

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

**Appendix 12.1.103: Woodland Report Parcel 2128,
Cruchie Wood**



APPENDIX 12.1.103: Woodland Report Parcel 2128, Cruchie Wood

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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.
- 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 assesses the potential impacts of the Proposed Development on Woodland, Parcel 2128, Cruchie Wood. 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 forest 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 12.1.103a: Parcel 2128 Location Map**. Cruchie Wood, is a medium sized commercial forestry plantation. Located 6.5 km north of Huntly on the A97, within the Aberdeenshire council district (NJ 581622 430932).

3 Development 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.
 - 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

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](#)

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 proposed 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 90 m in width is required throughout the commercial conifer plantation within Woodland Parcel 2128 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.103b: Parcel 2128 Proposed Felling Requirement**.

3.2 Access Track Route Design

- 3.2.1 Temporary access tracks will be created to the eastern boundary of the forest to access tower BN2-22, the remainder will be across agricultural ground out with the OC.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in January 2025. The OC between towers BN2-21 and BN2-22 crosses a plantation of mature Sitka spruce (SS), situated on a steep, north-facing slope. The site's challenging topography has contributed to windthrow damage along the southern section of the boundary, where exposed trees have been affected by strong winds, leading to instability within the stand. A small fringe of native broadleaves are situated along the road edge, the species present include Downy birch (DBI), willow (WL) and rowan (ROW).
- 4.1.2 To ensure the structural stability of the remaining forest, 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 The forest plantation holds an expired felling licence (FPA-10245). The site is to be clear felled before 2025 and restocked in 2027.
- 4.1.4 Windthrow is present within the site. However, the area is sheltered with a DAMS (Detailed Aspect Method of Scoring) of between 10³.
- 4.1.5 The Ecological Site Classification (ESC)⁴ identifies the site as having a cool, sheltered and moist climate. The soils have a slightly dry moisture status and very poor nutrient status.
- 4.1.6 The National Soil Map of Scotland⁵ indicates, the predominant soil type within the affected areas consists of humus iron podzols. The presence of these soils suggests that the area may experience challenges related to tree stability and growth, particularly in wetter conditions.

³ Forest Research (2025). 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.

⁴ Forest Research Decision Support Tools. Ecological Site Classification. Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁵ Scottish Government (2024). National soil map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

- 4.1.7 The site is categorised within the NatureScot Ancient Woodland Inventory⁶ as Long Established of Plantation Origin (LEPO). While the area has been historically managed as plantation, it retains structural and ecological characteristics indicative of long-term woodland cover.
- 4.1.8 The proposed section of OHL consists of a section of OC between towers BN2-21 and BN2-22. Proposed tracks in this section are within the OC and make use of existing infrastructure.
- 4.1.9 The current site access is limited, with no existing forest access routes available. To facilitate efficient timber haulage, the creation of new access tracks will be necessary. These tracks will provide a direct route for the extraction of timber, ensuring safe and efficient transportation from the site to external infrastructure. Timber will be extracted to the east, heading towards East Cruchie Farm, before connecting to the A97. This is classed as an Agreed Route by the Timber Transport Forum^{7,8}.
- 4.1.10 Considering the quality and quantity of available timber, along with the landform characteristics, forestry operations can largely be carried out using harvester and forwarder combinations.

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.

⁶NatureScot. A guide to understanding the Scottish Ancient Woodland Inventory (AWI). Available at: <https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi>

⁷The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: HYPERLINK "<https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>"<https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

⁸Agreed Routes 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 assumed to be Agreed Routes unless covered by one of the other TTG classifications (e.g. Consultation Route).

Photo 1: View from NJ 581932 431852 looking south along the A87 into the mature SS plantation, showing the fringe of NBL and steep ground conditions.



Photo 2: View from NJ 581822 431031 looking southeast, within the SS plantation. The image highlights the good quality crop of timber. The terrain is notably steep, with challenging ground conditions that may impact forestry operations.



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 **Section 12.4** of the Forestry Chapter. 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)⁹ for the implementation of the works required.

⁹ Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs>

- 5.1.2 Considering the condition, maturity, and the existing windthrow to the south of the plantation, there is a heightened risk of windthrow as a result of the felling of the OC.

6 Woodland Management Impact

- 6.1.1 The felling of the OC is expected to significantly impact the structural stability of the remaining forest, particularly along the newly created forest edges. The sudden removal of tree cover will expose adjacent stands to increased wind exposure, making them more vulnerable to windthrow and progressive edge destabilisation. As a result, extensive management felling has been identified as a necessary intervention to establish windfirm boundaries and mitigate the risk of uncontrolled tree loss.
- 6.1.2 The combination of OC felling and management felling represents a substantial shift in the overall forest management strategy within the affected areas. This transition will lead to a marked reduction in canopy cover, creating large clearfell areas that will alter both the landscape and ecosystem dynamic.
- 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 into currently poorly accessible areas. 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 which will avoid the incidences of Forest Industry Safety Accord¹⁰FISA 804 "Electricity at Work: Forestry").
- 6.1.5 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0 ha.

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. 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 block.

7.3 Restocking

- 7.3.1 In case the management felling of the OC takes place there will be a 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 BN2-21 and BN2-22. They detail 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.

¹⁰ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804>

Table 8.1: Woodland removal for Infrastructure, within OC

Item	Woodland Type	Area (ha)
Operational corridor felling	Mature Conifer Plantation (90m)	1.53
Total area		1.53

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Mature Conifer Plantation	1.53
Total area		1.53

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	1.53
Total Compensatory Planting Area	1.53
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 Plantation	3.7
Replanting / Restocking Opportunities	Conifer Plantation	3.7
Net Loss of Woodland Area		0.00

9 Compensatory Planting

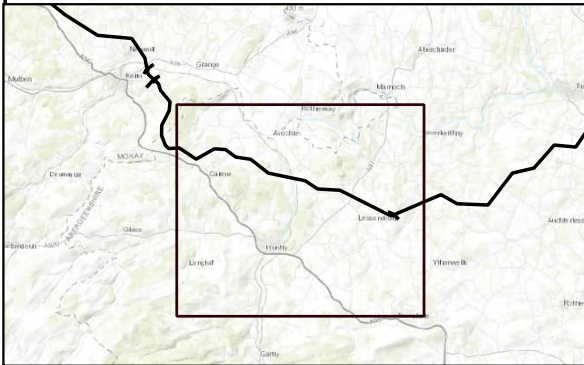
- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹¹. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically 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 licence 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 1.53 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 offsite compensatory planting within the same local authority area. It is proposed that full details of the areas subject to this offsite compensatory planting is notified to Scottish Forestry prior to energising the OHL.

¹¹ 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

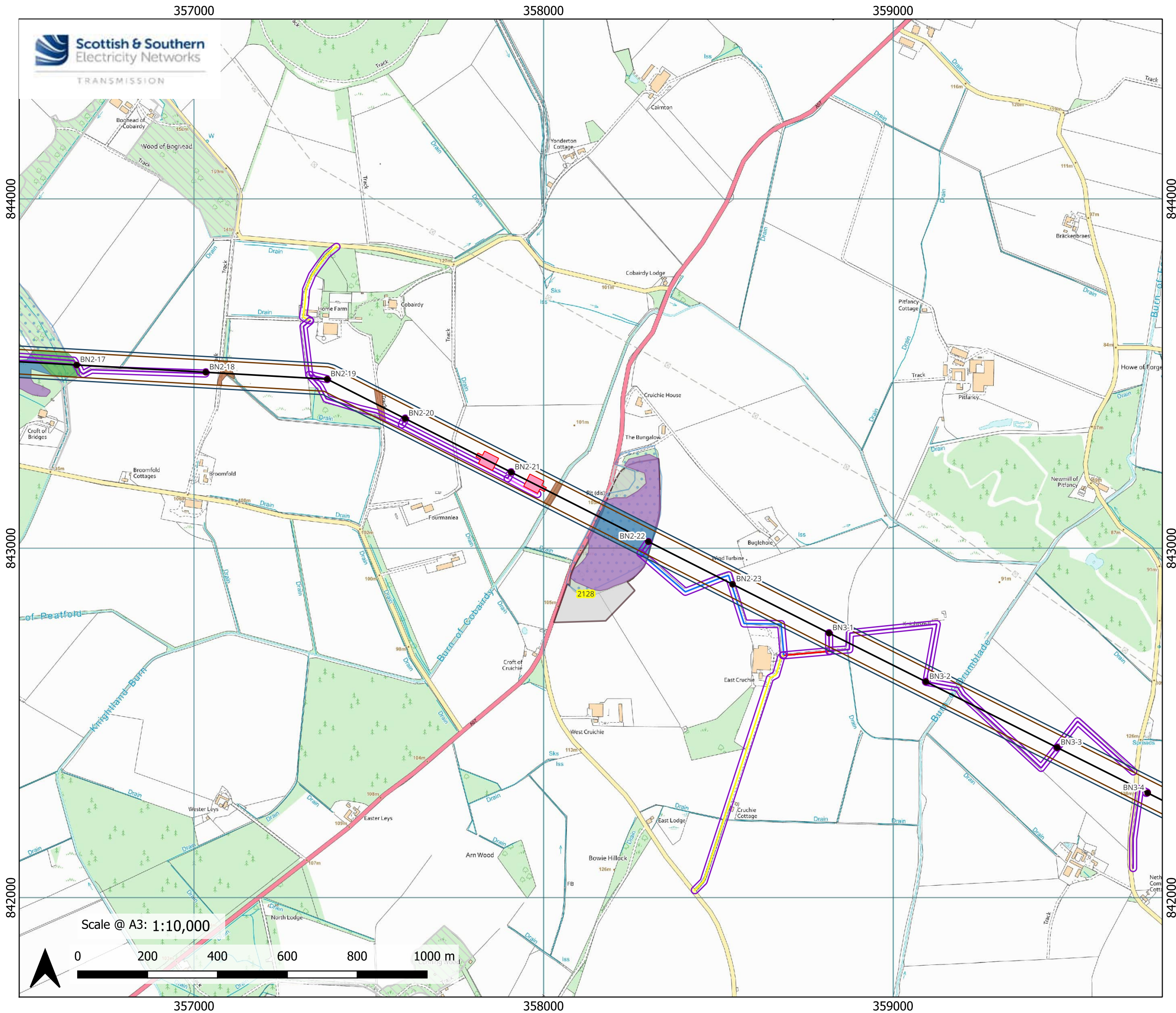


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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.103a Parcel 2128 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 – Temporary

Proposed Felling Requirements

- Broadleaved Woodland Operational Corridor Felling
- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management 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 12.1.103b** Parcel 2128 Proposed Felling Requirements

Drawn by: LA