# Glendye Wind Farm Overhead Line Grid Connection

# Environmental Impact Assessment

## Volume 4 | Appendix 11.2

## Overhead Line (OHL) Woodland Report

## Property: FGS 23FGS70293

October 2025

Scottish & Southern Electricity Networks

## Contents:

## 1 Introduction

This Technical Appendix (TA) presents information relevant to the Glendye Wind Farm Grid Connection. It should be read in conjunction with the **Chapter 2: The Routeing Process and Alternatives**, **Chapter 3: The Proposed Development** and **Chapter 11: Forestry** of the EIA Report for full details of the Proposed Development

Scottish and Southern Electricity Networks (SSEN) Transmission, hereafter referred to as 'the Applicant', owns and maintains the electricity transmission network across the north of Scotland. Due to the growth in renewable electricity generation in the north and north-east of Scotland, upgrade of the transmission network is required in order to provide the necessary increase in transmission capacity.

The Applicant is proposing to apply for consent under Section 37 of the Electricity Act 1989 to construct and operate a 19.2 kilometre (km) 132 kV single circuit overhead line (OHL) for the Glendye Wind Farm Overhead Line Grid Connection project.

## 2 Purpose of this Woodland Report

As part of the Environmental Impact Assessment (EIA) process, it was identified that the overhead line construction and the access tracks required to construct the Proposed Development would cross a number of woodland areas within private or state-owned landholdings, as shown on **Figure 11.1a-d** of the EIA Report (Volume 2).

This document provides a conceptual assessment of the woodland areas that are: (i) directly affected by the Proposed Development, including the requirement of woodland removal; and (ii) indirectly affected by the Proposed Development due to the need for woodland removal to create a wind firm edge (and therefore presents ~~and~~ management recommendations for the relevant landowner to mitigate the impact of the woodland removal).

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

## 3 Requirement and Objectives of the Report

This Woodland Report details the works required to the woodland, including the felling and any restocking, due to the construction and operation of the Proposed Development.

The objectives of this Woodland Report are to:

- Describe the woodland baseline conditions within the relevant area of the operational corridor and in the immediate surrounding areas.
- Identify the potential windthrow risk in connection with the Proposed Development.
- Identify the short and long-term potential impacts on any current woodland management plans.
- Describe any mitigation measures proposed to address likely impacts relating to loss of woodland and windthrow risk; and
- Identify the required quantity for compensatory planting.

### Limitations and Assumptions

All data included within has been gathered from field surveys or desk-based assessments, which includes analysis of nationally held datasets, up to date aerial imagery and field measurements and data collection

Baseline data was derived from Scotland's environmental web[1] and Scottish Forestry map viewer[2]. These digital mapping tools enabled identification of woodland within the National Forest Inventory (NFI)[3]. The NFI definition of woodland is a minimum area of 0.5 ha with trees possessing, or with the potential to achieve, tree crown cover of more than 20% of the ground. Within the NFI some woodlands are identified as native woodlands, also identified within the digital mapping tools referred to above. The Native Woodland Survey of Scotland (NWSS)[4] provides a baseline survey of all native woodlands (of minimum 0.5 ha), nearly native woodlands and plantations on ancient woodland sites in Scotland. A further subset of these woodlands is contained within the Ancient Woodland Inventory (AWI)[5] of Scotland, which identifies ancient woodland, long established woodland of plantation origin and semi-natural woodlands. However, the AWI is based on woodlands over 2_ha. NFI, NWSS and AWI are identified within the baseline conditions.

Forests (or woodlands) comprise the land, of at least 0.1 ha, under areas of trees with a canopy cover of at least 20%, or having the potential to achieve this, including the integral open space, as well as any felled areas awaiting replanting. For the purpose of this report the term Forest refers to commercial conifer plantations (private and publicly owned), the term woodland refers to individual areas (blocks) of broadleaved trees and of mixed tree species (conifer mixed with broadleaved) where appropriate.

Woodland structure and age for the purpose of this report has been categorised into an age class matrix:

- Young – young trees, generally less than 5 years old,
- Immature – trees between approximately 5-15 years old,
- Pole Stage – trees between 15 – 30 years old, primarily conifer,
- Mature – trees considered to be of felling age, and
- Established – established range of age classes with mature trees and an understory of younger trees.
- Over mature – Older declining woodland with potential for veteran trees.

## 4 Woodland Property

FGS Woodland Creation Ref. 23FGS70293 is a private woodland (**Figure 11.2.1**) (NGR NO 720 829) that lies approximately 3.4 Kilometres to the North of the village of Auchenblae. The entire woodland property extends to approximately 112.4 ha. The new woodlands occupy land around Glenfarquhar Lodge, land at Tipperty and Corsebauld. The woodlands are adjacent to the established Fetteresso Forest to the Northwest. The new woodlands are also adjacent to the woodlands around Glenfarquhar Lodge (Long-established (of plantation origin) 1860) and Hercha Hill. Otherwise, these woodlands are adjacent to agricultural fields.

[1] Scotland's environment web available at https://www.environment.gov.scot/ [Accessed on 25/05/2025]

[2] Scottish Forestry map viewer available at https://www.forestry.gov.scot/support-regulations/scottish-forestry-map-viewer [Accessed on 25/05/2025]

[3] National Forest Inventory available at https://www.forestresearch.gov.uk/tools-and-resources/national-forest-inventory/ [Accessed on 25/05/2025]

[4] The Native Woodland Survey of Scotland (NWSS) available at https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss [Accessed on 25/05/2025]

[5] Ancient Woodland Inventory (AWI) available at https://opendata.nature.scot/datasets/snh::ancient-woodland-inventory/explore [Accessed on 25/05/2025]

## 5 Development Requirements

### 132 kV single circuit overhead line (OHL)

The Study Area for this assessment is based on the required operational corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of the safe construction, resilience and continued maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 regulations and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage. As a result, the final corridor width would be based on the safety distance required to allow for a mature tree falling towards the OHL at the mid-point on an OHL span between two towers, taking account of topography and tree height at maturity. Standard falling distance for a mature conifer tree considered to be a minimum of 30 m. Where the OC passes through areas of native broadleaved woodland, it is noted that the width of woodland may be reduced, due to the general lower height and characteristics of the tree species present.

The proposed steel pole is based on a trident design requiring a matched pair of steel poles erected 2.5 m apart, with supporting crossarm steelwork linking the poles at the top to form a H pole. In addition to this, the safety vicinity zone from each conductor is a 3.5 m radius around the conductor.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline). Opportunities to reduce the OC width through native broadleaves will be considered where the height of the adjacent trees allows for a reduction on OC with whilst maintaining OHL resilience.

The OC lies within a 100 m Limit of Deviation (LoD), i.e. 50 m either side of the centre line of the OHL.

### Access Track Route Design

Access track requirements to facilitate pole construction does not encroach into the woodlands outside the OC.

## 6 Woodland Characteristics

The property is situated approximately 3.4 Kilometres to the North of the village of Auchenblae. The connected woodland to the Northwest of the OC extends to 6,677 ha of first and second rotation productive coniferous forest.

A desk-based study of the woodland areas was conducted, utilising web-based data provided by Scottish Forestry[6] and referencing the Scottish Government's Ancient Woodland Inventory, to identify current woodland environmental designations and classifications.

Scottish Forestry's Map Viewer provides information that the Woodland Creation Option for grant aid is for a Conifer woodland with a claim year of 2024. It is noted that a variation was agreed with Grampian Conservancy in 2021 and approved in 2023. **Table 11.1** describes the species planted by area (ha).

6 Scottish Forestry Land Information Search URL: https://map.environment.gov.scot/LIS_Agri/Agri.html
Scottish Forestry Map Viewer URL: https://scottishforestry.maps.arcgis.com/apps/webappviewer/index.html?id=0d6125cfe892439ab0e5d0b74d9acc18

| Table 11.1 Woodland Creation Species by Area | |
|---|---|
| **Species** | **Area (ha)** |
| Conifer | 213.69 |
| Diverse conifer | 26.03 |
| Broadleaved | 15.53 |
| Total Planted Area | 255.07 |

## 7 Windthrow Risk Impact

When assessing the windthrow risk to adjacent areas likely to be exposed due to the clearance of the OC, consideration is given to the soil and moisture regime, the topography, tree species, top height, exposure and aspect in relation to the prevailing wind direction and any previous management regimes from either observation at a site level or via an approved management plan. Reference is also made to Forest GALES 2.5 Forest Research decision support system. Felling outside the OC to a windfirm boundary is termed Management Felling.

The woodland site affected by the Proposed Development has a 'Detailed Aspect Method of Scoring' (DAMS)[7] windthrow hazard class score of 9 and is classified as sheltered with a low risk of windblow occurring.

However, as the trees are a very young age (planted in 2024), no windblow would occur with intervention at this stage. Therefore, no management felling is considered necessary.

## 8 Woodland Management Impact

The OHL alignment is likely to have minimal impact for the future management. The constraint associated with the electrical hazard will be reduced by regular maintenance of the operational corridor, which will avoid the incidences of "Red Zone" trees.[8]

The Proposed Development will permanently remove existing planted woodland from the operational corridor. No management felling is considered necessary.

## 9 Mitigation Opportunities

Further consideration, subject to engineering constraints, will be given to tree management following stringing of the conductors, and prior to energisation. Such management will likely involve arboricultural modifications to the structure of trees that would otherwise encroach into the OC.

The operational corridor woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the operational corridor, the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL.

[7] Detailed Aspect method of Scoring (DAMS) Ref. Forest Research, "Forest Gales software programme" and Forestry Commission Leaflet 85 "Windthrow Hazard Classification"

[8] As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)

## 10 Woodland Removal Impact

| Table 11.2.2 Woodland Removal for Infrastructure | | |
|---|---|---|
| **Item** | **Woodland Type** | **Area** |
| OHL | Young conifer plantation including mixed woodland | 7.40ha |
| | Native mixed broadleaved woodland | 1.29ha |
| Access Track Corridor | Conifer plantation | 0.0ha |
| | Native mixed broadleaved woodland | 0.0ha |

| Table 11.2.3 Compensatory Planting | | |
|---|---|---|
| Compensatory Planting Area | Mixed conifer or mixed broadleaves | 8.69ha |

| Table 11.2.4 Woodland Removal Impact of Infrastructure | | |
|---|---|---|
| Total Loss of Woodland Area | | 8.69ha |
| Total Compensatory Planting Area | | 8.69ha |
| **Total Net Loss of Woodland Area** | | **0.00ha** |

| Table 11.2.5 Woodland Removal for Management Felling | | |
|---|---|---|
| **Item** | **Woodland Type** | **Area** |
| Management Felling | | 0.00ha |
| Replanting/Restocking | | 0.00ha |
| Net Loss of Woodland Area | | 0.00ha |
| Note. Felling approval is via Scottish Forestry Felling Licence application process or Long-Term Forest Plan application or amendment process. | | |

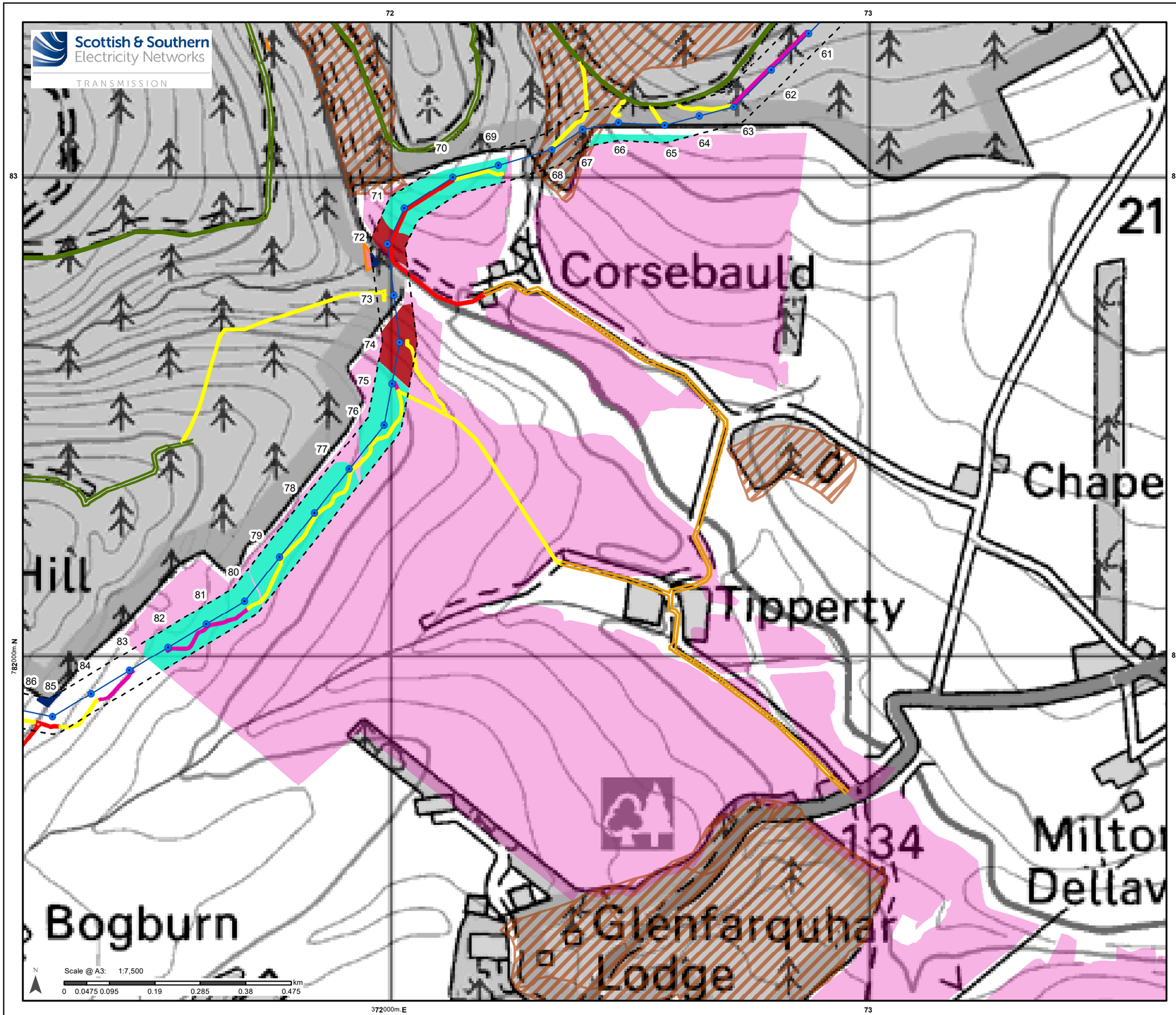
| Table 11.2.6 Non-Permanent Woodland Removal for Infrastructure | | |
|---|---|---|
| **Item** | **Woodland Type** | **Area** |
| Non-Permanent Woodland Removal | Conifers | 0.0ha |
| Non-Permanent Woodland Removal | Broadleaves | 0.00ha |
| **Total Non-Permanent Loss of Woodland Area** | | **0.00ha** |
| Restocking of non-permanent removal areas | | 0.00ha |
| **Net Non-Permanent Loss of Woodland Area** | | **0.00ha** |
| Note. *Felling and restocking approval is via Scottish Forestry Felling Permission application process or Long-Term Forest Plan application or amendment process. This is to be sought by the landowner on whose land the management felling takes place, who is also responsible for all associated restocking operations.* | | |

## 11 Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal, referenced above will be provided for the OHL and access track Operational Corridor area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy (CoWRP) of no net loss of woodland.

Compensatory planting will be detailed within the Compensatory Planting Management Strategy, **Appendix 11.4** of **Chapter 11: Forestry** of the EIA Report.

No management felling is required as there is no risk of windblow due to the recent planting and short stature of the trees currently.




## Legend

**S.37 Overhead Line (OHL) Works**

- Proposed OHL Pole Locations
- Proposed OHL Alignment
- OHL Operational Corridor (36 m Either Side of the Proposed Alignment)

**Ancillary Development**

- Proposed Permanent Tracks
- Proposed Temporary Trackway Panels
- Proposed Temporary New Stone Tracks
- Existing Tracks
- Existing Tracks to be Upgraded
- Proposed ATV Routes

**Forestry**

Ancient Woodland Inventory (AWI)

- Long-Established (of plantation origin)

**Felling**

- Mixed Conifer Felling
- Broadleaf Felling

**Forestry Grant Scheme (FGS) Woodland Creation**

- FGS Woodland Creation Ref. 23FGS70293

Reproduced by permission of Ordnance Survey on behalf of HMSO. Crown copyright and database right 2025 all rights reserved. Ordnance Survey Licence number 0100022432.

| | |
|---|---|
| Project No: | LT468/ 469 |
| Project: | Glendye Wind Farm Overhead Line Grid Connection |
| Title: | EIA Report: Figure 11.2.1 - Forestry Felling - FGS Woodland Creation Ref. 23FGS70293 |
| Drawn by: | CG |
| Date: | 08/10/2025 |
| Drawing: | 123008-F11.2.1-EIA-1.0.0 |