncastle Road (B48) on the settlement edge of Newbuildings	Medium/high (accounting for nearby residential dwellings)	Negligible	Neutral	Nil	Nil
15. View looking south-east, from Duncastle Road (B48)	Medium	Negligible	Neutral	Nil	Nil
16. View looking east, from Clampernow Road	Medium	Negligible	Negligible to minor adverse	Nil	Nil
17. View looing south/south-east, from Ballougry Road, south of Ballougry Hill	Medium	Negligible	Neutral	Nil	Nil
18. View looking south-east, from the public footpath on the western bank of the River Foyle	High	Negligible	Neutral	Nil	Nil
19. View looking south-east, from the public footpath, just east of Newtownhamilton	High	Negligible	Neutral	Nil	Nil
20. View looking south-east, from Mullenan Road (A40)	High (accounting for adjacent Historic Park and Garden)	Negligible	Neutral	Nil	Nil

- 7.11. The likely visual impacts associated with the proposed development will be limited to a range of receptors in the immediate and local context of the site and can be broadly summarised into two distinct areas of impact, where impacts and effects are considered 'greatest' (albeit not significant overall).
- 7.12. The greatest degree of visual impact would relate to users of the local road network, passing immediately adjacent to the site (including some nearby residential dwellings, although these tend to be screened by vegetation around the curtilages). Viewpoint 1 illustrates the nature of such views where at such a close distance, some degree of visual impact is inevitable.

Notwithstanding the significance of visual effect at Year 1 being 'moderate to major adverse' (largely by virtue of the change in land use and ancillary components such as attenuation and access track as well as the BESS infrastructure), this reduces to 'moderate adverse' given the positive effect of proposed earthworks and planting on screening and assimilating the development.

- 7.13. Viewpoints 8, 9 and 10 illustrate the nature of views from the areas around Curryfree Road, illustrated from the road network but also representative of some dwellings where these have clear and direct views to the site. From these locations the site is at its most visible in respect of the wider landscape (i.e. not adjacent to the site), with topography of the site presenting a slope which faces broadly east and north, and with the formation of the Burngibbagh valley affording more open views from locations which are set across this valley and on the higher ground of the Sperrin foothills.
- 7.14. That said, these are more distant views, and the site forms only a smaller part of the overall hill on which it sits; vegetation in both close and far proximity to the receptors does add some variability to the extent of available views.
- 7.15. Visual impacts from these locations varies, but tends to be 'moderate adverse' at completion, based on views to the existing ground plan of the site which will alter to that of the proposed development) reducing down to 'negligible to minor adverse' in the long term and following the establishment of mitigation. This is because the approach to mitigation, including the slightly lowered development platform, earthworks screening bund and proposed landscape planting will form an effective screen in the medium to long term.
- 7.16. Other areas to north, north-west and north (Viewpoints 11, 12 and 13) are generally from more elevated locations with direct views to the site potentially available, albeit more oblique and with existing vegetation more influential in terms of screening than from views to the east.
- 7.17. From the west, including longer distance views across the valley of the River Foyle, various factors influence the potential visibility of the proposed development plus, where visible, influenced the scale and perception of change. These include screening by landform and vegetation, but also the backdrop of the upland topography of the Sperrin foothills (which dominate views) along with the larger scale wind turbines. Existing larger scale farmsteads are an influence also.
- 7.18. From the south, there are some limited views but topography, combined with existing vegetation forms a partial screen and this will be augmented by the proposed tree planting and shelter belt which would fully screen views to the site from this direction
- 7.19. What remains is a large part of the surrounding landscape, including the areas accessible by the network of local roads, that have no views to the proposed development.
- 7.20. Overall, potential views and impact of the proposed development are limited to those on site and adjacent to the site boundaries. There is little/no perception of the site from the surrounding landscape, nor will there be of the proposed development. Consequently, the proposed development can be successfully integrated and assimilated into the landscape context with no significant visual effects overall.



## 8. Summary and Conclusions

### Overview

- 8.1. Pegasus Group has been instructed by RES Ltd. (the applicant), to undertake a Landscape and Visual Impact Assessment in relation to a proposed battery electricity storage scheme (BESS) on farmland at Trench Road, Disertowen, Co. Derry (the site).
- 8.2. The scope of this LVIA has included early consideration of constraints and opportunities for the site and its local landscape context. This has been used to inform the current proposed Landscape Masterplan for the proposed development.

### Site Overview

- 8.3. The site comprises a single field of agricultural grazing land, ca. 3.88 hectares (ha), with the access to the site proposed from its south-eastern edge, off Trench Road. The site lies within the administrative area of Derry City and Strabane District Council (DCS DC).
- 8.4. The site is not located in an area included in a statutory landscape designation at the national or local level.
- 8.5. The site is located toward the top of a localised rolling hill. The overall topography of the site falls from ca. +109m Above Ordnance Datum (AOD) in its western/south-western corner, across a gradual and even slope down to ca. +105m AOD and ca. +100m AOD in its north-western and north-eastern corners respectively. Beyond the site, the crest of the localised hill extends south-west into the adjacent field and topography generally falls to the north-west (toward the Foyle Valley) and south-east (into the Burngibbagh valley). The site is used for agriculture, currently forming an area of rough grassland/grazing, within a wider landscape context predominantly farmland (mainly pastoral but with occasional arable enclosures scattered across the area). Farmsteads are notable, but also scattered through the local landscape context.
- 8.6. In respect of landscape character, published guidance is available at a regional and local level, the former placing the site in an area of transitional landscape character between the Foyle Valley and the North Sperrin Hills and valleys; at the more local level the site sits more centrally within an extensive area defined as LCA 31, 'Burngibbagh and Drumahoe'.

### Proposed Development and Landscape Strategy

- 8.7. The proposed development comprises a battery energy storage system (BESS) together with associated equipment and infrastructure.
- 8.8. Landscape mitigation proposals include:
  - earthworks to create a practical development platform – partly sunken into the landform – and to create acoustic and visual screening bunds to the north and east/south-east of adjacent to the eastern and western boundaries of the site; and
  - attenuation basins in the northern parts of the site; and



- landscape planting and habitat enhancement in respect of landscape and ecological mitigation.
- 8.9. As well as providing the intended filtering and screening of views towards the proposed development, all of the proposed planting has been designed to fit with the local landscape character and vegetation patterns.

## Landscape Character Effects

- 8.10. Aside from the physical changes to the agricultural land use – along with introduction of the BESS facility and associated infrastructure – the landscape impacts will be concerned with the perception of these changes and subsequent impact on the character and appearance of the landscape.
- 8.11. The proposed development would result in the conversion of a small and single parcel of agricultural land to a BESS facility and associated ancillary infrastructure.
- 8.12. The changes to the physical landscape resources are limited to the site, and limited to the landform (cut and fill to achieve a development platform and create screening bunds/attenuation) and land use (with part of the site given over to BESS infrastructure and the remaining parts altered from agricultural to landscape mitigation).
- 8.13. The impacts on landform will not be of a sufficient scale to alter the overall profile of the localised hill, nor would the change in land use form a notable disturbance to the wider pattern of agricultural use.
- 8.14. Mitigation inherent in the proposed development will reduce the influence of this over a relatively short timescale. It's important to note that the proposed development is not limited to the adverse impacts of the built elements of the BESS and its infrastructure, but also include positive elements in respect of the contribution to landscape character in the form of hedgerow, tree belts, scrub planting and wildflower grasslands.
- 8.15. Notwithstanding changes (and impacts) at the site level, the proposed development would not disrupt the overall perception, understanding and appreciation of the wider landscape, to the point where it would be of detriment to its character.
- 8.16. The assessment of impacts on landscape character has determined that the significance of effect on the 'LCA 31 'Burngibbagh and Drumahoe' will be '**negligible adverse**' at Year 1, reducing to '**neutral**' in the longer term at Year 15.
- 8.17. Considering the site in its local landscape context, the significance of effect on the 'LCA 31 'Burngibbagh and Drumahoe' will be '**moderate adverse**' at Year 1, reducing to '**minor adverse**' in the longer term at Year 15.
- 8.18. Overall, this level of impact and effect in terms of the landscape character, particularly given the limited context and containment of the site, is not considered to be significant overall.

## Visual Effects

- 8.19. Overall, views of the site, and likely direct views of the proposed development, are restricted to a relatively limited area, including the site itself and from locations in the immediate



context of the site. There are some views from the wider landscape context but the site and proposed development will not form prominent components in these long distance views.

- 8.20. Overall, the proposed development would result in only limited effects on local visual amenity, with notable effects limited to locations on or adjacent to the site, including from Trench Road and from Curryfree to the east. However, mitigation inherent in the proposed development will be successful in reducing impacts and effects over time.
- 8.21. In longer distance views towards the site from the wider surrounding area, the proposed development is either not prominent, is consistent with the existing character, or is unlikely to be visible in the view.
- 8.22. Consequently, visual effects are not considered to be significant overall.

## **Conclusion**

- 8.23. Overall, it is considered that the proposed development incorporates a robust landscape mitigation strategy that is included as an inherent part of the scheme. This will avoid or minimise potential adverse effects.
- 8.24. Consequently, landscape and visual effects arising from the proposed development, even where these are higher in the short term, remain limited and highly localised overall.



## **APPENDICES.**



## **Appendix A.**

### **LVIA Methodology**



## **A. Appendix A: Landscape and visual effects detailed methodology (GLVIA3)**

### **A.1. INTRODUCTION**

A.1.1 This assessment aims to determine the likely effects of the proposed development on the existing landscape and visual receptors in the study area. The following landscape resources and visual receptors have been addressed:

- Physical landscape features and elements;
- Landscape character; and
- Views and visual amenity experienced by residents, recreational users (including visitors and tourists) and road users.

A.1.2 This assessment details the impacts that may result as a consequence of the proposed development and considers the likely significance of effect arising as a result.

### **A.2. APPROACH**

A.2.1 The approach and methodology used for this assessment has been developed in accordance with the guidance in the following documents:

- Landscape Institute and Institute of Environmental Management and Assessment (April 2013) Guidelines for Landscape and Visual Impact Assessment 3rd Edition;
- Natural England (October 2014) An Approach to Landscape Character Assessment;
- Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals; and
- Landscape Institute Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations.

A.2.2 The overall approach to the identification and assessment of landscape and visual effects is summarised as follows:

- determining the scope of the assessment;
- collating baseline information for landscape and visual receptors, including completing desk study research and undertaking field-based survey work;

- review the proposed development and identify and describe the likely impacts of the proposed development (enabling specific judgments to be made on sensitivity of landscape and visual receptors);
- establish the sensitivity of landscape and visual receptors (balancing judgments on susceptibility and value);
- determine the magnitude of impacts (balancing judgments on size / scale, duration and reversibility);
- the assessment of the likely significance of landscape and visual effects through a balanced approach and clear description of judgments on sensitivity and magnitude; and
- the identification of measures to avoid or remedy impacts and the subsequent re-assessment of likely effects.

A.2.3 The following sections provide further detail on this approach.

#### **Determining the Scope of Assessment**

##### ***Spatial Scope***

A.2.4 The spatial scope for the assessment has been determined by a two-staged approach. Firstly, a 'preliminary study area' is identified. This is based on the wider setting and context of the site and sets the broad parameters for collation of baseline information; this scope also accounts for the potential effects that will be generated by the proposed development.

A.2.5 In order to focus on the key sensitive receptors and likely effects the spatial scope of the preliminary study area is then refined through the initial stages of the assessment (i.e. desk study and field survey work).

A.2.6 The visual envelope of the site has been considered through desk top analysis of topographical data combined with field surveys to investigate visual enclosure arising from landform, vegetation and built form.

##### **Collating Baseline Information**

A.2.7 In order to capture a comprehensive description of the baseline position for landscape and visual receptors, information has been collated using desk study and field survey work. These processes include reference to published landscape character studies and a range of views and visual receptor types.

### ***Desk Study***

A.2.8 The desk study has identified potentially sensitive landscape resources by reference to OS maps and existing published landscape character studies, relevant planning policy guidance and/or designated or protected views. This stage has also enabled the identification of potential visual receptors such as public rights of way (PROW), residential properties or designated areas.

### ***Field Survey***

A.2.9 Detailed field survey work for this LVIA has further identified landscape elements and features that contribute to the landscape character of the area and visual receptors that will have potential views of the site.

A.2.10 A series of representative photographs were taken during the field work. The photographs were taken with a digital camera with a 50mm lens (equivalent focal length). These are presented as both a series of contextual panoramic photographs with a 60° horizontal field of view (HFoV), supplemented by a full-size single image centred on the site, with a 39.6° HFoV and a 27° vertical field of view (VFoV), as advised by the Landscape Institute Technical Guidance Note 06/19. These have been used to inform the assessment of both landscape and visual impacts.

### **Assessment of Effects**

A.2.11 Having established the relevant baseline position the assessment process then completes the following specific stages:

- Evaluate the sensitivity of the landscape receptors and visual receptors, specifically in response to the type of proposed development (sensitivity of landscape resources is not standard and depends on the nature and type of development proposed);
- Identify the potential magnitude of impact on the physical landscape, on landscape character and on visual receptors; and
- Combine professional judgments on the nature of the receptor (sensitivity) and the nature of the change or impact (magnitude) to arrive at a clear and transparent judgment of significance.

A.2.12 For both landscape and visual effects, the final conclusions on significance are based on the combination of sensitivity and magnitude. The overall judgment on significance is based on the combination of each of the criteria. The rationale for the balance and justification for each judgement is expressed in the detailed analysis.

A.2.13 To draw a distinction between different levels of significance, a scale for the degrees of significance, along with criteria and definitions, have been developed. These provide a structure for making judgements which are clear and objective. However, it is necessary to remember that landscapes and interactions in the landscape are both complex and subtle; as such an element of subjectivity remains. No landscape will fit wholly into any one definition and to try would require extensive and complex criterion.

A.2.14 Consequently, professional judgements draw in conclusions in respect of sensitivity, magnitude and significance are fully and clearly described by the detailed written analysis presented in the LVIA, supported by descriptive thresholds and criteria for each of these stages in relation to landscape impacts and, separately, visual impacts are set out in the following sections.

### **A.3. ASSESSMENT OF LANDSCAPE EFFECTS**

#### **Overview of landscape sensitivity**

A.3.1 Although landscape has some intrinsic sensitivity, different landscape receptors have different elements and features that can accommodate a variety of development types.

A.3.2 To reliably inform detailed assessment of impacts, landscape sensitivity needs to be determined with reference to the changes arising from the specific type of development in question. Therefore, landscape sensitivity is assessed combining judgements on the value attached to a landscape and the susceptibility to the type of change and nature of the development proposed.

#### ***Landscape value***

A.3.3 Landscape value is the relative value attached to a potentially affected landscape. Landscape value will vary in relation to the different stakeholders and different parts of society that use or experience a landscape.

A.3.4 Although factors such as formal designations are an important component when determining value, other aspects are also considered as part of the judgement process.

A.3.5 These include issues related natural and cultural heritage (for example ecological, geological or heritage matters), landscape condition, associations (in terms of connections with people, arts or events), distinctiveness (i.e. a sense of unique identity in the landscape), recreational opportunities, perceptual aspects (including scenic quality, wildness and tranquillity) and landscapes with a clearly identifiable role or function.

- A.3.6 Even where a landscape is included in the boundaries of a formal designation, landscape value will vary in response to the specific landscape that is being considered based on its condition, sense of seclusion or isolation, the presence or absence of detracting features, the presence or absence of rare or distinctive elements and features, and, the degree to which these form key characteristics.
- A.3.7 Factors that have been considered in making judgements on landscape value include designations (both national and local), local planning documents, status of features (e.g. TPOs or Conservation Areas) and local community and interests (for example local green spaces, village greens or allotments).
- A.3.8 The following table sets out the criteria that have been considered for determining landscape value. These are informed by the factors identified the LI TGN 02/21<sup>1</sup>.

**Table A.1: Factors used for determining landscape value**

Value	Factors
High	<p>Designated areas at an International or National level (including, but not limited to, World Heritage Site, National Parks, AONB's) and also considered an important component of the country's character, experienced by high numbers of tourists.</p> <p>Evidence of natural and cultural heritage interests which contribute positively to the landscape are prominent.</p> <p>Landscape condition in respect of the physical state of individual elements or overall structure is good.</p> <p>Landscape associations might be understood in the national.</p> <p>The distinctiveness of the landscape reflects a strong sense of identity.</p> <p>Recreational opportunities where the experience of landscape is important and/or promoted are extensive.</p> <p>Perceptual scenic/visual qualities are objectively considered as good.</p> <p>Perceptual qualities of wildness, tranquillity and/or dark skies are elevated.</p> <p>Elements of the landscape make a strong contribution to a clearly identifiable landscape function. Functions themselves are landscape specific.</p>

<sup>1</sup> Landscape Institute Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations

Value	Factors
Medium	<p>Designated areas at a Regional or County level (including, but not limited to, green belt, regional scale parks, designated as open space or a Conservation Area in local planning documents) and also considered a distinctive component or the region/county character experienced by a large proportion of its population.</p> <p>Evidence of natural and cultural heritage interests which contribute positively to the landscape are apparent.</p> <p>Landscape condition in respect of the physical state of individual elements or overall structure is fair.</p> <p>Landscape associations might be understood in the local context.</p> <p>The distinctiveness of the landscape reflects a common sense of identity.</p> <p>Recreational opportunities where the experience of landscape is important and/or promoted are available.</p> <p>Perceptual scenic/visual qualities are objectively considered as ordinary.</p> <p>Perceptual qualities of wildness, tranquillity and/or dark skies are fair.</p> <p>Elements of the landscape make a fair contribution to a clearly identifiable landscape function. Functions themselves are landscape related.</p>
Low	<p>No formal designations but a landscape of local relevance (including, but not limited to, public or semi-public open spaces, village greens or allotments) and also green infrastructure and open spaces within residential areas likely to be visited and valued by the local community.</p> <p>Evidence of natural and cultural heritage interests which contribute positively to the landscape are discreet.</p> <p>Landscape condition in respect of the physical state of individual elements or overall structure is poor.</p> <p>Landscape associations which might be understood are highly localised or esoteric.</p> <p>The distinctiveness of the landscape reflect a generic sense of identity.</p> <p>Recreational opportunities where the experience of landscape is important and/or promoted are limited.</p> <p>Perceptual scenic/visual qualities are objectively considered as poor.</p> <p>Perceptual qualities of wildness, tranquillity and/or dark skies are degraded.</p> <p>Elements of the landscape make a limited contribution to a clearly identifiable landscape function. Functions themselves are generic.</p>

***Landscape susceptibility***

A.3.9 The second component of landscape sensitivity relates to susceptibility. Landscape susceptibility to change is the ability of a landscape to accommodate change without undue consequences for the maintenance of the baseline situation. In this context, the term landscape receptors can be expanded to cover character areas, particular landscape character types or an individual landscape element or feature. Landscape susceptibility will vary in response to the specific landscape that is being considered and to the nature or type of change that may occur.

A.3.10 The following table sets out the criteria that have been considered for determining landscape susceptibility.

**Table A.2: Criteria for landscape susceptibility**

Susceptibility	Criteria
High	<p>Scale of enclosure – landscapes with a low capacity to accommodate the type of development proposed due to the nature of, and interactions between, landscape components (e.g. topography, vegetation cover and built form).</p> <p>Nature of land use – landscapes with no or very little existing reference or context to the type of proposed development.</p> <p>Nature of existing elements – landscapes with components that are not easily retained, replaced or substituted.</p> <p>Nature of existing features – landscapes where detracting features or major infrastructure is not present or where these are present but their influence on the landscape is limited.</p>
Medium	<p>Scale of enclosure – landscapes with a medium capacity to accommodate the type of development proposed due to the nature of, and interactions between, landscape components (e.g. topography, vegetation cover and built form).</p> <p>Nature of land use – landscapes with some existing reference or context to the type of proposed development.</p> <p>Nature of existing elements – landscapes with components that are easily retained, replaced or substituted.</p> <p>Nature of existing features – landscapes where detracting features or major infrastructure is present and the influence of these on the landscape is noticeable.</p>

Susceptibility	Criteria
Low	<p>Scale of enclosure – landscapes with a high capacity to accommodate the type of development proposed due to the nature of, and interactions between, landscape components (e.g. topography, vegetation cover and built form).</p> <p>Nature of land use – landscapes with extensive existing reference or context to the type of proposed development.</p> <p>Nature of existing elements – landscapes with components that are easily retained, replaced or substituted, or where there are few/no existing elements present.</p> <p>Nature of existing features – landscapes where detracting features or major infrastructure is present and the influence of these on the landscape is dominant.</p>

**Landscape sensitivity**

- A.3.11 Landscape sensitivity is a term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor. Receptors can include specific elements or features or may be judged at a wider scale and include landscape character parcels, types or areas.
- A.3.12 Having considered in detail the contributing factors to landscape value and the susceptibility of the site and surrounding area to the type of the development proposed, conclusions on landscape sensitivity can be drawn by balancing the judgements on value and susceptibility.
- A.3.13 As advocated in the GLVIA3, professional judgement is used to balance judgements on value and susceptibility in order to determine sensitivity. Each of these aspects of the analysis will vary subject to the scale and detail of the assessment. Overall judgements on landscape sensitivity are subsequently described as; ‘very high’, ‘high’, ‘medium’, ‘low’ or ‘negligible’.

**Magnitude of landscape impacts**

- A.3.14 The effect on landscape receptors is assessed in relation to the size or scale of impact, the geographical extent of the change and the duration and the reversibility of the impact. The magnitude of landscape impacts has been assessed in accordance with the criteria set out in the following table.



**Table A.3: Criteria for determining magnitude of landscape impacts**

Magnitude	Criteria
Very high	<p>The size and scale of change is considered very large due to the extent and proportion of loss of existing landscape elements or the degree of alteration to aesthetic or perceptual aspects.</p> <p>The nature and scale of change to key characteristics which are critical to character is considered very large.</p> <p>Where the geographical extent would have a very substantial influence on the landscape at a regional scale, i.e. across several landscape character areas/types.</p> <p>Duration of impacts would be considered very long term and where the potential reversal of the impact is not likely and in practical terms would be very difficult to achieve.</p>
High	<p>The size and scale of change is considered large due to the extent and proportion of loss of existing landscape elements or the degree of alteration to aesthetic or perceptual aspects.</p> <p>The nature and scale of change to key characteristics which are critical to character is considered large.</p> <p>Where the geographical extent would have a substantial influence on the landscape at a regional scale, i.e. across several landscape character areas/types.</p> <p>Duration of impacts would be considered long term and where the potential reversal of the impact is not likely and in practical terms would be very difficult to achieve.</p>
Medium	<p>The size and scale of change is considered moderate due to the extent and proportion of loss of existing landscape elements or the degree of alteration to aesthetic or perceptual aspects.</p> <p>The nature and scale of change to key characteristics which are critical to character is considered moderate.</p> <p>Where the geographical extent would influence the landscape at a local scale, i.e. a single landscape character area/type (or potentially multiple areas/types where a site is located on the boundary between areas).</p> <p>Duration of impacts would be considered midterm and where the potential reversal of the impact is likely and in practical terms would be difficult to achieve.</p>

Magnitude	Criteria
Low	<p>The size and scale of change is considered small due to the extent and proportion of loss of existing landscape elements or the degree of alteration to aesthetic or perceptual aspects</p> <p>The nature and scale of change to key characteristics which are critical to character is considered small</p> <p>Where the geographical extent would influence the landscape in the immediate setting of the site, i.e. limited to the influence of part of a single landscape character area/type</p> <p>Duration of impacts would be considered short term and where the potential reversal of the impact is more likely and in practical terms would easily be achieved</p>
Negligible	<p>The size and scale of change is considered very small due to the extent and proportion of loss of existing landscape elements or the degree of alteration to aesthetic or perceptual aspects</p> <p>The nature and scale of change to key characteristics which are critical to character is considered very small</p> <p>Where the geographical extent would substantially influence the landscape of the site only</p> <p>Duration of impacts would be considered very short term and where the potential reversal of the impact is very likely or committed and in practical terms would very easily be achieved</p>
Nil	There is no perceived change to the landscape

A.3.15 These judgements are then taken forward to an assessment of the significance of landscape effects.

#### A.4. ASSESSMENT OF VISUAL EFFECTS

A.4.1 Visual receptors include a particular person or groups of people likely to be affected at a specific viewpoint or series of viewpoints.

##### Visual sensitivity

A.4.2 Sensitivity of visual receptors is determined through balancing judgements on the value attached to a particular view against the receptors susceptibility to change in a view or visual amenity. Given the need to address the specific issues of the proposed development these factors in the context of visual sensitivity are considered as part of the assessment of visual effects.

A.4.3 The value attached to a view includes recognition of value through formal designations (for example planning designations or heritage assets), indicators of value attached to views by

visitors (for example inclusion on maps/guidebooks, provision of facilities, presence of interpretation).

A.4.4 For example, views of higher value are likely to be from designated landscapes where the condition or scenic quality of the view is higher and where distinctive elements or features form a prominent part of a view; views of lower value are likely to be from area of landscapes where the condition and scenic quality of the view is poorer, where there is no reference to distinctive elements or features and where detracting features are prominent in the view.

A.4.5 The susceptibility of different visual receptors to changes in views and visual amenity is judged based on the activity of people experiencing the view at any given time or location and the extent to which their attention would be focused on the view and visual amenity rather than on the activity being undertaken.

A.4.6 For example, views more susceptible to change are likely to be permanent views, in unenclosed or elevated positions in the landscape and where the landscape forms a primary focus for the activity of the receptor; views less susceptible to change are likely to be transient or temporary views, located in enclosed areas of the landscape where the landscape is a secondary focus or consideration to the activity of the receptor.

A.4.7 The following table sets out the definitions of sensitivity for different visual receptors.

**Table A.4: Criteria for visual sensitivity**

Sensitivity	Definition
Very high	Designated or protected views or views from publicly accessible locations in protected landscapes  Tourists and visitors to heritage assets, or other attractions, where views of the surroundings are an important contributor to the experience and visit
High	Occupiers of residential properties  People who are engaged in outdoor recreation whose attention is likely to be focussed on the landscape  People travelling through the landscape on roads, rail or other transport routes where this involves recognised scenic routes and an awareness of views and visual amenity

Sensitivity	Definition
Medium	<p>People travelling more generally through the landscape on roads, rail or other transport routes</p> <p>People staying in hotels and healthcare institutions</p> <p>People at work and in educational institutions where visual amenity is an important contributor to the setting and quality of working life</p>
Low	<p>People at work and in educational institutions where the visual setting is not important to the quality of working life</p> <p>People engaged in formal sports where the visual setting may play a role, but attention is focused on the activity</p> <p>Views from publicly accessible locations in degraded landscapes</p>

A.4.8 It should be noted that as professional judgement is applied to the balance of value and susceptibility of visual receptors, there may be some instances where a typical receptor is defined a different degree of sensitivity to the guidance included in the table, above.

**Magnitude of visual impacts**

A.4.9 The effect on visual receptors is also assessed in relation to the size or scale of change, the geographical extent of the change, the duration of the change and the reversibility of the impact. The magnitude of visual impacts has been assessed in accordance with the criteria set out in the following table.

**Table A.5: Criteria for determining magnitude of visual impacts**

Magnitude	Criteria
Very High	<p>The size and scale of change is considered very substantial due to the extent of loss, addition or alteration of features, the changes to the composition of the view including the proportion of the view occupied by the proposal, the degree of contrast and the nature of the experience</p> <p>The geographical extent in relation to the angle, distance and proportion of visibility is considered as very extensive</p> <p>Duration of impacts would be considered long term and where the potential reversal of the impact is not likely and in practical terms would not be achievable</p> <p>Alteration in very close proximity</p>

Magnitude	Criteria
High	<p>The size and scale of change is considered substantial due to the extent of loss, addition or alteration of features, the changes to the composition of the view including the proportion of the view occupied by the proposal, the degree of contrast and the nature of the experience</p> <p>The geographical extent in relation to the angle, distance and proportion of visibility is considered as extensive</p> <p>Duration of impacts would be considered long term and where the potential reversal of the impact is not likely and in practical terms would be very difficult to achieve</p> <p>Alteration in close proximity</p>
Medium	<p>The size and scale of change is considered fair due to the extent of loss, addition or alteration of features, the changes to the composition of the view including the proportion of the view occupied by the proposal, the degree of contrast and the nature of the experience</p> <p>The geographical extent in relation to the angle, distance and proportion of visibility is considered as small or intermediate</p> <p>Duration of impacts would be considered medium term and where the potential reversal of the impact is likely and in practical terms would be difficult to achieve</p>
Low	<p>The size and scale of change is considered small due to the extent of loss, addition or alteration of features, the changes to the composition of the view including the proportion of the view occupied by the proposal, the degree of contrast and the nature of the experience</p> <p>The geographical extent in relation to the angle, distance and proportion of visibility is considered as limited</p> <p>Duration of impacts would be considered short term and where the potential reversal of the impact is very likely and in practical terms would easily be achieved</p>
Negligible	<p>The size and scale of change is considered very small due to the extent of loss, addition or alteration of features, the changes to the composition of the view including the proportion of the view occupied by the proposal, the degree of contrast and the nature of the experience</p> <p>The geographical extent in relation to the angle, distance and proportion of visibility is considered as very limited</p> <p>Duration of impacts would be considered very short term and where the potential reversal of the impact is very likely or committed and in practical terms would very easily be achieved</p>
Nil	There is no view of the proposed development in the view

A.4.10 These judgements are then taken forward to an assessment of the significance of visual effects.

## A.5. DEFINING SIGNIFICANCE OF EFFECTS

- A.5.1 For both landscape and visual effects, the final conclusion on the significance of an effect is based on the combination of sensitivity of receptor and magnitude of change (or impact). The rationale for the overall judgement on significance is based on the combination of each of the criteria individually leading to the balance and justification of these.
- A.5.2 Detailed assessment is a means of drawing together, in a systematic way, an assessment of the likely significant environmental effects of a proposed development; however not all landscape and visual effects arising will be significant.
- A.5.3 Determination of the significance of an effect requires the application of professional judgement to balance the findings in relation to the sensitivity of the receptor and the magnitude of the predicted impacts.
- A.5.4 The GLVIA3 advocate a move away from formulaic matrices and tables and encourages an approach using professional judgement. Analysis and consideration of value and susceptibility gives rise to a spectrum of judgements on sensitivity, which along with magnitude inform decision making of the effects and help to determine the acceptability of a proposal in landscape and visual terms.
- A.5.5 The criteria for determining the significance of effects for landscape and visual impacts are set out in the following tables, below. These criteria are based on guidance provided by the Landscape Institute.

**Table A.6: Criteria for determining significance of landscape effects**

Significance of Effect	Description The proposed development would:
Major Adverse (Negative) Effect	Be at substantial variance with the character of the receiving landscape. Result in the total loss of a range of characteristic elements and features. Damage the sense of place.
Moderate Adverse (Negative) Effect	Be at variance or inconsistency with the character of the receiving landscape. Degrade or diminish the integrity of a range of characteristic elements and features. Detract from the sense of place.

<b>Significance of Effect</b>	<b>Description</b>
	<b>The proposed development would:</b>
Minor Adverse (Negative) Effect	Not quite fit the character of the receiving landscape. Have some variance with characteristic elements and features. Have a limited influence on sense of place.
Neutral/Negligible Effect	Maintain the character of the receiving landscape. Blend in with characteristic elements and features. Enable the sense of place to be retained.
Minor Beneficial (Positive) Effect	Complement the character of the receiving landscape. Maintain or enhance characteristic elements and features. Enable some sense of place to be restored.
Moderate Beneficial (Positive) Effect	Improve the character of the receiving landscape. Enable the restoration of characteristic elements and features partially lost or diminished as a result of changes from previous inappropriate management or development. Enable the sense of place to be restored.
Major Beneficial (Positive) Effect	Enhance the character of the receiving landscape. Enable the restoration of characteristic elements and features lost as a result of changes from previous inappropriate management or development. Enable the sense of place to be enhanced.

**Table A.7: Criteria for determining significance of visual effects**

<b>Significance of Effect</b>	<b>Description</b>
Major Adverse	The proposed development project would cause major deterioration to a view from a highly sensitive receptor, and would constitute a major discordant element in the view.
Moderate Adverse	The proposed development would cause obvious deterioration to a view from a moderately sensitive receptor, perceptible damage to a view from a receptor of lower sensitivity or limited damage to views to receptors of higher sensitivity.
Minor Adverse	The proposed development would cause limited deterioration to a view from a moderately sensitive receptor, or cause greater deterioration to a view from a receptor of lower sensitivity.
Negligible Adverse	The proposed development and associated changes would be barely perceptible in a view. Changes will be negative (adverse) however this degree of change is not likely to be material and therefore no distinction is made.

Significance of Effect	Description
Neutral	The change in the view would be barely perceptible but would not be apparent as either a positive or negative change.
Nil	There would be no view of the proposed development.
Negligible Beneficial	The proposed development and associated changes would be barely perceptible in a view. Changes will be positive (beneficial) however this degree of change is not likely to be material and therefore no distinction is made.
Minor Beneficial	The proposed development would cause limited improvement to a view from a moderately sensitive receptor, or would cause greater improvement to a view from a receptor of lower sensitivity.
Moderate Beneficial	The proposed development would cause obvious improvement to a view from a moderately sensitive receptor, perceptible improvement to a view from a receptor of lower sensitivity or limited improvements to views to receptors of higher sensitivity.
Major Beneficial	The proposed development would lead to a major improvement in a view from a highly sensitive receptor.

A.5.6 For both landscape and visual effects, interim categories of ‘negligible to minor’, ‘minor to moderate’ and ‘moderate to major’ are used where the judgements on an effect are determined to fit across the descriptive criteria for significance banding.

#### Assessment of Significance

A.5.7 Significance can only be defined in relation to each development and its specific location, and in landscape and visual terms there are no definitive rules as to what constitutes a significant effect.

A.5.8 The GLVIA3 state that, in relation to the EIA Regulations:

A.5.9 *"emphasis is on the identification of likely significant environmental effects. This should embrace all types of effect and includes for example those that are positive/beneficial and negative/adverse... Identifying significant effects stresses the need for an approach that is in proportion to the scale of the project and the nature of its likely effects."*

A.5.10 For the purposes of this LVIA, in relation to the Site and Proposed Development, effects are considered to be 'significant' where these are judged to be 'moderate to major' or 'major' (either adverse or beneficial).



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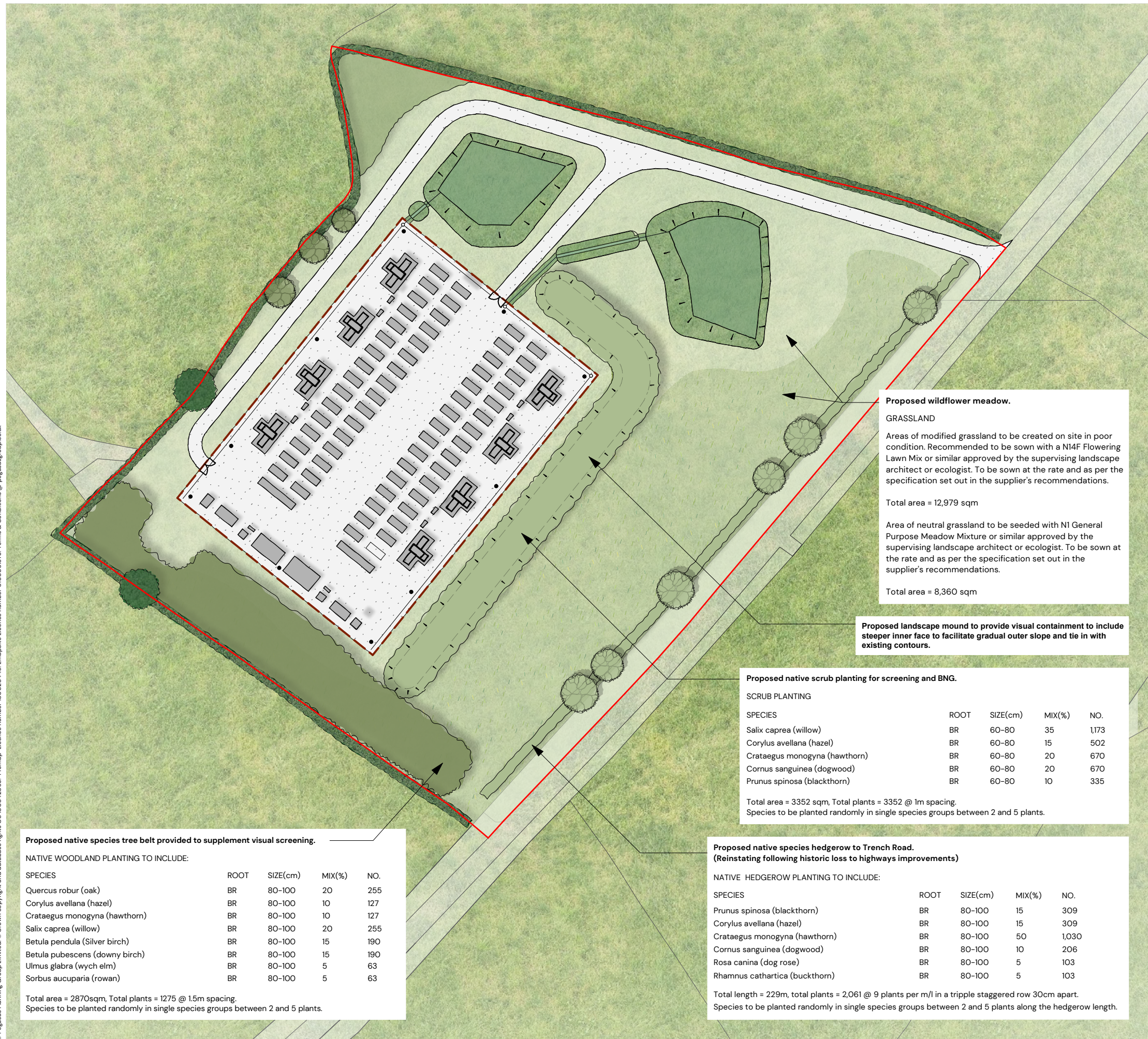
A.5.11 However, it is important to note that there remains an element of professional judgement when drawing together an 'overall judgment' on effects and that one single 'significant effect' might not lead to landscape and visual effects being significant on balance (for example, one viewpoint subject of a significant effect may not equate to visual effects being significant overall).















## **Appendix B.**

### **Illustrative Landscape Masterplan**





-  Site Boundary
-  Existing Vegetation to be Retained
-  Proposed Layout and Hardstanding Area
-  Proposed Fencing
-  Proposed Native Tree Planting
-  Proposed Woodland Shelter Belt
-  Proposed Native Scrub Planting
-  Proposed Native Hedgerow and Hedgerow Trees
-  Proposed Modified Grassland
-  Proposed Neutral Grassland
-  Proposed SuDS
-  Proposed Bund

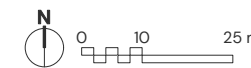
**NOTES:**  
 - The outer slope of the bund is to be graded and landscaped.  
 - All soft landscape works are to be carried out in accordance with BS4478 "Code of Practice for General Landscape Operations" and BS3936:1992 "Recommendations for Cultivations and Planting in the Advanced Nursery Stock Category".  
 - Planting numbers indicative only.

07/06/2024	B	Client comments
05/06/2024	A	Client comments
16/05/2024	-	First Issue
DATE	NO	REVISION NOTE

# Illustrative Landscape Masterplan

## Killymallaght Energy Storage System

CLIENT  
RES Ltd



DATE: 16/05/2024      SCALE: 1:1250@A3      TEAM: JW      APPRVD: JWA

DRAWING NUMBER

P23-2714\_EN\_0007\_B\_0001



**Proposed native species tree belt provided to supplement visual screening.**

**NATIVE WOODLAND PLANTING TO INCLUDE:**

SPECIES	ROOT	SIZE(cm)	MIX(%)	NO.
Quercus robur (oak)	BR	80-100	20	255
Corylus avellana (hazel)	BR	80-100	10	127
Crataegus monogyna (hawthorn)	BR	80-100	10	127
Salix caprea (willow)	BR	80-100	20	255
Betula pendula (Silver birch)	BR	80-100	15	190
Betula pubescens (downy birch)	BR	80-100	15	190
Ulmus glabra (wych elm)	BR	80-100	5	63
Sorbus aucuparia (rowan)	BR	80-100	5	63

Total area = 2870sqm, Total plants = 1275 @ 1.5m spacing.  
 Species to be planted randomly in single species groups between 2 and 5 plants.

**Proposed wildflower meadow.**

**GRASSLAND**

Areas of modified grassland to be created on site in poor condition. Recommended to be sown with a N14F Flowering Lawn Mix or similar approved by the supervising landscape architect or ecologist. To be sown at the rate and as per the specification set out in the supplier's recommendations.

Total area = 12,979 sqm

Area of neutral grassland to be seeded with N1 General Purpose Meadow Mixture or similar approved by the supervising landscape architect or ecologist. To be sown at the rate and as per the specification set out in the supplier's recommendations.

Total area = 8,360 sqm

**Proposed landscape mound to provide visual containment to include steeper inner face to facilitate gradual outer slope and tie in with existing contours.**

**Proposed native scrub planting for screening and BNG.**

**SCRUB PLANTING**

SPECIES	ROOT	SIZE(cm)	MIX(%)	NO.
Salix caprea (willow)	BR	60-80	35	1,173
Corylus avellana (hazel)	BR	60-80	15	502
Crataegus monogyna (hawthorn)	BR	60-80	20	670
Cornus sanguinea (dogwood)	BR	60-80	20	670
Prunus spinosa (blackthorn)	BR	60-80	10	335

Total area = 3352 sqm, Total plants = 3352 @ 1m spacing.  
 Species to be planted randomly in single species groups between 2 and 5 plants.

**Proposed native species hedgerow to Trench Road. (Reinstating following historic loss to highways improvements)**

**NATIVE HEDGEROW PLANTING TO INCLUDE:**

SPECIES	ROOT	SIZE(cm)	MIX(%)	NO.
Prunus spinosa (blackthorn)	BR	80-100	15	309
Corylus avellana (hazel)	BR	80-100	15	309
Crataegus monogyna (hawthorn)	BR	80-100	50	1,030
Cornus sanguinea (dogwood)	BR	80-100	10	206
Rosa canina (dog rose)	BR	80-100	5	103
Rhamnus cathartica (buckthorn)	BR	80-100	5	103

Total length = 229m, total plants = 2,061 @ 9 plants per m/l in a tripple staggered row 30cm apart.  
 Species to be planted randomly in single species groups between 2 and 5 plants along the hedgerow length.





## **Appendix C.**

### **Published Landscape Character Assessment Extract**

# Northern Ireland Landscape Character Assessment 2000

## LCA 31 Burngibbagh and Drumahoe

### Landscape

*Last updated: 12 February 2010*

#### Key Characteristics

- linear valley system with a strong NE-SW alignment
- valley has a flat floor and is enclosed by broad, rounded ridges
- hedgerows enclosing pastures form a strong, geometric pattern on the valley sides, with small areas of open moorland capping some summits
- pylons lines are a dominant landscape element, particularly to the north
- built development concentrated in centre of valley, near Drumahoe

#### Landscape Description

The Burngibbagh and Drumahoe landscape character area includes the long, linear valley system of the Burngibbagh and the lower Faughan River and its enclosing ridges. The valley lies to the east of Londonderry and is parallel to the River Foyle. The valley has a strong linear form and is aligned along a NE-SW axis, following a similar geological fault line to that of the River Foyle. The valley floor is relatively flat and well-defined and the enclosing ridges have a broad, rounded landform with open summits. The higher summits, such as Gortree Hill and Clondermot, are capped with brown moorland, which stands out clearly against the surrounding green pastures. Pasture is the predominant land use and the fields are enclosed by a neat network of hedgerows, with a transition to stone walls on some upper slopes. The hedgerows form a strong geometric pattern on the valley sides. The northern part of the valley, which contains the lower Faughan River, has a more open character, with larger fields and a relatively wide, unenclosed valley floor.

This part of the valley is dominated by a major power transmission line, with large pylons sited on raised plinths on the marshy valley floor. The Faughan River enters the Burngibbagh and Drumahoe valley system at its central point and then turns abruptly north to follow the natural fault-line. The valley is more open at this point and there is industrial development on the outskirts of the settlement of Drumahoe, as well as development spreading westwards from Londonderry along the A6. The southern part of the valley, which contains the Burngibbagh, has a more secluded character. The fields here are smaller and there are numerous hedgerow trees, which increase in density towards the valley floor. The Burngibbagh itself is relatively small and inconspicuous.

## **Landscape Condition and Sensitivity to Change**

The Faughan River valley, to the north, has a more degraded landscape character, with evidence of hedgerow loss and some sand and gravel extraction in the Gorticross area. The pylons also detract from the rural quality of this part of the valley. The valley landscape is relatively sensitive because it is in a highly accessible area; the ridgetops to the west also form part of the wider landscape setting of Londonderry. The Burngibbagh section of the valley, to the south, is particularly sensitive as it is relatively undeveloped. Its secluded, rural character could easily be diminished if the tree cover and hedgerow network was decreased due to built development, mineral extraction, farm expansion etc.

## **Principles for Landscape Management**

- the conservation of hedgerows and stone walls will ensure that the strong landscape pattern which is characteristic of the valley system is maintained
- there is scope to restore some of the disused sand and gravel quarries in the Gorticross area, using woodland planting to improve the definition of the valley form in this relatively open section of the valley

## **Principles for Accommodating New Development**

- the Clondermot ridge, to the east of Londonderry, forms part of the landscape setting for the city. The Burngibbagh valley system is, however, quite separate and it would not be appropriate for development to spread over the ridgetop and into the valley of the lower Faughan
- further development can be accommodated in the Drumahoe area, where the valley broadens to form a natural bowl shape. However, the valley is relatively open at this

point and any built development should be associated with extensive planting, using native species, to integrate it with the surrounding landform

- white-washed dwellings and red-roofed barns are characteristic of the area
- development within the Burngibbagh valley to the south could disrupt its secluded, unspoilt character

# Burngibbagh and Drumahoe Geodiversity Profile

▪ *Last updated: 16 February 2010*

## ▪ **Outline Geomorphology and Landscape Setting**

- The use of a cultural overlay in defining Landscape Character Areas (LCAs) means that they frequently subdivide natural physiographic units. It is common therefore for significant geomorphological features to run across more than one LCA. It is also possible in turn, to group physiographic units into a smaller number of natural regions. These regions invariably reflect underlying geological, topographic and, often, visual continuities between their component physiographic units, and have generally formed the basis for defining landscape areas such as AONBs. It is essential therefore, that in considering the 'Geodiversity' of an individual LCA, regard should be given to adjacent LCAs and to the larger regions within which they sit. In the original Land Utilisation Survey of Northern Ireland, Symons (1962) identified twelve such natural regions.
- This LCA lies within the region described as the Western River Basins,, although it grades westwards into the valley floor of the River Foyle and eastwards into the Northe Derry Uplands and Sperrin Mountains. The Western River Basins region consists essentially of the connected river systems that drain the Carboniferous and Old Red Sandstone plateau of County Tyrone, as well as the foothills of the Sperrin Mountains to the east and Donegal to the west. The region extends from the Omagh Basin in the south, northwards along the lower Foyle valley. The Omagh Basin has particular significance as an ice centre during the Late Midlandian and is now largely covered by a complex mixture of glaciofluvial sands and gravels and drumlins overlying Rogen moraines. When the headwaters of these river systems rise together they have in the past been responsible for serious flooding at the bottleneck of Strabane. Although this has been mitigated by extensive drainage control works in and around the town.
- The Burngibbagh and Drumahoe landscape character area includes the long, linear valley system of the Burngibbagh and the lower Faughan River and its enclosing ridges. The valley lies to the east of Londonderry and is parallel to the River Foyle. The valley has a strong linear form and is aligned along a NE-SW fault-guided axis of Caledonian trend. The valley floor is relatively flat and well defined and the enclosing ridges have a broad, rounded landform with open summits. The higher summits, such as Gortree Hill and Clondermot, are capped with moorland, which stands out clearly against the surrounding green pastures.



The Faughan River enters the Burngibbagh and Drumahoe valley system at its central point and then turns abruptly north to follow the natural fault-line. The valley is more open at this point and there is industrial development on the outskirts of the settlement of Drumahoe, as well as development spreading westwards from Londonderry along the A6. The southern part of the valley, which contains the Burngibbagh, has a more secluded character. The Faughan Valley is of high scientific interest due to the presence of extensive glaciolacustrine and glaciofluvial deposits consisting of deltas, moraines, eskers and outwash plains occurring in close field associations. There is scope to restore some of the disused sand and gravel quarries in the Gorticross area.

- **Pre-Quaternary (Solid) Geology**

- The stratigraphy of this area is made up of the mapped formations in the table, the youngest of which usually overlie the oldest. The older formations can be upside down (tectonically inverted).

- **Stratigraphic Table (youngest rocks at the top of the table)**

<b>Carboniferous - about 350 million years old</b>
Barony Glen
<b>Dalradian (Neoproterozoic) - about 600 million years old</b>
Un-named metabasites
Londonderry
Ballykelly

- This LCA is dominated by Dalradian (Neoproterozoic) strata of the Londonderry succession. Structural strike is dominantly east-west to northeast - southwest (NE-SW) with overall northerly dip in the north. These rocks were originally sediments with igneous intrusions: they have been metamorphosed and deformed, such as those seen at ESCR Site 336, Kittybane Quarry.
- Two tectonic phases have affected the area: the Caledonian (Ordovician - Silurian) and Variscan (end Carboniferous). Caledonian deformation is very apparent throughout the Dalradian succession.

- **Quaternary (Drift) Geology**

- Northern Ireland has experienced repeated glaciations during the Pleistocene period that produced vast amounts of debris to form the glacial deposits that cover more than 90% of the landscape. Their present morphology was shaped principally during the last glacial cycle (the Midlandian), with subsequent modification throughout the post-glacial Holocene period. The Late Midlandian, the last main phases of ice sheet flow, occurred between 23 and 13ka B.P. from dispersion centres in the Lough Neagh Basin, the Omagh Basin and Lower Lough

Erne/Donnegal. The clearest imprint of these ice flows are flow transverse rogen moraines and flow parallel drumlin swarms which developed across thick covers of till, mostly below 150m O.D. during a period that referred to as the Drumlin Readvance. At the very end of the Midlandian, Scottish ice moved southwards and overrode parts of the north coast. Evidence for deglaciation of the landscape is found in features formed between the glacial maximum to the onset of the present warm stage from 17 and 13ka B.P. - a period of gradual climatic improvement. Most commonly these are of glaciofluvial and glaciolacustrine origin and include: eskers, outwash mounds and spreads, proglacial lacustrine deposits, kame terraces, kettle holes and meltwater channels (McCarron et al. 2002). During the Holocene, marine, fluvial, aeolian and mass movement processes, combined with human activities and climate and sea-level fluctuations, have modified the appearance of the landscape. The landforms and associated deposits derived from all of these processes are essentially fossil. Once damaged or destroyed they cannot be replaced since the processes or process combinations that created them no longer exist. They therefore represent a finite scientific and economic resource and are a notable determinant of landscape character.

- The drift geology map for this LCA shows a landscape dominated by a mosaic of drift-free summits and lowlands masked by a cover of Late Midlandian till. The latter was laid down by ice that flowed northeastwards along the Foyle Valley, and the direction of flow is recorded by a mix of streamlined drumlins and rock ridges. However, the Quaternary features that are of possibly greatest geomorphological and geological significance are located within areas of deglacial sand and gravel. Of particular interest are those found in the valley of the lower Faughan, that form part of the Faughan/Dungiven Basins Complex. Although extensive sand and gravel deposits also occur in the valley of the Burngibbagh and in the west of the LCA, where there is a small area of the Foyle Valley Complex.
- The Faughan/Dungiven Basins Complex in this LCA consists of 2.1km<sup>2</sup> of outwash deposits along the lower Faughan Valley. The complex itself consists of glaciofluvial deposits that are primarily deltaic in origin and are situated along structural lows in the upper Faughan and upper Roe drainage basins. The area is of high scientific interest due to the presence of extensive glaciolacustrine and glaciofluvial deposits consisting of deltas, moraines, eskers and outwash plains occurring in close field associations. The high relief range allows pleasant views both from the basin bottoms and from the Sperrin valleys. There is a general lack of commercial sand and gravel production in the area except immediately east of

Dunnamanagh and another, larger pit at Moyagh. Most of the complex occurs in LCA 30, smaller areas occur in LCAs 27, 29, 33, 34 and 37.

- The Foyle Valley Complex in this LCA consists of a small area (0.9km<sup>2</sup>) on the western border with LCA 27. The complex itself is a widespread assemblage of landforms which are genetically linked by formation during ice-margin retreat westward from the Sperrin valleys during the last deglacial cycle. Strong control on ice-margin configuration and meltwater drainage patterns was exercised by bedrock topography, serving to focus meltwater along the valley axes. This resulted in the formation of thick, flat-topped glaciofluvial terraces. Increases in sediment supply or temporary reductions in ice-margin retreat rates resulted in the accumulation of thick belts of hummocky moraine. Most of the complex can be found in LCA 27, smaller areas in LCAs 20, 21, 26 and 29.

## ▪ **Key Elements**

### ▪ **Deglacial Complexes**

- the Faughan/Dungiven Basins Complex
- Deltaic deposits are preserved at seven principal locations and are of special scientific interest, as their widespread extent and relationship to proglacial water levels implies that substantial, deep lakes were impounded along the Faughan and upper Roe valleys as Irish ice masses retreated southwards and Scottish ice advanced southwestwards into the lower Roe valley. The upper Roe (Dungiven) and middle to upper Faughan valley basins have been used for mineral aggregate production in the northwest of the province for approximately twenty years.
- the Foyle Valley Complex
- The complex has a high scientific value, for understanding the complexity of deglacial processes and records ice retreat westward from the western Sperrin valleys into the topographic low of the Foyle valley, indicating ice pressure from the direction of the Omagh basin to the south during the last deglacial cycle.

### ▪ **Other sites/units identified in the Earth Science Conservation Review**

- 336 Kittybane Quarry
- Precambrian. Quality outcrop of Ballykelly Formation on south of Lough Foyle Syncline. Preserved sedimentary structures.

# Burngibbagh and Drumahoe Biodiversity Profile

*Last updated: 12 February 2010*

In the following account it should be noted that for consistency, the biodiversity section follows the standard order for all LCAs even though some of the communities discussed later may have more importance for biodiversity than those discussed earlier

## Key Characteristics

- woodlands cover only about 1% of the LCA, considerably lower than for Northern Ireland as a whole (c. 5.6%)
- woodland located as small patches in steep-sided tributary valleys, as wet woodland patches, and in estates
- grassland covers c.82% of the LCA, three quarters of which is improved pasture of low biodiversity; the remainder - rush dominated acid grassland - is also of low biodiversity
- small amount of upland heathland, but almost no peatland
- R. Faughan of importance for Atlantic salmon

## Woodlands

Woodlands cover only about 1% of the LCA, considerably lower than for Northern Ireland as a whole (c. 5.6%). It occurs as small patches alongside tributaries to the Burngibbagh and Faughan, as for example at Carnafarn where oak, ash and sycamore are frequent, but there is also some beech that may indicate 'landscaping'. The ground conditions are often quite wet but the herb layers are diverse. Elsewhere there are small patches of scrub and wood along the flat floor of the Burngibbah valley and on hillsides where soil drainage is particularly poor; willow and alder are dominant (**wet woodland**).

Although individual estate woodlands are small, they are locally significant and include a band east of Derry stretching from Ashbrook to Birch Wood, and Dullerton in the south (**lowland woodland pasture and parkland**). Typical trees of estate woodlands are found, including beech, Scots pine, lime and oak, but there is also birch, and willows and alder in wetter parts. Most of these estate woodlands, and some of the woods alongside the steep tributary valleys, were present by 1830 and indeed many have been traced back to at least the seventeenth century; 'long-established' (at least from 1830) and

possibly 'ancient' woodlands (pre-1600) are thought to be rare in Northern Ireland and may contain species not common in more recent woods.

## Grassland and Arable

Grassland covers c.82% of the LCA, three quarters of which is improved pasture. This generally has low biodiversity as a result of relatively intensive management. Some of the pastures are sown grasslands dominated by ryegrass and few other species - low biodiversity is in-built. Other grasslands have been converted to improved pastures through management. High levels of grazing or repeated cutting for silage, high inputs of fertilizers and slurry, and selective herbicides serve to reduce diversity of both flora and fauna. Arable land cover is similar to that for Northern Ireland as a whole (c.6%); although scattered through the LCA, it is more concentrated to the north on better-drained brown earth soils.



Biodiversity in areas of improved pastures and arable is often concentrated in hedgerows. Indeed, they may be the most significant wildlife habitat over much of lowland Northern Ireland, especially where there are few semi-natural habitats. Hedgerows are a refuge for many woodland and farmland plants and animals. In this LCA predominantly

hawthorn hedgerows around regular, square fields, are generally well-managed in the lower parts but thin towards the uplands where the improved pastures merge into acid and heathy grasslands. The northern part, which contains the lower Faughan River, has a more open character, with larger fields and a relatively wide, unenclosed valley floor; there has been some loss of hedgerows through field amalgamation. In the south, on the low ground of the Burngibbagh valley, the hedgerow trees are dense.

Acid grasslands on the upper slopes of the hills are dominated by rushy fields; some have been abandoned and colonised by willow and alder whereas other merge into heather heath. Rush dominated fields are also common on the organic soils of the flat floor of the Burngibbagh valley.

The variety of land cover within the farmland has created habitats for several bird Priority species, including **skylark**, **song thrush**, **spotted flycatcher** and **yellowhammer**.

## Heaths and Bogs

There is only a little blanket bog in the LCA, on the slopes of Curryfree, but this is cut-over; elsewhere the upland slopes are only of thin peat and generally covered by acid grassland with small areas of **upland heath** dominated by common heather. Patches of gorse occur on short, steep slopes on the hillsides.

## Wetlands and Lakes

There are no significant lakes, fens or reedbeds in the LCA. The River Faughan, as part of the Foyle system, is important for Atlantic salmon as well as sea trout and brown trout.

## Key Issues

General actions for UK and NI **Priority Habitats** and **Priority Species** are detailed in the [Habitat Action Plans](#) and **Species Action Plans**.

## WOODLANDS

**Issue:** low woodland cover of variable biodiversity value

### **Actions:**

- enhance the biodiversity value of demesne/parkland woodland through control of grazing and felling - by encouraging planting of saplings of the standard trees; by preventing further loss of parkland; by retention of fallen and veteran trees (particularly for bryophytes, ferns, fungi and fauna)
- further study of the history and ecology of demesne and other broadleaved woodlands particularly any ancient and long-established, as a key to future management
- encourage control of grazing in broadleaved woodlands along streams to foster regeneration and if necessary, encourage replanting of canopy species
- encourage planting of native broadleaved woodlands, through appropriate grant schemes - rather than small conifer plantations which are of poor biodiversity and landscape value

## GRASSLAND AND ARABLE

**Issue:** poor biodiversity of farmland

**Actions:**

- maintain and improve field boundaries especially hedgerows - this may be achieved through adoption of correct cutting cycles; hedge laying and replanting where necessary; leaving saplings uncut to develop into hedgerow trees; avoidance of spraying with fertilizers, slurry, herbicides; provision of wildlife strips and conservation headlands around fields; and limitation of field amalgamation
- encourage (through participation in Environmental Schemes) adoption of less intensive management of pastures to allow reversion to more species-rich grassland
- maintain and enhance floodplain grassland by restricting field or arterial drainage and encourage land-owners to promote environments for wetland birds - lapwing, curlew etc.
- leave stubble over winter, rather than autumn ploughing, to increase food resources for farmland birds; spring sown cereals are beneficial to breeding farmland birds

## HEATH AND BOGS

**Issue:** upland heathland is in decline in Northern Ireland, Ireland and Great Britain

**Actions:**

- promote membership of ESA and other environmental schemes through consultation with farmers and thereby
- control grazing intensity on existing heathland to encourage development of heathland and of heather of different ages
- control gazing intensity on some upland grassland to promote return to heathland
- discourage 'reclamation' to pasture fields around the heathland margins
- discourage afforestation

## WETLANDS

**Issue:** important rivers, particularly for salmon

**Actions:**

- protect water quality of rivers through nutrient management and by reducing suspended sediments and deposition, thus
- promote and encourage existing good farming practices so that streams are not polluted by run-off from agricultural land or seepage from silage pits

- continued monitoring of streams below industrial plants and quarries (noting the requirement of salmonids for clean water and river beds)
- monitor streams in relation to expansion of rural/urban housing and associated septic tanks/sewage treatment plants



# Expertly Done.

DESIGN | ECONOMICS | ENVIRONMENT | HERITAGE | LAND & PROPERTY | PLANNING | TRANSPORT & INFRASTRUCTURE



All paper sources from sustainably managed forests

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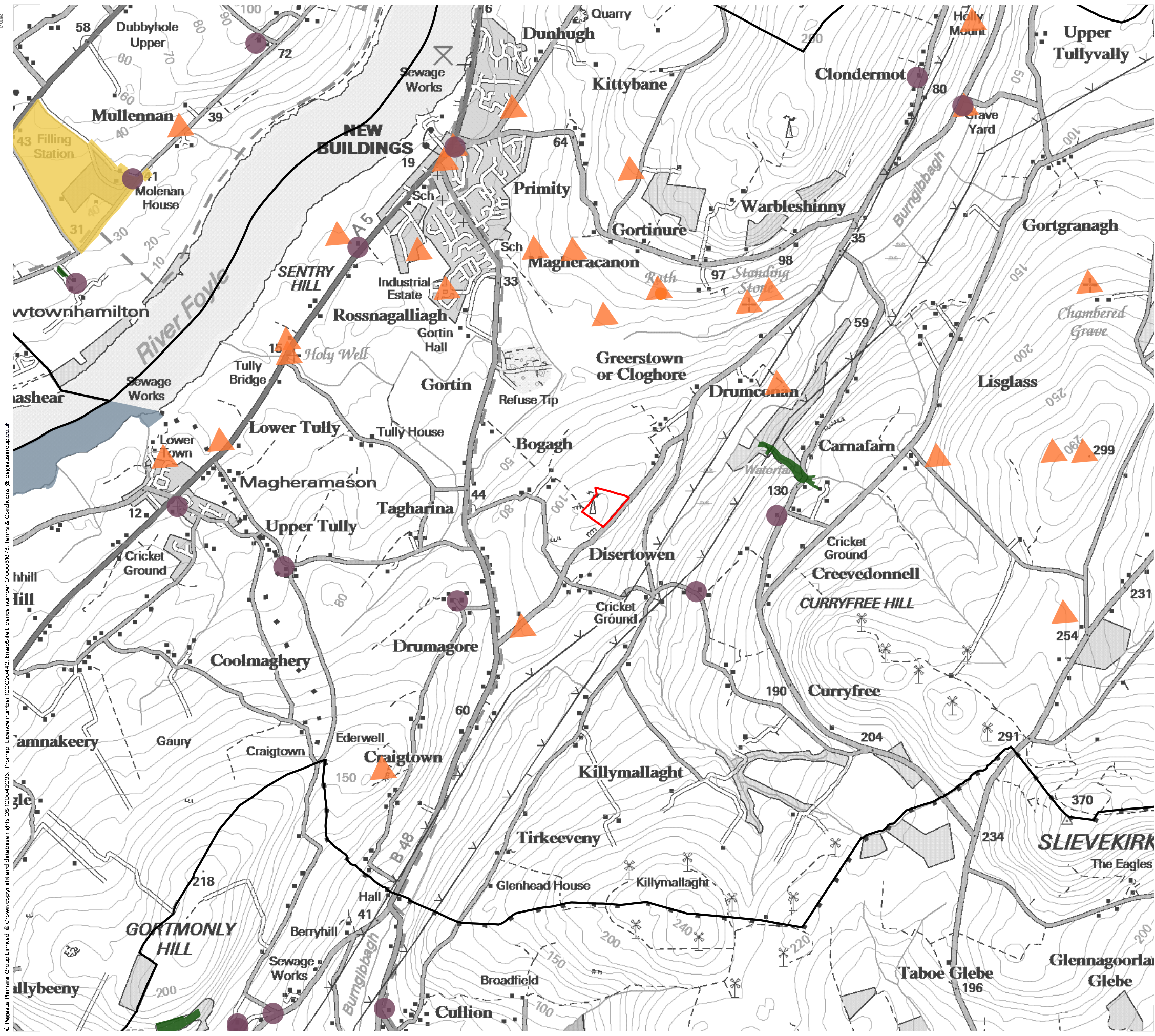


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








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**Key**

-  Site Boundary
-  District Boundary \*
-  Special Areas of Conservation (River Foyle and Tributaries) \*
-  Historic Parks and Gardens \*
-  Priority Habitat Woodland \*
-  Sites and Monuments \*
-  Listed Building \*

Reference:  
\* [www.opendatani.gov.uk](http://www.opendatani.gov.uk)

29/02/2024	-	First Issue
DATE	NO	REVISION NOTE

## Figure 2: Planning Designations

### Killymallaght Energy Storage System

CLIENT  
RES Ltd

N  
0 250 500 m

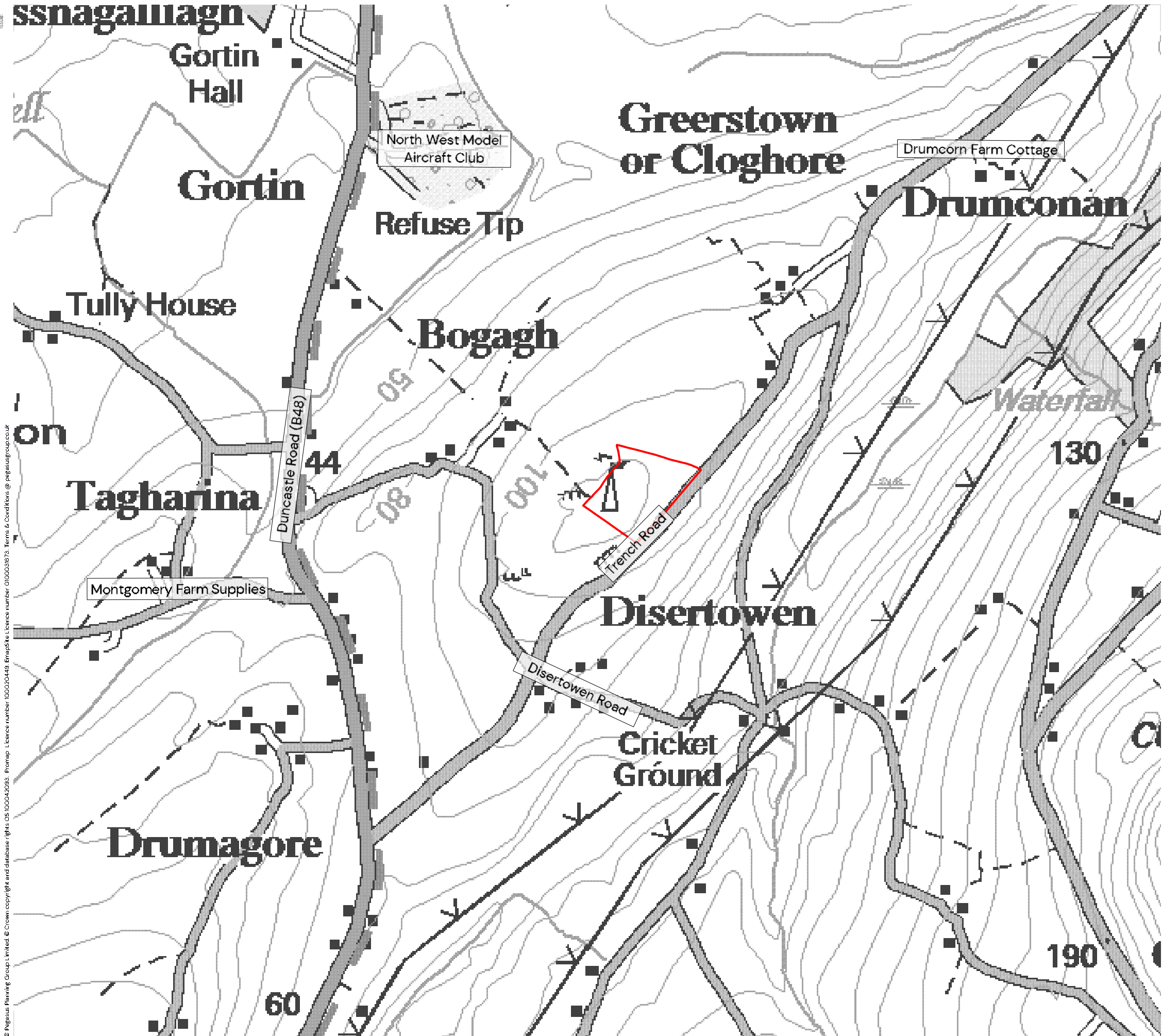
DATE	SCALE	TEAM	APPRVD
29/02/2024	1:25000 @A3	JW	JWA

DRAWING NUMBER

P23-2714\_EN\_0002\_-1 PD

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**Key**  
 Site Boundary


18/03/2024 - First Issue  
 DATE NO REVISION NOTE

**Figure 1: Site Location Plan**

**Killymallaght Energy Storage System**

CLIENT  
 RES Ltd 

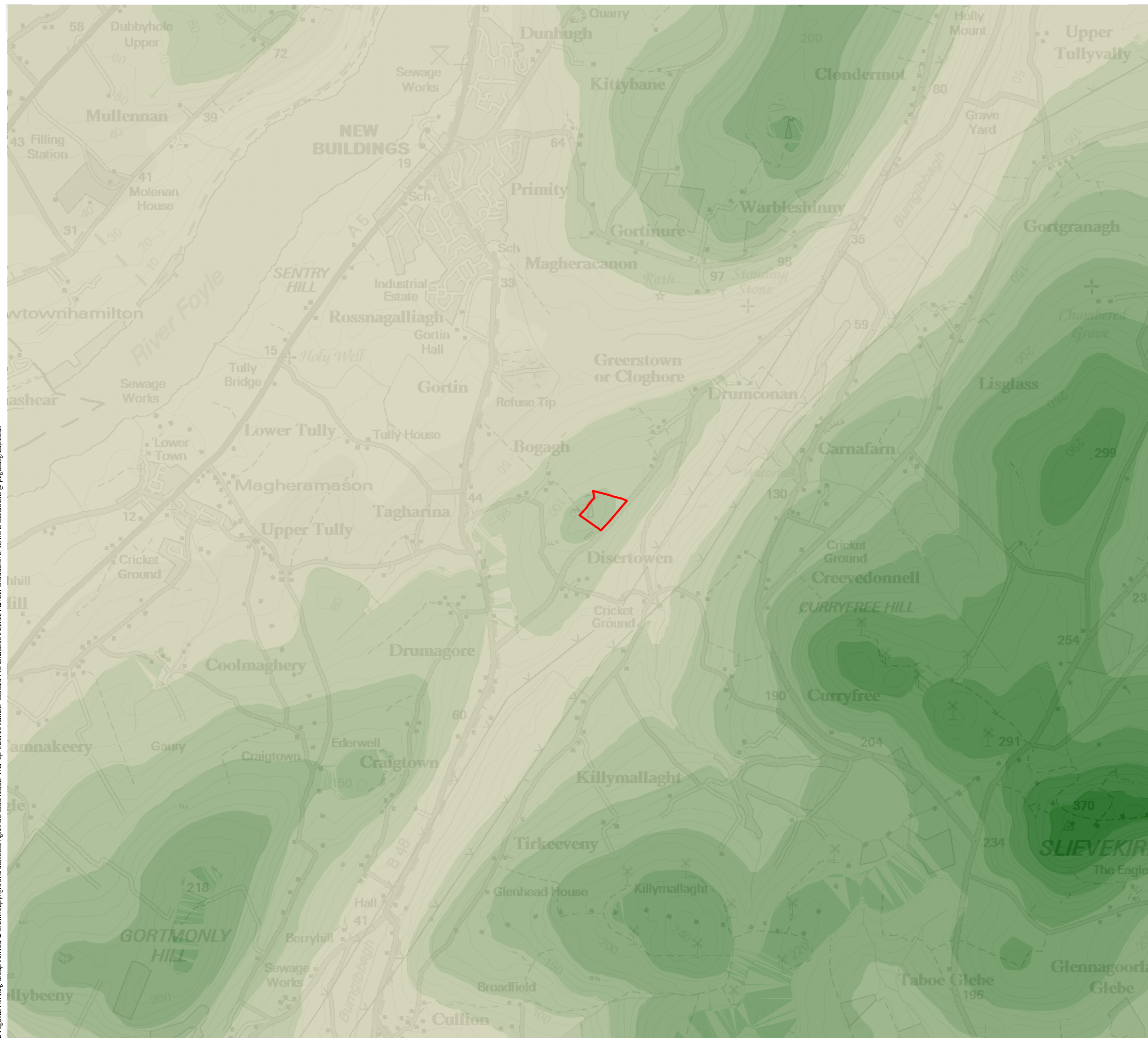
DATE 18/03/2024 SCALE 1:10000@A3 TEAM BR APPRVD JWA

DRAWING NUMBER  
 P23-2714\_EN\_0001\_-\_1 SL 

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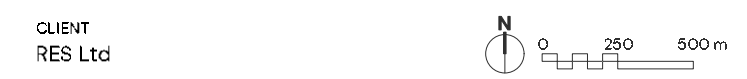
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DATE	NO	REVISION NOTE
22/03/2024	-	First Issue

### Figure 3: Topography

### Killymallaght Energy Storage System



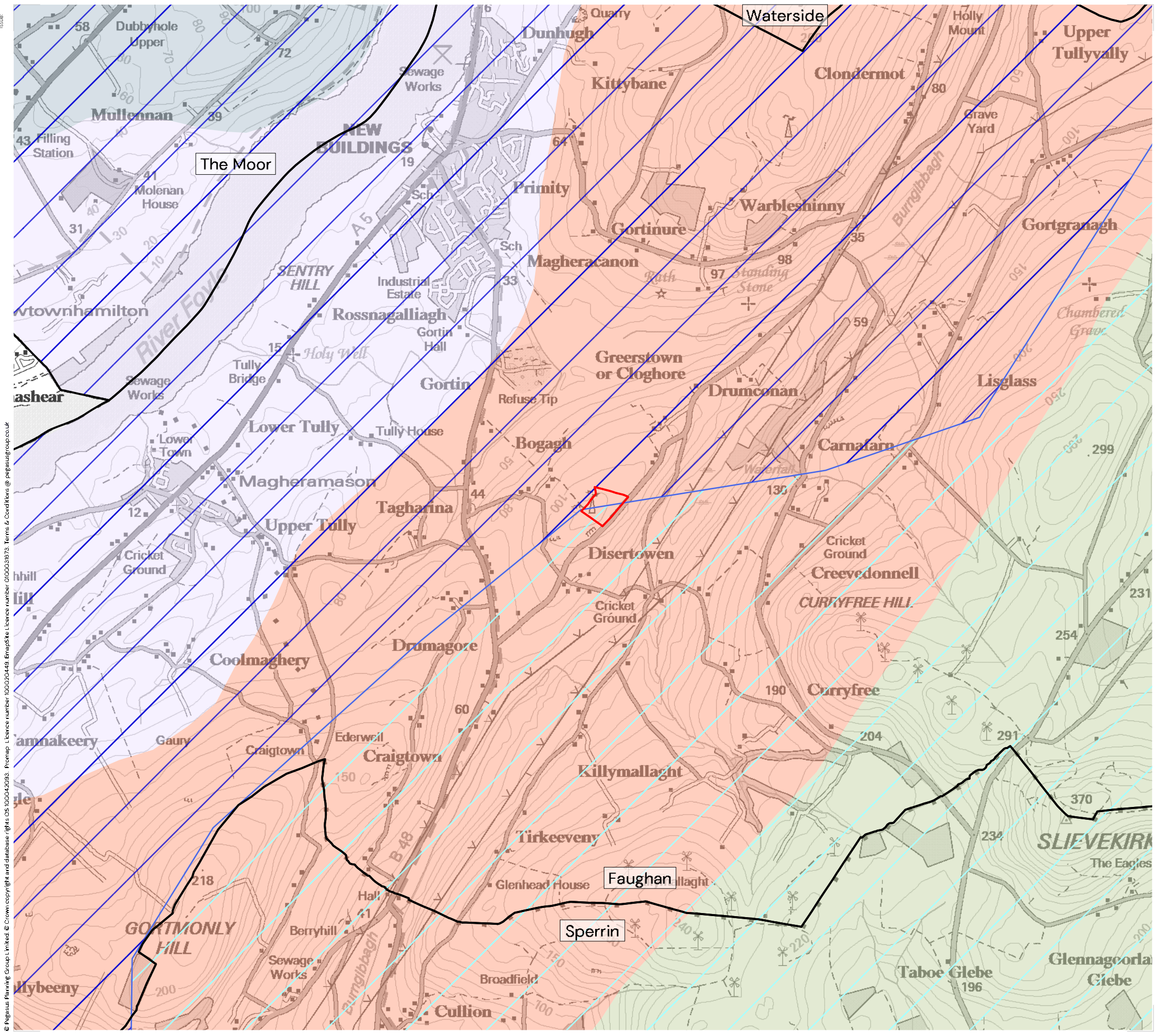
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22/03/2024	1:25000 @A3	BR	JWA

DRAWING NUMBER



P23-2714\_EN\_0003\_-\_1 TP













**Key**

-  Site Boundary
-  District Boundary

**Northern Ireland Regional Landscape Character Assessment**

-  6 - Foyle Valley
-  8 - North Sperrin Hills and Valleys

**Northern Ireland Landscape Character Areas (2000)**

-  32 - Derry Slopes
-  27 - Foyle Valley
-  31 - Burngibbagh and Drumahoe
-  30 - Sperrin Foothills

22/03/2024	-	First Issue
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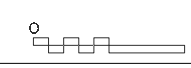

### Figure 4: Landscape Character

### Killymallaght Energy Storage System

CLIENT  
RES Ltd

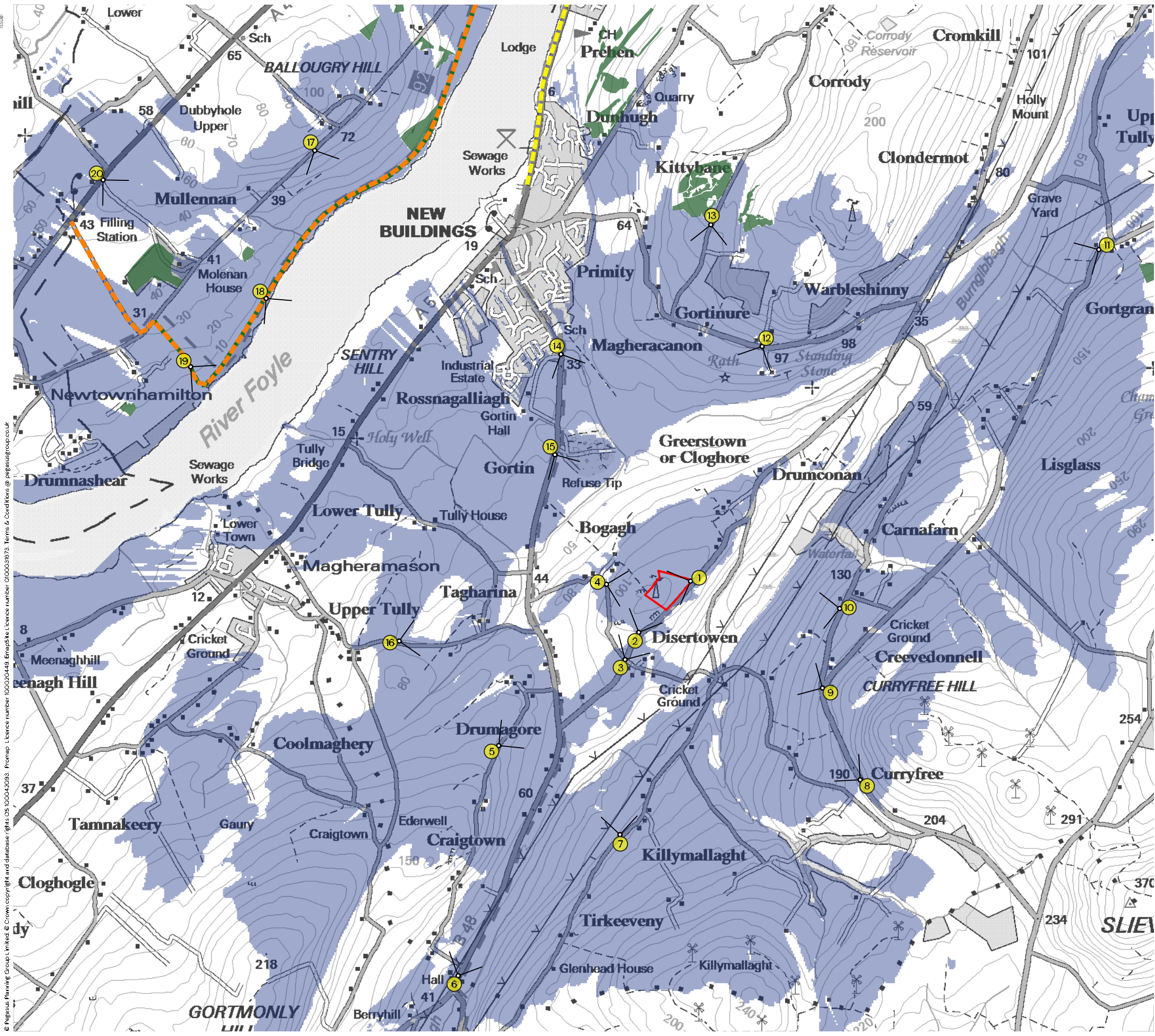
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DRAWING NUMBER  
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









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**Key**

-  Site Boundary
-  Viewpoint Locations
-  Screened Zone of Theoretical Visibility
-  OS Open Map Local Woodland - Maximum 15m
-  Right of Way
-  Existing Greenway
-  Existing Roadside Shared Use

Screened ZTV Production Information -  
 - DTM data used in calculations is OS Terrain 5 that has been combined with OS Open Map Local data for woodland and buildings to create a Digital Surface Model (DSM).

- Indicative woodland and building heights are modelled at 15m and 8m respectively.
- Viewer height set at 1.7m (in accordance with para 6.11 of GLVIA Third Edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the proposed development may be visible from, assuming 100% atmospheric visibility, and includes the screening effect from vegetation and buildings, based on the assumptions stated above.

29/02/2024	First Issue
DATE	NO REVISION NOTE

**Figure 5: ZTV, Viewpoint Locations and PRoW**  
 Killymallaght Energy Storage System

CLIENT: RES Ltd

SCALE: 1:25000 @A3

TEAM: JW

APPRVD: JWA

DATE	SCALE	TEAM	APPRVD
29/02/2024	1:25000 @A3	JW	JWA

DRAWING NUMBER: P23-2714\_EN\_0005\_-\_1 ZTV

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**Viewpoint details:**

*Approx. grid reference:*

242349, 410415

*Approx. elevation:*

102m AOD

*Distance to site:*

0m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise direct views into the pastoral enclosure which forms the site, to the west of Trench Road. Post and wire mesh fencing is visible in the immediate foreground (this forms the boundary to Trench Road) and a low cut hedgerow is visible to the right of the view.

Landform rises away from the viewpoint into the middle ground and this effectively screens views of the wider landscape.

Beyond the middle ground landform, a comms mast (located adjacent to the western boundary of the site) is partly visible above the horizon.

Note that receptors are defined as 'road users' and whilst this view is representative, the view will be a transient experience when passing the site on the highway.

**Description of change:**

The site is located in the foreground and middle ground of the view.

Changes to the view include:

- direct views to the proposed access track (long term)
- direct views to earthworks in relation to the development platform and creation of the screening bund (short term)
- direct views to the BESS infrastructure, albeit partially sunken within the landform
- direct views to proposed landscaping, including planting to reinstate hedgerow along Trench Road along with scrub planting across the bund and other grassland seeding and tree planting across the site.

In the longer term, landscape planting and management of existing boundary hedgerows will establish and mature, adding further screening.

**Magnitude of impact:**

*Operation*

High

*Year 15*

Medium

**Significance of effect:**

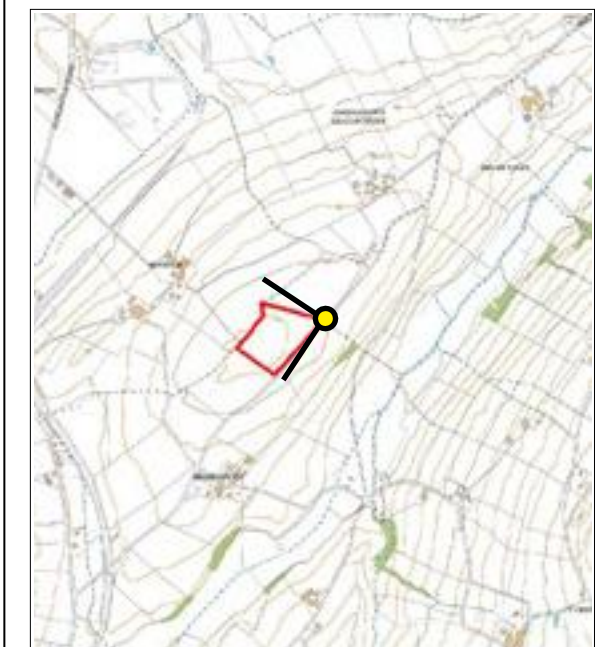
*Operation*

Moderate to major adverse

*Year 15*

Moderate adverse

**Viewpoint 1: View looking west, from Trench Road adjacent to the north-eastern corner of the site.**



**Figure 6: Viewpoint Photographs**

Site | Killymally Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_-\_0001

Date | 24/05/2024

Team | MW/JW

App | JWA











**Viewpoint details:**

*Approx. grid reference:*

242015, 410084

*Approx. elevation:*

100m AOD

*Distance to site:*

0m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise direct views into the pastoral enclosure (situated to the south of the site) to the west of Trench Road. Post and wire mesh fencing is visible in the immediate foreground (this forms the boundary to Trench Road).

Landform rises away from the viewpoint into the middle ground and this effectively screens views of the wider landscape. A fragmented hedgerow is visible on the skyline and this forms the southern field boundary to the site.

Beyond the middle ground landform, a comms mast (located adjacent to the western boundary of the site) is partly visible above the horizon.

Note that receptors are defined as 'road users' and whilst this view is representative, the view will be a transient experience when passing the site on the highway.

**Description of change:**

The site is located in the middle ground of the view (the ground plane being screened by landform).

Changes to the view include:

- partial views to earthworks in relation to the development platform and creation of the screening bund (short term)
- partial views to the BESS infrastructure, (upper sections) albeit partially sunken within the landform and screened by foreground topography
- direct views to proposed landscaping, including scrub planting across the bund and a proposed shelter belt in the southern part of the site.

In the longer term, landscape planting and management of existing boundary hedgerows will establish and mature, adding further screening.

**Magnitude of impact:**

*Operation*

Low

*Year 15*

Nil

**Significance of effect:**

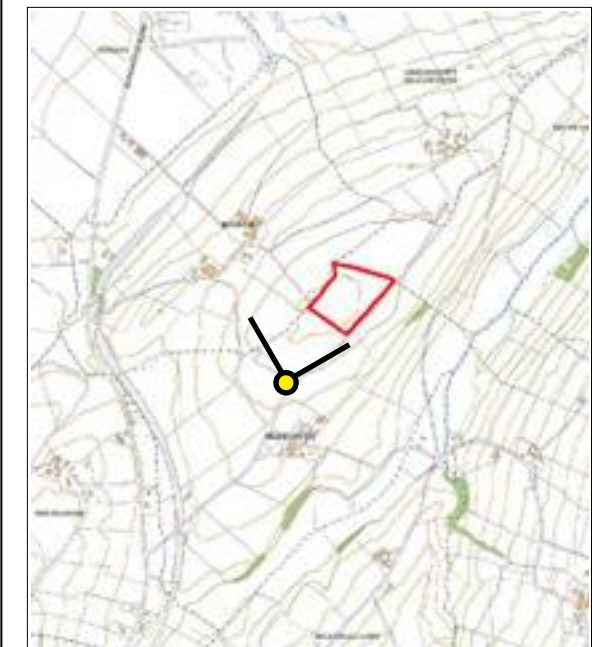
*Operation*

Minor adverse

*Year 15*

Neutral

**Viewpoint 2: View looking north, from Trench Road adjacent to the south-eastern corner of the site**



**Figure 6: Viewpoint Photographs**

Site | Killymally Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA









Comms mast adjacent to western site boundary

Existing post and wire fencing to Trench Road

Southern site boundary



**Viewpoint details:**

*Approx. grid reference:*

241927, 409908

*Approx. elevation:*

88m AOD

*Distance to site:*

191m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium/

**Baseline description:**

Existing views comprise the highways road junction between Trench Road and Disertowen Road. At this point the routes are defined by wide grass verges and boundaries to adjacent agricultural land comprise some hedgerow plating and some post and wire mesh fencing.

Landform rises away from the viewpoint to form a localised rounded hill in the middle ground; this area is characterised by mediums cale pastoral enclosures, bounded by a mix of hedgerows and post and wire mesh fencing.

Background views are generally screened by the middle ground topography, however there are some partial views to the upper sections of a tree belt, visible to the left of the view.

Note that receptors are defined as 'road users' and whilst this view is representative, the view will be a transient experience when passing the site on the highway.

**Description of change:**

The site is located in the background of the view.

Changes to the view include:

- partial and distant views to earthworks in relation to the development platform and creation of the screening bund (short term), however generally screened by foreground topography
- partial views to the BESS infrastructure, (upper sections) albeit partially sunken within the landform and screened by foreground topography
- direct views to proposed landscaping, including scrub planting across the bund and a proposed shelter belt in the southern part of the site, which would be visible in the background on the horizon and consistent with other tree belts and hedgerows across the view.

In the longer term, landscape planting and management of existing boundary hedgerows will establish and mature, adding further screening.

**Magnitude of impact:**

*Operation*

Low

*Year 15*

Nil

**Significance of effect:**

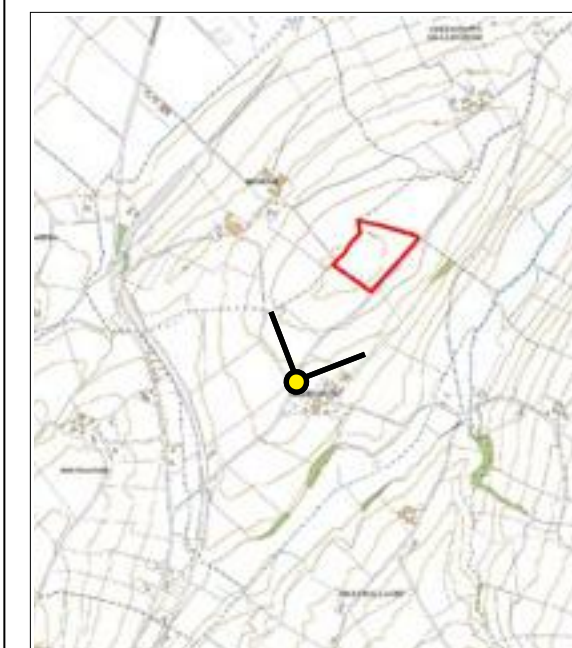
*Operation*

Nil

*Year 15*

Neutral

**Viewpoint 3: View looking north, from the junction of Trench Road and Disertowen Road (south of the site)**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA









Comms mast adjacent to western site boundary

Field gate off Disertowen Road



**Viewpoint details:**

*Approx. grid reference:*

241807, 410395

*Approx. elevation:*

89m AOD

*Distance to site:*

219m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise direct views into a pastoral field enclosure (located west of the site).

Landform rises from the viewpoint, up to a high point and localised rounded hill top, and this effectively screens views of the wider landscape.

Hedgerow field boundaries are present in the middle ground, partially fragmented and comprising gorse.

Beyond the middle ground landform, a comms mast (located adjacent to the western boundary of the site) is partly visible above the horizon.

**Description of change:**

The site is located in the background of the view.

Changes to the view include:

- potentially very limited views of earthworks (primarily any taller construction plant, rather than earthworks), however generally screened by foreground topography
- partial views to the upper sections of BESS infrastructure, albeit partially sunken within the landform and screened by foreground topography
- partial views to proposed landscaping, limited to any proposed planting on the higher (western) parts of the site, including scrub planting and a proposed shelter belt in the southern part of the site

In the longer term, landscape planting and management of existing boundary hedgerows will establish and mature, adding further screening.

**Magnitude of impact:**

*Operation*

Negligible to low

*Year 15*

Nil

**Significance of effect:**

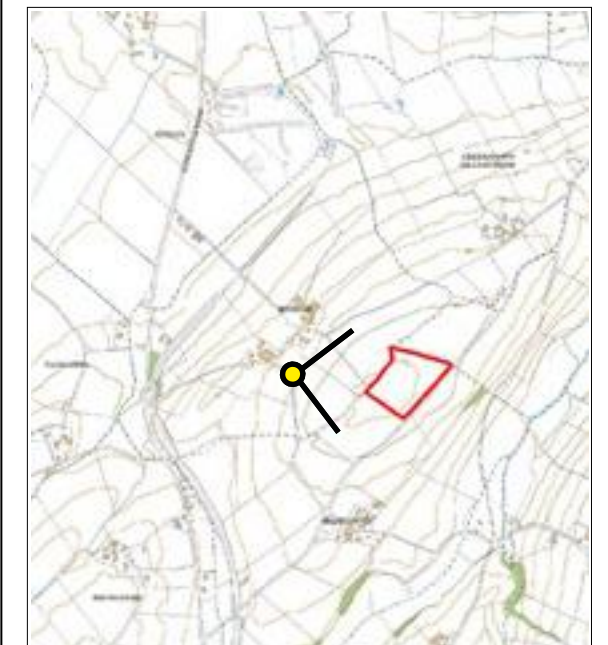
*Operation*

Negligible to minor adverse

*Year 15*

Neutral

**Viewpoint 4: View looking east, from Disertowen Road (west of the site)**



**Figure 6: Viewpoint Photographs**

Site | Killymally Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_-\_0001

Date | 24/05/2024

Team | MW/JW

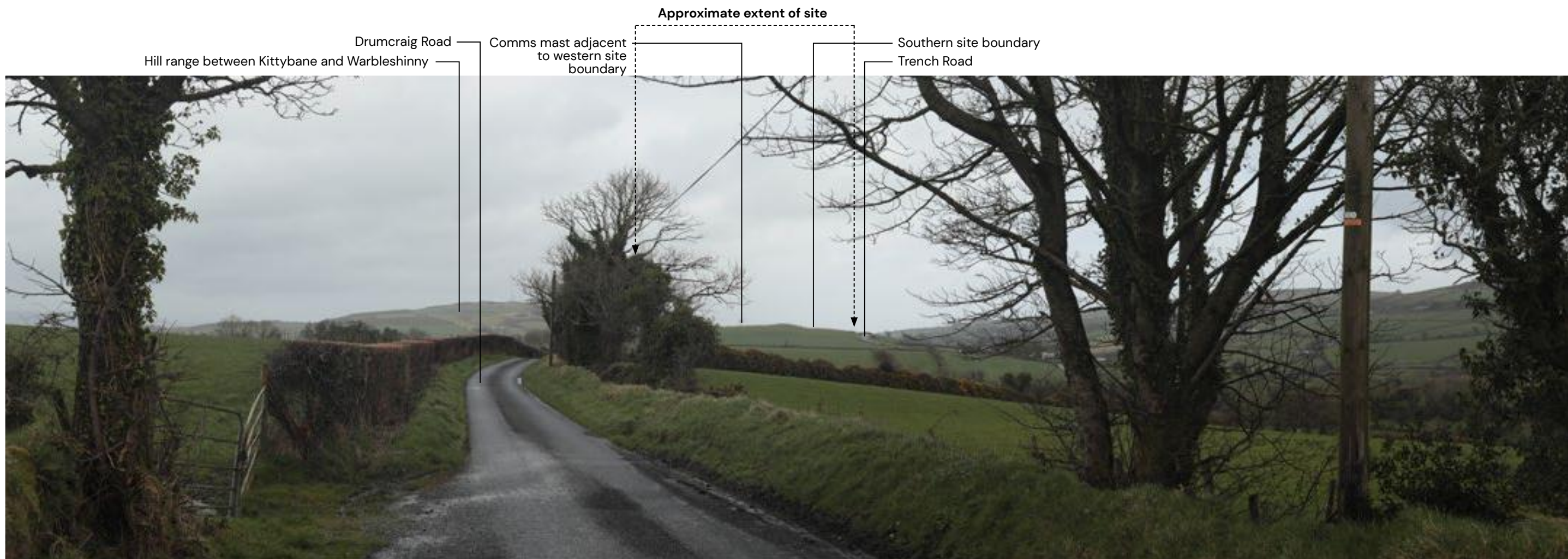
App | JWA











**Viewpoint details:**

*Approx. grid reference:*

241111, 409354

*Approx. elevation:*

98m AOD

*Distance to site:*

1134m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise the route of Drumcraig Road in the foreground and middle ground, beset by low hedge banks and hedgerows. Occasional hedgerow trees and taller sections of hedgerow are present along the route.

The landform falls broadly from west to east (left to right across the view) down into the localised valley of the Burngibbagh watercourse. Across this area the landscape is characterised by pastoral enclosures of medium scale. Occasional farmsteads are also present. In the middle ground, a comms mast (located adjacent to the western boundary of the site) is partly visible through the foreground screening.

Foreground vegetation forms a partial views to the wider panorama and background, but rising hills are apparent across the background of the view.

**Description of change:**

The site is located in the middle ground of the view.

Changes to the view include:

- all views of the proposed development, potentially visible in the middle distance, are partially screened by landform
- in the short term there is potential for views of taller plant utilised for construction activity, particularly in relation to earthworks
- also in the short term there is potential for limited views of the upper most sections of the BESS infrastructure
- at completion, views of proposed landscaping are not likely to be discernible, however the visibility and any additional screening will increase over time

In the longer term, proposed landscape planting will establish and mature which, with management of existing green infrastructure, will add further screening.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

*Operation*

Negligible adverse

*Year 15*

Nil

**Viewpoint 5: View looking north-east, from Drumcraig Road, south of Drumagore**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA









**Approximate extent of site**

Duncastle Road (B48)



**Viewpoint details:**

*Approx. grid reference:*

240849, 407868

*Approx. elevation:*

41m AOD

*Distance to site:*

2500m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

04.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium/high

(accounting for nearby residential dwellings)

**Baseline description:**

Existing views comprise the route of Duncastle Road, in the foreground and into the middle ground and background. This route is bounded by low grass verges along with hedgerow planting. Landform rises to the west of the route, and falls to the east (left and right of the view respectively), characterised by a mix of pastoral enclosures and some lower lying scrub vegetation associated with the river floodplain of the Burngibbagh watercourse.

The overall topography forms a valley, leading to channelled views in the far distance.

In the background the landform rises with mixed agricultural enclosures set across the hills.

**Description of change:**

The site is located in the background of the view.

From this location, whilst there may be potential views of construction activity and subsequent BESS infrastructure, this will be seen in the far distance and the nature of topography is such that the proposed development will largely be screened.

Mitigation includes landscape planting and a proposed shelter belt in the southern part of the site which, once matured, will add further to screening whilst also being contiguous with the mosaic of pastoral land and tree cover across the landscape.

Furthermore, the site forms only a very small part of the wider panorama, and is located at some distance from the viewpoint. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Negligible

**Significance of effect:**

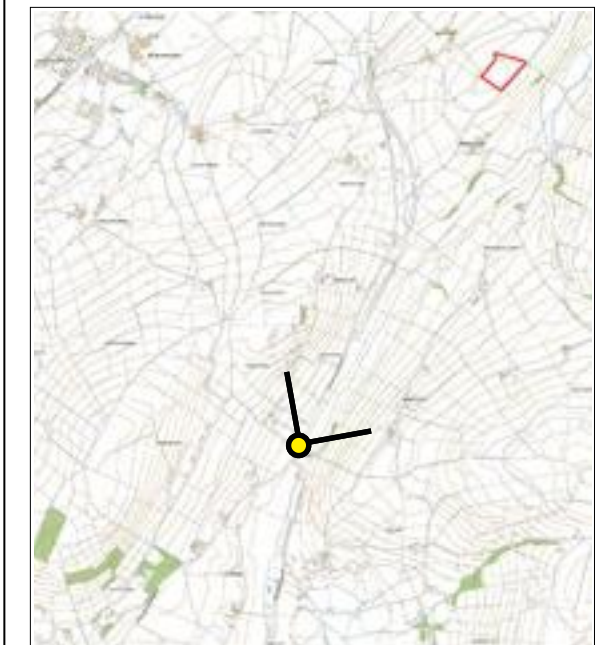
*Operation*

Neutral

*Year 15*

Neutral

**Viewpoint 6: View looking north/north-east, from Duncastle Road (B48) close to Berryhill**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA









Comms mast adjacent to western site boundary      Southern site boundary      Hill range between Kittybane and Warbleshinny



**Viewpoint details:**

*Approx. grid reference:*

241894, 408779

*Approx. elevation:*

82m AOD

*Distance to site:*

1306m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

04.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium/high

(accounting for nearby residential dwellings)

**Baseline description:**

Existing views comprise the agricultural mosaic set across the rolling landform.

In the foreground, landform falls away from the viewpoint, before rising to a rolling localised hills in the middle ground; these are characterised by medium scale pastoral fields with a mix of tree belts and hedgerows contributing to the mosaic. Occasional properties and farmsteads are visible across the view, including the larger scale farm to the north-west of the site, off Disertowen Road. Large scale overhead power lines cross the view.

In the background there are distant panoramic views across to the rolling high hills to the north-east of the site, and to the north of the River Foyle.

**Description of change:**

The site is located in the middle ground of the view, set on a localised rounded hill which rises up from the valley of the Burngibbagh watercourse.

From this location, whilst there may be potential views of construction activity and subsequent BESS infrastructure, this will be seen in the far distance and the nature of topography is such that the proposed development will largely be screened.

Mitigation includes landscape planting and a proposed shelter belt in the southern part of the site which, once matured, will add further to screening whilst also being contiguous with the mosaic of pastoral land and tree cover across the landscape.

Furthermore, the site forms only a very small part of the wider panorama, and is located at some distance from the viewpoint. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Negligible to low

*Year 15*

Negligible

**Significance of effect:**

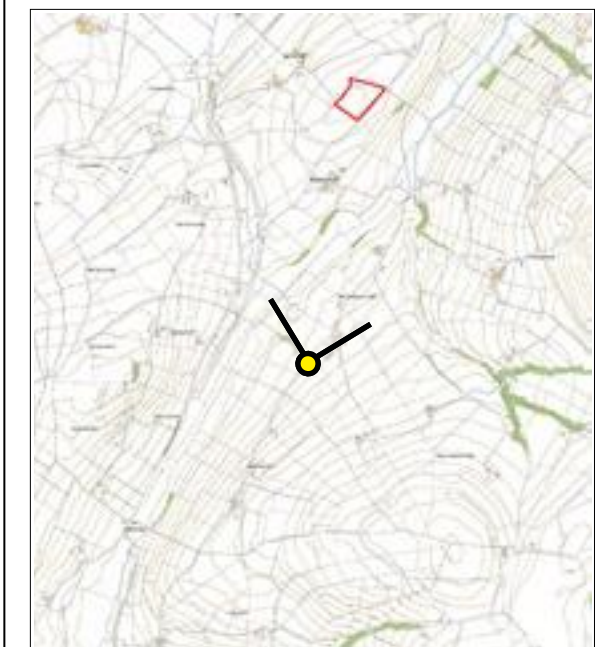
*Operation*

Negligible to minor adverse

*Year 15*

Neutral

**Viewpoint 7: View looking north, from Killymallaght Road, close to Killymallaght**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_-\_0001

Date 24/05/2024

Team MW/JW

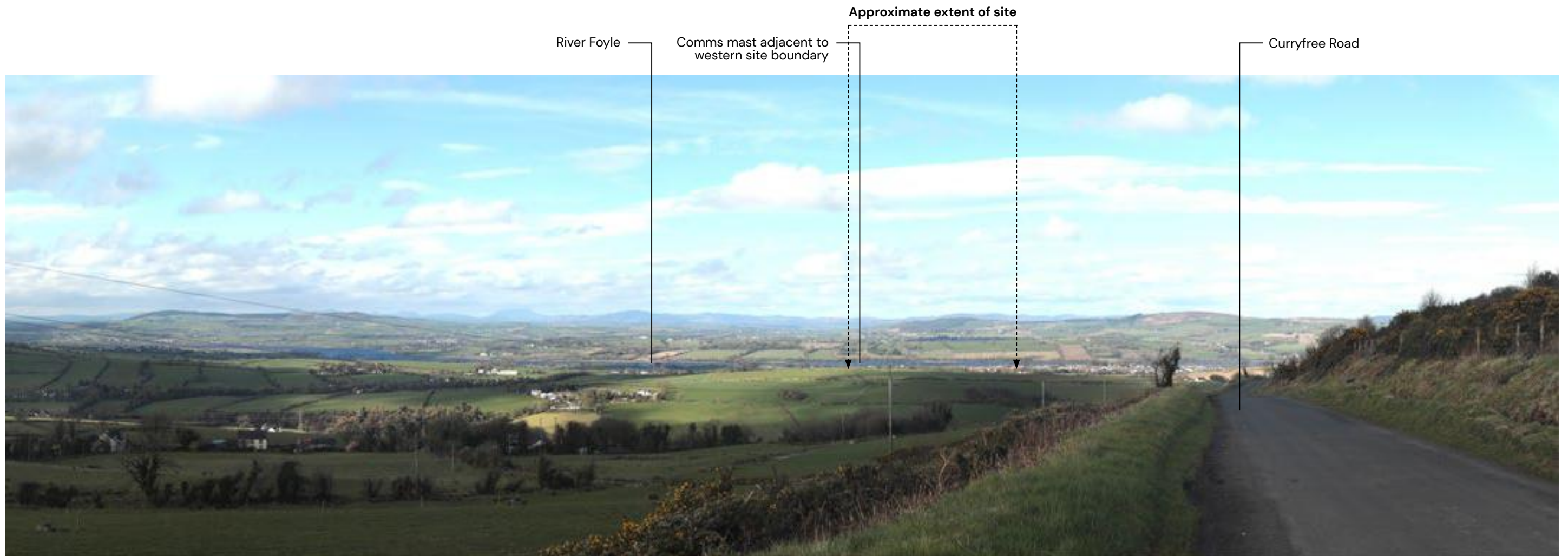
App JWA











**Viewpoint details:**

*Approx. grid reference:*

243445, 409133

*Approx. elevation:*

195m AOD

*Distance to site:*

1671m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

04.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise an extensive panorama including the wider landscape context to the River Foyle.

The route of Curryfree Road traverses the hillside away from the viewpoint, with topography also falling in this direction. In the middle ground the topography rises to form a rolling, localised hill, albeit at a lower level than some of the larger surrounding hills. The rolling landform is characterised by a mosaic of agricultural pasture along with occasional farmsteads and properties.

In the background there are views across the valley of the River Foyle, including the settlement area of Newbuildings.

There are also far distance views of the landscape to the north and west of the River Foyle.

**Description of change:**

The site is located in the middle ground, on a localised rolling hill, and there are direct views into the ground plane of the site.

Changes to the view include:

- direct but distant views to the proposed access track (long term)
- direct but distant views to earthworks in relation to the development platform and creation of the screening bund (short term)
- direct but distant views to the BESS infrastructure, albeit partially sunken within the landform
- direct but distant views to proposed landscaping, including planting to reinstate hedgerow along Trench Road (reinforcing field patterns) along with scrub planting across the bund and other grassland seeding and tree planting across the site
- direct but distant view of proposed landscape planting of the shelter belt, on the southern edge of the site, consistent with other landscape components in the view

In the longer term, landscape planting and management of existing boundary hedgerows will establish and mature, adding further screening.

Furthermore, the site forms only a small part of the wider panorama, and is located in the middle distance of the view. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Low to medium

*Year 15*

Negligible

**Significance of effect:**

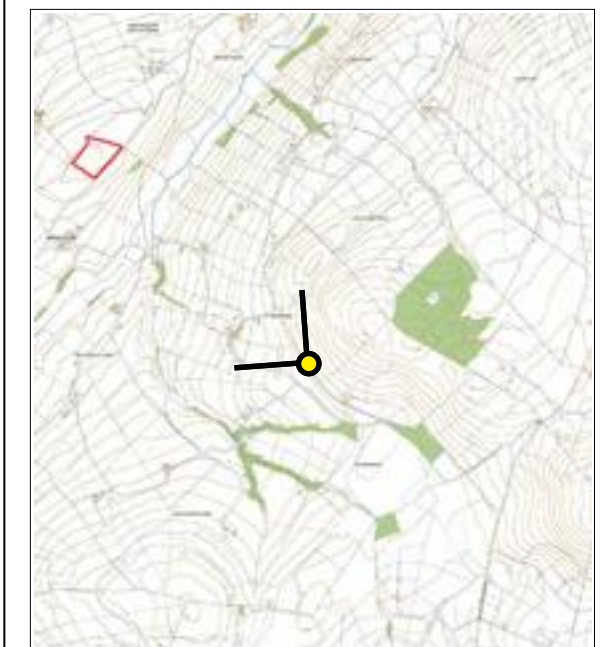
*Operation*

Moderate adverse

*Year 15*

Negligible to minor adverse

**Viewpoint 8: View looking north-west, from Curryfree Road, south of Curryfree Hill**



**Figure 6: Viewpoint Photographs**

Site | Killymally Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

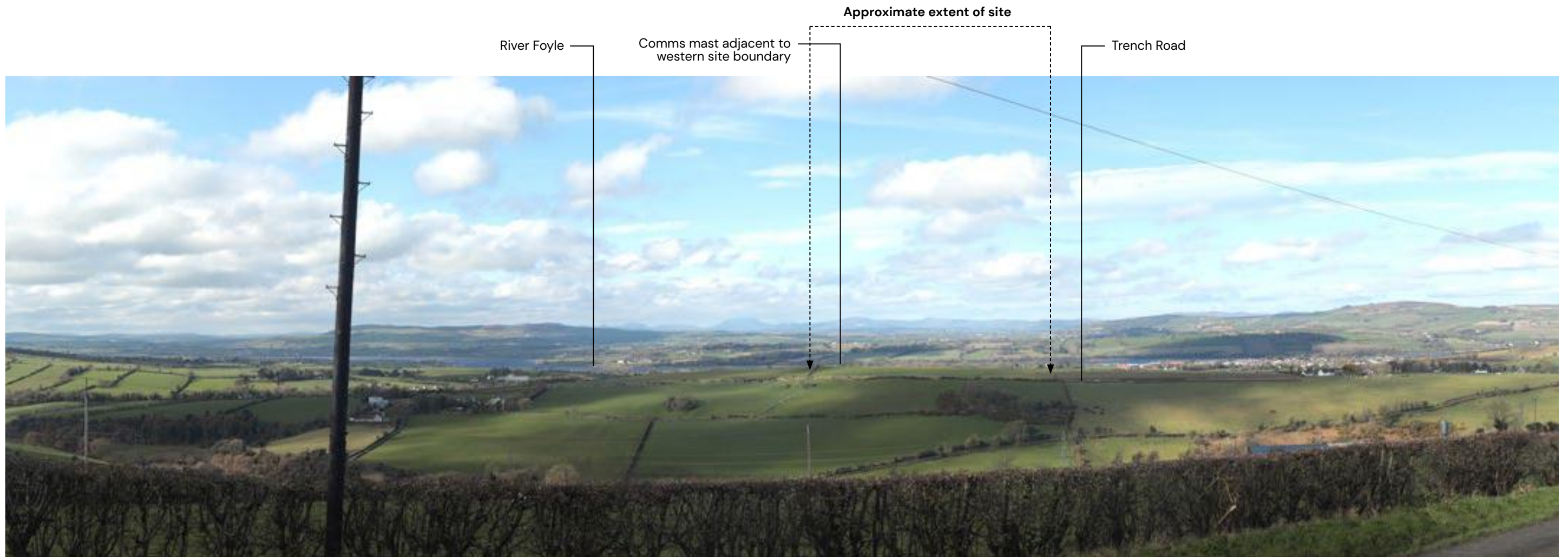
App | JWA











**Viewpoint details:**

*Approx. grid reference:*

243202, 409725

*Approx. elevation:*

159m AOD

*Distance to site:*

1096m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

04.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium/high

(accounting for nearby residential dwellings)

**Baseline description:**

Existing views comprise an extensive panorama including the wider landscape context to the River Foyle.

The route of Curryfree Road is notable due to the presence of the roadside hedgerow in the immediate foreground. Topography falls steeply away from the viewpoint before rising into the middle ground where it forms a rolling, localised hill, albeit at a lower level than some of the larger surrounding hills. The rolling landform is characterised by a mosaic of agricultural pasture along with occasional farmsteads and properties.

In the background there are views across the valley of the River Foyle, including the settlement area of Newbuildings.

There are also far distance views of the landscape to the north and west of the River Foyle.

**Description of change:**

The site is located in the middle ground, on a localised rolling hill, and there are direct views into the ground plane of the site.

Changes to the view include:

- direct but distant views to the proposed access track (long term)
- direct but distant views to earthworks in relation to the development platform and creation of the screening bund (short term)
- direct but distant views to the BESS infrastructure, albeit partially sunken within the landform
- direct but distant views to proposed landscaping, including planting to reinstate hedgerow along Trench Road (reinforcing field patterns) along with scrub planting across the bund and other grassland seeding and tree planting across the site
- direct but distant view of proposed landscape planting of the shelter belt, on the southern edge of the site, consistent with other landscape components in the view

In the longer term, landscape planting and management of existing boundary hedgerows will establish and mature, adding further screening.

Furthermore, the site forms only a small part of the wider panorama, and is located in the middle distance of the view. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Low to medium

*Year 15*

Negligible

**Significance of effect:**

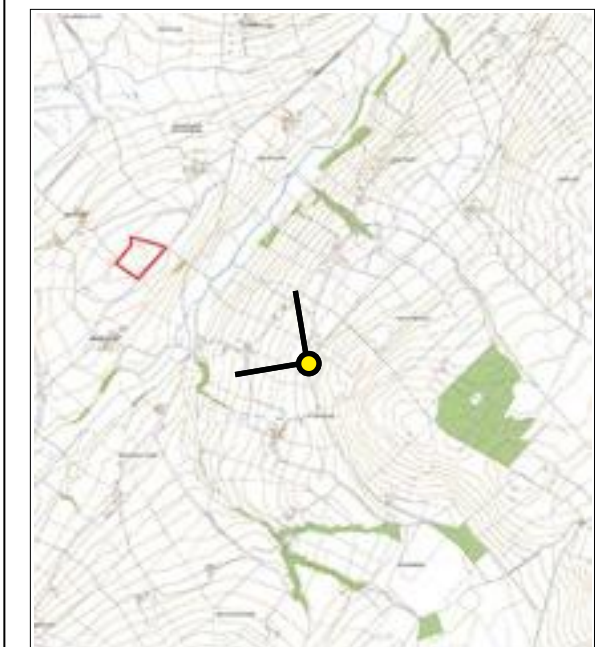
*Operation*

Moderate adverse

*Year 15*

Negligible to minor adverse

**Viewpoint 9: View looking north-west, from Curryfree Road at the junction with Rushall Road**



**Figure 6: Viewpoint Photographs**

Site | Killymally Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

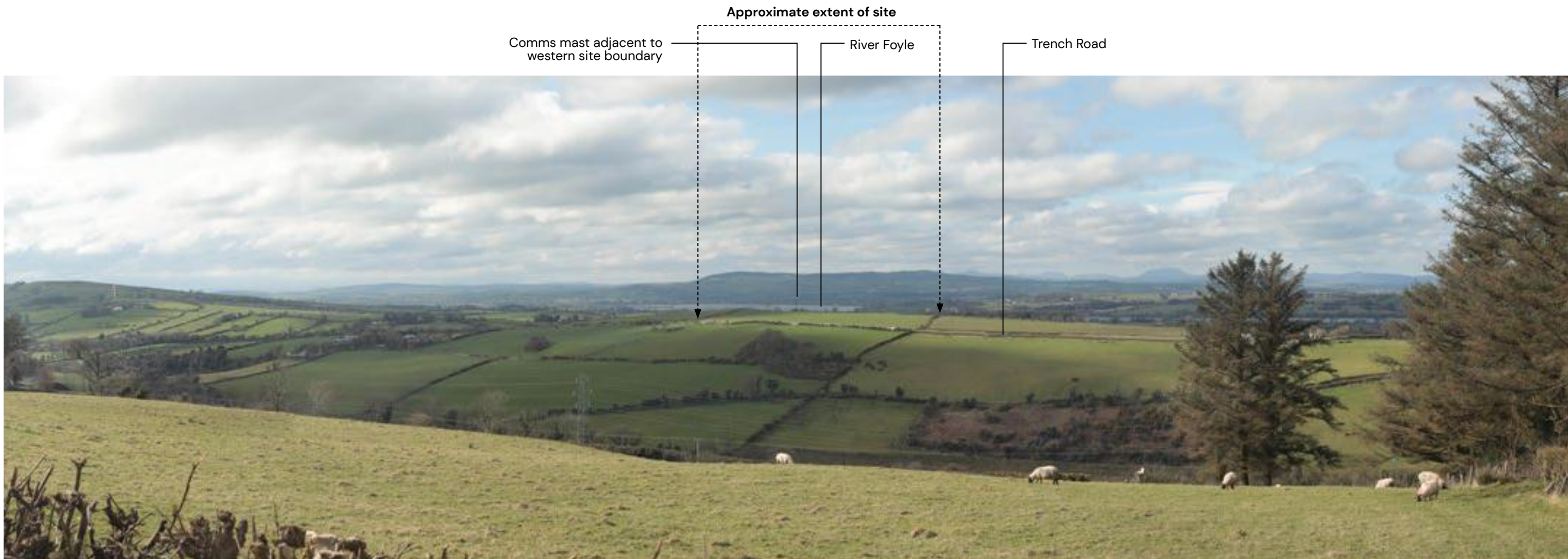
App | JWA











**Viewpoint details:**

*Approx. grid reference:*

243313, 410238

*Approx. elevation:*

142m AOD

*Distance to site:*

978m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

04.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium/high  
(accounting for nearby residential dwellings)

**Baseline description:**

Existing views comprise an extensive panorama including the wider landscape context to the River Foyle.

Foreground views comprise medium scale enclosures of grazing pasture. From here the topography falls steeply away from the viewpoint before rising into the middle ground where it forms a rolling, localised hill, albeit from this direction, the landform connects to other hills to the south forming a broad 'saddle' of topography extending into the background. The rolling landform is generally characterised by a mosaic of agricultural pasture along with occasional farmsteads and properties.

In the background there are views across the valley of the River Foyle, including far distance views of the landscape to the north and west of the river corridor.

**Description of change:**

The site is located in the middle ground, on a localised rolling hill, and there are direct views into the ground plane of the site.

Changes to the view include:

- direct but distant views to the proposed access track (long term)
- direct but distant views to earthworks in relation to the development platform and creation of the screening bund (short term)
- direct but distant views to the BESS infrastructure, albeit partially sunken within the landform
- direct but distant views to proposed landscaping, including planting to reinstate hedgerow along Trench Road (reinforcing field patterns) along with scrub planting across the bund and other grassland seeding and tree planting across the site
- direct but distant view of proposed landscape planting of the shelter belt, on the southern edge of the site, consistent with other landscape components in the view

In the longer term, landscape planting and management of existing boundary hedgerows will establish and mature, adding further screening.

Furthermore, the site forms only a small part of the wider panorama, and is located in the middle distance of the view. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Low to medium

*Year 15*

Moderate adverse

**Significance of effect:**

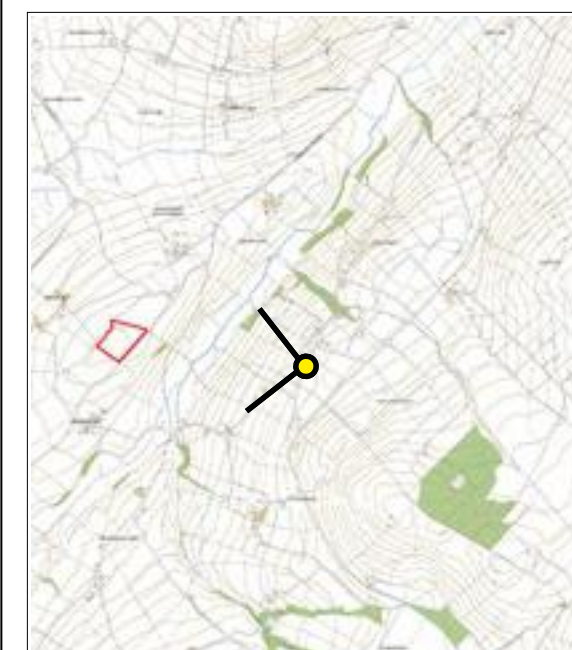
*Operation*

Negligible

*Year 15*

Negligible to minor adverse

**Viewpoint 10: View looking west, from Curryfree Road, just west of Creevedonnell Cricket Club**



**Figure 6: Viewpoint Photographs**

Site | Killymally Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA











**Viewpoint details:**  
*Approx. grid reference:*  
 244986, 412555  
*Approx. elevation:*  
 94m AOD  
*Distance to site:*  
 3392m  
*Camera type:*  
 Canon EOS 5D (50mm lens)  
*Date:*  
 04.03.2024  
*Approx. H FoV:*  
 60°

**Sensitivity of receptor:**  
 Medium/high  
 (accounting for nearby residential dwellings)

**Baseline description:**  
 Existing views comprise an extensive panorama including the rolling hills and valleys that are located to the east of the River Foyle.  
 The route of Curryfree Road traverses the hillside away from the viewpoint (left of view) with topography also falling into the middle ground (and away from the viewpoint). In the middle ground the topography rises to form a series of rolling, localised hills. The rolling landform is characterised by a mosaic of agricultural pasture along with occasional farmsteads and properties. The route of Trench Road is visible, across the rising landform, seen in the middle ground.  
 In the background there are views to a background of further rolling topography, albeit higher than the localised topography seen in the middle ground, such as Gortmonly Hill. These hills continue into the far distance.

**Description of change:**  
 The site is located in the background of the view.  
 Changes to the view include:  
 - all views of the proposed development, potentially visible in the background of the view, are partially screened by landform and vegetation  
 - in the short term there is potential for views of taller plant utilised for construction activity, particularly in relation to earthworks  
 - also in the short term there is potential for limited views of the upper most sections of the BESS infrastructure  
 - at completion, views of proposed landscaping are not likely to be discernible, however the visibility and any additional screening will increase over time  
 In the longer term, proposed landscape planting will establish and mature which, with management of existing green infrastructure, will add further screening.  
 Furthermore, the site forms only a small part of the wider panorama, and is located in the middle distance of the view. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**  
*Operation*  
 Negligible to low  
*Year 15*  
 Negligible  
**Significance of effect:**  
*Operation*  
 Minor adverse  
*Year 15*  
 Neutral

**Viewpoint 11: View looking south-west, from Rushall Road, at Gortgranagh**



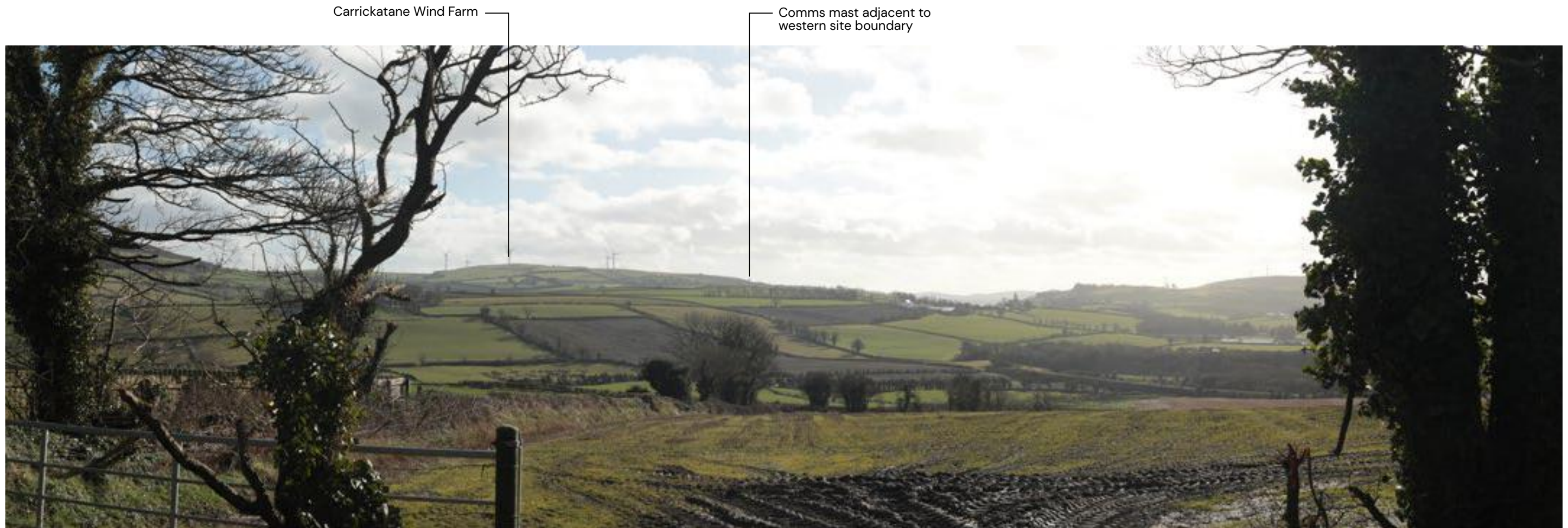
**Figure 6: Viewpoint Photographs**  
 Site | Killymallaght Energy Storage System  
 Client | RES Ltd  
 Drawing number | P23-2714\_EN\_0006\_- \_0001  
 Date | 24/05/2024  
 Team | MW/JW  
 App | JWA











**Viewpoint details:**

*Approx. grid reference:*

242812, 411930

*Approx. elevation:*

97m AOD

*Distance to site:*

1575m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium/high

(accounting for nearby residential dwellings)

**Baseline description:**

Existing views comprise a panoramic view across the foreground and middle ground, where undulating topography rises up to the middle ground and is characterised by an agricultural mosaic.

In the middle ground, field patterns are typically defined by a continuous pattern of hedgerows, with some tree belts and occasional woodland blocks. Also in the middle ground landform rises up to a localised hill. This sits to the fore of a more pronounced rise in topography and the hills to the south and east of the site.

Background views include further agricultural mosaic set across rising topography. A wind farm is located across the horizon (seen centre left of the view).

**Description of change:**

The site is located in the middle ground, on a localised rounded hill, but set against the backdrop of higher hills.

From this location, there may be views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

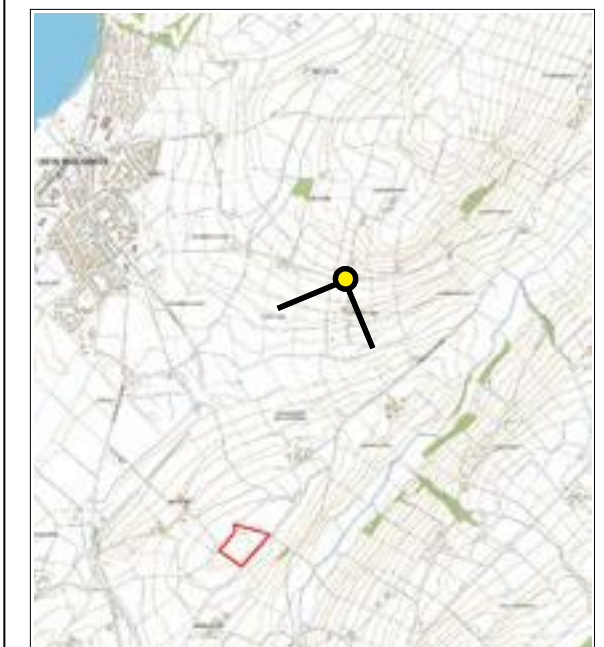
*Operation*

Negligible to minor adverse

*Year 15*

Nil

**Viewpoint 12: View looking south, from Gortinure Road, just west of Warbleshinny**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA











Carrickatane Wind Farm

Comms mast adjacent to western site boundary

Kittybane Road

**Viewpoint details:**

*Approx. grid reference:*

242481, 412715

*Approx. elevation:*

120m AOD

*Distance to site:*

2262m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise the route of Kittybane Road, bounded by grass verge and post and wire fencing.

Landform slopes away from the viewpoint, reflecting the overall fall of the wider hillside across which the route passes, Adjacent field enclosures are pastoral and defined by a mix of post and wire fencing along with fragmented and remnant hedgerow.

In the middle ground, the landform rises again and the landscape is characterised by a mixed agricultural mosaic, including various isolated properties as well as the settlement edge of Newbuilding, which is visible.

In the background, landform continues to rise up to a series of more pronounced hills. A windfarm is also present on the horizon.

**Description of change:**

The site is located in the background of the view, on a localised rounded hill, but set against the backdrop of higher hills.

From this location, there may be views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

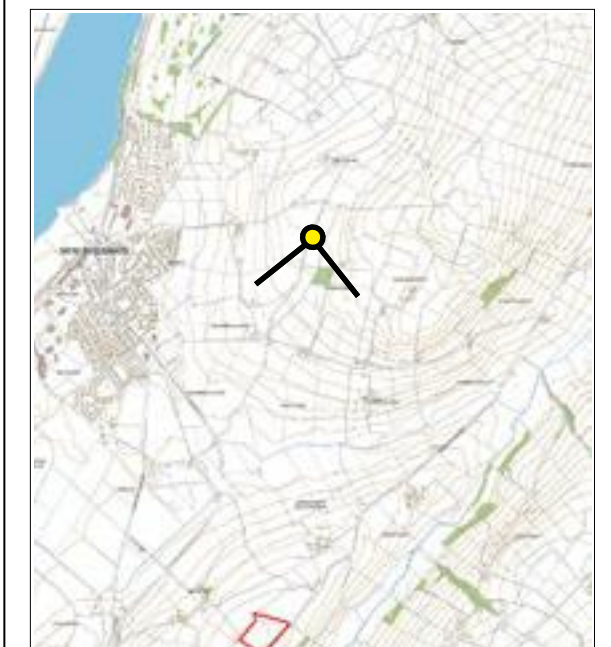
*Operation*

Negligible to minor adverse

*Year 15*

Nil

**Viewpoint 13: View looking south, from Kittybane Road, north of Gortinure**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA











**Viewpoint details:**

*Approx. grid reference:*

241512, 411879

*Approx. elevation:*

32m AOD

*Distance to site:*

1535m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium/high

(accounting for nearby residential dwellings)

**Baseline description:**

Foreground views comprise the highway corridor of Duncastle Road as it leaves the settlement edge of Newbuildings. At this point the highway is set adjacent to an existing dwelling access and also by a road verges and post and wire fencing. Landform rises gradually away from the viewpoint but across a shallow slope. The immediate landscape beyond Duncastle Road is characterised by medium to large scale enclosures of pastoral land.

In the middle ground, pastoral land uses continue and are set across a more gradual and undulating topography. More mature woodland blocks are present.

in the background, topography rises up to a backdrop of high hills with wind turbines present across parts of the horizon.

**Description of change:**

The site is located in the background of the view, on a localised rounded hill, but set against the backdrop of higher hills.

From this location, there may be views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

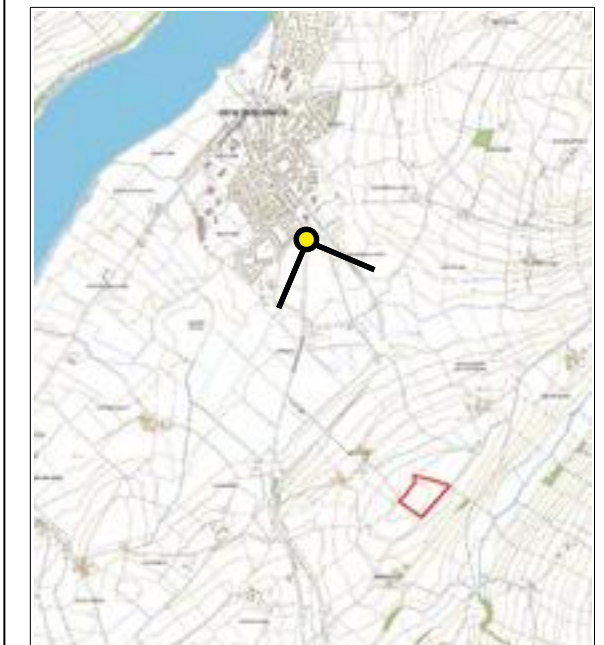
*Operation*

Neutral

*Year 15*

Nil

**Viewpoint 14: View looking south-east, from Duncastle Road (B48) on the settlement edge of Newbuildings**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_-\_0001

Date | 24/05/2024

Team | MW/JW

App | JWA









Approximate extent of site

Curryfree Wind Farm

Comms mast adjacent to western site boundary



**Viewpoint details:**

*Approx. grid reference:*

241474, 411231

*Approx. elevation:*

34m AOD

*Distance to site:*

1006m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Foreground views comprise medium scale pastoral fields set across a relatively even topography, although landform does rise gradually away from the viewpoint. Mature tree belts and farm buildings are present to the left and right of the view respectively.

In the middle ground, landform rises up to a low rounded hill, and includes further farm buildings set within the pastoral enclosures and surrounded partly by linear tree belts.

Middle ground topography broadly screens longer distance views however rising landform in the background reveals high ground at Curryfree Hill; wind turbines are also present on this part of the horizon.

**Description of change:**

The site is located in the middle ground of the view, on a localised rounded hill, but set beyond a linear tree belt and existing farmstead.

From this location, there may be views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

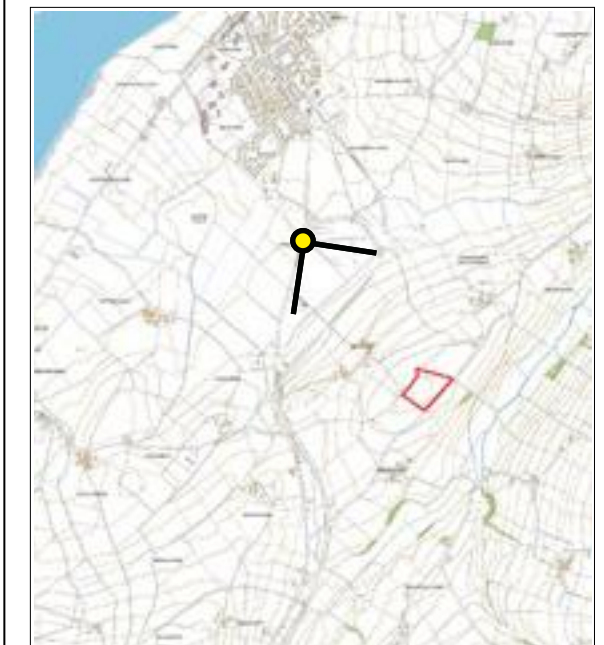
*Operation*

Neutral

*Year 15*

Nil

**Viewpoint 15: View looking south-east, from Duncastle Road (B48)**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA









Hill range between Kittybane and Warbleshinny

Comms mast adjacent to western site boundary

Clampernow Road



**Viewpoint details:**

*Approx. grid reference:*

240468, 410028

*Approx. elevation:*

62m AOD

*Distance to site:*

1423m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

04.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise the route of Clampernow Road in the foreground and middle ground, beset by low hedge banks and some fragmented, managed hedgerows. Occasional hedgerow trees are present along the route.

The landform extends away from the viewpoint before falls broadly from south to north (right to left across the view) down into the lower lying landform. Across this area the landscape is characterised by pastoral enclosures of medium scale.

Occasional farmsteads and individual dwellings are also present.

In the middle ground, a comms mast (located adjacent to the western boundary of the site) is partly visible through the foreground and middle ground screening.

In the background there are views to the higher ground and hills in the wider landscape context.

**Description of change:**

The site is located in the middle ground of the view, on a localised rounded hill, but set beyond various trees and hedgerows and existing farmstead.

From this location, there may be views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

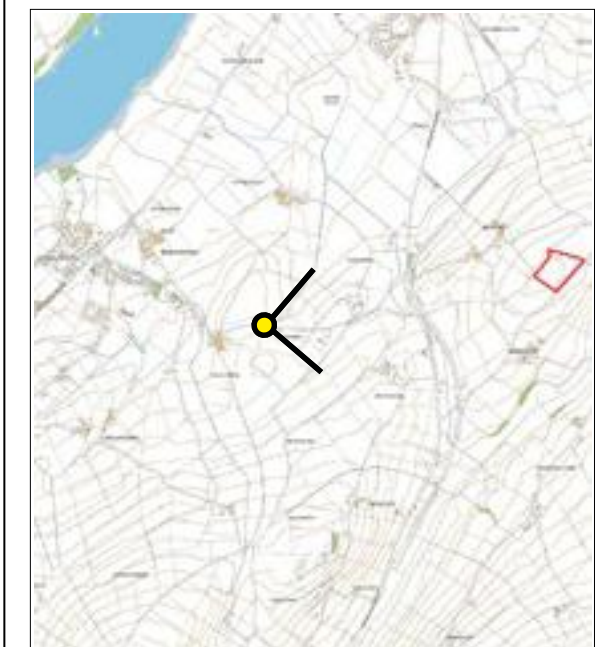
*Operation*

Negligible to minor adverse

*Year 15*

Nil

**Viewpoint 16: View looking east, from Clampernow Road**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

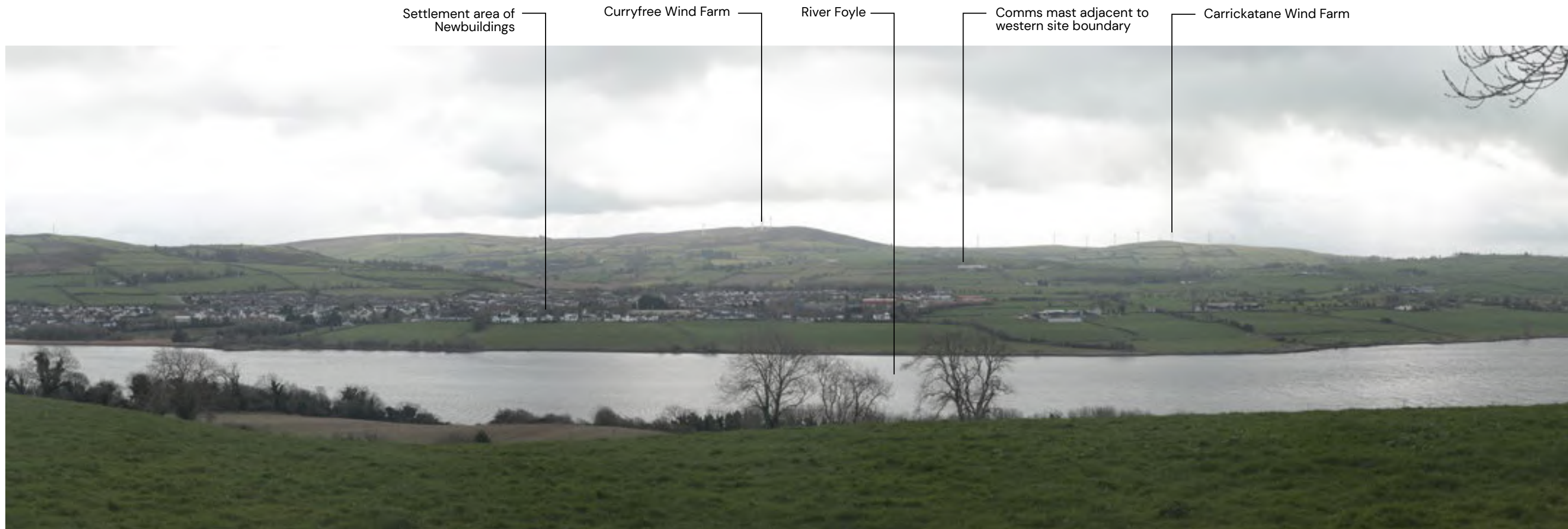
App | JWA











**Viewpoint details:**

*Approx. grid reference:*

239922, 413195

*Approx. elevation:*

66m AOD

*Distance to site:*

3509m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

Medium

**Baseline description:**

Existing views comprise the immediate river corridor of the River Foyle.

In the foreground the landform falls away from the viewpoint down toward the watercourse, this area comprising grassland with some low level tree belts.

The open river affords views across to the eastern bank and floodplain in the middle ground, this area comprising various pastoral enclosures but also the more extensive settlement area of Newbuilding.

Beyond Newbuilding, in the background, landform rises up to a series of intermediate and high hills, characterised by an overall undulating topography with a mosaic of pastoral agricultural land enclosure by hedgerows. Occasional farmsteads and individual dwellings are scattered across the area.

In the far distance, wind farms are located on high ground at Curryfree Hill and to the south of Killymallaght.

**Description of change:**

The site is located in the background, set on the interim rolling hills beyond the River Foyle and settlement area of Newbuildings.

From this location, there may be distant views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

Furthermore, the site forms a distant and very small part of an overall and complex panorama. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

*Operation*

Neutral

*Year 15*

Nil

**Viewpoint 17: View looking south/south-east, from Ballougry Road, south of Ballougry Hill**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA











**Viewpoint details:**

*Approx. grid reference:*

239609, 412240

*Approx. elevation:*

4m AOD

*Distance to site:*

3067m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

High

**Baseline description:**

Existing views comprise the corridor of the River Foyle, at this point more enclosed by tree and woodland belts along this section of the river corridor.

Existing views comprise the immediate western river bank, at this point defined by a belt of mature trees but with some recent management works opening up short sections to views.

In the middle ground, the river itself extends across the viewpoint, with the eastern river bank beyond with pastoral enclosures and occasional dwellings.

Foreground vegetation generally screens views of the background, however there are some distant and filtered views of the intermediate and high hills beyond. W

In the far distance, wind farms are located on high ground at Curryfree Hill.

**Description of change:**

The site is located in the background, set on the intermediate rolling hills beyond the River Foyle.

From this location, there may be distant views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

Furthermore, the site forms a distant and very small part of an overall and complex panorama. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

*Operation*

Neutral

*Year 15*

Nil

**Viewpoint 18: View looking south-east, from the public footpath on the western bank of the River Foyle**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA











**Viewpoint details:**

*Approx. grid reference:*

239121, 411798

*Approx. elevation:*

16m AOD

*Distance to site:*

3200m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

High

**Baseline description:**

Existing views comprise the immediate corridor of the River Foyle.

In the foreground the landform falls away from the viewpoint down toward the watercourse, this area comprising some arable land with some low level tree belts.

The open river affords views across to the eastern bank and floodplain in the middle ground, this area comprising various pastoral enclosures along with scattered farmsteads and dwellings.

In the middle ground the landform rises up to a series of low, intermediate hills, before topography rises in the background to form a series of high hills, characterised by an overall undulating topography with a mosaic of pastoral agricultural land enclosure by hedgerows.

In the far distance, wind farms are located on high ground at Curryfree Hill and to the south of Killymallaght.

**Description of change:**

The site is located in the background, set on the intermediate rolling hills beyond the River Foyle.

From this location, there may be distant views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

Furthermore, the site forms a distant and very small part of an overall and complex panorama. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

*Operation*

Neutral

*Year 15*

Nil

**Viewpoint 19: View looking south-east, from the public footpath, just east of Newtownhamilton**



**Figure 6: Viewpoint Photographs**

Site | Killymallaght Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA











**Viewpoint details:**

*Approx. grid reference:*

238555, 413004

*Approx. elevation:*

51m AOD

*Distance to site:*

4364m

*Camera type:*

Canon EOS 5D (50mm lens)

*Date:*

05.03.2024

*Approx. H FoV:*

60°

**Sensitivity of receptor:**

High (accounting for adjacent Historic Park and Garden)

**Baseline description:**

Exiting views comprise the landscape context of the more elevated land to the west of the River Foyle.

Foreground views comprise an area of arable land which extends across a broadly even topography away from the viewpoint.

A belt of mature trees, seen to the right of the view, partially screens longer distance views for part of the panorama (the tree belt denoting the eastern edge of the Historic Park and Garden designation).

In the middle ground, beyond the foreground plateau, landform falls down into the corridor of the River Foyle, but this is not visible.

Beyond this landform rises up in the background of the view to a series of intermediate and high hills. These are characterised by an overall undulating topography with a mosaic of pastoral agricultural land enclosure by hedgerows.

In the far distance, wind farms are located on high ground at Curryfree Hill.

**Description of change:**

The site is located in the background, set on the intermediate rolling hills beyond the River Foyle.

From this location, there may be very distant views of initial construction works (limited to any taller elements during construction) and BESS infrastructure (upper sections in the longer term), however the nature of topography, coupled with existing and proposed vegetation on the northern and western edges of the site, will contribute to screening of these components.

Furthermore, the site forms a distant and very small part of an overall and complex panorama. The proposed development is not likely to be prominent in this context.

**Magnitude of impact:**

*Operation*

Negligible

*Year 15*

Nil

**Significance of effect:**

*Operation*

Neutral

*Year 15*

Nil

**Viewpoint 20: View looking south-east, from Mullenan Road (A40)**



**Figure 6: Viewpoint Photographs**

Site | Killymally Energy Storage System

Client | RES Ltd

Drawing number | P23-2714\_EN\_0006\_- \_0001

Date | 24/05/2024

Team | MW/JW

App | JWA





