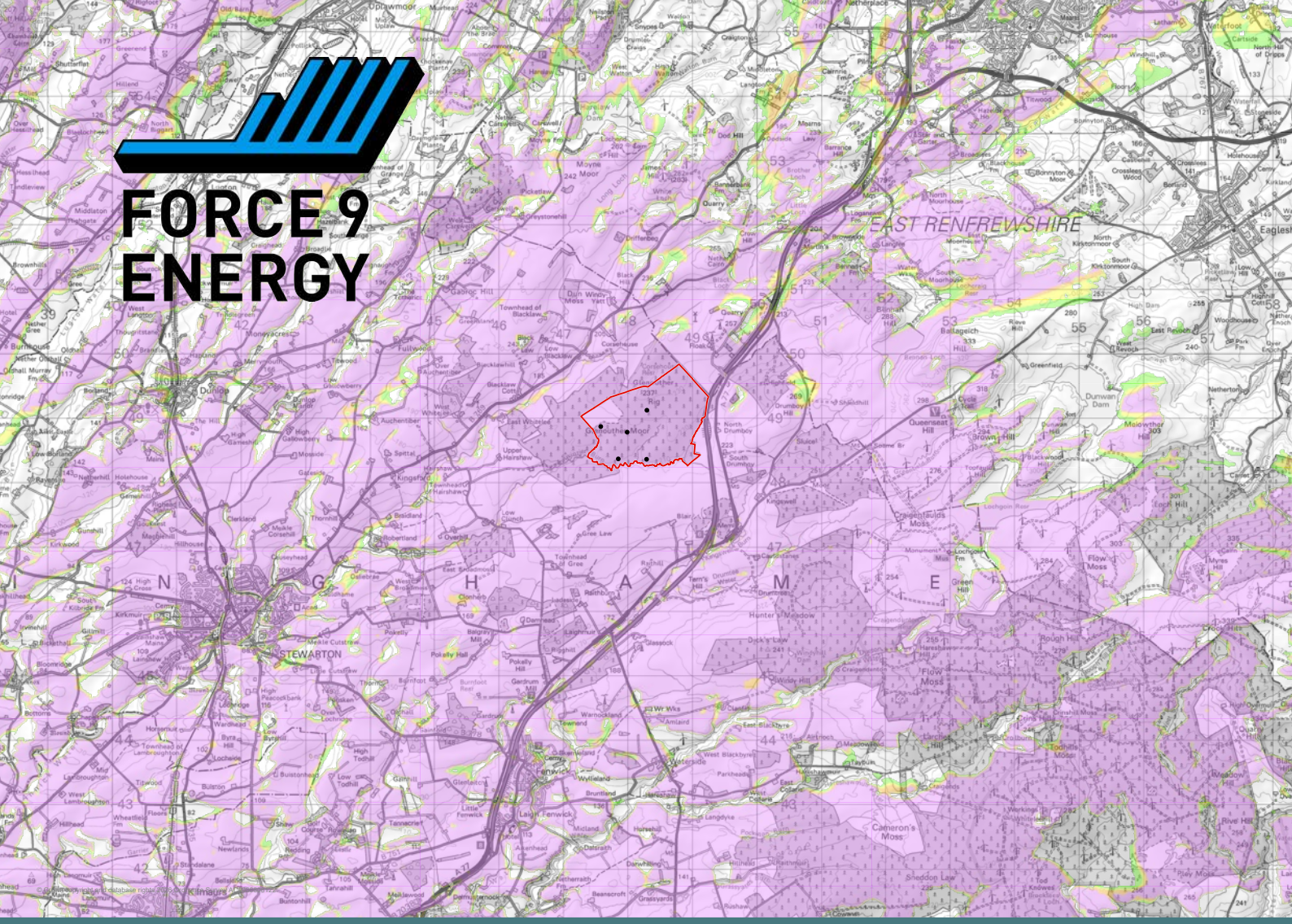


Glenouther Wind Farm

Design and Access Statement

LUC

August 2026

Glenouther Wind Farm

Design and Access Statement (DAS)

Prepared by LUC

On behalf of

Wind Power North Four Limited

August 2026

Preface

This Design and Access Statement supports a planning application by Wind Power North Four Limited ('the Applicant') to East Ayrshire Council (EAC) under the Town and Country Planning (Scotland) Act 1997 as amended ('the Act') to construct and operate Glenouther Wind Farm ('the Proposed Development'). The Proposed Development is located on Glenouther Moor approximately 4.5 kilometres (km) north-east of Stewarton within the EAC administrative area. The Proposed Development will comprise up to five wind turbines and other ancillary infrastructure.

An Environmental Impact Assessment (EIA) Report has also been prepared to accompany the application and presents the likely significant environmental effects of the Proposed Development. The EIA Report comprises the following volumes:

- Volume 1: Non-Technical Summary;
- Volume 2: Main Report;
- Volume 3a: Figures;
- Volume 3b: Landscape and Visual Impact Assessment Visualisations (Part 1);
- Volume 3c: Landscape and Visual Impact Assessment Visualisations (Part 2) and Cultural Heritage Visualisations;
- Volume 4: Technical Appendices; and
- Volume 5: Confidential Documents.

In addition to the above, the application is also supported by a Planning Statement, a Pre-Application Consultation (PAC) Report and a Socio-Economic, Tourism, and Recreation Impact Assessment Report.

A hard copy of the EIA Report (excluding Volume 5) and the other supporting application documents will be available for public viewing during the application consultation period within business opening hours at the following addresses:

The Johnnie Walker Bond
Strand Street
Kilmarnock
East Ayrshire
KA1 1HU

Stewarton Community Library
17 Avenue Street, Stewarton
Kilmarnock
East Ayrshire
KA3 5AP

A hard copy of the EIA Report (excluding Volume 5) can be obtained at a cost of £1,200.00. Alternatively, a USB memory stick is available for £15.00. Any requests should be made using the following email address: glenouther@mucklemedia.co.uk. An electronic version of the EIA Report (excluding Volume 5) and supporting documents will also be available to view and download from the project website at: https://glenouther.vestaswindprojects.com/ and the EAC planning portal: https://eplanning.east-ayrshire.gov.uk/online/.

Any public representations to the application may be submitted via the EAC planning portal at https://eplanning.east-ayrshire.gov.uk/online/ or by email to submittoplanning@east-ayrshire.gov.uk, identifying the proposal and specifying the grounds for representation. EAC will advertise the submission of the EIA Report in the local and national press and the EAC planning portal. The advert will state the deadline for submitting representations to the EAC in relation to the planning application.

Contents

1. Introduction

1.1 Introduction

1.1.1 This Design and Access Statement (DAS) has been prepared by LUC on behalf of Wind Power Four Ltd (hereafter referred to as 'the Applicant'), to accompany an application for planning permission to construct and operate a wind farm with up to five turbines with associated infrastructure known as the Glenouther Wind Farm (hereafter referred to as 'the Proposed Development'). The Site (defined by the redline boundary) is located on Glenouther Moor south of Corsehouse Reservoir and west of the M77 motorway. The Site is located wholly within the East Ayrshire Council (EAC) administrative area as shown in **Figure 1.1: Site Location**.

1.1.2 Planning permission for the Proposed Development is required from EAC under the Town and Country Planning (Scotland) Act 1997 as amended ('the Act'), in consultation with relevant statutory consultees. As the output capacity of the Proposed Development is > 20 megawatts (MW), it is classified as a 'major' development under The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009[1]. As such, this DAS has been prepared in accordance with Regulation 13 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (as amended) as required for all major developments.

1.1.3 The DAS comprises two parts, namely:

- The Design Statement, which describes the Proposed Development and how it has evolved through the design process; and
- The Access Statement, which details how the Site will be accessed during the construction and operation of the Proposed Development.

1.1.4 This document should be read in conjunction with the Environmental Impact Assessment Report (EIA Report) submitted to accompany the application for planning permission.

1.2 Purpose of the DAS

1.2.1 The purpose of this DAS is to provide information on the principles and approach that have guided the design process. This DAS demonstrates how the Site and its surroundings have been fully appraised to ensure that the final design solution achieves a balance across the range of factors which require to be addressed. It describes the starting point for the Proposed Development's design, the various factors which have driven the design process, and subsequent iterations to the layout that were made in response to the environmental and technical issues identified during the EIA process. Details are also provided on the access arrangements, both in terms of transport access for construction and maintenance works.

1.3 The Proposed Development

1.3.1 The Proposed Development is described in detail in **Chapter 4: Development Description** of the EIA Report. In summary it will comprise:

- Up to five wind turbines each with a maximum blade tip height of up to 200 metres (m) and an indicative combined site output capacity of 36 MW;
- Medium intensity (2000 candela (cd)) steady red aviation warning lights installed on the hubs of Turbines (T)1, T3, T4 and T5 which will be reduced to 200 cd in clear weather conditions, and infra-red (non-visible) warning lights on all turbines[2];
- Foundations supporting each turbine (comprising a mixture of piled and excavated construction methods);
- Permanent crane hardstandings at each turbine location comprising a mixture of piled (for T1, T2 and T3) and excavated (for T4 and T5) construction methods;

[1] The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009. Available [online] at: https://www.legislation.gov.uk/ssi/2009/51/contents/made [Accessed: 30th April 2026]
[2] The lighting scheme has been approved by the Civil Aviation Authority (CAA) through consultation (see EIA Report Technical Appendix 4.3: Aviation Assessment)

Figure 1.1: Site Location

East Renfrewshire

East Ayrshire

North Ayrshire

- Site boundary
- Landownership area
- Local authority boundary

Map scale 1:50,000 @ A3

LUC FIG01_01_13210_r1_DAS_SiteLocation_A3L 07/08/2026
Source: LUC, Wind Power North 4 Ltd.

- A site access point which links to an existing track which runs alongside the M77 motorway to the unclassified road at Floak Bridge;
- Approximately 4.1 kilometres (km) of new access track comprising approximately 1.3 km of excavated track and approximately 2.8 km of floated track;
- Up to 12 new watercourse crossings (of which two are mapped watercourses, five are unmapped minor watercourses and five are artificial drains);
- A control building and substation;
- A network of underground cables to connect the turbines to the onsite substation; and,
- A Biodiversity Enhancement Management Plan (BEMP).

1.3.2 In addition to the above permanent components associated with the operation of the Proposed Development, construction will also require the following components/works:

- A temporary construction compound including car parking;
- Approximately 0.3 km of temporary floated track north-east of the substation which will be used as a dedicated passing place for construction vehicles as they enter and exit the Site;
- Temporary auxiliary hardstandings at each turbine (comprising a mixture of excavated and floated construction methods); and
- The removal of approximately 105 hectares (ha) of forestry to physically construct the Proposed Development, support wider woodland management and enable forest-to-bog restoration[3].

1.4 The Applicant

1.4.1 The application for planning permission is being made by Wind Power North Four Limited, a wholly owned subsidiary company of Vestas Development A/S which is in turn owned by Vestas Wind Systems A/S. The project is being developed under the terms of an agreement between Force 9 Energy Limited and Vestas Development A/S. Through the agreement, Force 9 leads on the development process of wind farm proposals up to consent. Force 9 is supported during this period by Vestas both financially and with staff resources requested by Force 9 on issues such as access, engineering design, turbine selection, wind flow and optimisation of energy capture.

1.4.2 Vestas is, by many measures, the leading global manufacturer and supplier of wind turbines. Vestas has installed over 91,000 turbines with a capacity of over 189,000 MW in 88 countries worldwide. In addition, Vestas has a broad range of experience of project development issues including turbine siting and optimisation, grid connection and construction management. They maintain and service over 56,000 turbines worldwide amounting to 156,000 MW.

1.4.3 Force 9 Energy is a successful, independent UK wind farm developer. Wind farms developed by the Force 9 team and in operation already contribute more than 200 MW of clean, renewable, generating capacity in the UK. Force 9 also has a development pipeline of over 300 MW of consented potential installed capacity, 72 MW (installed wind capacity) of developments in planning and are bringing forward a portfolio of over 400 MW of potential generating capacity (including Glenouther).

[3] As detailed in Technical Appendix 4.1: Wind Farm Forestry Plan which also includes long-term forestry works associated with the operation of the Proposed Development.

2. The Design Statement

2.1 The Site and Surroundings

2.1.1 The Site is located on Glenouther Moor and is located approximately 4.5 kilometres (km) north-east of the closest settlement, Stewarton (see **Figure 1.1**) The Site (as defined by the red line boundary) occupies a total area of 205 hectares (ha) at grid reference NS 48337 48922 and is located south of Corsehouse reservoir and directly west of the M77 motorway. The Site slopes from the north (230 m Above Ordnance Datum (AOD)) to the south (210 m AOD) which facilitates drainage from the northern section of the Site to Annick Water, Coursehose Burn and Corsehouse Reservoir. The southern section of the Site drains towards the Swinzie Burn, a tributary of Annick Water. The Site is located within an area of privately owned commercial plantation forestry with areas of open bog habitat. The Site forms part of a wider landownership boundary with a total area of 378 ha and over which the Applicant has control (shown as blue line boundary in **Figure 1.1**). The Site is wholly within the EAC administrative area, but is directly adjacent to the East Renfrewshire Council (ERC) administrative boundary.

2.1.2 Land cover within the Site and the surrounding area is predominantly Plateau Moorland with commercial plantation forestry, largely comprising Sitka Spruce (a non-native species). There are smaller inclusions of blanket bog land across the Site (such as the area in the north-western extent of the Site) with areas of early-stage woodland running adjacent to the southern boundary.

2.1.3 The Site is surrounded by residential properties and farmsteads which are accessed by the A77 to the east, Clunch Road to the south/south-west and the B769 to the north, however all are at least 1.1 km away from the turbines. Within a 5 km radius of the Site, other operational wind farms include Whitelee Wind Farm (to the east), Middleton Wind Farm (to the north) and Neilston Community Wind Farm (to the north-west).

2.1.4 The Site is largely contained within the Plateau Moorland with Windfarms – Ayrshire Landscape Character Type (LCT 79)[4]. The key characteristics are as follows:

- "*Comparatively level topography with extensive plateau rising to soft contoured ridges and flatter basins.*
- *Heather and grass moorland, with moss and lochs.*
- *Extensive areas of conifer forest.*
- *Sparse network of minor roads.*
- *Infrequent farms and houses in valleys and on lower hill slopes on outer fringes.*
- *Extensive operational wind farm development, with associated infrastructure, reducing wild character and sense of remoteness.*
- *Visible as largely horizontal backdrop skyline with wind turbines from the Ayrshire Basin, parts of the Irvine Valley and Glasgow*".

2.1.5 Given the large-scale nature of the landscape in this area and the gently undulating landform, the Site does not contribute to any distinctive skylines or form an important part of the view from the surrounding landscape. In addition, there are no local or designated landscapes within 15 km of the Site.

2.2 Site Selection Process

2.2.1 Force 9 Energy and its development partner (Vestas) undertake a rigorous review of potential sites for wind farm development before deciding to pursue any potential opportunities. Feasibility assessments consider:

- Wind resource;
- Accessibility for construction and turbine delivery routes;
- The presence and proximity of internationally, nationally and locally designated sites (for landscape, archaeology, ecology and ornithology);

[4] Scottish Natural Heritage (2019) National Landscape Character Assessment – Landscape Character Type 79 – Plateau Moorland with Wind Farms. Available [online] at: https://www.nature.scot/sites/default/files/LCA/LCT%20079%20-%20Plateau%20Moorland%20with%20Windfarms%20-%20Ayrshire%20-%20Final%20pdf.pdf.

- Existing land use constraints;
- The potential for a site to support protected species and/or habitats (including deep peat) and potential opportunities to demonstrate meaningful biodiversity conservation and enhancement;
- The proximity to settlements and residential receptors;
- The location of other operational or proposed wind farm developments in the landscape;
- Grid connection options;
- National and local planning policy considerations, including guidance on landscape sensitivity to wind farm development which support/preclude development; and,
- Support from the respective landowner.

2.2.2 The early feasibility work identified that the Proposed Development Site was suitable for a wind farm for the following reasons:

- It has a good wind resource (measured to have a site derived capacity factor of 34.7%[5]);
- It is in proximity to an area which can support a feasible grid connection;
- It is well served by strategic transport routes such as the M77 and A77 allowing for good access for construction traffic and turbine deliveries, as well as being near two existing quarries which provides opportunities for sourcing aggregate materials locally;
- It is not within a National Park or National Scenic Area (NSA) which preclude development of wind farms according to national planning policy (NPF4 Policy 11(b))[6];
- There are no international or national natural heritage designations within the Site or in the immediate surrounding area;
- The existing land use as commercial forestry plantation is compatible with the development of a renewable energy scheme;
- Whilst the Site has deep peat, the existing plantation forestry has degraded the quality of the peat and its effectiveness to sequester carbon, such that there are good opportunities to restore peatland condition within the Site and thereby promote biodiversity enhancement;
- The Site is at distance from major residential areas with the closest being Stewarton approximately 4.5 km to the south-west. Whilst there are residential properties surrounding the Site, it is considered that impacts on residential visual amenity, noise and shadow flicker can be managed by careful design and applying an appropriate set back distance;
- The host landscape (LCT79: Plateau Moorland with Wind Farms) is already defined by the presence of commercial scale wind farms (Whitelee + Extensions and Sneddon Law). Middleton Wind Farm and Neilston Community Wind Farm are also within 5 km of the Site. These wind farms, together with key transport routes, including the M77 motorway and A77, have established a landscape that has a strong sense of human influence through man-made development which reduces the sense of wildness and remoteness which would otherwise be typical of alternative upland landscapes;
- Knowledge of the Site and surrounding area show that there are no key environmental constraints which would preclude development, or which cannot be avoided through design; and
- The Proposed Development falls wholly within the EAC administrative area. The statutory Development Plan for EAC is the East Ayrshire Local Development Plan 2 (LDP2) (2024)[7] as well as NPF4. As part of EAC's

[5] 'Capacity factor' is a measure of the actual electricity output of a wind farm relative to its maximum possible output, depending on location and technology.
[6] Scottish Government (2023) National Planning Framework 4. Available [online] at: https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf [Accessed 2nd March 2026]
[7] East Ayrshire Local Development Plan 2 (LDP2) (2024). Available [online] at: https://www.east-ayrshire.gov.uk/PlanningAndTheEnvironment/development-plans-and-policies/ldp2/ldp2-information.aspx [Accessed: 2nd March 2026]

Supplementary (Non-Statutory) Guidance, the Council has re-adopted its Landscape Wind Capacity Study[8] which was produced in 2018. This provides guidance with respect to strategic planning for wind energy development and the appraisal of individual wind farms and wind turbine proposals in East Ayrshire across 12 landscape character types. According to the Study, the Proposed Development is considered to comprise *very large turbines* (over 130 m high). The Proposed Development falls within an area of high-medium sensitivity according to the appraisal for character type 18b: East Ayrshire Plateau Moorlands with Forestry and Wind Farms. Whilst the Study identifies that there is no scope for larger turbines (over 130 m high) within this character type due to the existing pattern of other wind farm development within the core of the upland plateau, the Proposed Development will need to be determined based on its own merits and compliance with the wider policy in EAC's LDP2 and NPF4. The NatureScot guidance on Landscape Sensitivity Assessment (2022)[9], discusses the replacement of the term "capacity studies" with "sensitivity studies", stating *"In the past, many "capacity" studies often dealt with susceptibility rather than capacity. Capacity is determined by the need for a target amount of development while sensitivity is not. Most studies should therefore be correctly referred to as sensitivity studies, unless such targets have been set at an appropriate scale" (page 4).* Similar to the capacity studies above, the NatureScot guidance also states, *"Sensitivity studies are never a substitute for a site- and proposal – specific Landscape and Visual Impact Assessment (LVIA). These studies can inform strategic site selection for development, helping to steer it towards better locations and informing LVIA, but they should not be used to determine planning applications. Instead, they should be seen as a complementary source of information which can help inform the decision-making process and environmental assessment" (page 3).* In relation to NPF4, Policy 11 also sets out that *"significant landscape and visual impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable"* (emphasis added). Further details in relation to the planning policy, and an appraisal of the Proposed Development's compliance with such policy, is provided in the **Planning Statement** which accompanies the application.

2.3 Design Strategy

2.3.1 The design strategy defines the overall approach to the design of the Proposed Development. It provides the starting point for the Proposed Development's design, and subsequent alterations to the design that were made in response to various considerations as identified during the EIA process, including landscape and visual amenity, noise, ecological, ornithological, hydrological and geological (including with respect to peat) constraints and effects, together with wind yield, and feasibility of construction.

2.3.2 The design strategy for the Proposed Development aims to provide a balance between maximising the Site's energy yield and creating a layout that responds to its setting in terms of landform and pattern with other existing and proposed wind farm schemes, whilst minimising environmental impacts on sensitive receptors (including landscape, views, peat, and residential visual amenity). A key element of the overarching design strategy has also been to revisit the reasons for refusal of the previous Glenouther Renewable Energy Park[10]. The process seeks to design a project which achieves, on balance, the best outcome between maximising energy generation, whilst seeking to reduce the level of effects that were previously considered unacceptable, and which responds positively to current key local and national planning policy tests. A key focus has been in regards to landscape and visual amenity and biodiversity enhancement (NPF4 Policy 3 and 11) – see the accompanying **Planning Statement** for further details on the key planning policy tests of relevance to the Proposed Development.

2.3.3 As such, this has meant that the design process has been led by landscape and visual, residential and visual amenity (RVA) and peat considerations. The design of the Proposed Development layout has aimed to meet the guidance contained within NatureScot's Siting and Designing Wind Farms in the Landscape[11], in so far as possible.

[8] East Ayrshire Council (2024). East Ayrshire Landscape Wind Capacity Study – Supplementary Non-Statutory Guidance 2024. Available [online] at: https://www.east-ayrshire.gov.uk/Resources/PDF/L/Landscape-wind-capacity-study.pdf [Accessed: 2nd March 2026]
[9] NatureScot (2022) Landscape Sensitivity Assessment Guidance. Available [online] at: https://www.nature.scot/doc/landscape-sensitivity-assessment-guidance-methodology
[10] The previous proposal on the site was the Glenouther Renewable Energy Park (Planning Reference: 15/0584/PP) refused by the EAC on 25th May 2016 for landscape and visual (including cumulative), and residential visual amenity impacts on surrounding properties. The application was appealed (appeal reference: PPA-190-2059-1) and later dismissed with planning permission refused on 2nd October 2018.
[11] NatureScot (Previously Scottish Natural Heritage) (2017) Siting and Designing Wind Farms in the Landscape Guidance Document. Available [online]: https://www.nature.scot/sites/default/files/2017-11/Siting%20and%20designing%20windfarms%20in%20the%20landscape%20-%20version%203a.pdf [Accessed: 3rd March 2026]

In respect of residential amenity design scenarios have been modelled and tested from residential properties cited in the reason for refusal of the Glenouther Renewable Energy Park.

Design Objectives

2.3.4 The key overarching objectives of the design strategy were as follows:

- To maximise the potential energy yield of the Site and create a competitive and financially viable project;
- To use the latest wind turbine technology consisting of more efficient and larger turbines where these can be reasonably accommodated within the landscape, as supported by the Onshore Wind Policy Statement (OWPS)[12] and NPF4[6];
- To create a layout and use a turbine option that ensures thresholds for visual impact, noise and shadow flicker are not breached in regard to surrounding residential properties, addressing the reasons for refusal of the Glenouther Renewable Energy Park proposal on the Site (see below);
- To design a small and well composed group of turbines that is seen as a discrete development and does not materially increase the perceived extent of wind farm development across the landscape from key views;
- To design a balanced and coherent layout that minimises 'stacking' of turbines in key views, and reduces notable gaps and outliers;
- To explore opportunities to restore and enhance biodiversity including for birds and peat; and
- To develop a layout that fulfils the above objectives whilst respecting other environmental and technical constraints including noise; ecological, ornithological; hydrological and ground conditions (including peat), telecommunications links and aviation related constraints identified during the EIA and consultation process.

2.3.5 At an early stage in the design process, consideration was given to residential visual amenity impacts associated with an initial five turbine layout comprising heights of up to 200 m to blade tip. Particular attention was given to the properties which were previously considered by the appeal Reporter to be a concern from a residential visual amenity perspective, these being properties at Floak (group of properties), Drumboy (group of properties), Blair Farm, Greelaw Farm, Glenouther Farm and Corsehouse Farm. Consideration was also given to Blacklaw Cottage (group of properties) to understand potential residential visual amenity impacts for properties in the wider area not previously cited by the appeal Reporter, but which could be subject to impacts on residential visual amenity. The study was to ensure that residential visual amenity impacts at these properties were fully understood from the outset, and to acknowledge any restrictions to turbine movements that should be applied in order to avoid breaching the residential visual amenity threshold – see **Technical Appendix 5.2: Residential Visual Amenity Assessment (RVAA) of Volume 4** of the **EIA Report** for further details.

2.3.6 During the design process, computer modelling was also used as a tool to aid design. Zone of Theoretical Visibility (ZTV) models and wireframes were generated and used to aid understanding of potential visual effects of the turbines and to 'test' the design iterations. A particular focus in design was ensuring that the field of view occupied by residential properties was compressed as far as possible within the limitations of turbine spacing to address prior reasons for refusal and to maintain as 'simple' a composition as possible in views which is as visually permeable as possible. Wind yield analysis was also used to determine the optimal locations of turbines in order to reduce spacing between turbines to create as compact a form as possible whilst working within tolerable technical limitations for turbine operation.

2.3.7 Meeting operational noise limits (including cumulatively) has also been key design consideration. Throughout the design process, the layout of the Proposed Development has been 'tested' in relation to noise limits, and the turbine locations have been optimised to ensure these limits can be met.

2.3.8 The main elements of the Proposed Development considered in the initial design iterations were the turbines. The locations of other infrastructure components were largely dictated by the positioning of the turbines, and were designed around onsite environmental constraints (see Site Constraints and Identification of Initial Developable Area section below), particularly peat depth. Later iterations to the turbine layout involved several alterations to turbine and infrastructure locations, which were reviewed against all constraints.

[12] Scottish Government (2022) Onshore Wind Policy Statement. Available [online] at: https://www.gov.scot/publications/onshore-wind-policy-statement-2022/documents/ [Accessed: 20th February 2026]

2.4 Site Constraints and Identification of Initial Developable Area

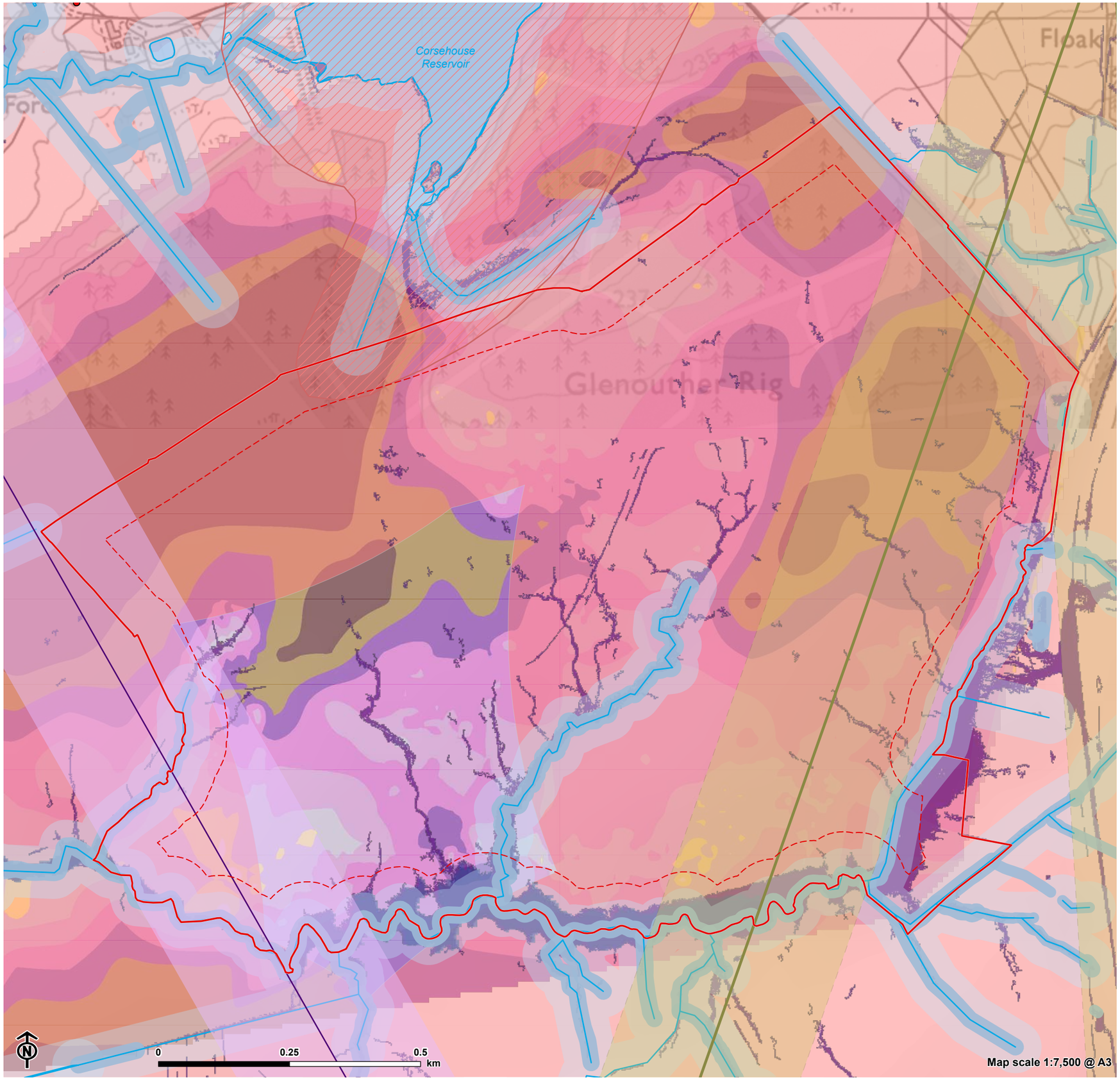
2.4.1 A number of technical and environmental constraints have been considered in the iterative design process and have guided the positioning of both turbines and infrastructure and the formation of site-specific design principles. An illustrative constraints plan is shown on **Figure 2.1: Site Constraints Plan**. This plan does not include all constraints that have informed the design (e.g. confidential information on certain protected species for example) and is not presented at the level of detail at which certain constraints were reviewed. Furthermore, various key potential environmental effects of the Proposed Development, including landscape and visual effects, residential visual amenity impacts and noise impacts are not easily depicted by constraints mapping. These effects influenced the design instead by iterative assessment (e.g. the generation of wireline visualisations and ZTV mapping) and running technical models.

2.4.2 Following the completion of the initial environmental baseline surveys (in relation to birds, protected mammals, habitats and peat), as well as feasibility studies in relation to aviation, access, telecommunications and a wind measurement campaign, an initial constraints exercise was undertaken by Force 9 Energy. This was also informed by the key planning policy considerations and Site planning history as well as turbine spacing limitations. This initial exercise was to understand the maximum number of turbines which could be realistically accommodated by the Site, and limitations to the placement of supporting infrastructure to determine the 'Developable Area'. On this basis, consideration was given to the following:

- Ensuring the amenity of properties in the vicinity of the Site in terms of visual effects, noise and shadow flicker is not so affected that those properties become unattractive places in which to live. Particular attention was given to Blair Farm, Corsehouse Farm, Glenouther Farm, Gree Law and properties at Drumboy and Floak, as properties where the Reporter found a level of effect sufficient to refuse the previous Glenouther Renewable Energy Park development (12 turbines at 126.5 m to blade tip). Focus was given to narrowing the field of view in comparison to the previously refused scheme given less turbines were proposed to be used;
- Seeking to limit development footprint on key habitats;
- Avoiding deep peat (in excess of 1 m) where possible;
- Avoiding placing turbines within a 181 m buffer of an identified Airwave Solutions link passing through the eastern part of the Site to maintain its operational integrity;
- Where it is not possible to avoid key habitats or deep peat, ensuring the scope for adequate mitigation and/or compensation is understood;
- Understanding the impact of the project on existing forestry onsite;
- Getting the best out of the Site in terms of energy generation and carefully considering turbine spacing to compress design whilst not compromising operational efficiency; and
- Keeping turbines outside an 81 m internal buffer to prevent oversailing onto adjacent land outside the planning redline boundary – see **Figure 2.1**. Micrositing within this area would not be possible.

2.4.3 Through the application of a minimum 1.2 km from the properties which were referenced by the Reporter in the original refusal of Glenouther Renewable Energy Park (1.1 km buffer on all other properties including Blair Farm which was understood to have fallen into disuse at the time), consideration of peat depths, the location of protected species, mapped watercourses (50 m buffer) and telecommunications links, it was clear that turbines would need to be focussed in the south central part of the Site outside the oversail buffer – see **Image 1**. This established the 'Initial Developable Area' as a starting point for the design.

Figure 2.1: Site Constraints Plan



Site boundary
Site boundary turbine oversail 81 m buffer

Constraints

- Residential properties
- Residential property buffer (1.2 km except Blair Farm 1.1 km buffer)
- Local Nature Conservation Site (LNCS)
- Airwave Solutions Links from OfCom
- Airwave Solutions Links from OfCom 181 m buffer
- Arqiva Link
- Arqiva Link 181 m buffer
- Watercourse (Ordnance Survey 1:25k)
- Waterbody (Ordnance Survey 1:25k)
- Watercourse/waterbody 50 m buffer
- Recommended riparian corridor (SEPA)

SEPA Future Surface Water and Small Watercourses Medium Likelihood

- By the 2070s, each year this area may have a 0.5% chance of flooding

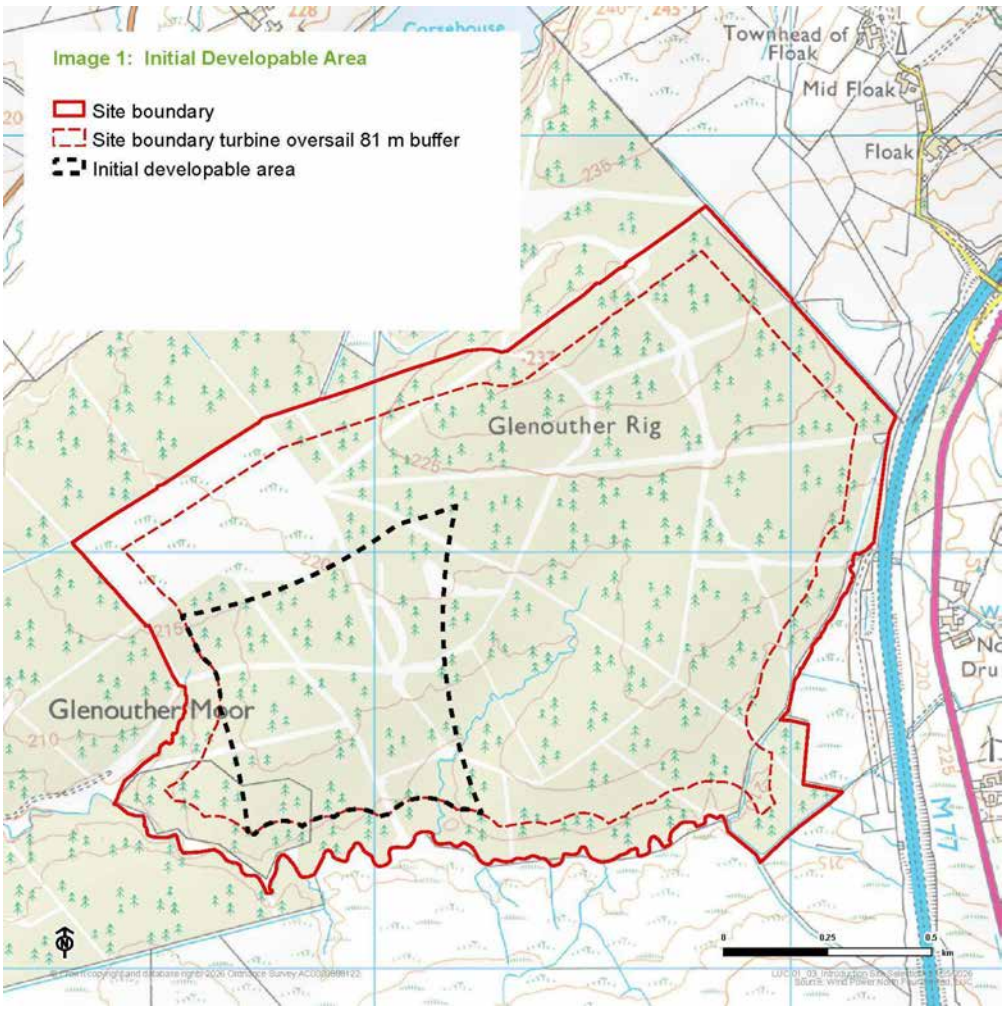
SEPA Future Flood Maps River Medium Likelihood

- By the 2080s, each year this area may have a 0.5% chance of flooding

Interpolated peat depth (m)

- <= 0.3
- 0 - 0.5
- 0.5 - 1
- 1 - 2
- 2 - 3
- 3 - 4
- 4 - 5
- 5 - 9

LUC FIG02_01_13210_r5_DAS_Site Constraints Plan_A3L 07/08/2026
Source: Wind Power North Four Limited, LUC



2.4.4 Through additional baseline environmental surveys, desk-study and consultation undertaken as part of the EIA, several other environmental constraints have been identified and factored into the iterative design process. Overall, the key environmental and technical constraints taken into consideration are as follows:

- Residential Properties: The Site is surrounded by residential properties, with adverse impacts on residential visual amenity being one of the reasons for the original refusal of the Glenouther Renewable Energy Park.
- Cumulative Wind Farms: There are a number of other operational wind farms within 5 km of the Site, including Whitelee Wind Farm and Extensions, Sneddon Law, Middleton and Neilston Community Wind Farms which would need to be considered in terms of cumulative landscape and visual impacts and cumulative noise impacts.
- Habitats: There is deep peat onsite, with approximately 66% of peat probes recording peat with depths of >1 m. The deepest areas of peat occur in the north-western and eastern parts of the Site – see **Figure 2.1**. In addition, NVC habitat survey identified priority peatland habitats across the Site (NVC codes M18 and M19). Most of the M19 habitat occurs within forest rides and a large area of open M18 habitat occurs in the north-western part of the Site. Both habitats are considered to have the potential to raise issues of national interest should they be impacted[13].
- Hydrology: There are two watercourses within the Site which are shown on OS 1:25,000 mapping and which are tributaries of the Swinzie Burn to the south. There is also an extensive network of drainage features and minor watercourses not shown on OS 1: 25,000 mapping. The Scottish Environment Protection Agency (SEPA) future flood maps indicate that the main fluvial flood risk to the Site is the flood risk area associated with the Swinzie

[13] NatureScot (2023). Advising on peatland habitats and carbon-rich soils in development management. Available [online] at: https://www.nature.scot/doc/advising-peatland-habitats-and-carbon-rich-soils-development-management#priority-peatland-habitat.

Burn. The Corsehouse Reservoir lies approximately 350 m north of the Site. The reservoir is fed by the Annick Water and drains to the west. The reservoir is no longer used for drinking water supply.

- Private Water Supplies: There are 15 properties identified within 1 km of the Site with potential to be supplied with a private water supply (PWS); however, none of the sources are considered to be hydrologically linked to the Site infrastructure.
- Cultural Heritage: Whilst there are no designated assets within the Site, there are four scheduled monuments (The Moyne prehistoric funerary cairn (SM12856), The Middleton and Bannerbank prehistoric settlements (SM12815; SM12816) and the medieval Robertland Castle (SM3380)), 30 Listed Buildings (two category A, nine category B, and 19 category C), and one Conservation Area (High Fenwick (CA52) within 5 km of the Site.
- Protected Species: Protected mammal species surveys identified otter spraints along the banks of the Swinzie Burn. Small watercourses within the Site also offer foraging and commuting opportunities for otter. Breeding bird surveys identified activity by protected bird species within a 2 km survey area; and
- Telecommunications: Additional desk-based study identified another microwave link operated by Arqiva crossing through the western part of the Site, and this was subject to a 181 m buffer.

2.5 Site Design Principles

Site Specific Design Principles

2.5.1 Based on a review of the Site and its landscape context, identified environmental constraints (see **Figure 2.1**), the Site's previous planning history/reasons for the original refusal of the Glenouther Renewable Energy Park, initial design work and advice contained in good practice guidance, the following site-specific design principles were adopted and considered throughout the iterative design process:

- Where possible in the context of other competing environmental constraints, maintain a minimum 1.2 km buffer from key residential properties (as noted above) in order to reduce residential visual amenity impacts and achieve operational noise limits (including cumulatively with other wind farms)[14]. Whilst 1.2 km was used as an initial rule of thumb, site specific conditions relating both to the properties themselves and on the Site, were also filtered into decision making about design to fix a location where it was considered turbines would not breach the RVAA threshold (see **Technical Appendix 5.2: Residential Visual Amenity Assessment**).
- Ensure a well composed and coherent layout is achieved from residential properties and nearby settlements, including Stewarton and Fenwick (where visible).
- Design a layout and consider a choice of turbines which reduce direct and indirect impacts on landscape character as far as possible, particularly within LCT 79 - Plateau Moorland with Windfarms – Ayrshire (host LCT), LCT 214 - Plateau Moorland with Windfarms - Glasgow & Clyde Valley, and LCT 66 - Agricultural Lowlands – Ayrshire.
- Ensure a coherent and well-balanced layout from key transport and recreational routes where there is widespread theoretical visibility, including the M77/A77 (including cycling route), A735 (including Glasgow to Kilmarnock Railway), A719, B778 and B769, and core paths within 5 km.
- Seek to develop a reduced aviation lighting scheme, including mitigation which reduces the intensity of lighting when viewed below the horizontal, to help minimise night-time effects including for nearby residents.
- Avoid deep peat >1 m and priority peatland habitats as far as possible within the context of other environmental constraints.
- Avoid near natural area of blanket bog (M18) habitat in the north-western part of the Site (also corresponds to very deep peat).
- Maintain the appropriate disturbance distances to breeding bird locations.
- Consider the impacts on the setting of key designated heritage assets where setting forms a key component of their cultural significance.

[14] Following further analysis of other onsite environmental constraints all properties except those at North Drumboy and Blair Farm are at least 1.2 km from the nearest turbine. See Technical Appendix 5.2.

- Seek to achieve at least a 50 m buffer on all watercourses and water features shown on OS 1:25,000 scale mapping in the interests of pollution control and protection of otter. For all minor unmapped water features seek to maintain the SEPA recommended riparian corridors for temporary infrastructure or infrastructure requiring excavations of less than 1 m, where possible (see **Technical Appendix 9.1: Watercourse Crossings and Buffer Assessment** in **Volume 4** of the **EIA Report**).
- Avoid the flood risk zone associated with the Swinzie Burn.
- Seek to maintain at least a 181 m buffer (100 m + blade length) on all three telecommunications links which pass through the Site.
- Maximise biodiversity enhancement in accordance with NPF4 Policy 3, including forest-to-bog opportunities, whilst maintaining good forestry management principles; and
- Where possible, adopt a phased approach to felling within the Site boundary in order to retain a degree of screening of ground-based infrastructure from nearby properties until such time as the restocked forestry has reached maturity.

Likely Grid Connection Route

2.5.2 The grid connection for the Proposed Development (referred to in the EIA Report as the 'Likely Grid Connection Route') does not form a part of the application for planning permission for the Proposed Development and is therefore not considered within this DAS, which relates to the Proposed Development only. The design principles adopted for the Likely Grid Connection Route, and an assessment of its environmental effects as a necessary component of the overall wind farm proposal, is considered within the EIA Report which accompanies the planning application.

2.6 Turbine Design – Size and Scale

2.6.1 Onshore wind continues to be the lowest cost form of renewable energy; however, there is limited UK Government financial support available. The ability to maximise the potential yield from the Site through turbine choice is important for maximising yield and for the financial viability of the Proposed Development.

2.6.2 The supply of smaller turbines (e.g. below 150 m) across Europe is already reducing due to lack of demand as manufacturers are recognising that the world market is shifting to larger machines and are focussing their development work on increasing capacity and efficiency of the turbine technology to secure the highest yield. Larger turbines have longer blades which significantly improve energy capture. Turbines are required to be spaced apart for operational efficiency and longer turbine blades means that turbines need to spaced further apart than smaller turbines.

2.6.3 When considering the most efficient route to extracting energy from the wind several factors therefore need to be taken into account – does a site lend itself to fewer larger turbines (spaced further apart) or more, smaller turbines spaced closer together. Given the wind speed and complexity and the nature of environmental constraints, the Site was considered to lend itself to fewer taller turbines to maximise energy yield because:

- Fewer turbines mean fewer turbine foundations, hardstanding and access tracks to service turbines, meaning the physical footprint of the project would be smaller in terms of peat disturbance;
- That a compressed layout with fewer turbines would narrow the field of view from residential properties;
- Fewer turbines would mean a greater visual permeability between turbines; and
- Whilst turbines would necessarily be taller than those refused planning permission in the Glenouther Renewable Energy Park proposal, they would be stepped back further reducing their relative height.

Visible Aviation Lighting

2.6.4 In the interests of aviation safety in periods of darkness, Article 222 of the Air Navigation Order (ANO) 2016[15] requires that all structures of 150 m or more above ground level should have medium intensity (2000 candela (cd)) steady red lights (one operating and one for back-up should the other fail) installed as close as possible to the top of

[15] Air Navigation Order (2016). Available online at: https://www.legislation.gov.uk/uksi/2016/765/contents/

obstacles, as well as three fixed red 32cd lights on the tower at half the nacelle height (to provide 360 degree coverage). There are, however, exceptions that can be made under Article 222(7) where it is demonstrated to the Civil Aviation Authority (CAA) that a reduced lighting design would still be sufficient for the purposes of managing air safety. A reduced lighting scheme has been derived which satisfies the design criteria set out in CAP 764 and this has been agreed with the CAA (see **Technical Appendix 4.3: Aviation Assessment** of **Volume 4** of the EIA Report). As such, two steady red lights (one of which will be for back up) will be installed on T1, T3, T4 and T5, with no visible lights being installed on T2. No 32 cd lights are required to be installed on the turbine towers. Further details are provided in **Chapter 4**, including when lights can be expected to operate at a reduced intensity. The visual effects of the proposed lighting scheme are assessed in **Technical Appendix 5.3: Aviation Lighting Night-Time Impact Assessment** of **Volume 4** of the EIA Report).

Outcome of the Application of the Turbine Design Process

2.6.5 Based on the parameters set out above and consideration of wind turbine spacing requirements, it was decided that the maximum number of turbines that could be reasonably accommodated would be five (owing to the limited Developable Area as dictated by environmental and technical constraints) – see **Figure 2.2: Site Constraints with Application Layout**. Turbine tip heights of up to 200 m would accommodate turbines up to 7.2 MW each, giving an indicative output capacity of up to 36 MW (based on a Vestas V162 candidate). Whilst turbines were sited in areas of shallowest peat possible, it was clear that areas of deep peat within the Developable Area would be unavoidable, and opportunities for mitigation and/or compensation would be required to demonstrate biodiversity net gain (BNG) in compliance with current NPF4 policy and guidance. Given the forested nature of the Site, albeit in poor condition due to being planted on peat, it was identified that the most effective way to secure this would be to consider forest-to-bog restoration whilst maintaining good forest design principles. The proposed turbines will be three bladed serrated edged horizontal axis turbines with a non-reflective pale grey colour, which will be consistent with other nearby schemes.

2.6.6 The consideration of residential visual amenity impacts (and resulting limited Developable Area) has resulted in a proposal which has a much reduced horizontal extent and simpler design which minimises stacking, avoids outliers and achieves greater visual permeability at surrounding residential properties compared with the Glenouther Renewable Energy Park proposal. **Annex A** sets out comparative wirelines from the key design properties (Blair Farm, Corsehouse Farm, Glenouther Farm, Gree Law, properties at Drumboy and Floak and Blacklaw Cottage) discussed above. **Table 2.1** also sets out a comparison between Glenouther Renewable Energy Park (GREP) and the Proposed Development (PD) in terms of distance from properties to the nearest turbine, the number of properties in view and the angle of view occupied by each of the proposals. The table and wirelines show how the Proposed Development has adhered to the design principles in respect of residential visual amenity as set out above.

Table 2.1: Comparison of Design Parameters between Glenouther Renewable Energy Park and the Proposed Development

	Number of Turbines in View		Distance to Nearest Turbine (m)		Angle of View Occupied by Turbines (degrees)	
Property	**GREP**	**PD**	**GREP**	**PD**	**GREP**	**PD**
Floak	12	5	1014	1351	31	25
Drumboy	12	5	1042	1123	59	37
Blair Farm	12	5	1017	1083	49	27
Gree Law	12	5	1036	1368	43	30
Glenouther Farm	12	5	988	1256	39	27
Blacklaw Cottage	12	5	1186	1377	45	26
Corsehouse Farm	12	5	1116	1258	56	32

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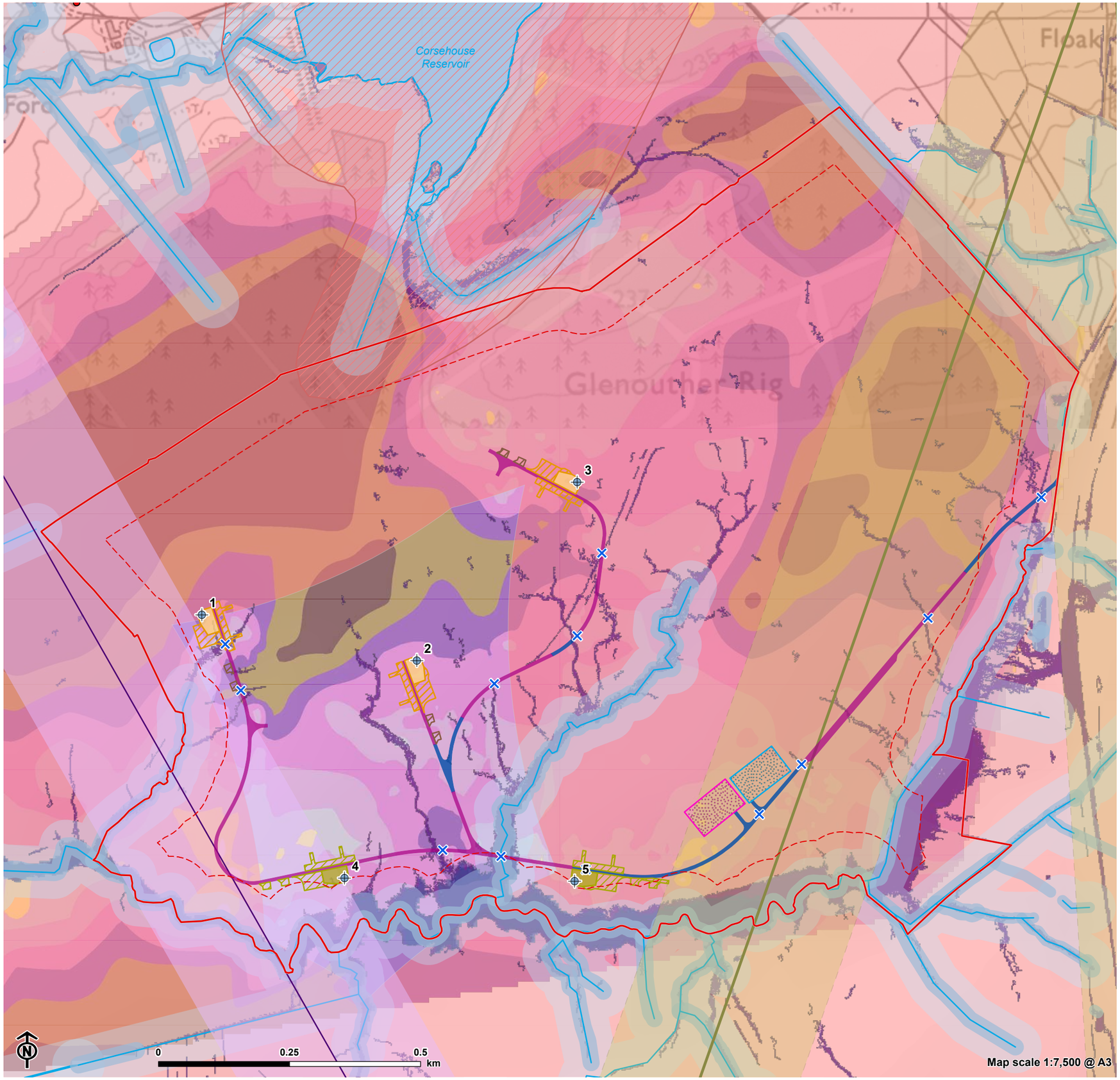
Figure 2.2: Site Constraints Plan with Application Layout



- Site boundary
- Site boundary turbine oversail 81 m buffer
- Turbine
- Construction compound (temporary)
- Substation compound
- New access track (excavated)
- New access track/ turning head (floated)
- Piled turbine foundation/hardstanding (permanent) (T1, T2 and T3)
- Excavated turbine foundation/hardstanding (permanent) (T4 and T5)
- Floating hardstanding (temporary) (T1, T2 and T3)
- Piled auxiliary crane pad (temporary) (T1, T2 and T3)
- Excavated hardstanding (temporary) (T4 and T5)
- Watercourse crossing

Constraints

- Residential properties
- Residential property buffer (1.2 km except Blair Farm 1.1 km buffer)
- Local Nature Conservation Site (LNCS)
- Airwave Solutions Links from OfCom
- Airwave Solutions Links from OfCom 181 m buffer
- Arqiva Link
- Arqiva Link 181 m buffer
- Watercourse (Ordnance Survey 1:25k)
- Waterbody (Ordnance Survey 1:25k)
- Watercourse/waterbody 50 m buffer
- Recommended riparian corridor (SEPA)

SEPA Future Surface Water and Small Watercourses Medium Likelihood

- By the 2070s, each year this area may have a 0.5% chance of flooding

SEPA Future Flood Maps River Medium Likelihood

- By the 2080s, each year this area may have a 0.5% chance of flooding

Interpolated peat depth (m)

- <= 0.3
- 0 - 0.5
- 0.5 - 1
- 1 - 2
- 2 - 3
- 3 - 4
- 4 - 5
- 5 - 9

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2.7 Infrastructure Design

2.7.1 The design of the Site components was based on the following objectives, which fundamentally sought to balance environmental objectives by making the Proposed Development footprint as small as possible, whilst ensuring health and safety objectives for site working are maintained:

- To keep overall new track length to a minimum thereby reducing stone imports, excavations and associated potential environmental effects;
- Where avoiding deep peat is not possible, propose alternative solutions to limit peat excavation, such as piled and floated turbine foundations (permanent and temporary) and floating tracks where technically feasible (see **Chapter 4**);
- Minimise the ancillary infrastructure needed to support construction of a wind farm of this scale, such as the size of the construction compound to reduce land-take and habitat loss;
- Minimise the need for new watercourse crossings, and, where necessary, ensure any new crossing structures minimise the impact on biodiversity and flood risk;
- Facilitate safe access to each turbine avoiding ground with potential instability;
- Choose a site access point which provides the most direct and shortest route to the turbine locations whilst meeting the standards required to maintain road safety;
- Position the construction compound and substation in proximity to the Site entrance to facilitate easy access during construction and operation;
- To follow the existing ground topography and contours as much as possible, minimising the requirement for cut and fill engineering works and associated environmental and visual effects; and
- Consider the balance of tree felling necessary to allow construction and operation of the Proposed Development and forest to bog restoration for biodiversity net gain.

2.7.2 Proposed infrastructure is discussed in detail in **Chapter 4** of the **EIA Report.**

Turbine Foundation and Crane Hardstanding Design

Peat

2.7.3 As noted above, given the small Developable Area available after taking into account other environmental constraints (see **Figure 2.2**), the interaction between deep peat and infrastructure is unavoidable (albeit the deepest areas of peat within the Site (to the north and north-east) have been avoided). As such, it has been necessary to take an innovative approach to the design of the foundations and crane hardstandings (both permanent and temporary) where they are located on deep peat deposits as determined by the peat depth surveys. The aim of this approach has been to reduce peat excavation and re-use requirements and associated impacts. As shown in **Figure 2.2** of this DAS and **Figure 9.7a-e** in **Volume 3a** of the **EIA Report**, T1, 2 and 3 and their associated hardstandings are on peat which averages between 3-4 m. A decision has therefore been taken to adopt a piled construction technique for the foundations, permanent crane hardstandings and auxiliary crane pads for these turbines, and a floated construction technique for the temporary hardstandings – see **Figure 4.3a** in **Volume 3a** of the EIA Report. This means that no peat excavation is necessary for these turbines and hardstandings which reduces environmental impact. Further details on these construction techniques are provided in **Chapter 4** of the EIA Report. A conventional cut and fill technique will be employed for T4 and T5 (see **Figure 4.3b** in **Volume 3a** of the **EIA Report**) where depths are shallower (between 1-2 m) and peat excavation volumes are less meaning peat re-use is more achievable. Piling is not possible in these locations as the total depth of the pile, pile cap and load transfer platform would lead to a substantial above ground structure and a need to build track up to the finished surfaces (increasing track footprints on the run ins to either side. Further details are provided in **Technical Appendix 9.3: Outline Peat Management Plan** of **Volume 4** of the **EIA Report**.

Hydrology

2.7.4 A boggy unmapped headwater area associated with a watercourse is currently encroached by temporary hardstanding at T1 due to other environmental constraints restricting movement in this area including deep peat to the north, turbine spacing parameters and buffers to telecommunications links. It has therefore been necessary to

review the standard hardstanding layout typically specified by Vestas for a V162 candidate (as proposed) due to these constraints, and design a bespoke hardstanding which helps to minimise this encroachment at this pre-construction stage – see **Figure 4.4b** in **Volume 3a** of the **EIA Report**. Whilst it has not been possible to completely avoid the headwater through bespoke hardstanding design for T1, it is proposed that the temporary hardstanding position in relation to the headwater will be amended to achieve at least a 10 m buffer during construction within the 50 m micrositing tolerance. If this cannot be achieved, the channel will be temporarily culverted under the hardstanding during construction. Additional Mitigation (e.g. silt fences/additional Sustainable Drainage Systems (SuDS)) will be installed between the hardstanding areas and the watercourse to reduce the risk of sediment/silt runoff during construction. In addition, a drain is within 10 m of the temporary secondary support crane pad at T1. The temporary hardstanding will be microsited during construction to maintain a 10 m buffer distance from the drain. If this cannot be achieved, the drain will be diverted during construction. Silt fences/additional SuDS will also be installed– see **Chapter 9: Hydrology, Hydrogeology, Geology and Peat** in **Volume 2** of the **EIA Report**.

Track Design

2.7.5 Due to the positions of turbines in deep peat, it has also been necessary to propose access tracks within these areas, albeit every attempt has been made to confine tracks to shallower peat as far as possible (see track linking T4 and T5 in the south on **Figure 2.2** as an example). A floating track design is only feasible and effective where certain technical criteria are met, namely slopes are less than 3 degrees and peat is ≥0.5 m over spans of ≥100 m and these criteria was applied to the track design. As a result, 2.8 km of the 4.1 km of track required (approximately 68%) is proposed to be floated. Further details on the floating track method are provided in **Chapter 4** of the **EIA Report**.

Outcome of the Application of the Infrastructure Design Process

2.7.6 Based on the infrastructure design objectives noted and with cognisance to the key onsite environmental and technical constraints, the infrastructure design has been optimised with regards to deep peat and hydrology. This has been done through careful consideration of construction methods to avoid peat excavation such as piling foundations for T1, T2 and T3 and floating sections of tracks where possible. Piling for T1-T3 will save approximately 68,000 m^3 of peat from being excavated which would lead to difficulties with re-use across the Site. Similarly, floating tracks will save approximately 28,000 m^2 of peat from being excavated. Bespoke design mitigation, micrositing and additional mitigation will help to address the potential impacts on the headwater and drain at T1. Further details are provided in **Technical Appendix 9.3** and **Chapter 9 of the EIA Report.** With regards to hydrology, 12 new permanent watercourse crossings are required to access the Proposed Development, although 10 of these are over minor watercourses or artificial drains which were identified and mapped during the site hydrology surveys (see **Technical Appendix 9.1** and **Figures 9.2a-e** of the **EIA Report**). All new crossings will be designed to pass the 0.5% annual exceedance probability flows, with an appropriate allowance for climate change, as recommended by SEPA. In terms of encroachment into SEPA recommended watercourse buffers, there are five locations (including at T1 in relation to the unmapped headwater and artificial drain) where a 50 m buffer from excavations greater than 1 m could not be achieved. In four of these locations, the SEPA recommended riparian corridor buffer was also not achieved. However, the implementation of the 50 micrositing allowance will enable watercourse encroachment to be avoided as far as possible on balance with other key environmental and technical constraints.

2.8 Forestry Design

2.8.1 Details of the Proposed Development's infrastructure were amalgamated with the forestry baseline data (as shown in **Technical Appendix 4.1: Forestry of Volume 4** of the **EIA Report** to inform the forestry design proposals for the Proposed Development.

2.8.2 The Site is located within part of Glenouther Forest which was planted with commercial conifer crops (predominantly Sitka spruce) over the period 1974 – 1980. Growth rates within the crops are poor with the weighted average Yield Class (YC) across the whole property calculated at YC7 against UK average figures of YC14 – YC16 for Sitka spruce. No timber harvesting has been implemented to-date and sections of the crop could be considered for felling in the next few years though, at present, no felling license or long-term forest plan (LTFP) is in place for the property and there is currently no access road into the forest for extraction purposes.

2.8.3 Given the deep peat onsite, and in light of the requirements placed upon developers to secure significant long term biodiversity net gain (BNG) for major projects under NPF4 Policy 3, there is an opportunity to incorporate peatland restoration into restocking proposals following construction of the Proposed Development as part of an overarching LTFP for the property. The overarching design principle associated with forestry within the Site at this stage has

therefore been to strike an appropriate balance between complying with good forest management principles (including those set out in the Scottish Government Control of Woodland Removal Policy (CoWRP[16]) and delivering biodiversity enhancement through forest-to-bog restoration in compliance with national planning policy.

2.8.4 Construction of the infrastructure required for the Proposed Development will require the removal of trees from the Site, as illustrated at **Figure 4.1.3** of **Technical Appendix 4.1 of Volume 4** of the **EIA Report**, and for some of these areas to be subsequently maintained free of trees to ensure access for operation and maintenance during the lifetime of the Proposed Development. Some crops adjoining the areas to be felled to construct the Proposed Development infrastructure will require further tree clearance due to the predicted instability of these adjacent crops. It is anticipated that windblow damage will develop in the cut faces left in these areas; therefore, it will be safer and more productive to clear these surrounding trees to wind-firm edges along existing roads, rides and drains at the same time that trees are cut to facilitate infrastructure construction.

2.8.5 Access tracks will be constructed within clearance corridors of up to 16 m wide with additional laybys as required. Clearance around the turbine positions will comprise of 100 m radii to provide access and wider areas to facilitate crane access. A radius of 85.8 m around each turbine will be maintained as open ground post-construction in order to meet requirements for suitable bat-separation distances. Other elements of the infrastructure will have provision for a 20 m boundary buffer to aid access during construction.

2.8.6 As a result, approximately 105 ha of forestry will be removed within the Site to facilitate construction of infrastructure and wider forest management. Of the 105 ha felled, approximately 28 ha will be removed for the construction of infrastructure (and working buffers) and 77 ha for management felling – see **Figure 4.1.3** of **Technical Appendix 4.1** of **Volume 4** of the **EIA Report**.

2.8.7 When considering restocking proposals, it was also relevant to consider the guidance published by Forest Research[17] covering management options for afforested deep peatland. This guidance suggests that where the previous conifer crop achieved growth rates of less than yield class 8 (YC8) then restoration to peatland and peatland edge planting can be considered. Consequently, all forestry compartments below YC8 have been included within the peatland restoration areas and their inclusion should not trigger a requirement for compensatory planting. The bat exclusion areas (BEAs) for T3 and T5 have also been included as restoration and will not require compensatory planting.

2.8.8 The Proposed Development Species Restocking Plan (see **Figure 4.1.6** of **Technical Appendix 4.1** of **Volume 4** of the EIA Report) shows which woodlands will be restocked and with which species, including forest-to-bog areas. Of the 105 ha initially felled, approximately 58 ha will be restocked (comprising a mixture of coniferous and broadleaved trees to achieve species diversity) and approximately 47 ha will be left unstocked (comprising approximately 6 ha as long-term open ground for wind farm infrastructure and 41 ha for forest-to-bog restoration). The 6 ha of woodland permanently lost will be compensated for by establishing an appropriately designed new planting scheme on a substitute site in order to satisfy the requirements of the CoWRP. A substitute site will be used as there is no additional ground suitable for planting with the Site or the wider forest.

2.9 Design Evolution

2.9.1 The design strategy and principles outlined above have been taken into account as the design of the Proposed Development has evolved. The design process involved workshops and discussions with technical team members to address identified constraints associated with one or more of the turbines or elements of the associated infrastructure. Each team member also summarised feedback from the relevant technical stakeholders as appropriate to the design process, and comments received through consultation with the local community were given due regard during the evolution of the project design. This design process and consideration of feedback is described in further detail below and shown in **Figure 2.3: Turbine Layout Modifications** (with **Inset Images 2-4** below showing the infrastructure design evolution). **Figure 2.4: Site Layout** presents the final layout for which planning permission is being sought. As noted in Section 2.4, the Developable Area (largely defined by the 1.2 km buffer on residential properties where possible in the context of other environmental and technical constraints) has restricted any material movements to the locations of turbines, and so this has been limited to the consideration of

[16] Forestry Commission Scotland (2009) The Scottish Government's Policy on the Control of Woodland Removal. Available at: https://forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal
[17] Forestry Research (2015) Deciding future management options for afforested deep peatland. Available at: https://www.forestresearch.gov.uk/publications/deciding-future-management-options-for-afforested-deep-peatland/

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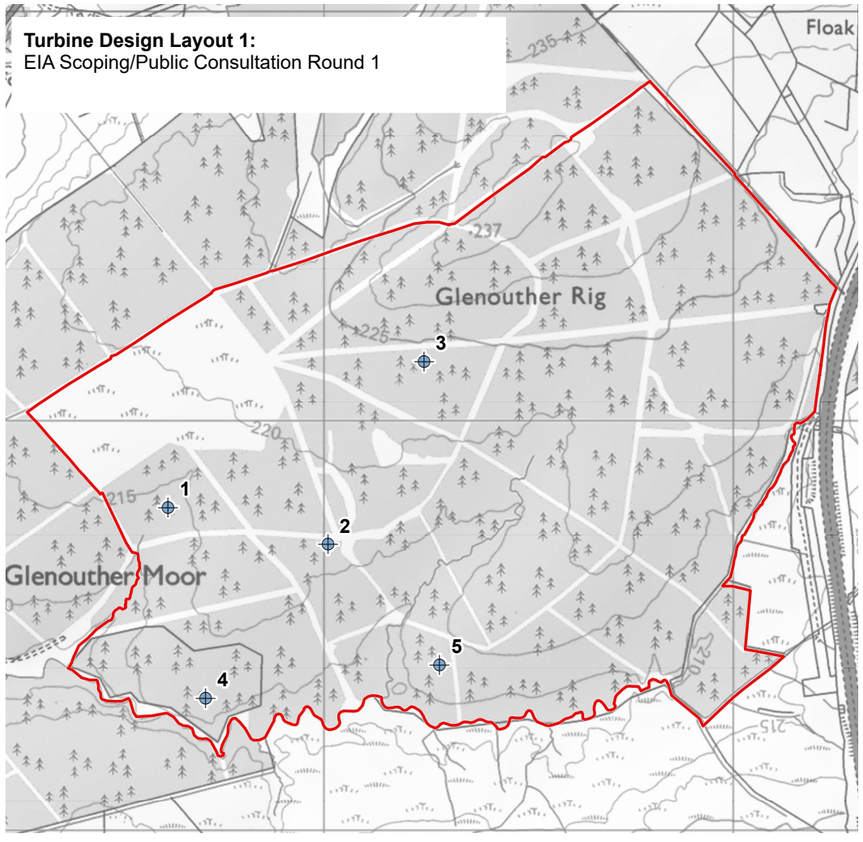
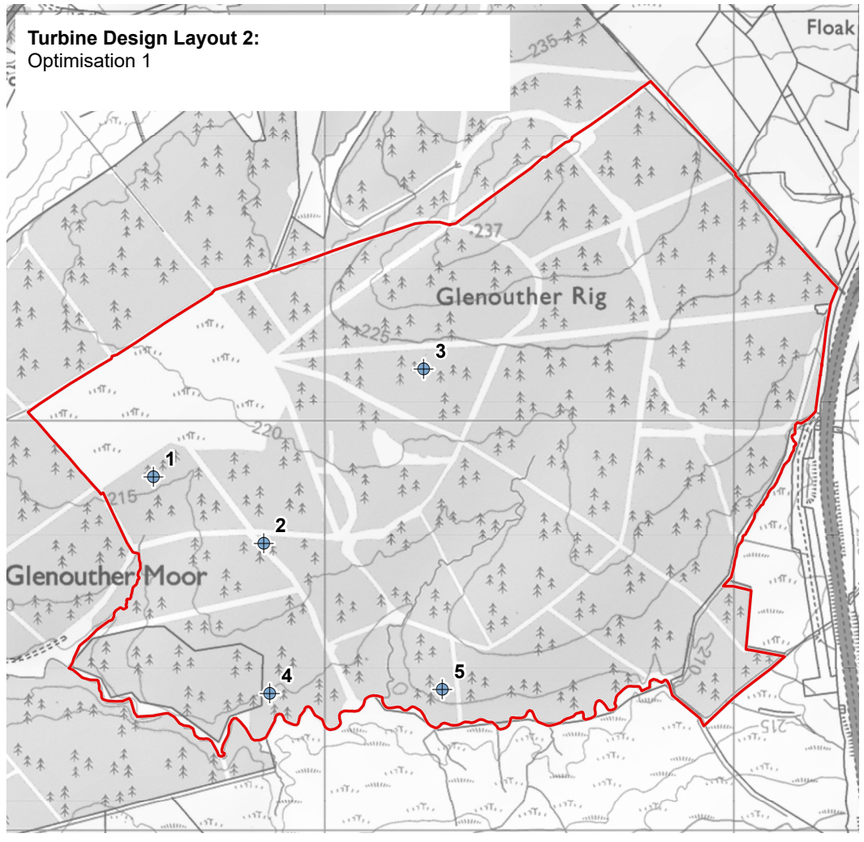
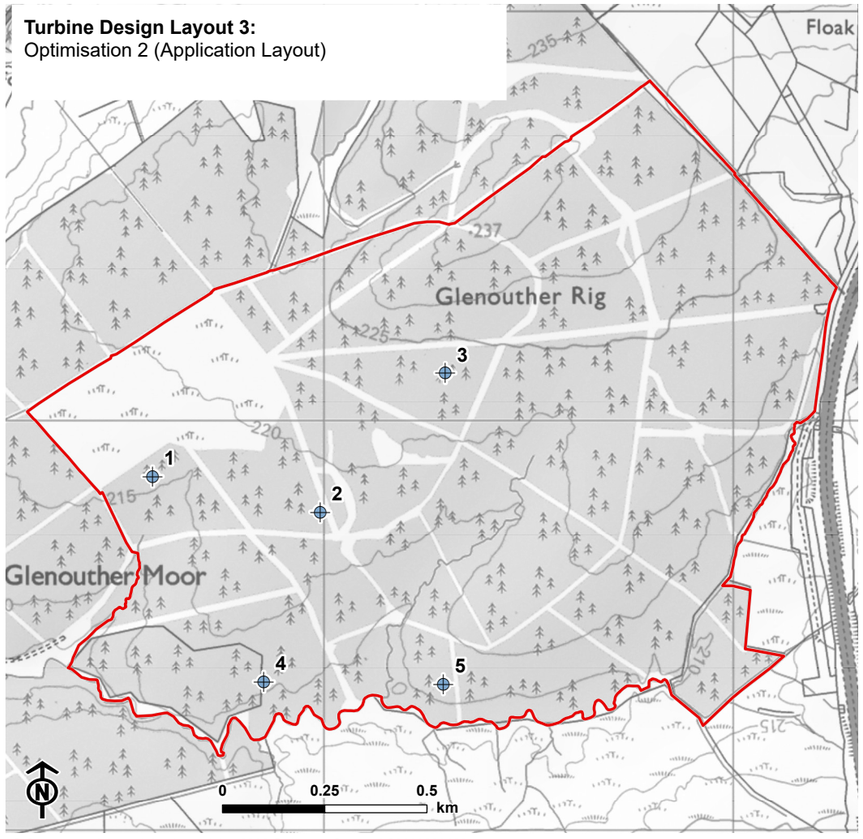
Figure 2.3: Turbine Layout Modifications







Site boundary

Turbine

Map scale 1:15,000 @ A3

LUC FIG02_03_13210_r0_DAS_Turbine Layout Modifications_A3L 18/08/2026
Source: Wind Power North Four Limited, LUC

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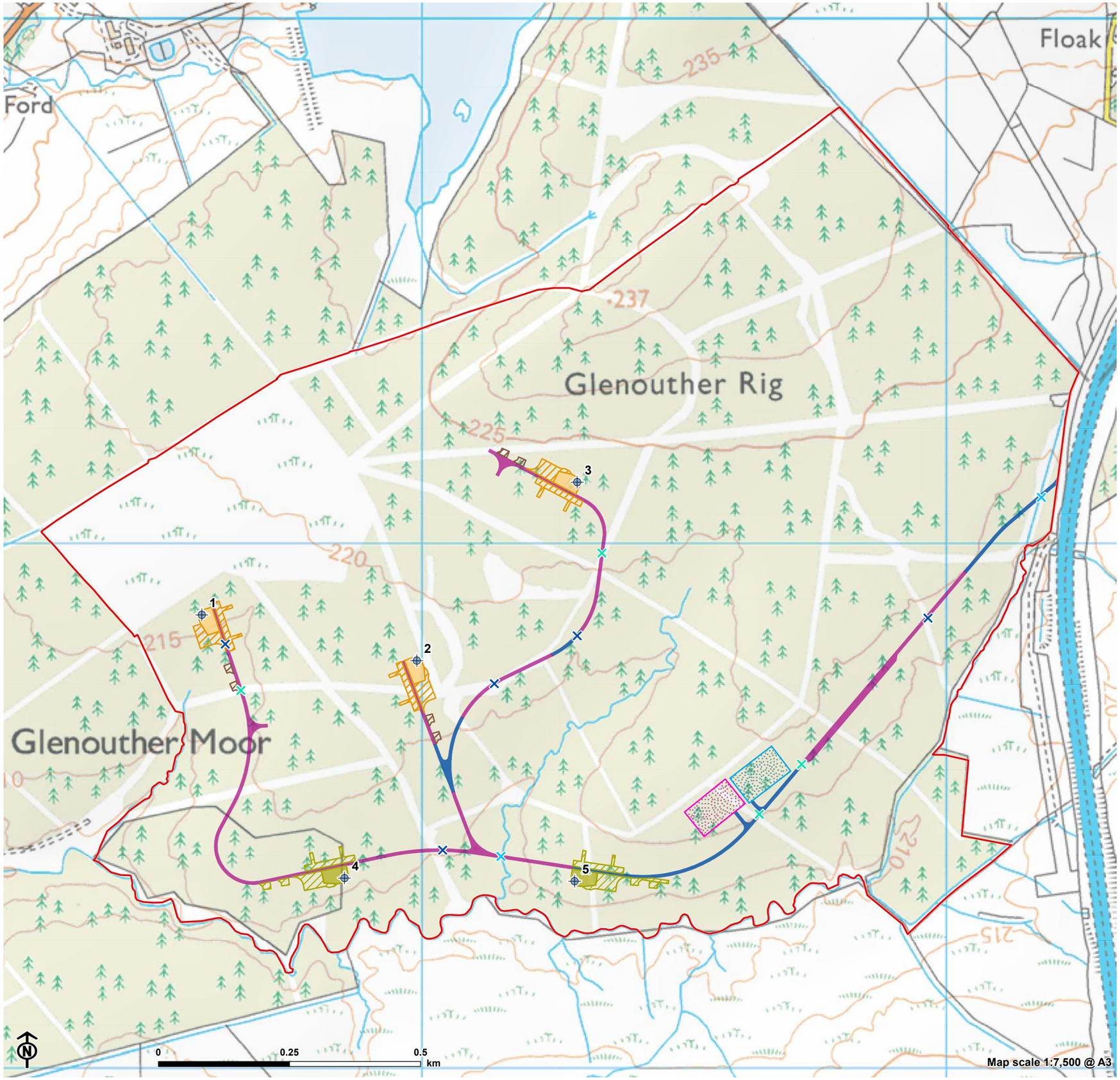
Figure 2.4: Site Layout Plan (Overview)



- Site boundary
- Turbine
- Construction compound (temporary)
- Substation compound
- New access track/ turning head (floated)
- New access track (excavated)
- Piled turbine foundation/hardstanding (permanent) (T1, T2 and T3)
- Excavated turbine foundation/hardstanding (permanent) (T4 and T5)
- Floating hardstanding (temporary) (T1, T2 and T3)
- Piled auxiliary crane pad (temporary) (T1, T2 and T3)
- Excavated hardstanding (temporary) (T4 and T5)

New watercourse crossing

- Watercourse crossing (Ordnance Survey 1:25K)
- Minor watercourse crossing
- Artificial drain crossing

Map scale 1:7,500 @ A3

LUC FIG02_04_13210_r4_DAS_Site Layout_A3L 18/08/2026
Source: Wind Power North Four Limited, LUC

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other environmental constraints where they would help to better achieve the design objectives and site-specific design principles.

Turbine Design Layout 1: EIA Scoping/Public Consultation Round 1

2.9.2 The starting point for the design was the EIA Scoping/Public Consultation Round 1 layout provided by the Applicant comprising five turbines of up to 200 m to blade tip. This initial turbine design was a result of the initial constraints led exercise (discussed at Section 2.4) taking into consideration residential visual amenity, noise and shadow flicker impacts (by applying at least a 1.2 km buffer to properties (1.1 km on all other properties including Blair Farm) which were considered to be subject to adverse residential visual amenity impacts by the Glenouther Renewable Energy Park appeal Reporter), limiting footprint on key habitats and avoiding deep peat where possible, avoiding telecommunication links in the eastern part of the Site by at least 200 m whilst maximising the energy generation output from the Site, all within the confines of the established Initial Developable Area. This layout was also subject to initial residential visual amenity review which identified constraints to micrositing certain turbines within the Initial Developable Area (including the position of T3 and T5 relative to properties at Drumboy, T1 and T4 relative to Glenouther Farm and T1 and T3 relative to Corsehouse Farm) in order to avoid the potential for breaching the residential visual amenity threshold.

Turbine Design Layout 2: Optimisation 1

2.9.3 Through additional consultation with telecommunications stakeholders, an additional link operated by Arqiva was identified passing through the western end of the Site. A buffer of 181 m (100 m clearance plus blade length) was applied to constraints mapping to determine the implications for the layout. As a result, T4 was moved 150 m east to clear the buffer and avoid adverse impacts on the operation of the link. In order to improve wind yield, T1 was moved 80 m north-east (also assisted with being further from headwater of defined watercourse), T2 was moved 150 m west, T3 was moved 20 m south and T5 was moved 60 m south. Moving T5 slightly closer to Blair Farm (and therefore beyond the Initial Developable Area – see **Image 1** above and **Figure 2.3**). This was not considered to breach the residential visual amenity threshold because survey of Blair Farm established that a large agricultural building had been constructed north-west between the house and the Site. This layout was then subject to additional noise modelling to confirm that noise limits were still achievable.

Turbine Design Layout 3: Optimisation 2 (Application Layout)

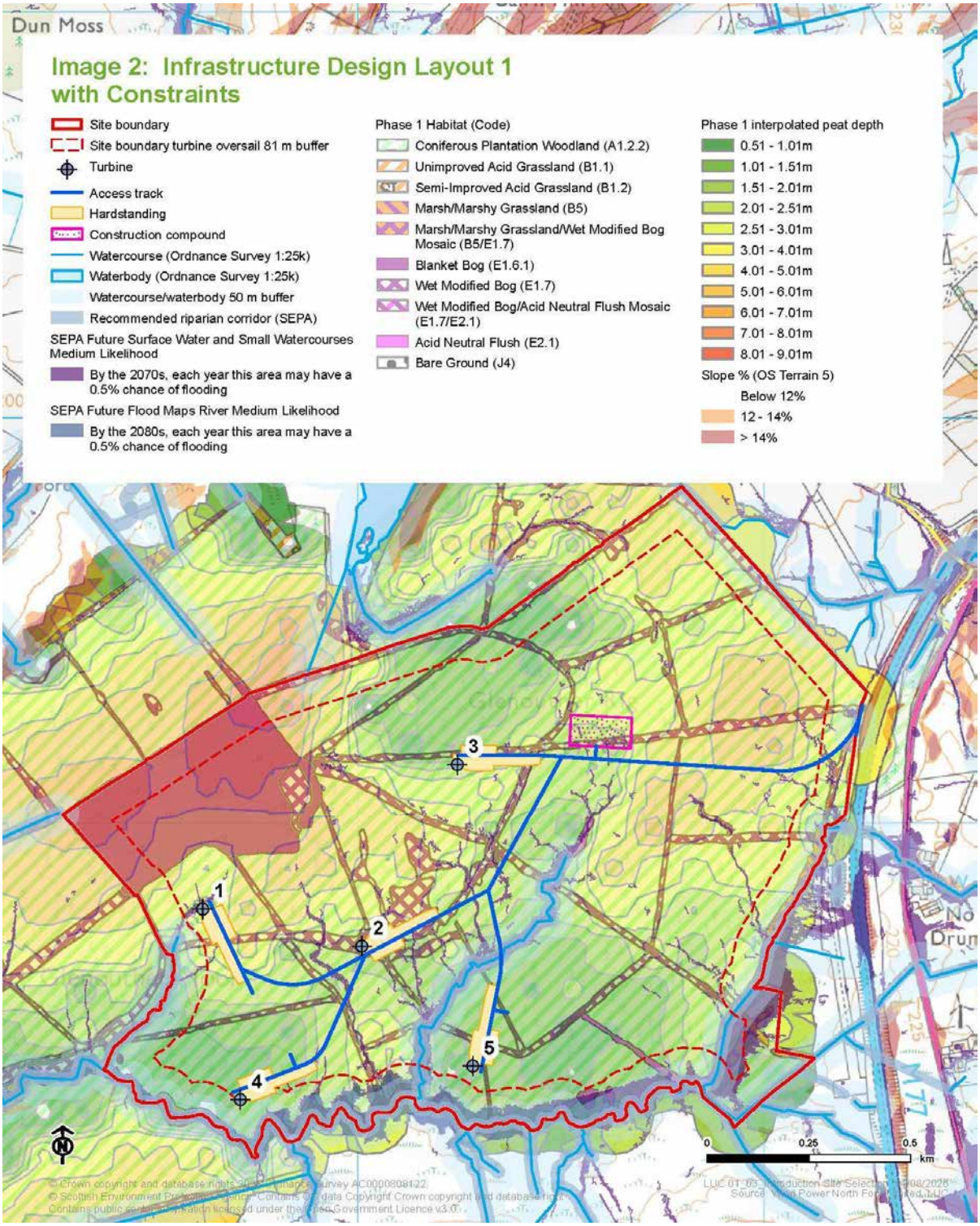
2.9.4 At this stage, a further review of the design was undertaken using wirelines to 'test' the layout from key viewpoints. It was found that the change to the position of T2 in Layout 2 resulted in a less coherent and balanced layout in key views as a result of stacking with T4. T2 was therefore repositioned approximately 170 m north-east to a central position which helped to create a more evenly spaced layout from key viewpoints. In order to improve the layout when viewed from Stewarton, T3 was moved 55 m south-east which reduced stacking with T1 in these views. Whilst T3 now encroached into the 1.2 km residential visual amenity design buffer applied to properties at Drumboy (and therefore beyond the Initial Developable Area – see **Image 1** above), it was considered that there would continue to be no breach of the residential visual amenity threshold, following site survey. In addition, noise modelling continued to show no exceedance of operational noise limits at surrounding properties, including those at Drumboy. A further review of hydrological constraints identified that it was necessary to increase the separation distance of T4 and T5 to Swinzie Burn in order to ensure that supporting infrastructure (including tracks) did not encroach within 50 m of the watercourse and minimised crossover with the flood risk area identified by SEPA mapping. T4 was therefore moved 30 m north-west and T5 was moved 15 m north-east. These changes resulted in the application layout which were presented at the Round 2 public consultation. At this stage, the turbine positions were reviewed to determine the aviation lighting design in accordance with CAP 764[18]. This resulted in the requirement for T1, T3, T4 and T5 to be lit, with no visible lights being installed on T2 (as detailed above).

Infrastructure Design Layout 1: Initial Draft

2.9.5 The initial Site infrastructure draft included the five turbine layout (Turbine Design Layout 1) with hardstanding envelopes, onsite access tracks, and a construction compound adjacent to the Site's eastern track leading to T3.

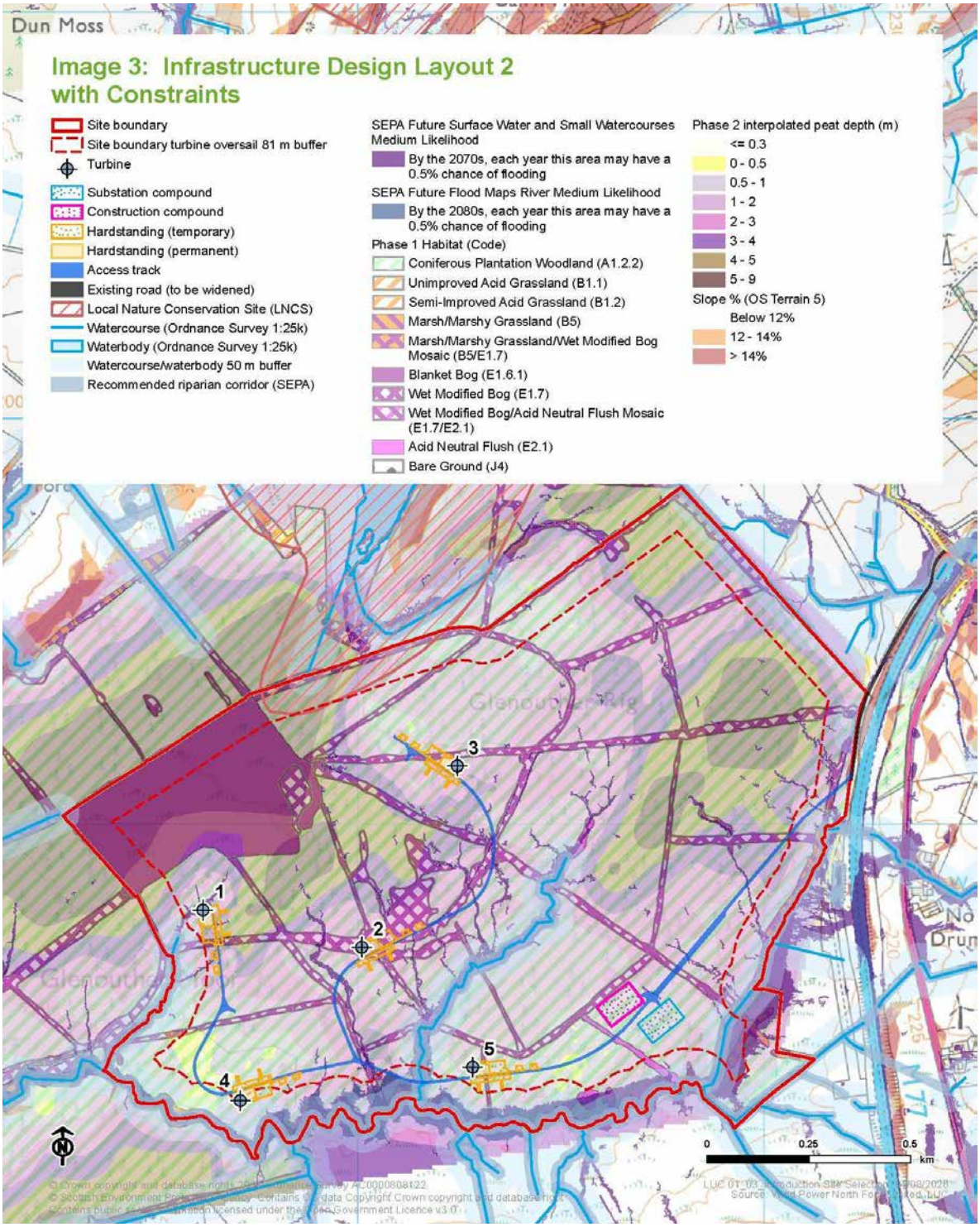
[18] Civil Aviation Policy (CAP) 764: CAA Policy and Guidelines on Wind Turbines. Available [online] at: https://www.caa.co.uk/data-and-publications/publications/documents/content/cap-764// . [Accessed: 17th March 2026]

This was based on the environmental constraints information available at the time, including Phase 1 peat data, 50 m watercourse buffer and flood risk, habitat data and topography – see **Image 2**.



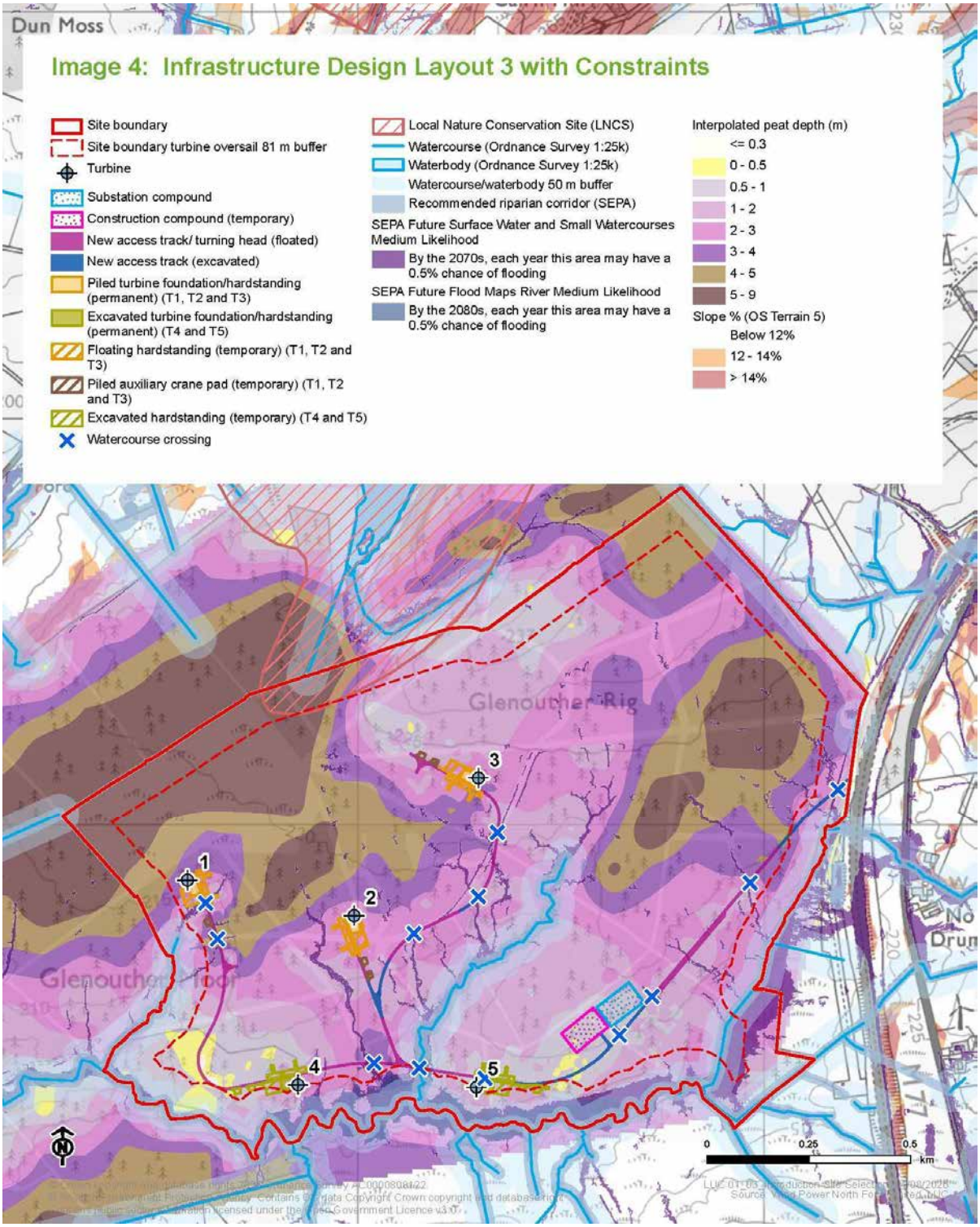
Infrastructure Design Layout 2: Design Optimisation 1

2.9.6 This layout represented the largest change brought about by peat constraints as identified by peat depth surveys. Access into the Site was re-aligned to avoid deep peat/blanket bog in the eastern part of the Site which was identified through Phase 2 peat survey. In this way, a new track was established linking T4 and T5 along the southern boundary to the north of Swinzie Burn where peat depths are shallower. By linking T4 with T1, this removed the need for the track between T1 an T2 which was on deeper peat. The track between T5 and T2 was also removed, reducing the need to cross a tributary of the Swinzie Burn. A decision was also made to relocate the construction compound onto shallower peat to the east of T5. The substation was also established to the south-east of this location. These locations in the vicinity of the Site entrance allowed for direct access during construction and operation – see **Image 3**.



Infrastructure Design Layout 3: Design Optimisation 2 (Application Layout)

2.9.7 In response to further turbine position changes made throughout the iterative design process (highlighted above), the infrastructure design continued to be optimised in relation to peat and hydrological constraints. The track linking T4 and T5 was repositioned north further away from the Swinzie Burn to reduce flood risk impact. The substation location was relocated to be adjacent to the construction compound on the northern side of the track by moving the construction compound further west onto shallower peat. The movement of T2 north in Turbine Design Layout 3 meant that the associated track alignment was altered resulting in T2 branching off a spur of the track to T3. This did, however, mean that the T2 hardstanding encroached upon deeper peat. At this stage, a full review of peat excavation was undertaken to determine if a peat mass balance could be achieved across the Site. Given that T1, T2 and T3 were located on deep peat as a result of the need to strike a balance with other key environmental constraints (including landscape and visual amenity and residential visual amenity considerations), it was determined that the foundations and hardstandings for these turbines would be piled/floated to avoid excavation of peat. A further review of opportunities for floating access tracks to avoid peat disturbance was undertaken, and this was incorporated into the final infrastructure design – see **Image 4**.



2.10 Design Conclusion

2.10.1 This chapter sets out the process undertaken to identify the Site and the design strategy, objectives and evolution of alternative layouts to design the Proposed Development.

2.10.2 The inherent nature of wind turbines as tall, modern structures means that the form of the Proposed Development as a whole is important. This, along with the planning history of the Site, meant that a clear design strategy was necessary. A key element of the overarching design strategy has been to revisit the reasons for why the previous Glenouther Renewable Energy Park was refused and re-design a scheme which achieves, on balance, the best

outcome between maximising energy generation, whilst seeking opportunities to reduce the environmental effects that were previously identified, and which responds positively to current key local and national planning policy tests, particularly in regards to landscape and visual amenity and biodiversity enhancement (NPF4 Policy 3 and 11). By developing and applying site specific design principles in relation to landscape and visual amenity, residential visual amenity, hydrology, peat and ecology to guide the iterative design process, it is considered that the final design (as shown on **Figure 2.4**) strikes an appropriate balance between minimising environmental impact, maximising generational output from the Site and compliance with planning policy.

3. The Access Statement

3.1 Construction and Operational Site Access

3.1.1 It is anticipated that the majority of construction traffic, including HGVs and staff vehicles, will approach the Site from both the north and south (i.e. via Glasgow and Ayrshire). Access will be taken from the existing junction on the A77, located to the west of North Drumboy Quarry. Construction vehicles will then travel along Floak Road and across the M77 via the existing Floak Bridge, which currently serves nearby farms including Floak, Mid Floak and Townhead of Floak, as well as Floak Quarry. From this point, vehicles will utilise the existing M77 service road to continue south-west to a new access point which will serve the Site.

3.1.2 It is anticipated that the turbine components will be delivered to King George V Docks in Glasgow. Abnormal Indivisible Load (AIL) vehicles will then transport the components to the Site via the M8, M77 (exiting at Junction 6) and the A77 before turning onto Floak Road west of Drumboy. A blade lifter will be used from port to the Site to enable safe passage over Floak Bridge. Again, the existing M77 service road will be used by abnormal load vehicles to reach the Site entrance.

3.1.3 Details of the proposed vehicle movements during construction and operation of the Proposed Development are provided in **Chapter 11: Access, Traffic and Transport** of the **EIA Report. Chapter 11** also provides detail on the proposed abnormal loads' route to the Site which is supported by **Technical Appendix 11.1: Transport Statement Volume 4** of the **EIA Report**. **Technical Appendix 11.1** also includes details on suitable traffic management measures to be put in place to maintain safe access to local properties at Floak during construction and to minimise conflicts with existing traffic associated with North Drumboy Quarry, such as issuing prior notification to residents and businesses of the proposed abnormal load movements and implementing wheel cleaning facilities to reduce the transfer of dirt and debris onto Floak Road and the A77.

3.2 Onsite Access Tracks

3.2.1 Approximately 4.1 km of new permanent track (with a minimum running surface of 6 m) will be required to facilitate access to the turbines, construction compound and substation, and this will commence at the Site entrance off the existing M77 service road. Owing to the deep peat design considerations, approximately 2.8 km of new track will be of a floated design (on sections where tracks are on slopes that are less than 3 degrees and peat is ≥0.5 m over spans of ≥100 m), and 1.3 km will be of a conventional excavated design. An additional section of temporary floated track is proposed north-east of the substation and will act as a temporary passing place for construction vehicles entering and existing the Site. This section of track will be approximately 12 m wide, but will be restored to 6 m following construction. The new permanent tracks required will be left in-situ for the 35-year operational period to allow for maintenance and repairs.

3.3 Public Access

3.3.1 There are no dedicated pedestrian facilities in the immediate vicinity of the Site, reflecting its rural setting. A review of the EAC Core Path network[19] and the ERC Core Path network[20] indicates that there are no Core Paths within the immediate vicinity of the Site, with the closest Core Path located to the east, running adjacent to the A77 as shown in **Figure 6** of **Technical Appendix 11.1: Transport Statement** in **Volume 4** of the **EIA Report.**

3.3.2 There are currently no recreational activities undertaken on the Site. With regards to cycling, a review of Walk Wheel Cycle Trust (formerly Sustrans) map[21] indicates that there are no cycle routes within the vicinity of the Site or study area. There, is however, a shared path / cycleway which runs adjacent to the A77.

3.3.3 As there are no formal recreational paths located within or in close proximity to the Site, there is no potential of construction works to directly affect any formal path. No formal paths will have to be closed during construction and there is no potential health and safety risk to any members of the public within the Site.

3.3.4 The Applicant is committed to maintaining public access to the countryside in line with the Scottish Outdoor Access Code. During the 20-month construction period, access restrictions to Site will be enforced so as not to compromise

[19] East Ayrshire Council, Core Path Plan: https://webgis.east-ayrshire.gov.uk/webGISv3/ [Accessed June 2026]
[20] East Renfrewshire Council Core Path Plan: https://eastrenfrewshire.gov.uk/media/8508/Core-Path-Plan-Proposals-Map/pdf/Core_Path_Plan_Proposals_Map.pdf?m=1669736492567 [Accessed June 2026]
[21] https://www.walkwheelcycletrust.org.uk/ [Accessed April 2026]

the safety of the general public. Once the wind farm is operational, there will be no restrictions on access to the Site. The network of new tracks will be open for use by walkers, cyclists, and horse riders, effectively expanding the recreational area available to the public.

3.3.5 It is proposed that a Construction Traffic Management Plan (CTMP) will be implemented for the Proposed Development to manage the effect of construction traffic on the public road network, following the principles set out in **Technical Appendix 11.1** of the **EIA Report**. This will include measures such as ensuring roads are maintained in a clean and safe condition, deploying a wheel washing / wheel cleaning facility onsite to reduce mud and debris being deposited onto the local road network, and the erection of Site signage along the identified construction traffic routes to warn other road users of construction activities and associated construction vehicles.

4. Summary

4.1.1 This DAS sets out the process undertaken to identify the Site and the design strategy, the objectives and site-specific design principles adopted and how these influenced the evolution and exploration of alternative layouts as part of the iterative design process. The overall aim for the design strategy was to provide a balance between maximising the Site's energy yield and creating a layout that responds to its setting in terms of landform and pattern with other existing and proposed wind farm schemes, whilst minimising environmental impacts on sensitive receptors. A key element of the overarching design strategy has also been to revisit the reasons for refusal of the previous Glenouther Renewable Energy Park.

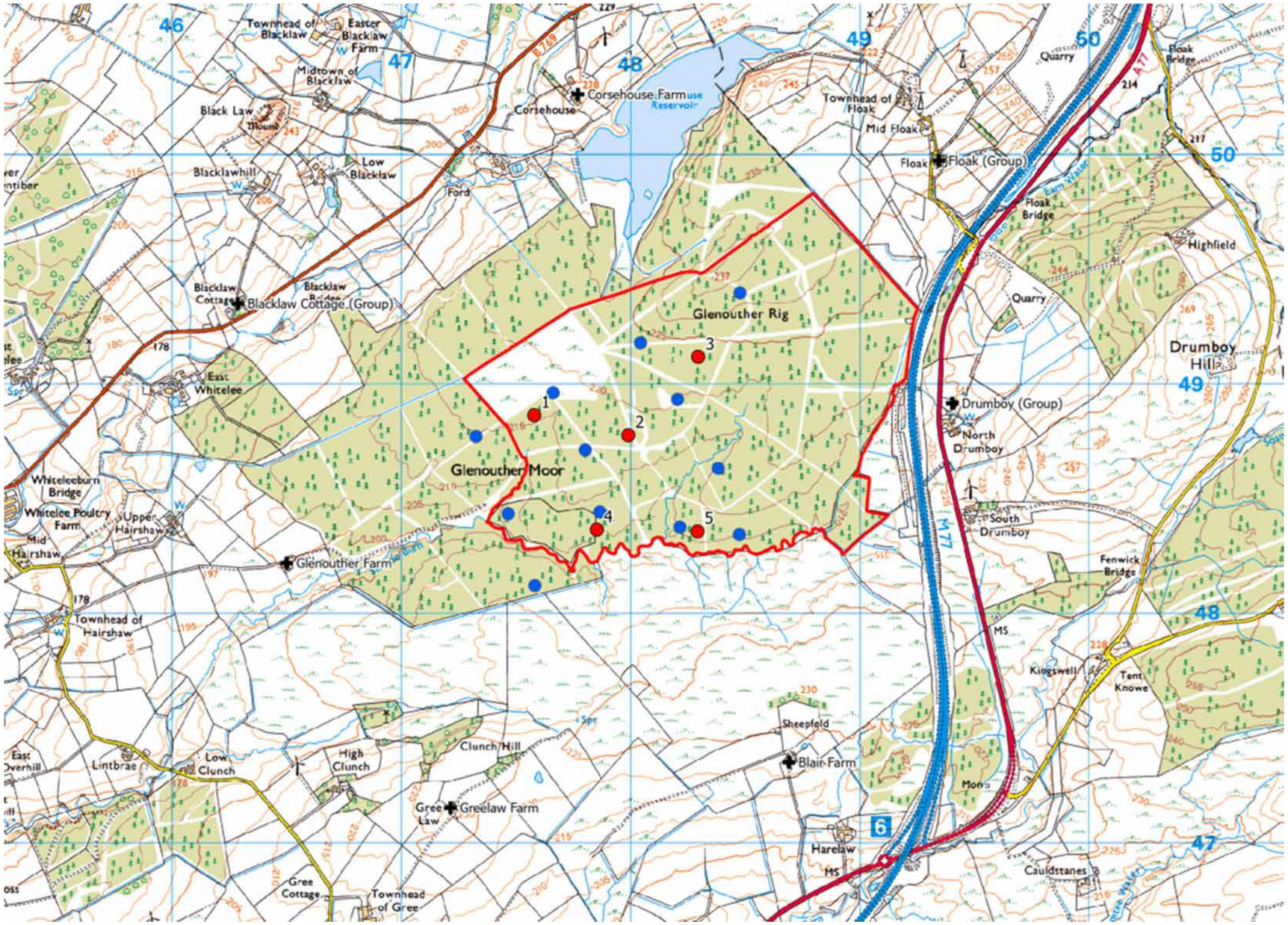
4.1.2 By developing and applying site specific design principles in relation to landscape and visual amenity, residential visual amenity, hydrology, peat and ecology as identified through the EIA process, most environmental effects associated with the Proposed Development have been avoided or mitigated (particularly with regards to peat excavation where approximately 96,000 m^3 of peat will be left in situ through low impact construction techniques). It is considered that the final design (as shown on **Figure 2.4**) strikes an appropriate balance between minimising environmental impact, maximising generational output from the Site and compliance with planning policy (particularly NPF 4 Policy 3 and 11).

4.1.3 The Access Statement in this DAS outlines the construction and operational access proposals and how safe access to the Site for the public will be managed.

Appendix 1. Glenouther Wireline Comparisons

Glenouther Wireline Comparisons

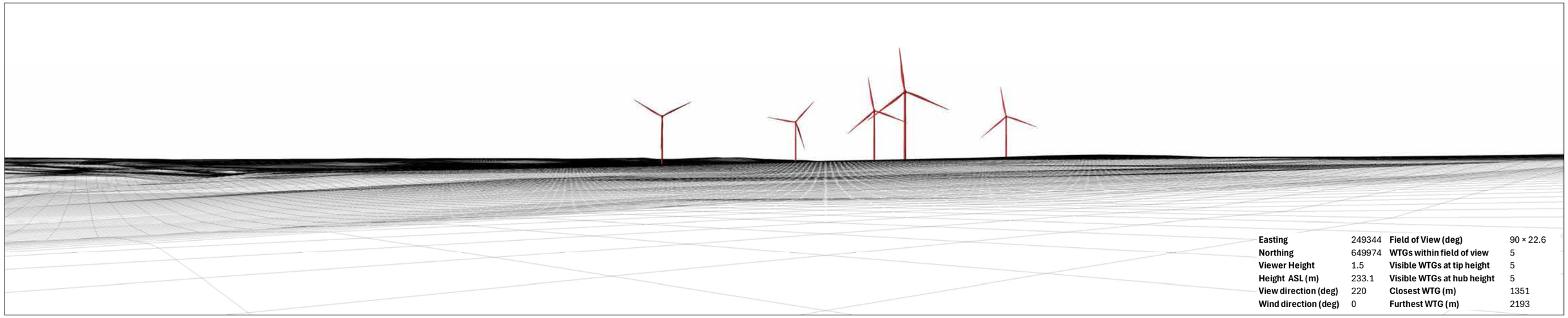
Layout and Viewpoint Locations



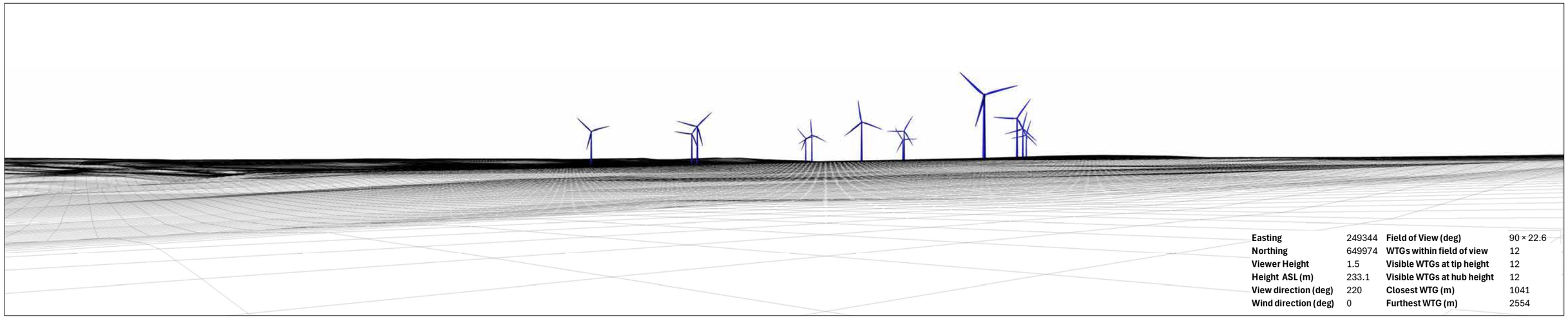
Glenouther Wind Farm, 5 turbines to 200m to Blade Tip (red turbines)

Glenouther Renewable Energy Park, 12 turbines to 126.5m to Blade Tip (blue turbines)

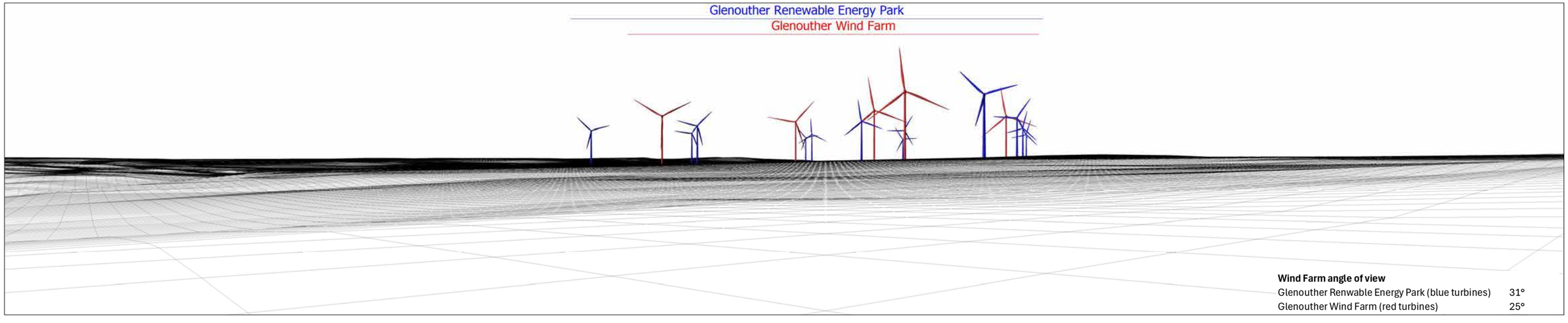
Wireline: Floak (GR 249344, 649974)



Easting	249344	**Field of View (deg)**	90 × 22.6
Northing	649974	**WTGs within field of view**	5
Viewer Height	1.5	**Visible WTGs at tip height**	5
Height ASL (m)	233.1	**Visible WTGs at hub height**	5
View direction (deg)	220	**Closest WTG (m)**	1351
Wind direction (deg)	0	**Furthest WTG (m)**	2193

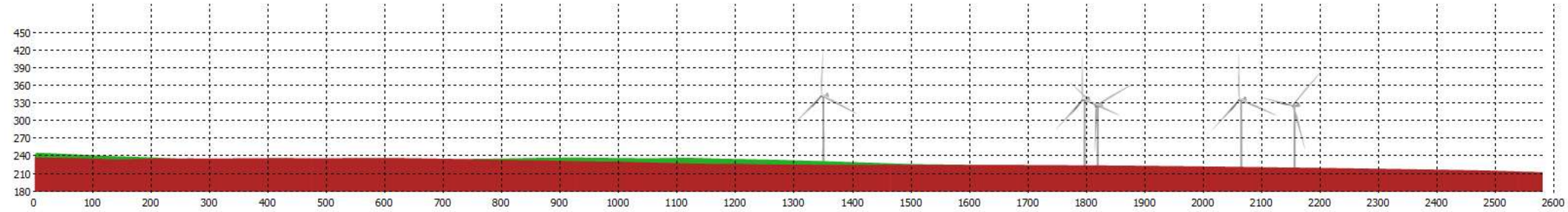


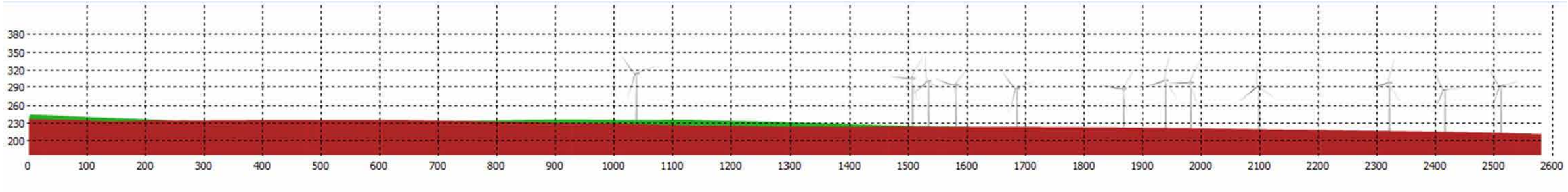
Easting	249344	**Field of View (deg)**	90 × 22.6
Northing	649974	**WTGs within field of view**	12
Viewer Height	1.5	**Visible WTGs at tip height**	12
Height ASL (m)	233.1	**Visible WTGs at hub height**	12
View direction (deg)	220	**Closest WTG (m)**	1041
Wind direction (deg)	0	**Furthest WTG (m)**	2554

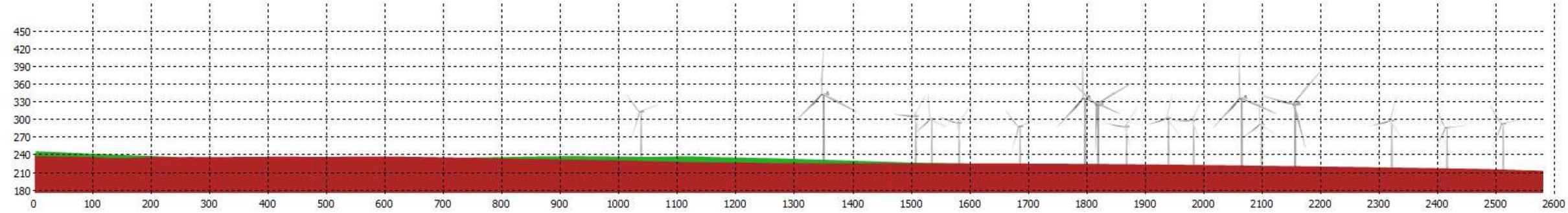


Wind Farm angle of view	
Glenouther Renwable Energy Park (blue turbines)	31°
Glenouther Wind Farm (red turbines)	25°

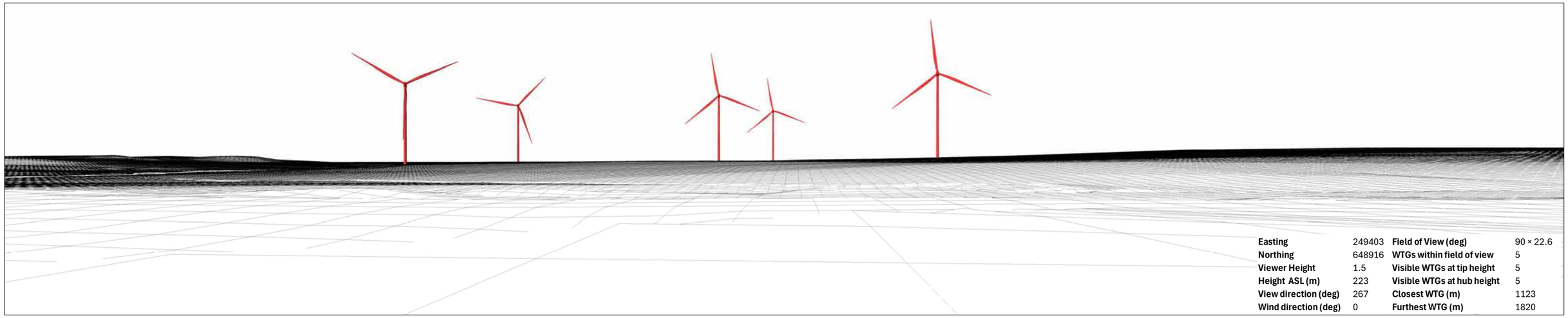
Floak Profiles;



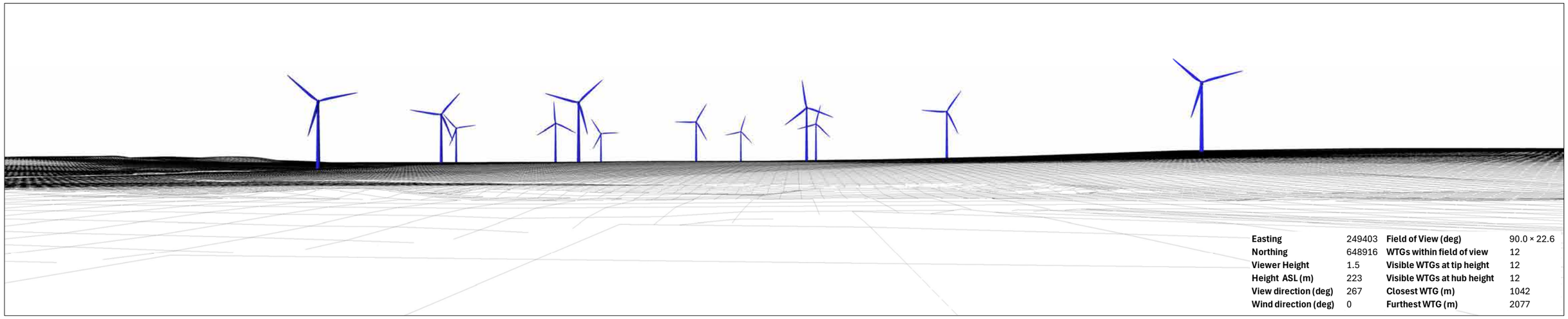




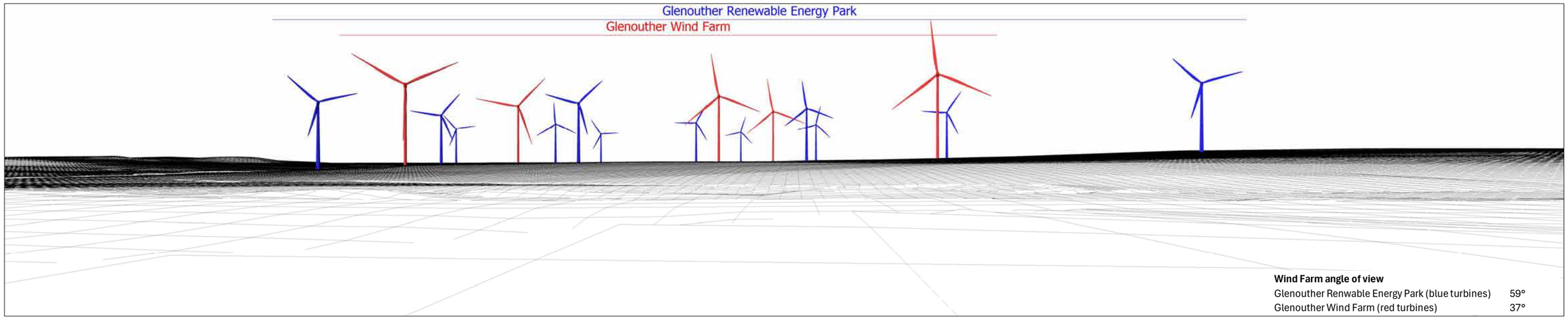
Wireline: Drumboy (GR 249403, 648916)



Easting	249403	**Field of View (deg)**	90 × 22.6
Northing	648916	**WTGs within field of view**	5
Viewer Height	1.5	**Visible WTGs at tip height**	5
Height ASL (m)	223	**Visible WTGs at hub height**	5
View direction (deg)	267	**Closest WTG (m)**	1123
Wind direction (deg)	0	**Furthest WTG (m)**	1820

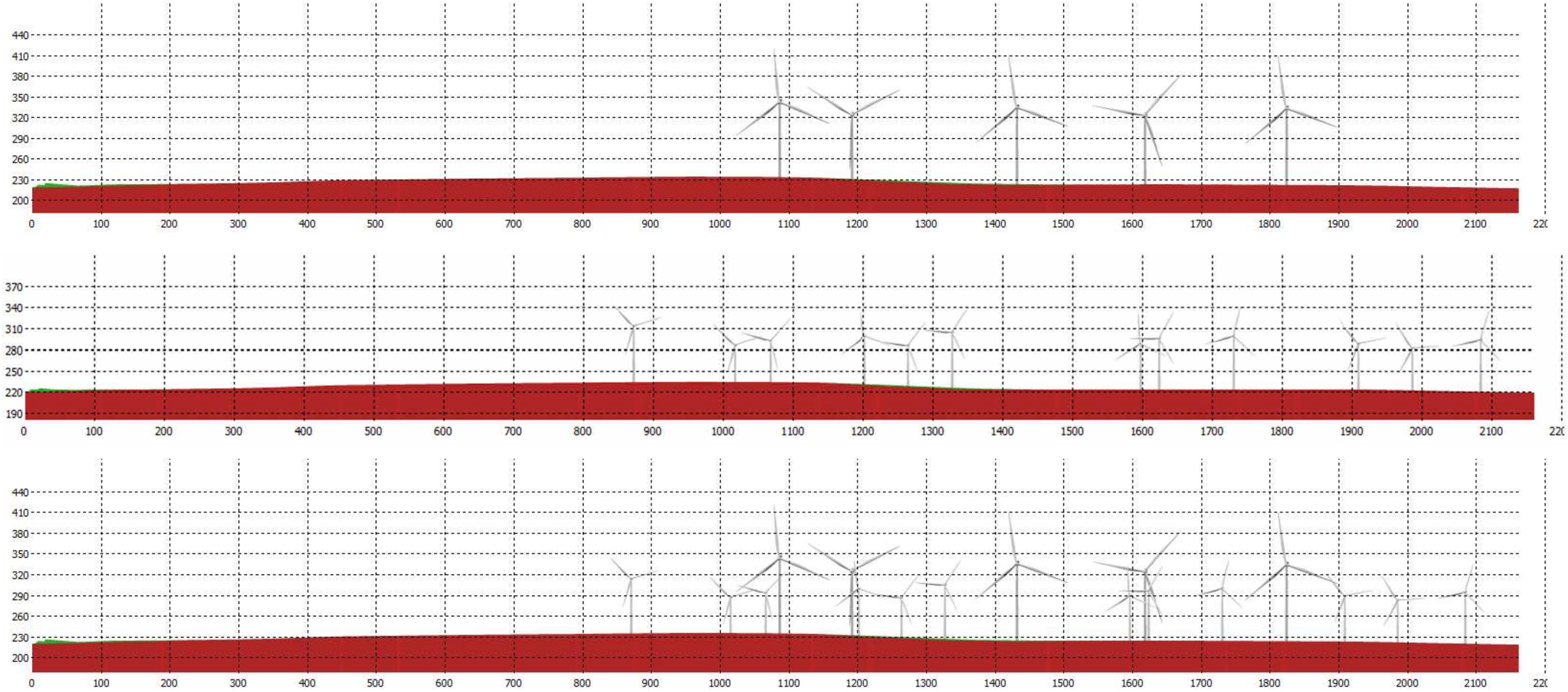


Easting	249403	**Field of View (deg)**	90.0 × 22.6
Northing	648916	**WTGs within field of view**	12
Viewer Height	1.5	**Visible WTGs at tip height**	12
Height ASL (m)	223	**Visible WTGs at hub height**	12
View direction (deg)	267	**Closest WTG (m)**	1042
Wind direction (deg)	0	**Furthest WTG (m)**	2077

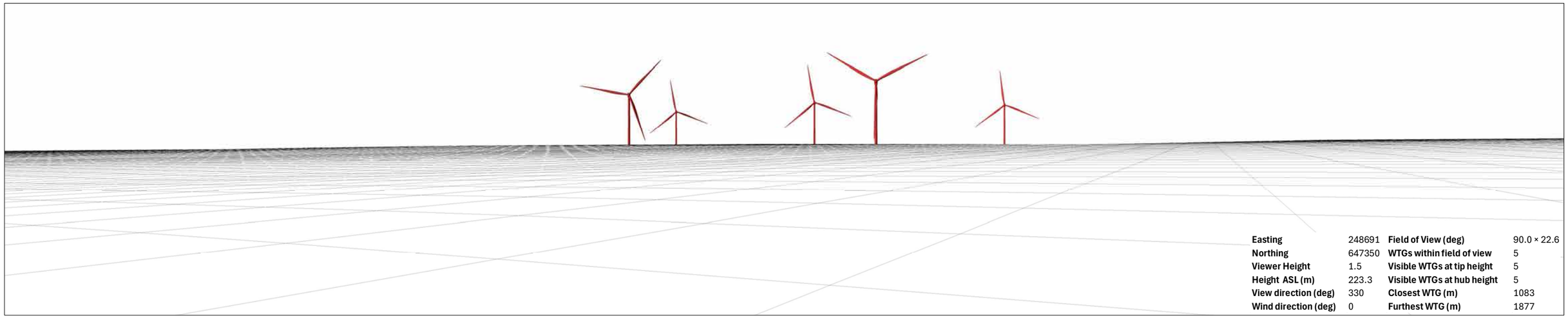


Wind Farm angle of view	
Glenouther Renwable Energy Park (blue turbines)	59°
Glenouther Wind Farm (red turbines)	37°

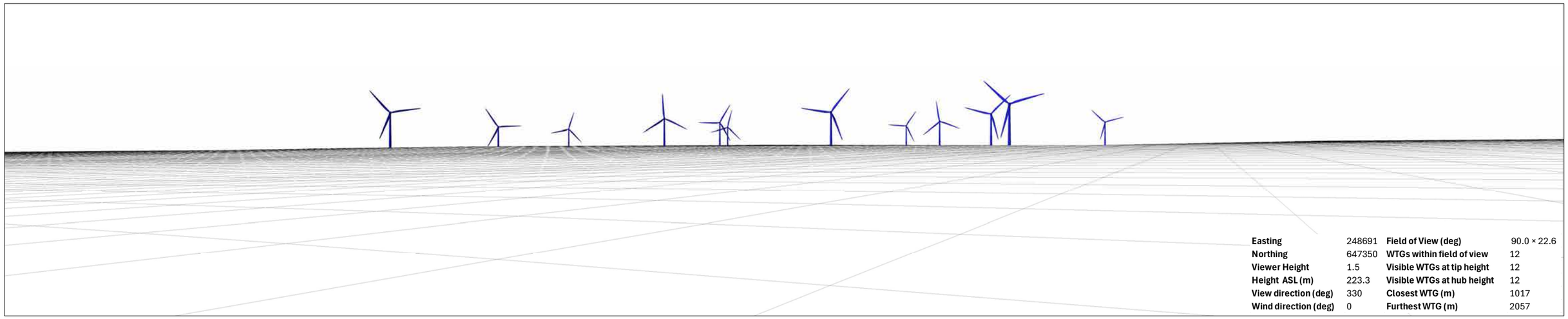
Drumboy Profiles:



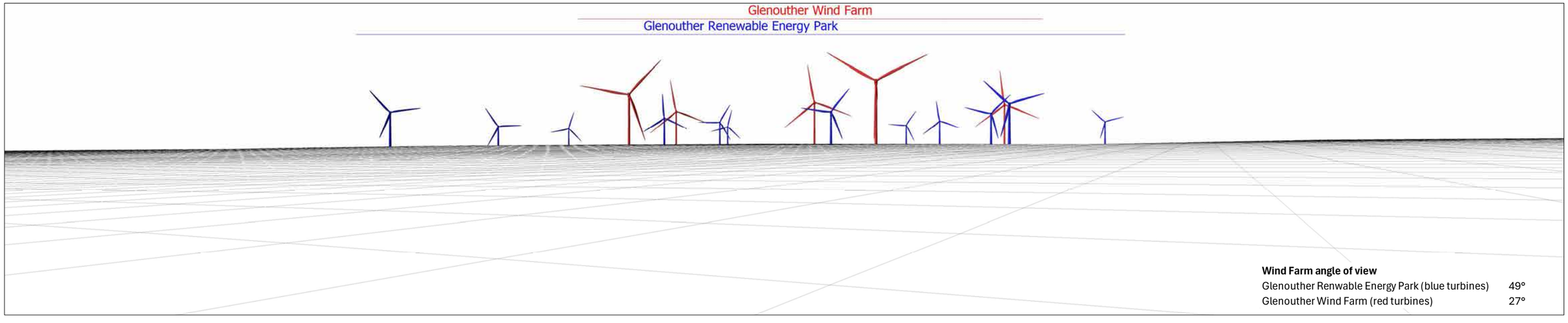
Wireline: Blair Farm (GR 248691, 647350)



Easting	248691	**Field of View (deg)**	90.0 × 22.6
Northing	647350	**WTGs within field of view**	5
Viewer Height	1.5	**Visible WTGs at tip height**	5
Height ASL (m)	223.3	**Visible WTGs at hub height**	5
View direction (deg)	330	**Closest WTG (m)**	1083
Wind direction (deg)	0	**Furthest WTG (m)**	1877

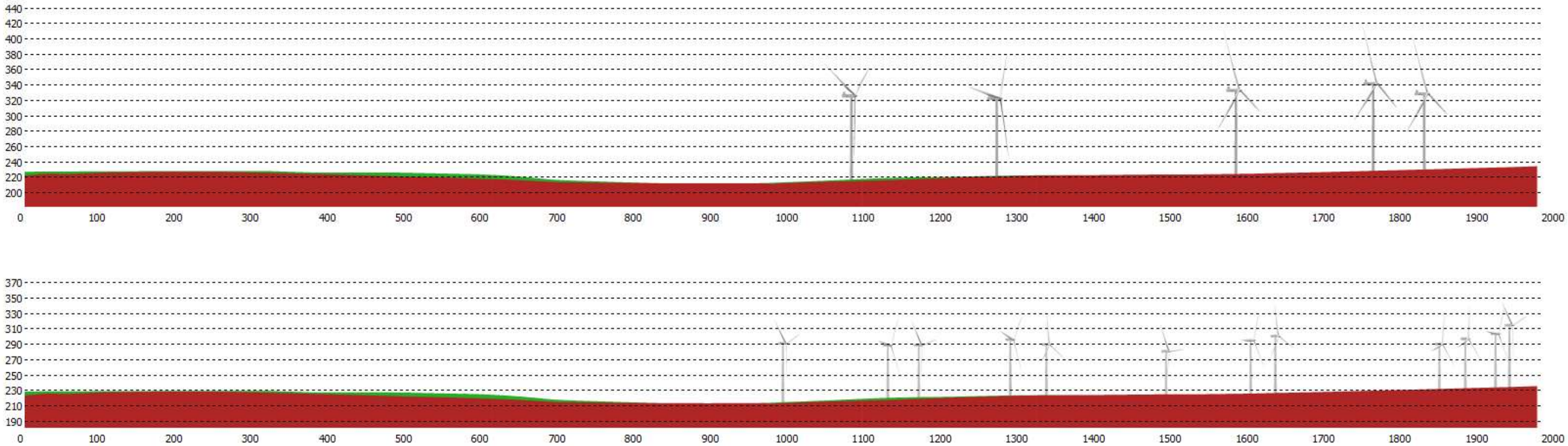


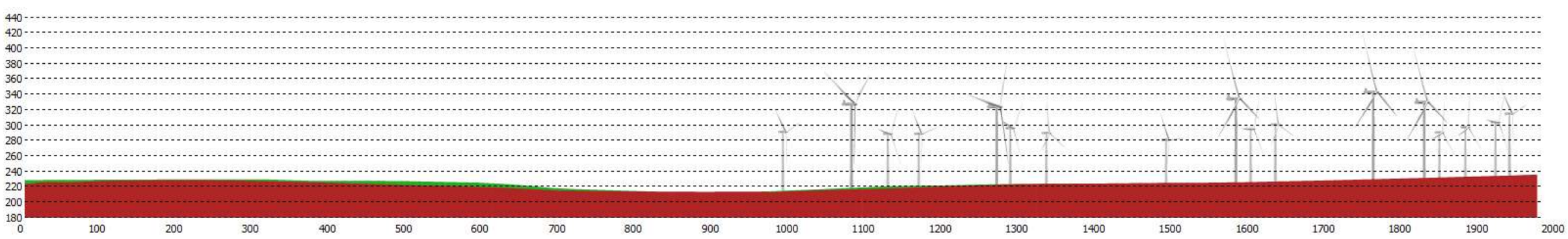
Easting	248691	**Field of View (deg)**	90.0 × 22.6
Northing	647350	**WTGs within field of view**	12
Viewer Height	1.5	**Visible WTGs at tip height**	12
Height ASL (m)	223.3	**Visible WTGs at hub height**	12
View direction (deg)	330	**Closest WTG (m)**	1017
Wind direction (deg)	0	**Furthest WTG (m)**	2057



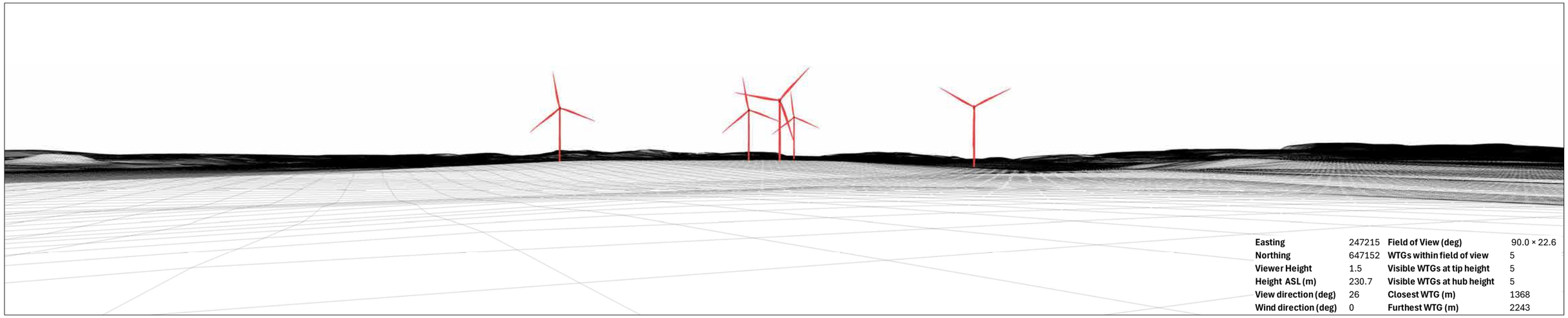
Wind Farm angle of view	
Glenouther Renwable Energy Park (blue turbines)	49°
Glenouther Wind Farm (red turbines)	27°

Blair Farm Profiles:

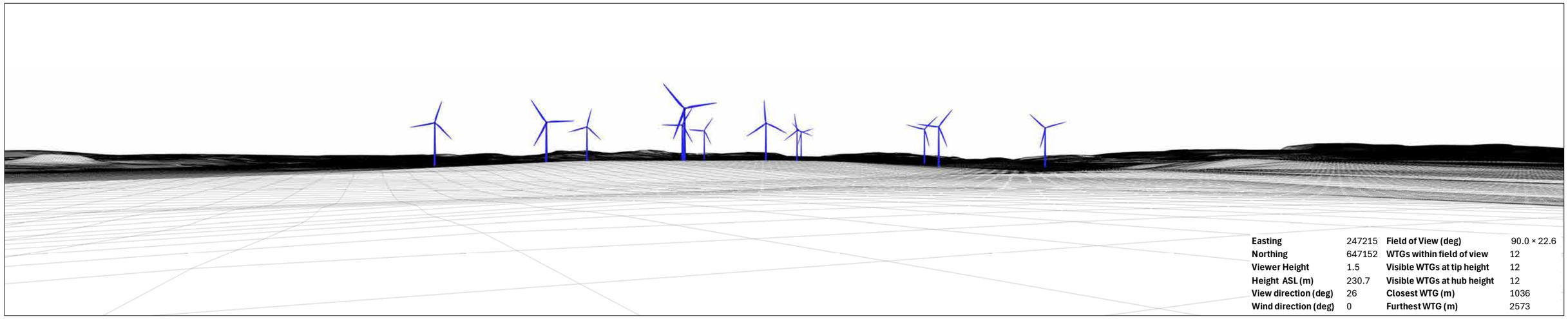




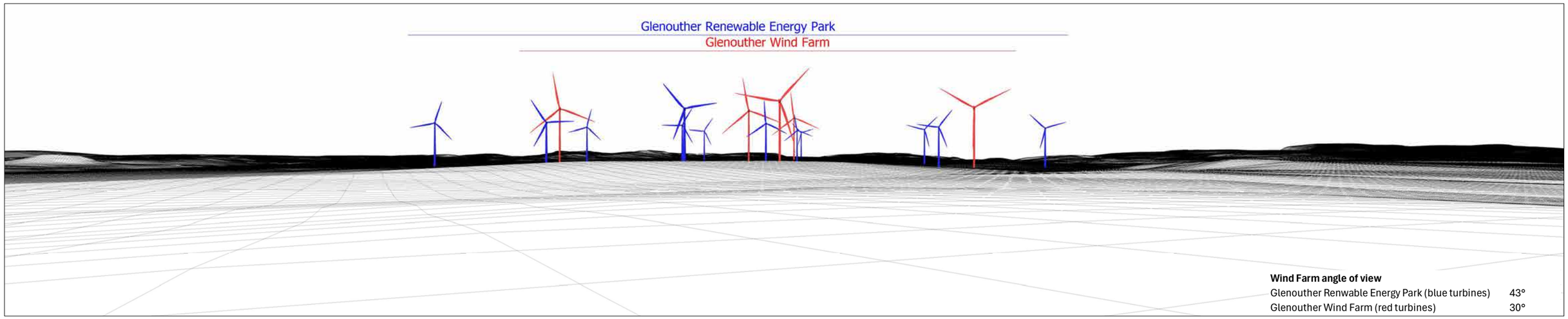
Wireline: Gree Law Farm (GR 247215, 647152)



Easting	247215	**Field of View (deg)**	90.0 × 22.6
Northing	647152	**WTGs within field of view**	5
Viewer Height	1.5	**Visible WTGs at tip height**	5
Height ASL (m)	230.7	**Visible WTGs at hub height**	5
View direction (deg)	26	**Closest WTG (m)**	1368
Wind direction (deg)	0	**Furthest WTG (m)**	2243

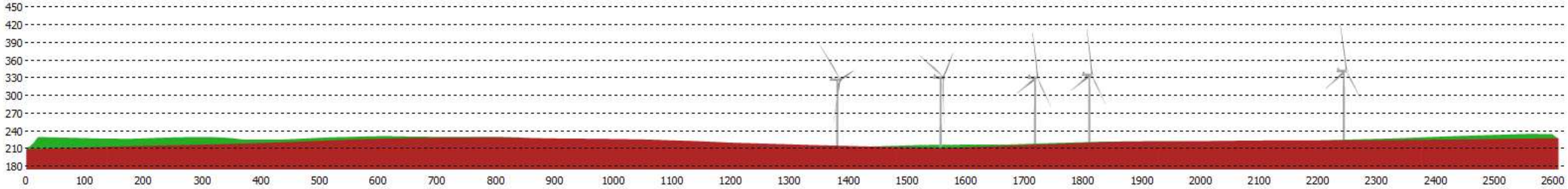


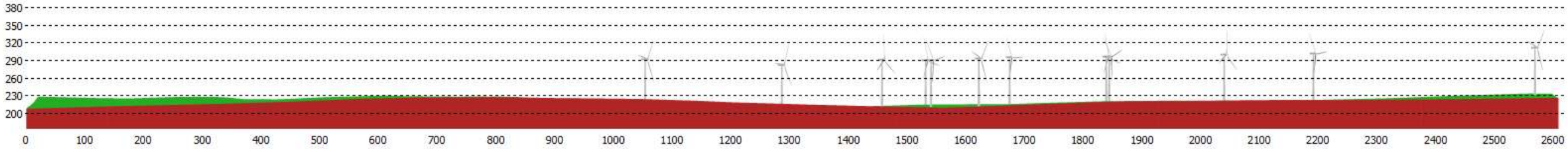
Easting	247215	**Field of View (deg)**	90.0 × 22.6
Northing	647152	**WTGs within field of view**	12
Viewer Height	1.5	**Visible WTGs at tip height**	12
Height ASL (m)	230.7	**Visible WTGs at hub height**	12
View direction (deg)	26	**Closest WTG (m)**	1036
Wind direction (deg)	0	**Furthest WTG (m)**	2573

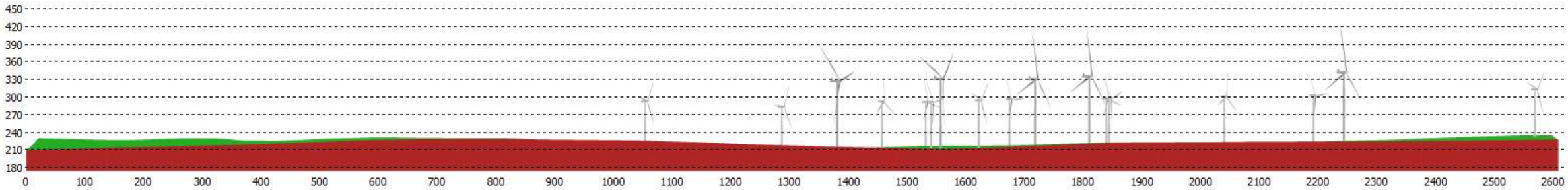


Wind Farm angle of view	
Glenouther Renwable Energy Park (blue turbines)	43°
Glenouther Wind Farm (red turbines)	30°

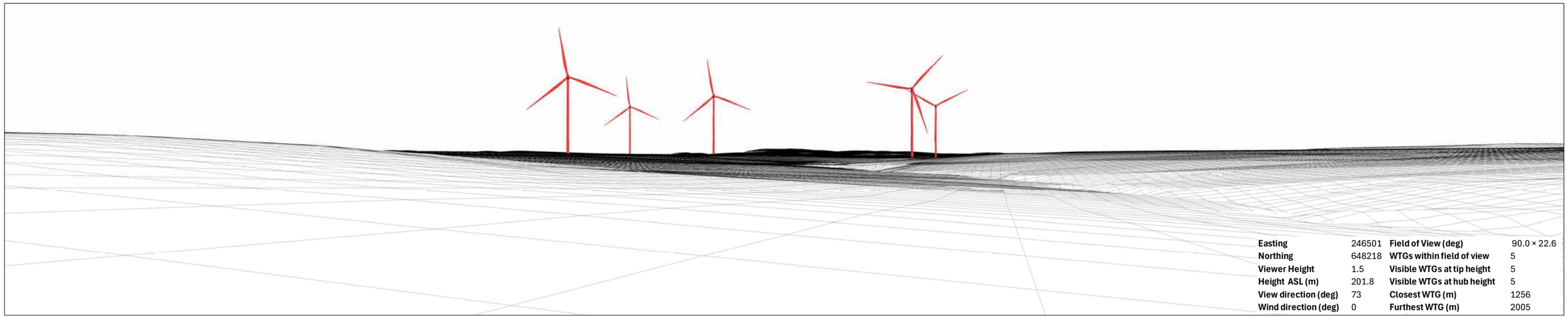
Gree Law Farm Profiles:



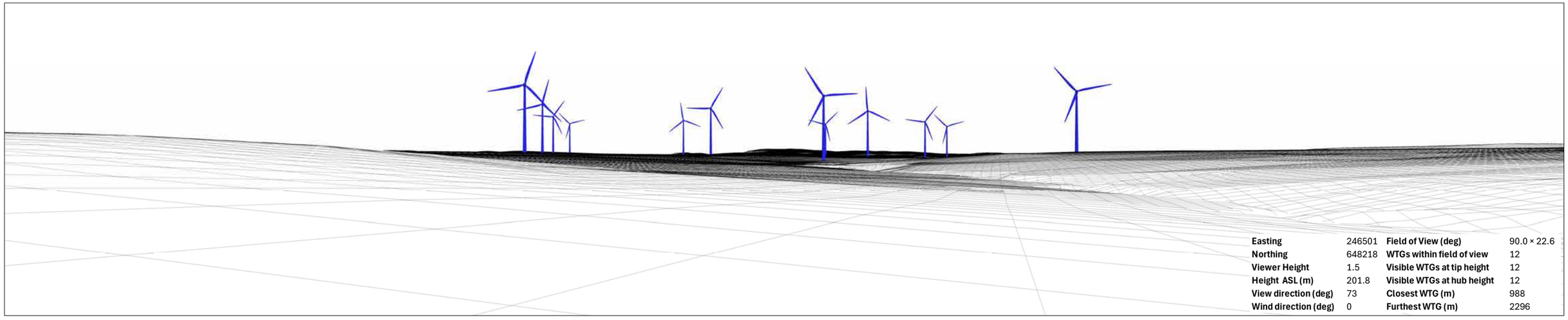




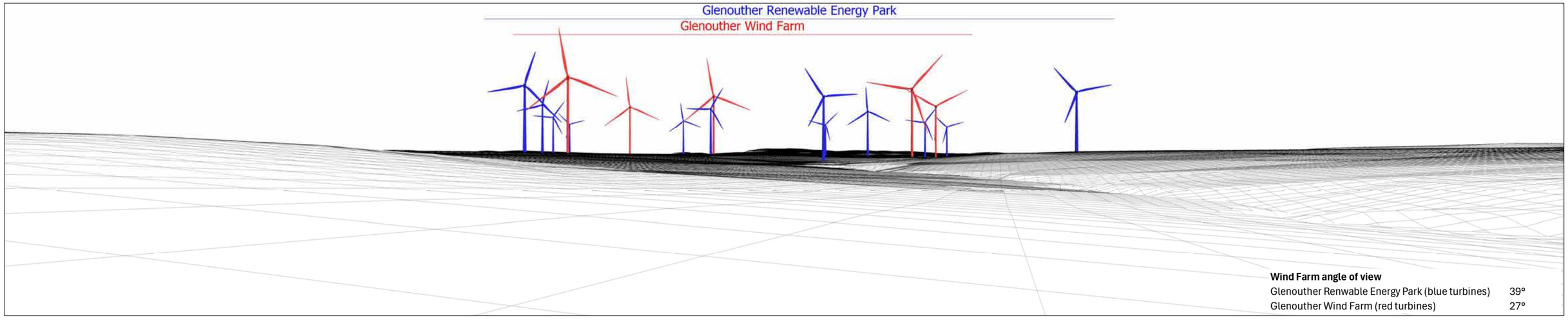
Wireline: Glenouther Farm (GR 246501, 648218)



Easting	246501	**Field of View (deg)**	90.0 × 22.6
Northing	648218	**WTGs within field of view**	5
Viewer Height	1.5	**Visible WTGs at tip height**	5
Height ASL (m)	201.8	**Visible WTGs at hub height**	5
View direction (deg)	73	**Closest WTG (m)**	1256
Wind direction (deg)	0	**Furthest WTG (m)**	2005

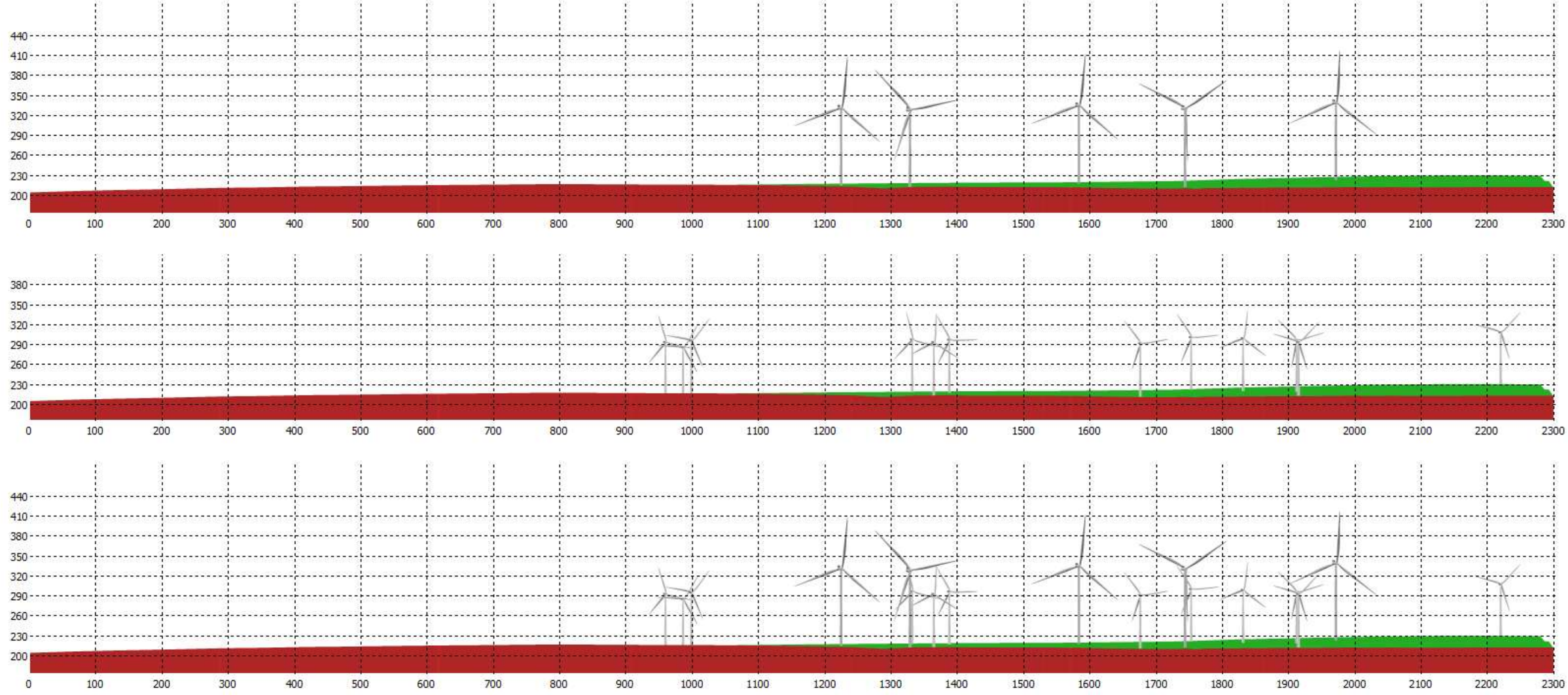


Easting	246501	**Field of View (deg)**	90.0 × 22.6
Northing	648218	**WTGs within field of view**	12
Viewer Height	1.5	**Visible WTGs at tip height**	12
Height ASL (m)	201.8	**Visible WTGs at hub height**	12
View direction (deg)	73	**Closest WTG (m)**	988
Wind direction (deg)	0	**Furthest WTG (m)**	2296

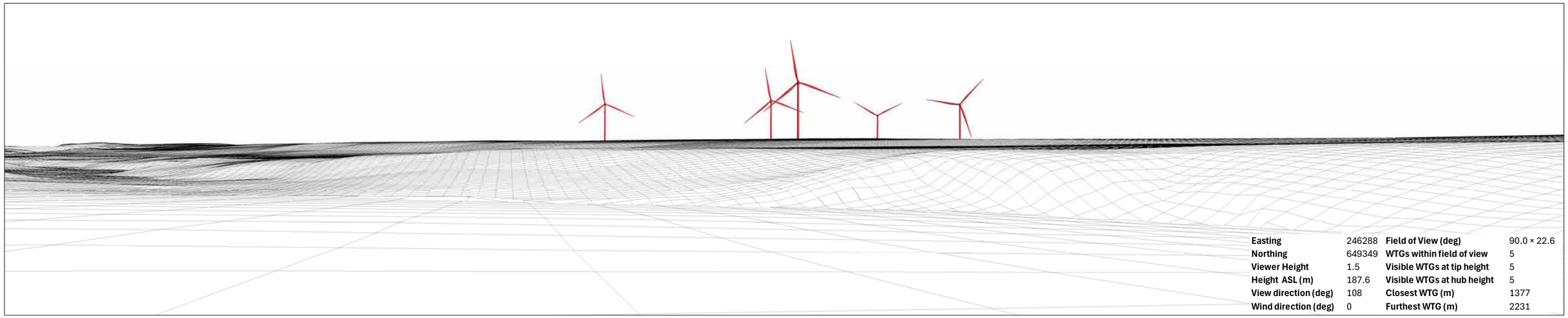


Wind Farm angle of view	
Glenouther Renwable Energy Park (blue turbines)	39°
Glenouther Wind Farm (red turbines)	27°

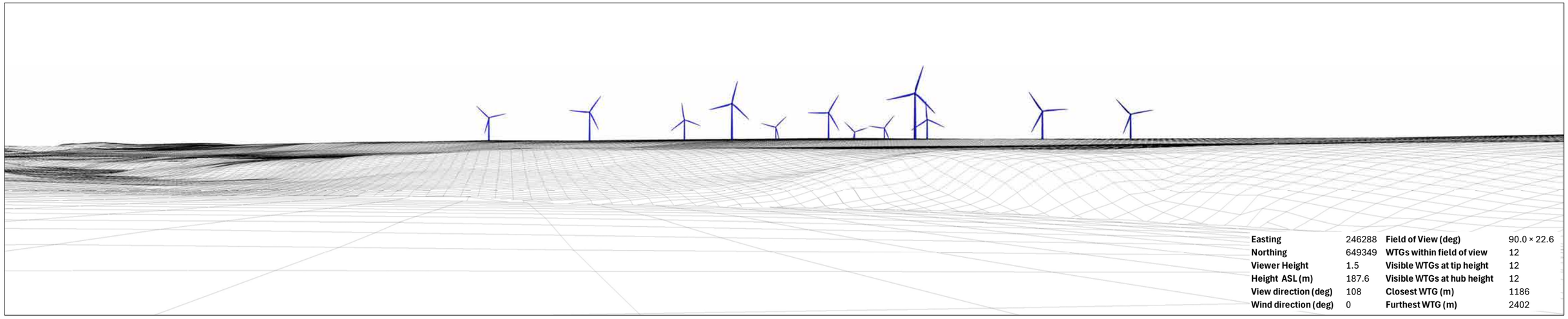
Glenother Profiles:



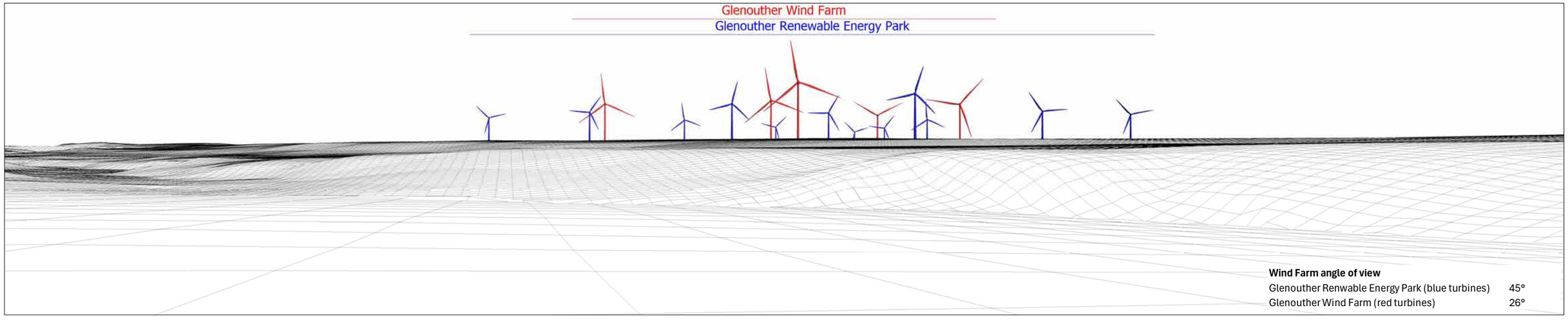
Wireline: Blacklaw Cottage (GR 246288, 649349)



Easting	246288	**Field of View (deg)**	90.0 × 22.6
Northing	649349	**WTGs within field of view**	5
Viewer Height	1.5	**Visible WTGs at tip height**	5
Height ASL (m)	187.6	**Visible WTGs at hub height**	5
View direction (deg)	108	**Closest WTG (m)**	1377
Wind direction (deg)	0	**Furthest WTG (m)**	2231

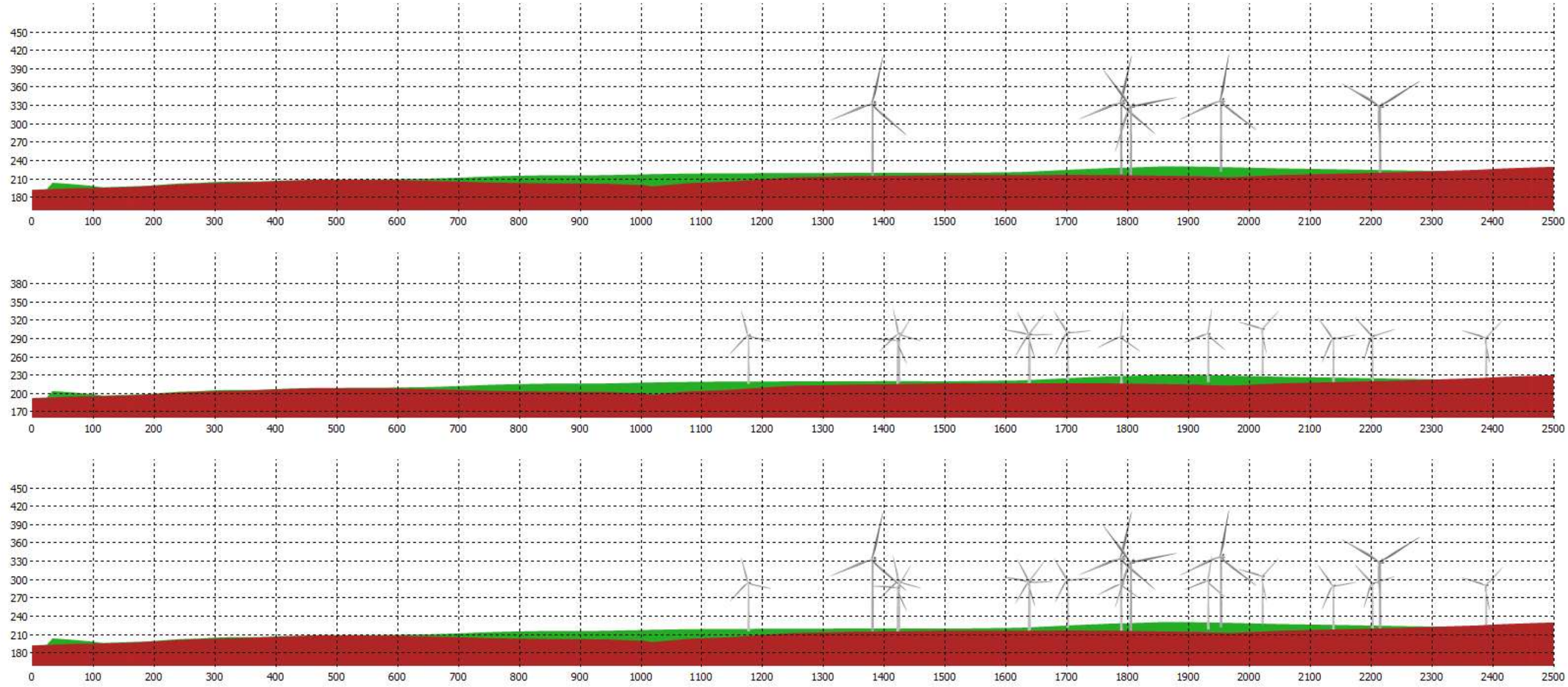


Easting	246288	**Field of View (deg)**	90.0 × 22.6
Northing	649349	**WTGs within field of view**	12
Viewer Height	1.5	**Visible WTGs at tip height**	12
Height ASL (m)	187.6	**Visible WTGs at hub height**	12
View direction (deg)	108	**Closest WTG (m)**	1186
Wind direction (deg)	0	**Furthest WTG (m)**	2402

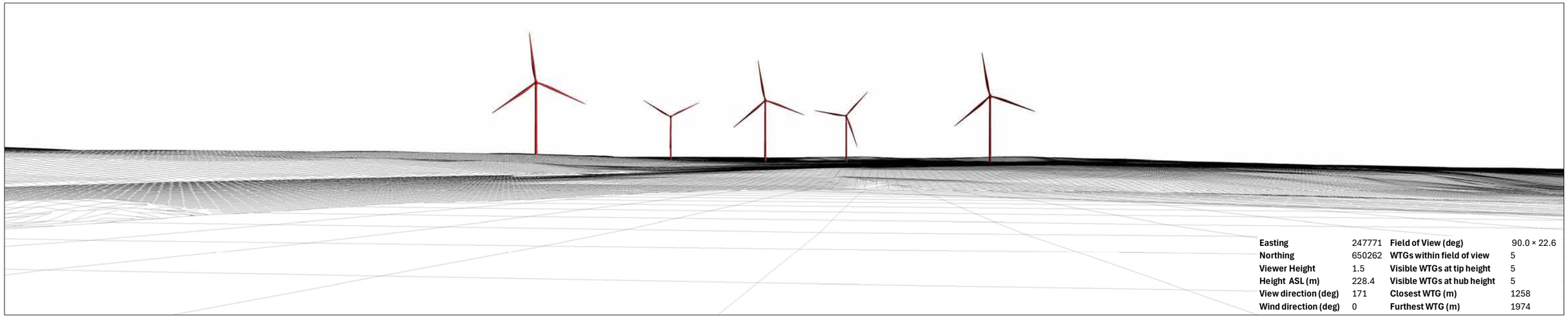


Wind Farm angle of view	
Glenouther Renwable Energy Park (blue turbines)	45°
Glenouther Wind Farm (red turbines)	26°

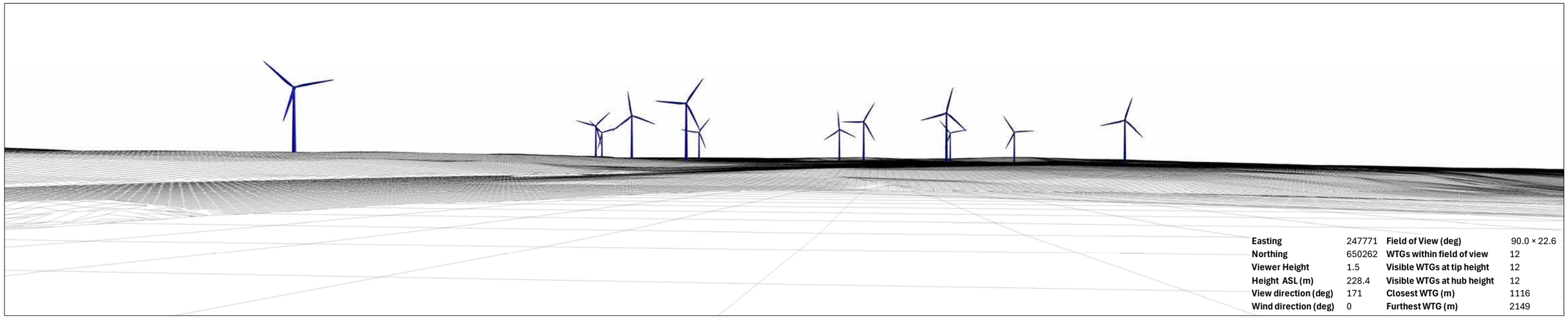
Blacklaw Profile:



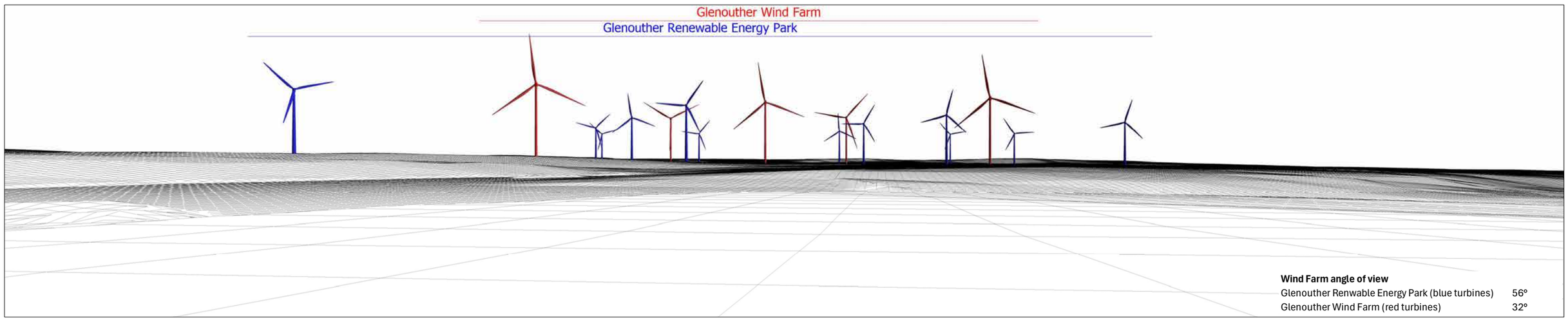
Wireline: Corehouse Farm (GR 247771, 650262)



Easting	247771	**Field of View (deg)**	90.0 × 22.6
Northing	650262	**WTGs within field of view**	5
Viewer Height	1.5	**Visible WTGs at tip height**	5
Height ASL (m)	228.4	**Visible WTGs at hub height**	5
View direction (deg)	171	**Closest WTG (m)**	1258
Wind direction (deg)	0	**Furthest WTG (m)**	1974



Easting	247771	**Field of View (deg)**	90.0 × 22.6
Northing	650262	**WTGs within field of view**	12
Viewer Height	1.5	**Visible WTGs at tip height**	12
Height ASL (m)	228.4	**Visible WTGs at hub height**	12
View direction (deg)	171	**Closest WTG (m)**	1116
Wind direction (deg)	0	**Furthest WTG (m)**	2149



Wind Farm angle of view	
Glenouther Renwable Energy Park (blue turbines)	56°
Glenouther Wind Farm (red turbines)	32°

Corsehouse Profile: