

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

**Appendix 12.1.108: Woodland Report Parcel 2628,
Hill of Denmoss**



APPENDIX 12.1.108: Woodland Report Parcel 2628, Hill of Denmoss

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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 has been prepared to assess the potential impacts of the Proposed Development on Woodland, Parcel 2628, Hill of Denmoss. 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 12.1.108a: Parcel 2628 Location Map**. The Hill of Denmoss Woods, (NJ 648662 427313) are situated approximately 12 km northeast of Huntly in the Aberdeenshire council district. The woodland comprises a semi-mature plantation of commercial conifer species.

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 90 m in width is required throughout the commercial conifer plantation and 70m within the native broadleaved woodland within Woodland Parcel 2628 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.108b: Parcel 2628 Proposed Felling Requirements**.

3.2 Access Track Route Design

3.2.1 A permanent access track is proposed within the OC of the Proposed OHL Alignment.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in January 2025. The OC between towers BN4-15 through BN4-18 comprise a mosaic of semi-mature conifer plantations and recently established native broadleaves. The stands are generally unthinned and display variable structure, form, and site conditions.
- 4.1.2 BN4-15 to BN4-16 consists of a semi-mature Norway spruce (NS), Sitka spruce (SS), and Larch (L) plantation, with canopy heights ranging from 10 to 15 metres. The crop is unthinned.
- 4.1.3 At the junction with the BN4-16 tower, a small stand of semi-mature Scots pine (SP) is present. Trees are 6 to 8 metres in height, unthinned, and show poor form with localised windblow.
- 4.1.4 BN4-17 comprises a young plantation of tubed native broadleaves including Sessile oak (SOK), Rowan (ROW), Downy birch (DBI), and Aspen (ASP). The trees are establishing well, ranging from 6 to 9 metres in height.
- 4.1.5 BN4-18 is a semi-mature plantation of SS, SP and L, with trees between 8 and 10 metres tall. The site is unthinned and suffers from poor form due to wet ground conditions.
- 4.1.6 The Detailed Aspect Method of Scoring (DAMS) () is showing a maximum of 16³, indicating moderately exposed wind exposure.

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.

- 4.1.7 The Ecological Site Classification identifies the site as having a cool, moderately exposed and moist climate. The soils have a slightly dry moisture status and a very poor nutrient status⁴.
- 4.1.8 The National Soil Map of Scotland⁵ indicates the predominant soil type within the affected areas consists of humus iron podzols.
- 4.1.9 The woodlands do not appear in the Scottish Ancient Woodland Inventory⁶.
- 4.1.10 The proposed section of OHL consists of a section of OC between towers BN4-15 and BN4-18.
- 4.1.11 The closest public road suitable for access within the ownership is B9001 to the west, this is classed as a Consultation Route by the Timber Transport Forum⁷. Access to the site will need to be taken along the existing farm roads from the B9001. Considering the quality and quantity of the material operations can be carried out by a combination of harvester and hand felling.

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.

⁴ Ecological Site Classification. Available at: <http://www.forestdss.org.uk/geoforestdss/>

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

⁶ The Scottish Ancient Woodland Inventory. Available at: <https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi>

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

The Agreed Routes Maps identify the following categories of roads:

- **Consultation Routes**

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).

Photo 1: View from NJ 650891 425952, looking north into the semi-mature SS plantation.



Photo 2: View from NJ 641432 431121 at tower BN4-16, showing poor quality stand of SP.



Photo 3: View from NJ 652981 425572 towards tower BN4-17, showing planted native broadleaves.



Photo 4: View from NJ 656291 425662, toward tower BN4-18, showing stand of windblown unstable SS and L. Significant amount of gorse and broom scrub in understorey.



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). This is covered in more detail in the Forestry Chapter in Section 12.4. 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 Taking into account the relatively young age of the crop and the current lack of full canopy closure, it is assessed that there is minimal risk of windblow associated with the proposed felling of trees within the OC. The tree species present, combined with their developmental stage and spacing, do not currently form a continuous, interdependent canopy structure that would typically be vulnerable to windthrow when adjacent trees are removed.

6 Woodland Management Impact

- 6.1.1 In the long-term the OC will reduce the management unit leaving small forest blocks to the south of the OC. These will not be of commercial interest considering their size, location and constraints. This will have a negative impact on productivity of the land in this ownership.

⁸ Scottish Forestry (2024). Available online at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs> (accessed 01/05/2025)

- 6.1.2 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).
- 6.1.3 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 FISA 804 “Electricity at Work: Forestry”⁹).
- 6.1.4 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.71 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 As the proposed operations will remove a large part of the semi-mature trees within the ownership, the woodland structure will be negatively impacted.
- 7.2.2 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. In the long term this might benefit forest structure.

7.3 Restocking

- 7.3.1 There are no restocking obligations on the woodland.

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 BN4-15 and BN4-18. They detail the areas designated for clear felling, within the OC and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC.

Item	Area (ha)	Area (ha)
Operational corridor felling	Native Broadleaved Woodland (70m)	0.71
Operational corridor felling	Conifer Woodland (90m)	4.30
Total Net Loss of Woodland Area	0.00	5.01

⁹ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804b>

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland	0.71
Compensatory Planting Area	Conifer Woodland	4.30
Total area		5.01

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	5.01
Total Compensatory Planting Area	5.01
Total Net Loss of Woodland Area	0.00

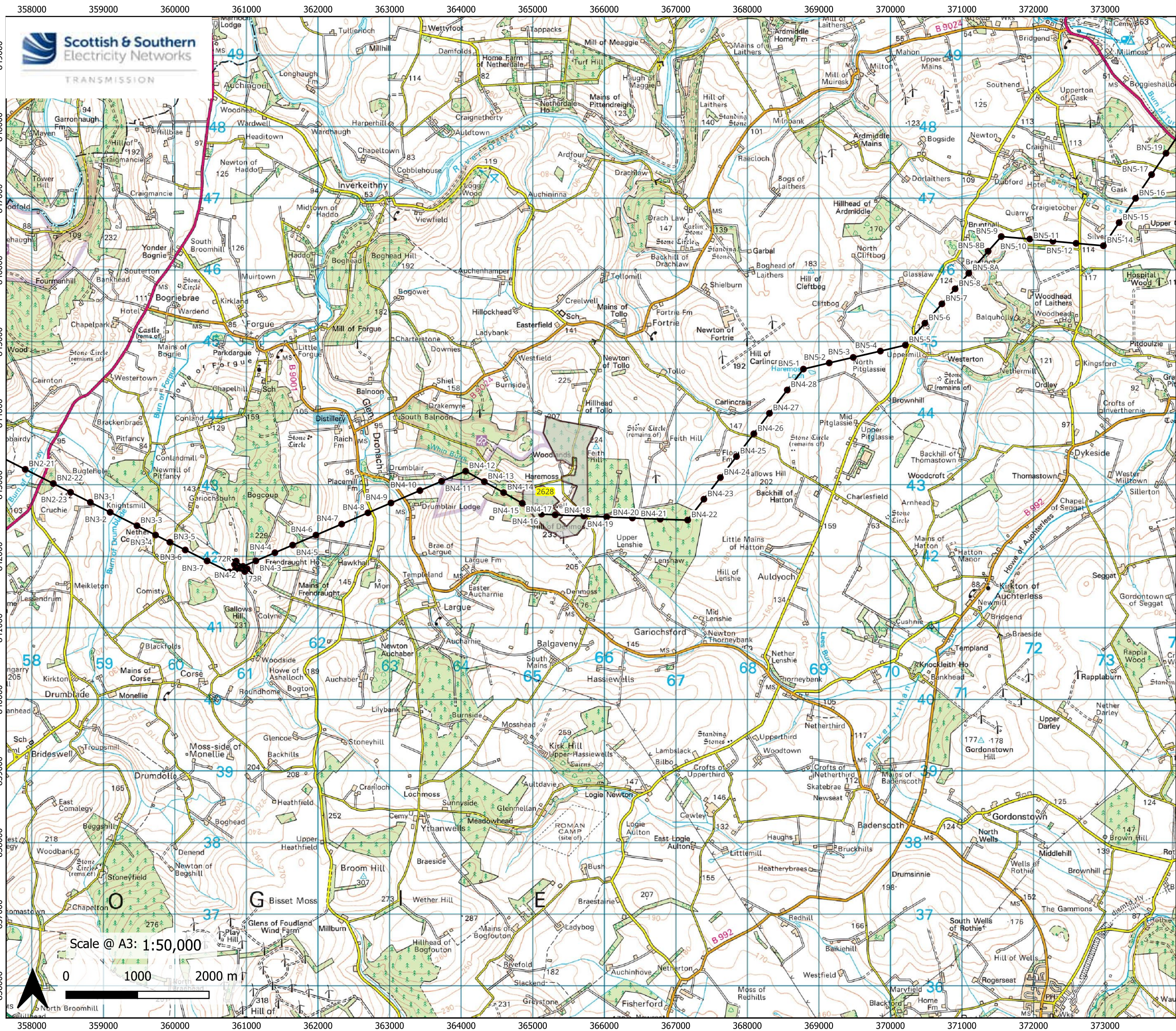
Table 8.4: Woodland removal for Management Felling, outwith OC.

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)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 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 5.01 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.

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>



Legend

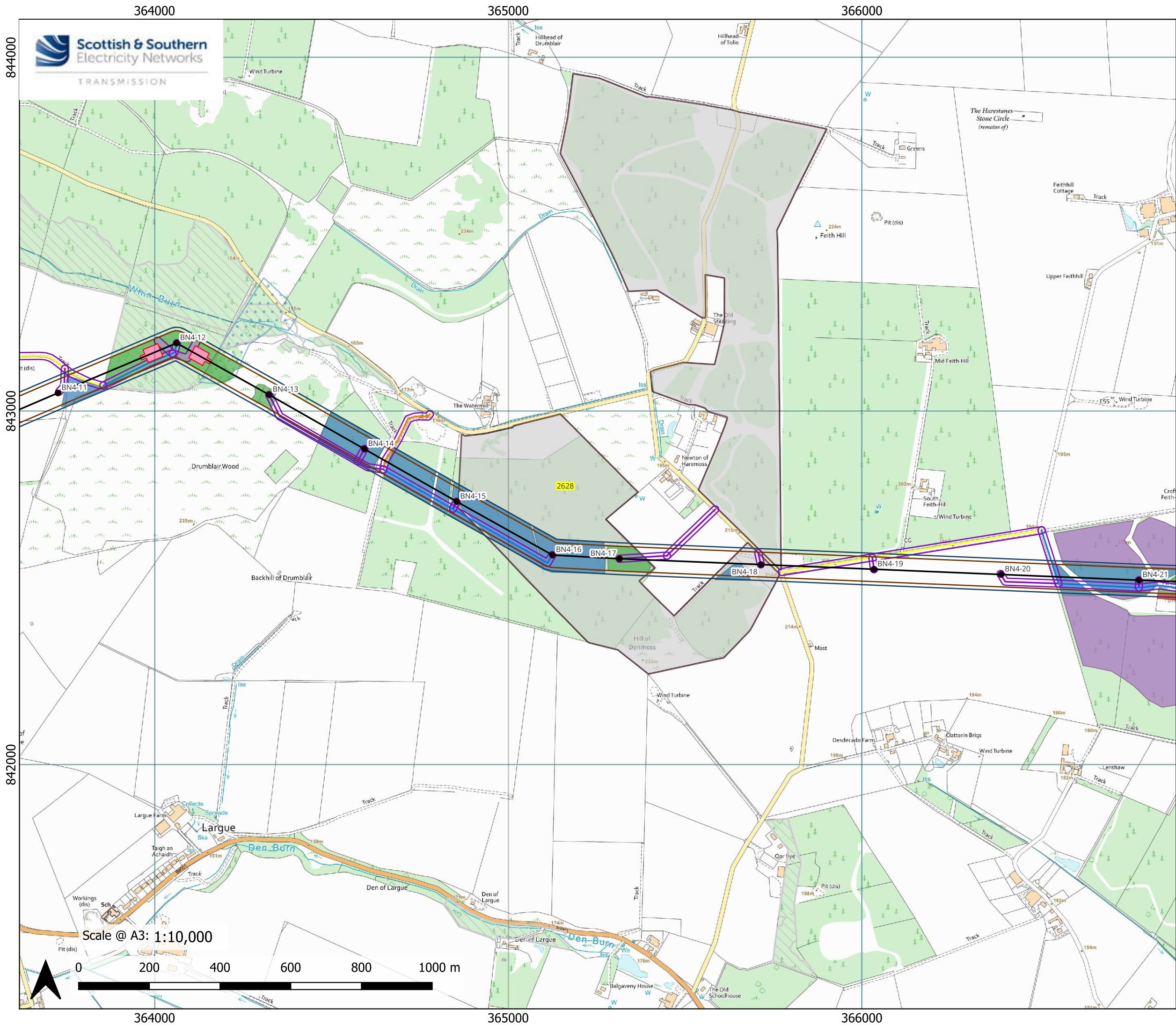
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- Landownership Boundary/Parcel

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

Title:
Figure 12.1.108a Parcel 2628 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

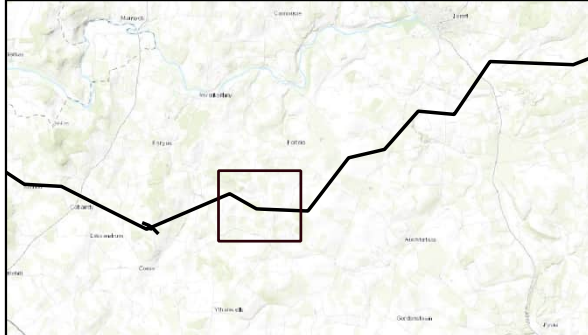
- Existing Access - Upgrade - Good/Fair Condition
- Existing Access - Upgrade - Poor Condition
- Proposed Access - ATV or Temporary Trackway
- Proposed Access - Permanent
- Proposed Access - Temporary

Proposed Felling Requirements

- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management Felling
- Native Woodland 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 12.1.108b** Parcel 2628 Proposed Felling Requirements

Drawn by: LA