

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

Appendix 12.1.36 - Woodland Report Parcel 3040





APPENDIX 12.1.36: Woodland Report Parcel 3040

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Figure 12.1.36b: Parcel 3040 Proposed Felling Requirements



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.
- 1.1.2. 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.
- 1.1.3. This woodland report has been prepared to assess the potential impacts of the Proposed Development on Woodland, Parcel 3040. 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

2.1.1. The landholding property boundaries are identified in **Figure 12.1.36a**: **Parcel 3040 Location Map.** The woodlands are situated approximately 200m east of the A9, approximately 4.5 km south of Inverness in the Highland council area (NH 719811 407701). There is an existing tarmacadam single track road in poor repair extending from the B851 at Grid Reference NH 722461 406044, which leads to the parcel.

3. Development Requirements

3.1. 400 kV Overhead Line Infrastructure Requirements

- 3.1.1. 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) 2002¹ and the Electricity Act 1989². 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; and

¹ UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: The Electricity Safety, Quality and Continuity Regulations 2002

² UK Gov (1989). Electricity Act 1989. Available at: <u>Electricity Act 1989</u>



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 - 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 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.
 - 3.1.2. 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 proposed 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.
 - 3.1.3. A resilient OC of 70 m in width is required throughout the native broadleaved woodland within Woodland Parcel 3040 and taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.36b: Parcel 3040 Proposed Felling Requirement.

3.2. Access Track Route Design

3.2.1. There are no tracks associated with this section of the OHL within the OC.

4. **Woodland Characteristics**

4.1. Woodland Composition and Site Conditions

- 4.1.1. The woodland was surveyed in January 2025. The proposed section of OHL consists of a section of OC between towers CB2-17 and CB2-18A.
- 4.1.2. The parcel consists of a small stand of planted native broadleaved woodland, approximately fifteen years old, comprising predominantly Siver birch (SBI), with Ash (AH) and Gean, (WCH). There are individual mature Scots pine (SP) from previous rotations, on the edge of this woodland. The stand is well managed with beating up and protection in tree shelters is ongoing.
- 4.1.3. The area is moderately exposed with a maximum Detailed Aspect Method of Scoring (DAMS) score of 14^3 .
- 4.1.4. The Ecological Site Classification⁴ describes the site as having a cool, moderately exposed and wet climate
- 4.1.5. The Soil Map of Scotland⁵ identifies the soils as being predominantly humus-iron podzols.
- 4.1.6. No existing forest plans or felling permissions were found on the Scottish Forestry Web Viewer.

³ Forest Research (n.d.). Available at: http://www.forestdss.org.uk/geoforestdss/ 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.

Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: http://www.forestdss.org.uk/geoforestdss/

⁵ Scotland's Soils (n.d.). National Soil Map of Scotland. Available at: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/



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4.1.7. There is an existing tarmacadam single track road in poor repair within the ownership, extending from the B851 and running within the ownership to the OC. Following upgrade, timber can be extracted along this route to the B851 from there south to the A9 trunk road. This is classified as a Consultation Route⁶ by the Timber Transport Forum⁷.

4.2. Photo Record - Operational Corridor Assessment

4.2.1. The following photographs provide a visual record of key locations along the proposed 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: View at Grid Reference NH 719255 406906 looking northeast from track within OC, showing planted native broadleaves between CB2-17 and CB2-18.



⁶ 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)

⁷Timber Transport Forum (n.d.). Introduction to Agreed Routes Map. Available at: https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/



5. Windblow Risk

- 5.1.1. 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 **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 out with 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)⁸ for the implementation of the works required.
- 5.1.2. There is no risk of windblow within this parcel.

6. Woodland Management Impact

- 6.1.1. Felling in the OC will reduce the area of productive forestry to the north of the OC but should not impact access.

 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future forest management as it could provide a more robust access and extraction route for woodland management.
- 6.1.2. Given the location of the stand adjacent to a major trunk road the timing of any management felling should be considered at the same time, or immediately after felling within the OC.
- 6.1.3. The Proposed OHL Alignment 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 FISA 804 "Electricity at Work: Forestry").
- 6.1.4. The total loss of Broadleaved woodland resulting from the proposed alignment is 0.59 ha.

7. Mitigation Opportunities

7.1. Woodland Mitigation Measures

7.1.1. To mitigate the landscape impact on this section of the Proposed OHL Alignment, the 'Landscape Replanting Proposals' as set out in **Chapter 7: Landscape and Visual.**

7.2. Restructuring

7.2.1. The felling of the OC for the development will create new green edges, which will allow the landowner to work to in the future if that is desired.

7.3. Restocking

7.3.1. There are no restocking opportunities within the OC.

⁸ Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs (Accessed 15 August 2025).

⁹ Forest Industry Safety Accord (2025). FISA Safety Guide 804 – Electricity at Work: Forestry. Available at: https://ukfisa.com/Safety/Safety-Guides/fisa-804 (Accessed: 15 August 2025).



8. Net Effect / Summary

8.1.1. **Tables 8.1 to 8.4** outline the operational requirements for forestry management within the OC between towers CB2-17 and CB2-18A. 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	Broadleaved woodland (70 m)	0.59
Total area		0.59

Table 8.2: Compensatory Planting

ltem	Woodland Type	Area (ha)
Compensatory Planting Area	Broadleaved woodland (70 m)	0.59
Total area		0.59

Table 8.3: Woodland Removal Impact of Infrastructure

ltem	Area (ha)
Total Loss of Woodland Area	0.59
Total Compensatory Planting Area	0.59
Total Net Loss of Woodland Area	

Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling	Broadleaved woodland	0.00
Replanting / Restocking Opportunities		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)¹⁰. 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 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 0.59 ha.

¹⁰ 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



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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.



