

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

**Appendix 12.1.53: Woodland Report Parcel 13796,
Glenernie**



APPENDIX 12.1.53 – Woodland Report Parcel 13796, Glenernie

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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 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 Overhead Line (OHL) 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 13796, Glenernie. 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 12.1.53a: Parcel 13796 Location Map**. The Glenernie Estate woodlands are situated near Dunphail, approximately 14.4 km south of Forres in the Moray council district (NJ 001031 448732). Forming a key component of the region's rural and ecological landscape.
- 2.1.2 The woodlands within the Proposed Development area are open habitat native broadleaved and commercial conifer woodlands which form part of the wider estate woodland holding, characterised by rolling hills, dense woodlands, and open fields. The A940 runs through the middle of the estate, serving as a key access route.

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

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](#)

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 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 broadleaved woodland area and 90 m within the commercial conifer forest within Woodland Parcel 13796 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.53b: Parcel 13796 Proposed Felling Requirements**.

3.2 Access Track Route Design

- 3.2.1 Temporary and permanent access tracks are proposed through woodland and open ground to facilitate access.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in November 2024. The estate woodlands are managed under a Long-Term Forest Plan (LTFP), Case no.4351718.
- 4.1.2 The woodlands at tower CB7-6(70-5) are a mix of young and mature native Downy birch (DBI) woodland and semi-mature Sitka spruce (SS) and Scots pine (SP) which has been managed for timber production. To ensure the structural stability of the remaining woodland, additional management felling will be required to maintain a windfirm edge along the OC boundary, mitigating the risk of windthrow and further habitat degradation.
- 4.1.3 Between towers CB7-6(70-5) and CB7-8(70-6) the OC intersects a semi-mature native broadleaved woodland dominated by Downy birch (DBI) and willow (WL) and open grassland.
- 4.1.4 At tower CB7-9(70-7) a field edge of mixed native broadleaves dominated by DBI, WL and will be impacted.
- 4.1.5 The area is moderately exposed with a maximum Detailed Aspect Method of Scoring score (DAMS) of 13^{3,4}, indicating a heightened risk of windthrow.
- 4.1.6 The Ecological Site Classification⁵ describes the site as having a cool, moderately exposed and wet climate. The soils have a moderately dry moisture status and are of very poor nutrient status.

³ Forest Research (2025). Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁴ 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.

⁵ Ecological Site Classification, Available at: <http://www.forestdss.org.uk/geoforestdss/>

- 4.1.7 The Soil Map of Scotland⁶ identifies the soils as being predominantly humus-iron podzols.
- 4.1.8 The woodlands appear in the Native Woodland Survey of Scotland⁷.
- 4.1.9 The proposed section of Proposed OHL Alignment consists of a section of OC between towers CB7-6(70-5) and CB7-9(70-7). The majority of the proposed tracks in this section are found within the OC.
- 4.1.10 The existing internal forest roads and estate infrastructure will require upgrading to facilitate timber extraction. Considering the quality and quantity of the material and the landform operations can be carried out by harvester / forwarder combinations.
- 4.1.11 The closest forest road suitable for haulage within the ownership is the A940. This is classed as an Agreed Route by the Timber Transport Forum^{8,9}.
- 4.1.12 Considering the quality and quantity of the material and the landform operations can be carried out by a combination of harvester / forwarder and mulching.

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: View at NJ 006051 450741 looking east towards tower CB7-9(70-7) at the field edge woodland of DBI / WL.



⁶ National Soil Map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

⁷ Scottish Forestry. Native Woodland Survey of Scotland. Available at: <https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss>

⁸ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

⁹ Roads which can be used for timber haulage without restriction other than as regulated by the Road Traffic Act 1988. "A" roads (e.g. the A9) are classified as Agreed Routes by default unless covered by one of the other categories (e.g. Consultation Route).

Photo 2: View at NJ 006051 450741 looking west towards tower CB7-8(70-6). Showing the mature native Downy birch woodland in the foreground and the semi-mature mixed conifer woodland impacted by the OC and additional management felling.



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 Forestry Chapter 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)¹⁰ for the implementation of the works required.
- 5.1.2 There is an increased risk of windblow within the commercial conifer forest as a result of the proposed felling, as indicated by the DAMS score and the topography of the site.

6 Woodland Management Impact

- 6.1.1 As a result of the felling of the OC it is expected that the forest edges along the OC will be severely destabilised and as such significant areas of management felling have been identified. The felling of the OC and the management felling will form a drastic shift in management strategy in areas affected resulting in loss of canopy and large clear-fell.
- 6.1.2 In the long-term woodland management will be impacted as the area of land available for commercial forestry is reduced. However, the OHL will result in green edges to which the landowner can work to in the future to split the management units into smaller areas.
- 6.1.3 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future forest management as it could provide long term access. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
- 6.1.4 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 FISA 804 "Electricity at Work: Forestry"¹¹).
- 6.1.5 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 1.70 hectares ha.

¹⁰ Scottish Forestry (2024). Available online at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs>

¹¹ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804>

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 There is potential opportunity for compensatory planting out with the OC. This opportunity could be explored with the landowner.

7.2 Restructuring

- 7.2.1 Considering the size of the felling the proposals will have an impact on forest structure within the forest. The reestablishment of the felled areas as a result of the Proposed OHL Alignment, although large and contiguous, will lead to a different age category in the woodland.
- 7.2.2 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

7.3 Restocking

- 7.3.1 Restocking will be carried out by the landowner in all areas out with the OC with suitable species to continue the commercial viability of the forest.
- 7.3.2 It is anticipated that native broadleaved regeneration is likely to occur within the OC, as a result of its proximity to existing seed sources.

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 CB7-6(70-5) and CB7-9(70-7). It details the areas designated for clear felling, both within the OC and additional recommended Management Felling outside the OC to address windthrow risks and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

Item	Woodland Type	Area (ha)
OC felling	Native Broadleaved Woodland (70 m)	1.70
OC felling	Conifer woodland (90 m)	1.13
Total area		2.83

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland	1.70
Compensatory Planting Area	Conifer woodland	1.13
Total area		2.83

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	2.83
Total Compensatory Planting Area	2.83
Total Net Loss of Woodland Area	0.00

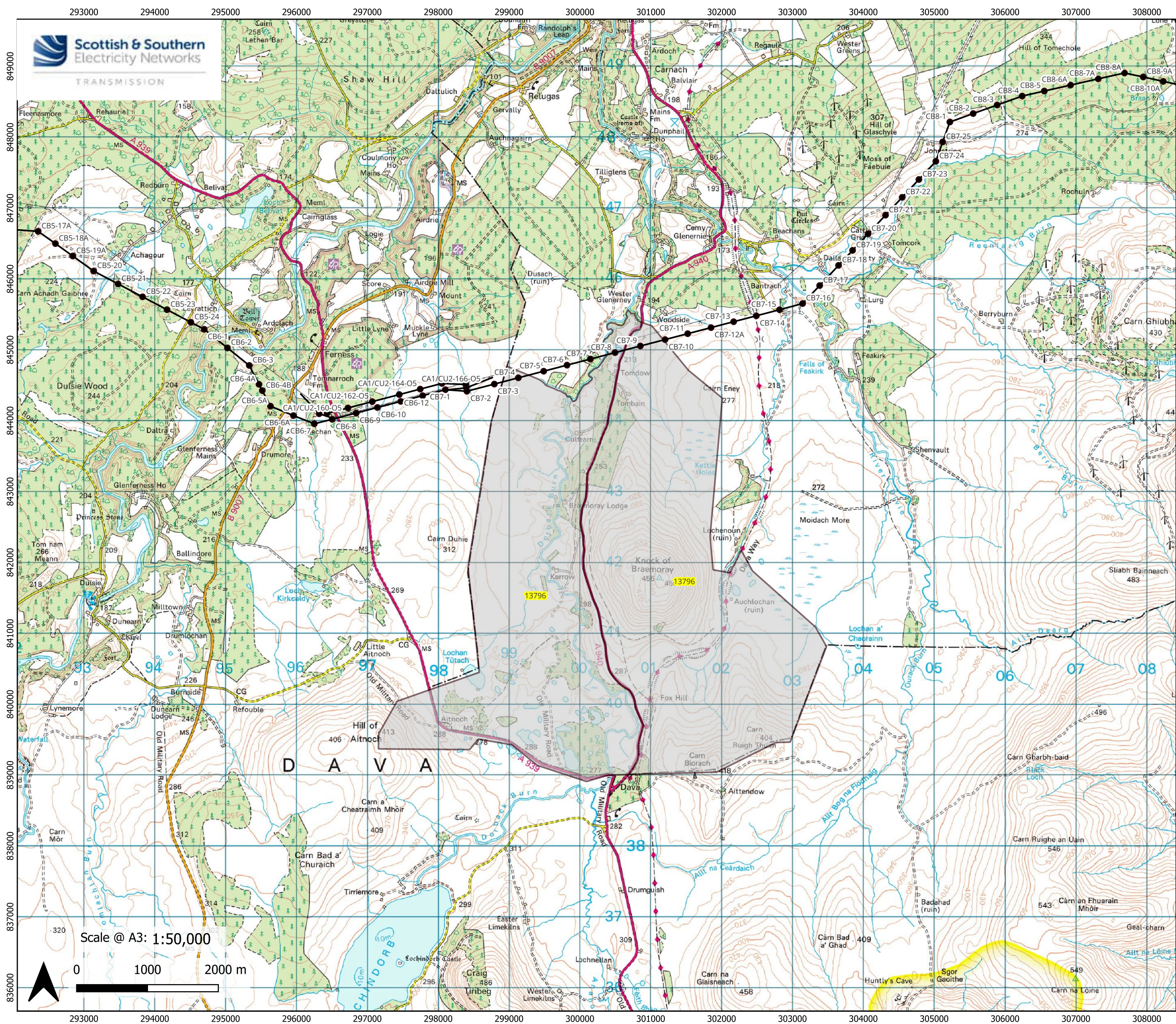
Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling	Conifer Woodland	0.94
Replanting / Restocking Opportunities	Conifer Woodland	0.94
Net Loss of Woodland Area		0.00

9 Compensatory Planting

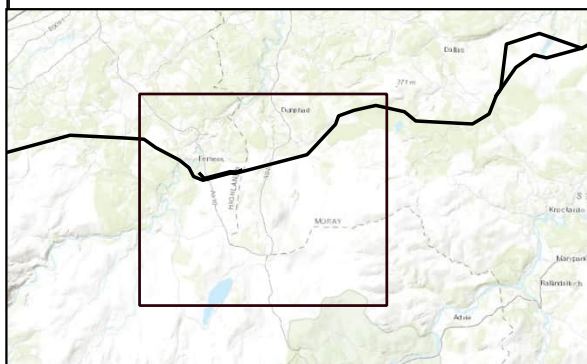
- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹². This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically 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 is 2.83 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.

¹² 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

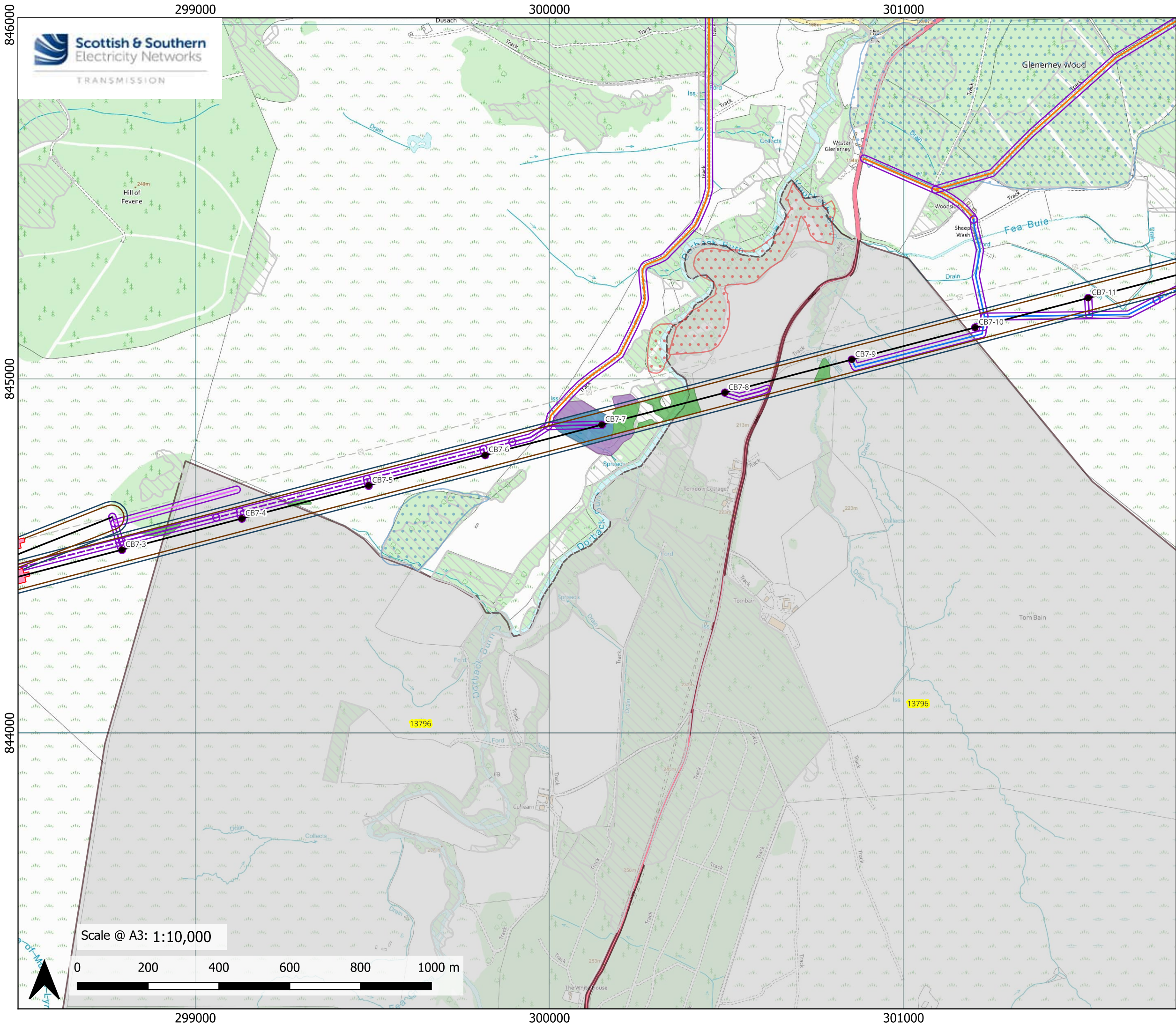


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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.53a Parcel 13796 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 – Poor Condition
- Proposed Access – ATV or Temporary Trackway
- Proposed Access – Permanent
- Proposed Access – Permanent Floated
- Proposed Access – Temporary
- Proposed Access – Temporary Floated

Proposed Felling Requirements

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

Ancient Woodland Inventory

- Ancient (of semi-natural origin)
- Long-Established (of plantation origin)
- Landownership Boundary/Parcel
(Landownership boundary extends beyond map extent – relevant area shown)

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

Title: **Figure 12.153b** Parcel 13796 Proposed Felling Requirements

Drawn by: LA