

Beauly to Blackhillock to New Deer to
Peterhead 400 kV Project
Environmental Impact Assessment Report
Volume 5 | Appendices

**Appendix 12.1.48: Woodland Report Parcel 13812** 





# APPENDIX 12.1.48: Woodland Report Parcel 13812

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### 1 Introduction

- 1.1.1 This Appendix presents information relevant to the Beauly to Blackhillock to New Deer to Peterhead 400 kV Overhead Line, OHL Project (the Proposed Development). It should be read in conjunction with the Environmental Impact Assessment (EIA) Report, specifically **Chapter 12: Forestry**, for full details of the Proposed Development.
- As part of the EIA, it has been identified that construction of the Proposed OHL Alignment and the associated access tracks would cross several woodland areas within private or publicly owned landholdings.
- This woodland report has been prepared to assess the potential impacts of the Proposed Development on Woodland, Parcel 13812, Cawdor. It includes the requirements for woodland removal and management recommendations to mitigate the impact of the woodland removal. The report provides an overview of the characteristics of the affected woodland, including woodland composition, site conditions, soil conditions, exposure levels and existing felling approvals. The report also provides details of existing infrastructure, and potential constraints related to forestry operations. It aims to inform decision-making by identifying key environmental and logistical considerations associated with the Proposed Development. Additionally, it evaluates the feasibility of timber extraction and access whilst highlighting necessary mitigation measures to minimise disruption to the woodland ecosystem and surrounding landscape.
- 1.1.4 Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics, to identify the woodland removal required and recommended. This document also sets out the area quantity hectares (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

## 2 Woodland Property

The landholding property boundaries are identified in **Figure 12.1.48a**: **Parcel 13812 Location Map.** The woodlands comprise native broadleaved woodland. The woodlands are located approximately 12.7 km to the southeast of Nairn, and 1.8 km west of Ferness in the Highland council area (NH 947021 452685).

## 3 Development Requirements

#### 3.1 400 kV Overhead Line Infrastructure Requirements

- The Study Area for this assessment initially focussed on a 100 m width either side of the centreline of the Proposed OHL Alignment and ancillary infrastructure, where relevant, prior to the identification of an Operational Corridor (OC). The Applicant defines the OC as 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<sup>1</sup> and The Electricity Act 1989<sup>2</sup>. The OC is defined based on two different factors as follows:
  - The first factor in which the OC is determined is with reference to the distance at which a tree could fall and cause damage to the OHL, resulting in a supply outage. As a result, the OC 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 is considered to be a minimum of 45 m. Where the OC passes through areas of broadleaved woodland, it is noted that the width of woodland removal is likely to be reduced, due to the general lower height and characteristics of the tree species present.
  - The second factor that is considered is the maximum distance that the OHL conductors can blow out from the tower under a 1 in 50-year return period wind condition, plus the required electrical clearance distance. This is to ensure that the OHL conductors do not come into contact with, or come close enough to, any object that

<sup>&</sup>lt;sup>1</sup> UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: The Electricity Safety, Quality and Continuity Regulations 2002

<sup>&</sup>lt;sup>2</sup> UK Gov (1989). Electricity Act 1989. Available at: Electricity Act 1989



could result in an electrical clearance infringement. This conductor blowout distance varies between each tower dependent on span length and must therefore be considered on a span-by-span basis.

- The typical OC required within areas of commercial conifer forestry for a 400 kV OHL is 90 m (i.e. 45 m either side of the centre line). Where the OC passes through areas of broadleaved woodland, it is proposed that the extent of woodland removal is likely to be reduced due to the lower height of the tree species present. The OC for the Proposed OHL Alignment through areas of broadleaved woodland has been reduced to 70 m (i.e. 35 m either side of the centre line of the OHL). This has been based on the likely height of the woodland at maturity. Where any woodland removal within the OC is proposed to be reduced from the 45 m either side of the line, a site-specific assessment must be carried out to confirm that the conductor blowout does not exceed the OC width. If the conductor blowout exceeds the OC, then the width of the OC must be increased to meet the requirements of the blowout assessment as a minimum. This will ensure compliance with ESQCR requirements and that the required safety clearances are maintained.
- A resilient OC of 70 m in width is required throughout the native woodland and 90 m required throughout the commercial conifer within Woodland Parcel 13812, taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.48b: Parcel 13812 Proposed Felling Requirement.

#### 3.2 Access Track Route Design

3.2.1 A temporary access track is proposed within and outwith the OC between CB5-24 and CB6-1. A temporary bellmouth off the eastern side of the C1173 road is proposed.

#### 4 Woodland Characteristics

#### 4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in August 2025. In this section the OC traverses an area of semi-mature and mature native broadleaved woodland, and mature conifer woodland on the banks of the River Findhorn.
- 4.1.2 The proposed section of Proposed OHL Alignment consists of a section of OC between towers CB5-23 and CB6-2 as far as the western bank of the River Findhorn.
- This native woodland consists of a mixture of native broadleaved species, predominantly Silver birch (SBI) and Downy birch (DBI), with Rowan (ROW) and Whitebeam (WB). The woodland has a varied structure, with a very open canopy structure in places. The conifer woodland on the banks of the River Findhorn comprises of a stand of mature Scots pine (SP), with a fringe of native broadleaves including SBI, ROW and Bird cherry, (BC).
- 4.14 This section of Proposed OHL Alignment is sheltered with a Detailed Aspect Method of Scoring (DAMS) of 10<sup>3,4</sup>.
- 4.15 The Ecological Site Classification<sup>5</sup> describes the site as having a cool, sheltered and climate. The soils are slightly dry moisture status, and very poor nutrient status.
- The Soil Map of Scotland<sup>6</sup> identifies the soils as being predominantly peaty gleyed podzols in the broadleaved woodland and humus-iron podzols in the conifer woodland.
- 4.1.7 Woodlands in this parcel are identified in the Native Woodland Survey of Scotland<sup>7</sup> as native woodlands of an unidentifiable type, with 80% canopy cover and varied age class structure.

<sup>&</sup>lt;sup>3</sup> Forest Research (2025). Available at: <a href="http://www.forestdss.org.uk/geoforestdss/">http://www.forestdss.org.uk/geoforestdss/</a>

<sup>&</sup>lt;sup>4</sup> The Detailed Aspect Method of Scoring (DAMS) is a system used to assess wind exposure in forestry and land management. It provides a numerical score that quantifies the level of exposure a site experiences based on factors such as elevation, topography, and aspect (the direction a slope faces). The DAMS score helps foresters predict wind risk, which is crucial for understanding tree stability, growth potential, and the likelihood of windthrow (trees being uprooted or broken by wind) The scoring system ranges from 0 to 24, with higher scores indicating more exposure to wind.

Ecological Site Classification, Available at: <a href="http://www.forestdss.org.uk/geoforestdss/">http://www.forestdss.org.uk/geoforestdss/</a>

<sup>&</sup>lt;sup>6</sup> National Soil Map of Scotland. Available at: <a href="https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/">https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/</a>

Native Woodland Survey of Scotland. Available at: https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss



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- 4.1.8 No environmental designations apply to this parcel.
- 4.19 The closest road suitable for haulage is the C1173, Belivat Dulsie Wood Road. The C1173 is classified as a Consultation Route by the Timber Transport Forum<sup>8</sup>, making it an approved route for timber haulage. However, the river Findhorn presents a significant constraint to forest management due to the steep gradient of the terrain and potential risks to the river's water quality. Given the steep slope in this section, timber extraction may require the use of a winch system to transport material to the nearest access point. While this method can reduce the environmental footprint, it introduces a risk of pollution from accidental spills or runoff into the river. As such, all timber extraction activities must be carefully planned to include appropriate mitigation measures, such as spill response protocols and erosion control.

### 4.2 Photo Record - Operational Corridor Assessment

4.2.1 The following photographs provide a visual record of key locations along the OC. Each image illustrates existing vegetation types, land use, and notable landscape features relevant to the planning and management of the OC. Particular attention has been given to areas of mature woodland, natural regeneration, and locations where proposed works may intersect with ecologically or visually sensitive habitats. The photos are intended to support site assessments and inform mitigation strategies.

Photo 1: Mature and semi mature native woodland between CB-24 and CB6-1 within the OC (NH 946458 453654, looking southwest)



<sup>&</sup>lt;sup>8</sup> The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <a href="https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/">https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/</a>. Consultation Routes are recognised as being key to timber extraction but are not up to Agreed Route standard. Consultation with the Local Authority is required and it may be necessary to agree limits of timing, allowable tonnage etc. before the route can be used. B roads and minor roads that are not categorised should be assumed to be Consultation Routes unless covered by one of the other classifications (e.g. Severely Restricted Route).



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Photo 2: Stand of Mature Scots pine woodland on the banks of the River Findhorn, fringed with Native broadleaves, between CB6-1 and CB6-2 within the OC (NH 945372 452700, looking southeast)



#### 5 Windblow Risk

- It is acknowledged that the creation of the OC would result in wider potential indirect effects on the surrounding woodland areas. These areas would be subject to potential increased risk of damage (windblow). Each woodland report identifies further areas of felling to a windfirm edge, defined as 'Management Felling' (categorised as an indirect secondary impact), which is covered in more detail in the Chapter 12: Forestry in Section 12.4. Management felling would be considered as part of any application for felling permission. This would provide restocking as agreed with Scottish Forestry which would result in balancing the loss of woodland. Any felling undertaken outwith the OC would be solely under the control of the relevant landowner (and not the Applicant). It is the intention of the Applicant to encourage the landowners to follow this good practice in terms of redesign of their current Long-Term Forest Plans, which in-turn would aim to follow UK Forestry Standard (UKFS)9 for the implementation of the works required.
- 5.1.2 There is a negligible risk of windblow within this Woodland Parcel.

#### 6 **Woodland Management Impact**

- 6.1.1 While tree felling within the OC will result in a slight reduction in the total area of woodland, this loss is marginal and should not significantly affect overall forest management, or access at a larger scale.
- 6.1.2 The Proposed OHL Alignment furthermore introduces an electrical hazard, but the constraint associated with the electrical hazard will be reduced by regular maintenance of the OC which will avoid the incidences of "Red Zone" trees (reference Forest Industry Safety Accord, FISA 804 "Electricity at Work: Forestry" 10).

<sup>9</sup> Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: <a href="https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs">https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs</a>
10 Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <a href="https://ukfisa.com/Safety/Safety-Guides/fisa-804">https://ukfisa.com/Safety/Safety-Guides/fisa-804</a>

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- 6.1.3 The total loss of Native Broadleaved woodland resulting from the proposed alignment 0.45 ha.
- 6.1.4 The total loss of Commercial Conifer resulting from the proposed alignment is 1.46 ha.

## 7 Mitigation Opportunities

#### 7.1 Restructuring

- 7.1.1 The section of conifer woodland within this ownership is single aged and will likely be felled all at once. Therefore, there is no positive or negative impact of the felling on the structure within the ownership.
- 7.1.2 The felling of the OC for the development, will create a new green edge, allowing the landowner to carry out future clear fell more safely in proximity to the new power line

### 7.2 Restocking

7.2.1 No Management felling is suggested in this section of Proposed OHL Alignment therefore there will be no restock obligation on the landowner.

## 8 Net Effect / Summary

Tables 8.1 to 8.4 outline the operational requirements for forestry management within the OC between towers CB5-24 and CB6-2 in this Woodland Parcel. They detail the areas designated for clear felling, within the OC and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

ltem	Woodland Type	Area (ha)
OC felling	Native broadleaves (70 m)	0.41
OC felling	Commercial conifers (90 m)	1.46
Track felling	Native woodland	0.04
Total area		1.91

**Table 8.2: Compensatory Planting** 

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native broadleaves	0.45
Compensatory Planting Area	Commercial conifers	1.46
Total area		1.91

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	1.91
Total Compensatory Planting Area	1.91
Total Net Loss of Woodland Area	



Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling		0.00
Management Felling		0.00
Net Loss of Woodland Area		0.00

## 9 Compensatory Planting

- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)<sup>11</sup>. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically applies to areas where tree removal is necessary for the Proposed Development. See **Appendix 12.3 Compensatory Planting Management Strategy**.
- 9.1.2 Any additional felling outside the OC, such as areas cleared for windthrow management or forest design improvements, falls under the responsibility of the landowner and is not included in the compensatory planting requirements. Instead, these areas may be replanted under a forest plan revision or felling license at the landowner's discretion. This approach aligns with national forestry guidelines, balancing infrastructure development with sustainable woodland management.
- 9.1.3 The total amount of net felling requiring compensation under the CoWRP 1.91 ha.
- 9.1.4 In order to provide a greater balance limiting long-term impacts on forestry interests it is proposed that the majority of this woodland loss is compensated via off-site compensatory planting within the same local authority area. It is proposed that full details of the areas subject to this off-site compensatory planting is notified to Scottish Forestry prior to energising the OHL.

<sup>&</sup>lt;sup>11</sup> Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285



