

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

Appendix 12.1.47: Woodland Report Parcel 13820



APPENDIX 12.1.47: Woodland Report Parcel 13820

1	Introduction.....	2
2	Woodland Property.....	2
3	Development Requirements.....	2
3.1	400 kV Overhead Line Infrastructure Requirements	2
3.2	Access Track Route Design.....	3
4	Woodland Characteristics.....	3
4.2	Photo Record – Operational Corridor Assessment.....	4
5	Windblow Risk.....	7
6	Woodland Management Impact.....	7
7	Mitigation Opportunities.....	8
7.1	Restructuring.....	8
7.2	Restocking	8
8	Net Effect / Summary.....	8
9	Compensatory Planting	9

Appendix Figures

Figure 12.1.47a: Parcel 13820 Location Map

Figure 12.1.47b: Parcel 13820 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 13820, 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

- 2.1.1 The landholding property boundaries are identified in **Figure 12.1.47a: Parcel 13820 Location Map**. The woodlands comprise native broadleaved woodland. The woodlands are located approximately 12.7 km to the southeast of Nairn, and 2.0 km west of Ferness in the Highland council area (NH 939803 453984).

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.

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: [Electricity Act 1989](#)

- 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 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 woodland within Woodland Parcel 13820 and taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.47b: Parcel 13820 Proposed Felling Requirements**.

3.2 Access Track Route Design

- 3.2.1 A permanent access track is proposed in the OC between CB5-22 and CB5-24. A permanent bellmouth off the western side of the C1173 is proposed.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in January 2025. In this section the OC traverses an area of mature native woodland, comprising of mature upland birchwood, with occasional younger planted Scots pine.
- 4.1.2 The proposed section of overhead powerline consists of a section of OC between towers CB5-22 and CB5-24.
- 4.1.3 This native woodland consists of a mixture of native broadleaved species, predominantly Silver birch (SBI) and Downy birch (DBI), with Rowan (ROW) and Willow species (WL). Juniper (JUN) is present in the western end of the woodland. The woodland has a varied structure, with senescent and mature SBI, as well as pole stage and early establishing regeneration or SBI, DBI and ROW. The woodlands are grazed.
- 4.1.4 Several of the trees present exhibit Notable Tree characteristics³ including:
- Larger than average for its species in the local context. May be approaching veteran status.
 - Displays early-stage veteran features such as deadwood, cavities, or a hollowing trunk, but not extensively
 - Biodiversity value, including habitat provision for insects, bats, and fungi
- 4.1.5 This section of proposed powerline is moderately exposed ranging from a Detailed Aspect Method of Scoring (DAMS) of 14^{4,5}.

³ Woodland Trust. <https://www.woodlandtrust.org.uk/media/1836/what-are-ancient-trees.pdf>

⁴ Forest Research (2025). Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁵ 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.

- 4.1.6 The Ecological Site Classification⁶ describes the site as having a cool, moderately exposed and wet climate. The soils are fresh moisture status with moderately dry moisture status, and very poor nutrient status.
- 4.1.7 The Soil Map of Scotland⁷ identifies the soils as being predominantly peaty gleyed podzols.
- 4.1.8 Woodlands in this parcel are described in the Native Woodland Survey of Scotland⁸ as upland birchwoods, with 80% canopy cover and varied age class structure.
- 4.1.9 No environmental designations apply to this parcel.
- 4.1.10 There is no existing access infrastructure into these woodlands. Tree removal is most easily achieved through hand felling or mulching after which material can be left on site or extracted using smaller machinery. The closest forest road suitable for haulage within the ownership is the unclassified C1173 Belivat to Dulsie Wood road to the that leads to the A939 in the north. This is classed as a Consultation Route⁹ by the Timber Transport Forum¹⁰.

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.

⁶ Ecological Site Classification, Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁷ National Soil Map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

⁸ Native Woodland Survey of Scotland, [Scottish Forestry - Native Woodland Survey of Scotland](#)

⁹ 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).

¹⁰ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

Photo 1: Heavily grazed pole stage birch woodland at CB5-17A within the OC (NH 940156 455802, looking east)



Photo 2: Birch woodland with Rowan and Juniper between tower CB5-22 and CB5-23 within the OC (NH 940764 456399, looking southeast)



Photo 3: Mature Silver birch with profuse natural regeneration, juniper and planted Scots pine between tower CB5-23 and tower CB5-24 within the OC, (NH 939803 453984, looking northeast)



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 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 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 UKFS¹¹ for the implementation of the works required.
- 5.1.2 There is a negligible risk of windblow within this Parcel.

6 Woodland Management Impact

- 6.1.1 The impact on younger woodland design and future management will be significant, creating permanent wayleaves through establishing native pinewood native woodland areas.

¹¹ Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs>

- 6.1.2 The infrastructure built for this section of the OHL could provide a minor benefit to the landowner for future woodland management as it could provide greater long term access. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
- 6.1.3 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 Forestry Industry Safety Accord, FISA 804 “Electricity at Work: Forestry”¹²).
- 6.1.4 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 3.37 ha.

7 Mitigation Opportunities

7.1 Restructuring

- 7.1.1 The OC will cut through native woodlands which is likely negative for the environmental value of these woodlands at a local scale. In the immediate locality and at the regional scale, significant areas of similar woodland will be retained, preserving a varied woodland structure over a wider area.
- 7.1.2 Notable trees within the woodland represent important mature specimens with developing veteran characteristics and ecological value. By implementing a detailed survey and proactive mitigation strategy, their long-term conservation can be ensured while accommodating the necessary development work. The following management strategies should be implemented:
- Establishing buffer zones (minimum 10 m–15 m RPZ) around notable trees to protect roots and soil structure.
 - Avoiding soil compaction through the use of temporary track matting during construction
 - If notable trees must be felled, compensatory planting should include species of local provenance
 - Felled wood can be repurposed as deadwood habitat piles.
 - Installing bat and bird boxes to mitigate the loss of potential roosting/nesting sites.

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

- 8.1.1 **Tables 8.1 to 8.4** outline the operational requirements for forestry management within the OC between towers CB5-17 and CB5-22. It details the areas designated for clear felling, within the OC and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

Item	Woodland Type	Area (ha)
OC felling	Native broadleaves (70 m)	3.37
Total area		3.37

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native broadleaves	3.37

¹² Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804>

Total area	3.37
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Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	3.37
Total Compensatory Planting Area	3.37
Total Net Loss of Woodland Area	0.00

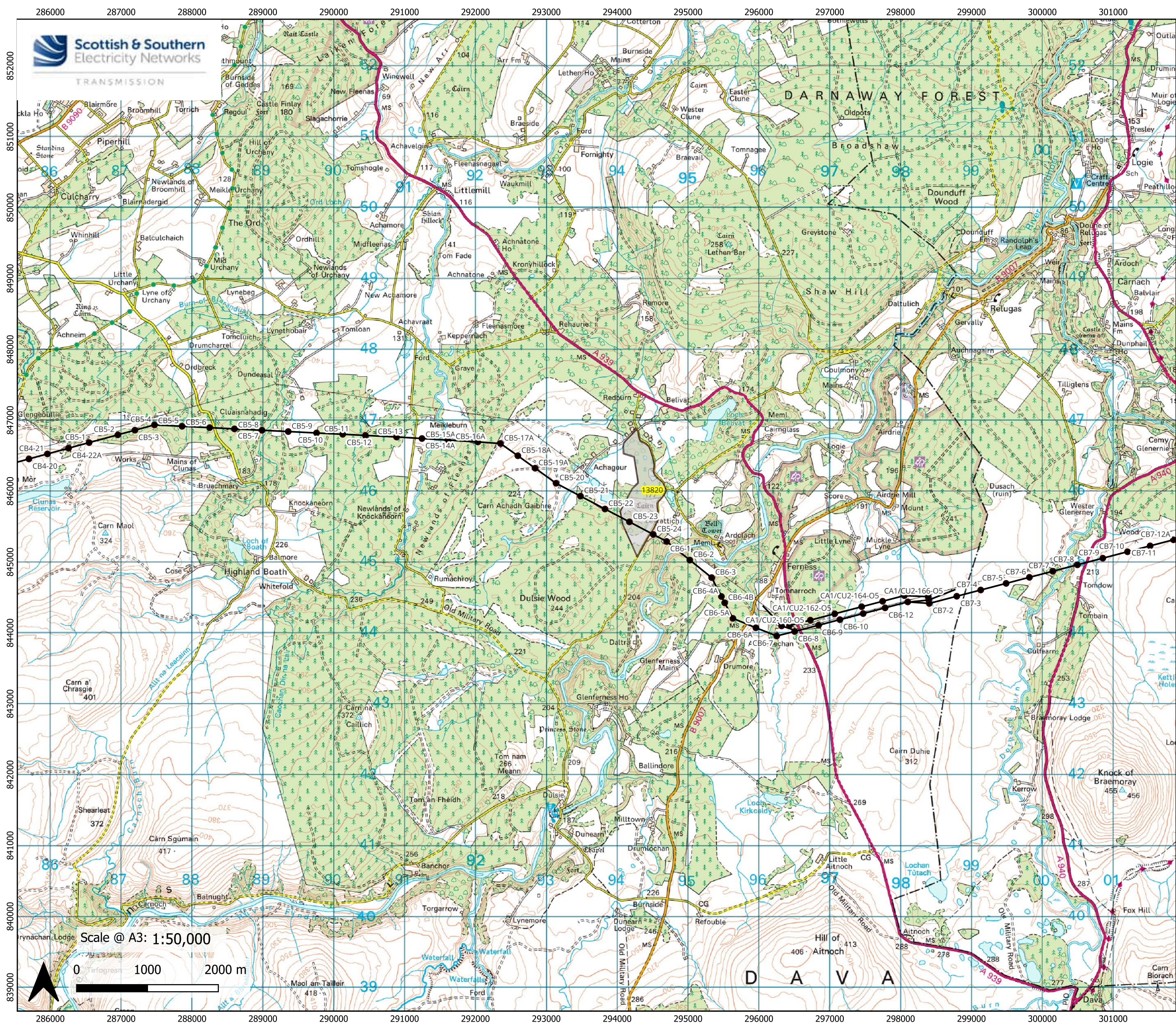
Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling		0.00
Replanting / Restocking Opportunities		0.00
Net Loss of Woodland Area		0.00

9 Compensatory Planting

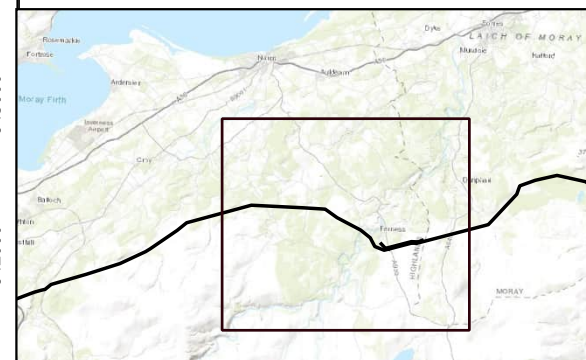
- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹³. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically 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 3.37 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.

¹³ 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>



Legend

- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- ▭ Landownership Boundary/Parcel

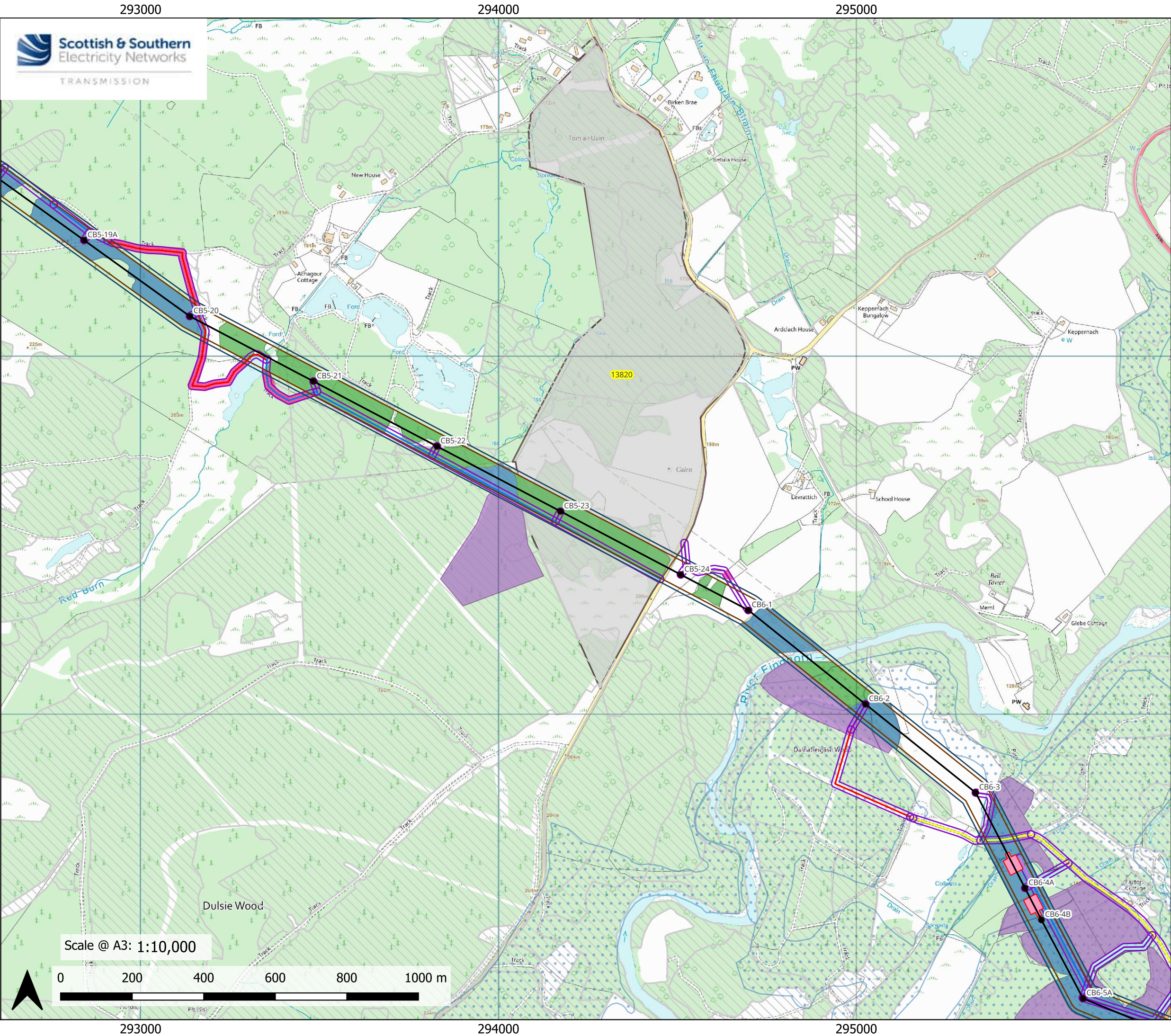


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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.47a Parcel 13820 Location Map

Drawn by: LA



Legend

- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- Proposed Conductor Pulling Area (EPZ)
- 70m Operational Corridor - Broadleaved Woodland
- 90m Operational Corridor - Commercial Woodland
- Access Track 20m Buffer

Proposed Access Tracks

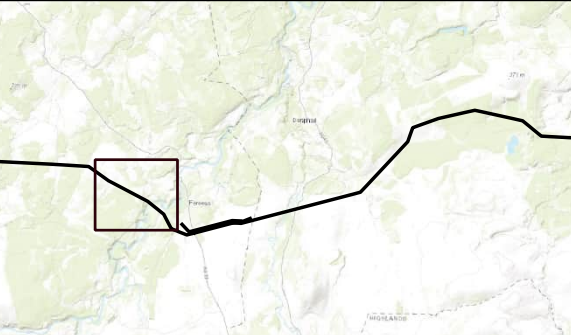
- Existing Access - Upgrade - Good/Fair Condition
- Existing Access - Upgrade - Very Poor Condition
- Proposed Access - ATV or Temporary Trackway
- Proposed Access - Permanent
- Proposed Access - Permanent Floated
- Proposed Access - Temporary

Proposed Felling Requirements

- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management Felling
- Mixed Conifer Access Track Felling
- Native Woodland Access Track Felling
- Native Woodland Survey Scotland (NWSS)

Ancient Woodland Inventory

- Long-Established (of plantation origin)
- Landownership Boundary/Parcel



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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title: **Figure 12.1.47b** Parcel 13820 Proposed
Felling Requirements

Drawn by: LA