

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

**Appendix 12.1.113: Woodland Report Parcel 2562,
Wood of Darra**



APPENDIX 12.1.113: Woodland Report Parcel 2562, Wood of Darra

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
4.1	Woodland Composition and Site Conditions	3
4.2	Photo Record – Operational Corridor Assessment.....	4
5	Windblow Risk.....	8
6	Woodland Management Impact	8
7	Mitigation Opportunities.....	8
7.1	Woodland Mitigation Measures.....	8
7.2	Restructuring.....	8
7.3	Restocking	9
8	Net Effect/Summary	9
9	Compensatory Planting	10

Appendix Figures

Figure 12.1.113a: Parcel 2562 Location Map

Figure 12.1.113b: Parcel 2562 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 assesses the potential impacts of the Proposed Development on the woodland, Parcel 2562, Wood of Darra. 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 in order 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 12.1.113a: Parcel 2562 Location Map**. The woodland is situated on the south side of the A947, 2.5 km south of Turriff within the Aberdeenshire council region (NJ 739711 478144).
- 2.1.2 The Wood of Darra consists largely of non-native commercial conifer species which have sustained significant windblow. It furthermore contains a mature beech edge on its southern side and a strip of younger broadleaves on the boundary with the A947.

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 and 90m width throughout the commercial conifer species within Woodland Parcel 2562, taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.113a: Parcel 2562 Location Map**.

3.2 Access Track Route Design

- 3.2.1 The proposed access tracks in this section are located out with the OC; temporary tracks will be created across agricultural ground to facilitate access.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 Woodland parcel 2562 was surveyed in November 2024. The forest consists largely of commercial Sitka Spruce (SS) plantation with elements of Downy Birch (DBI) which has sustained significant wind damage, likely during the storms in 2021. On the northeastern edge, bordering on the trunk road, mixed broadleaves are found on the slope between the conifer plantation and the lower laying trunk road. A variety of species is found within this section including Sessile Oak (SOK), Wild Cherry (WCH) and DBI on the southern edge, south of the existing track, the property contains a strip of mature Beech (BE).
- 4.1.2 The forest plantation sits within a landscape characterised by farmed and wooded river valleys. The surrounding land use is agricultural. The conifer plantation and beech shelterbelt both sit on a plateau which ties into the agriculture south and west. The broadleaves in the northeast are found on a reasonably steep slope leading down the A947 and the Burn of Turriff.
- 4.1.3 The woodland is moderately exposed with a maximum Detailed Aspect Method of Scoring (DAMS) score of 13³. The northeastern face, which drops down towards the A947 is more sheltered than the forest on top of the plateau.

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.

- 4.1.4 The National Soil Map of Scotland⁴ indicates the dominant soil types within the site are humus-iron podsol soils.
- 4.1.5 The Ecological Site Classification (ESC)⁵ identifies the site as having a cool, moderately exposed and moist climate. The soils have a slightly dry moisture status and very poor nutrient status.
- 4.1.6 The Wood of Darra is as Long-Established Plantation Origin in the Ancient Woodland Inventory (AWI)⁶.
- 4.1.7 The woodlands are recorded in the Native Woodland Survey of Scotland⁷ as mature upland birchwood and Nearly native woodland.
- 4.1.8 No environmental designations apply to the parcel.
- 4.1.9 The proposed section of OHL consists of a section of OC between towers BN5-17 and BN5-20.
- 4.1.10 The proposed track within this section makes use of existing infrastructure on the southern side of the Wood of Darra.
- 4.1.11 Operations would be best carried out using harvester/forwarder combinations. The existing infrastructure on the southern edge of the block can be used however slight upgrades will be required to facilitate timber haulage. An element of hand felling will be required for the beech trees and potentially some of the broadleaves on the slope on the northeastern edge. Liaison with the Trunk Road Authority will be required to facilitate the operations.
- 4.1.12 The closest forest road suitable for haulage within the ownership is the unclassified road to the southwest that leads to the A947. This is classed as an Agreed Route by the Timber Transport Forum^{8,9}.

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

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

⁶ NatureScot. Available at: <https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi>

⁷ Scottish Forestry (2014). Available online at: <https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss>. Accessed (01/05/2025)

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 1: From left to right, productive SS crop, existing infrastructure and beech shelterbelt. (NJ 737632 476081, looking east)



Photo 2: Windblown SS (NJ 739791 477582, looking west)



Photo 3: Mixed broadleaves along A947 (NJ 740711 477372, looking northwest)



Photo 4: SS plantation with wind damage and pockets of DBI (NJ 736822 476219, looking northeast)



Photo 5: Standing SS plantation on eastern end of the woodland (NJ 740811 476602, looking north)



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)¹⁰ for the implementation of the works required.
- 5.1.2 Considering the existing wind damage in the conifer crop along with the unthinned nature, exposure and current height, there is a high risk that the felling in the OC would lead to further windblow in the spruce. The beech shelterbelt to the south appears extremely stable due to its historic exposure and wind blow risk as a result of felling in the OC is low. The broadleaves along the A947 are more sheltered, shorter and more open grown than the spruce plantation above it and therefore windblow risk as a result of the felling of the OC is also low in this area.

6 Woodland Management Impact

- 6.1.1 The proposed operations are likely to have a low impact on forest management in the short term. The most commercially interesting element of the woodland has sustained wind damage and therefore it is likely that removal sooner rather than later is the most economically viable option.
- 6.1.2 In the long term the proposed operations will negatively impact the forest management as the OC splits the small forest area into two smaller management units. The size of these management units likely decreases profitability of the woodland block.
- 6.1.3 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future access to the trees. The OC will furthermore provide green edges to work to in the future which will help with restructuring of the forest. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner.
- 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 ¹¹FISA 804 "Electricity at Work: Forestry").
- 6.1.5 The total loss of native and non-native broadleaved woodland resulting from the proposed alignment is 0.51 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 No opportunities for mitigation were found in this parcel.

7.2 Restructuring

- 7.2.1 The felling consists of the majority of the Wood of Darra and as such the operations will have a negative impact on forest structure. However, considering the extent of wind damage in the spruce and birch crop, it is likely that the size of felling would have been similar if no operations relating to the Proposed OHL Alignment were taking place.

¹⁰ Scottish Forestry (2024). Available online at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs> (accessed 01/05/2025)

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

- 7.2.2 The felling of the OC for the development will create new green edges to which the landowner can work to in the future. For this property this is unlikely to benefit the landowner.

7.3 Restocking

- 7.3.1 If management felling takes place there will be an obligation on the landowner to restock any felled ground out with the OC.

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 BN5-17 and BN5-20 within this parcel. 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.

Table 8.1: Woodland removal for Infrastructure, within OC.

Item	Woodland Type	Area (ha)
Operational corridor felling	Native Broadleaves (70m)	0.29
Operational corridor felling	Broadleaved Woodland (70m)	0.22
Operational corridor felling	Mixed Conifer (90m)	1.79
Total area		2.31

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaves	0.29
Compensatory Planting Area	Broadleaved Woodland	0.22
Compensatory Planting Area	Mixed Conifer	1.79
Total area		2.31

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	2.31
Total Compensatory Planting Area	2.31
Total Net Loss of Woodland Area	0.0

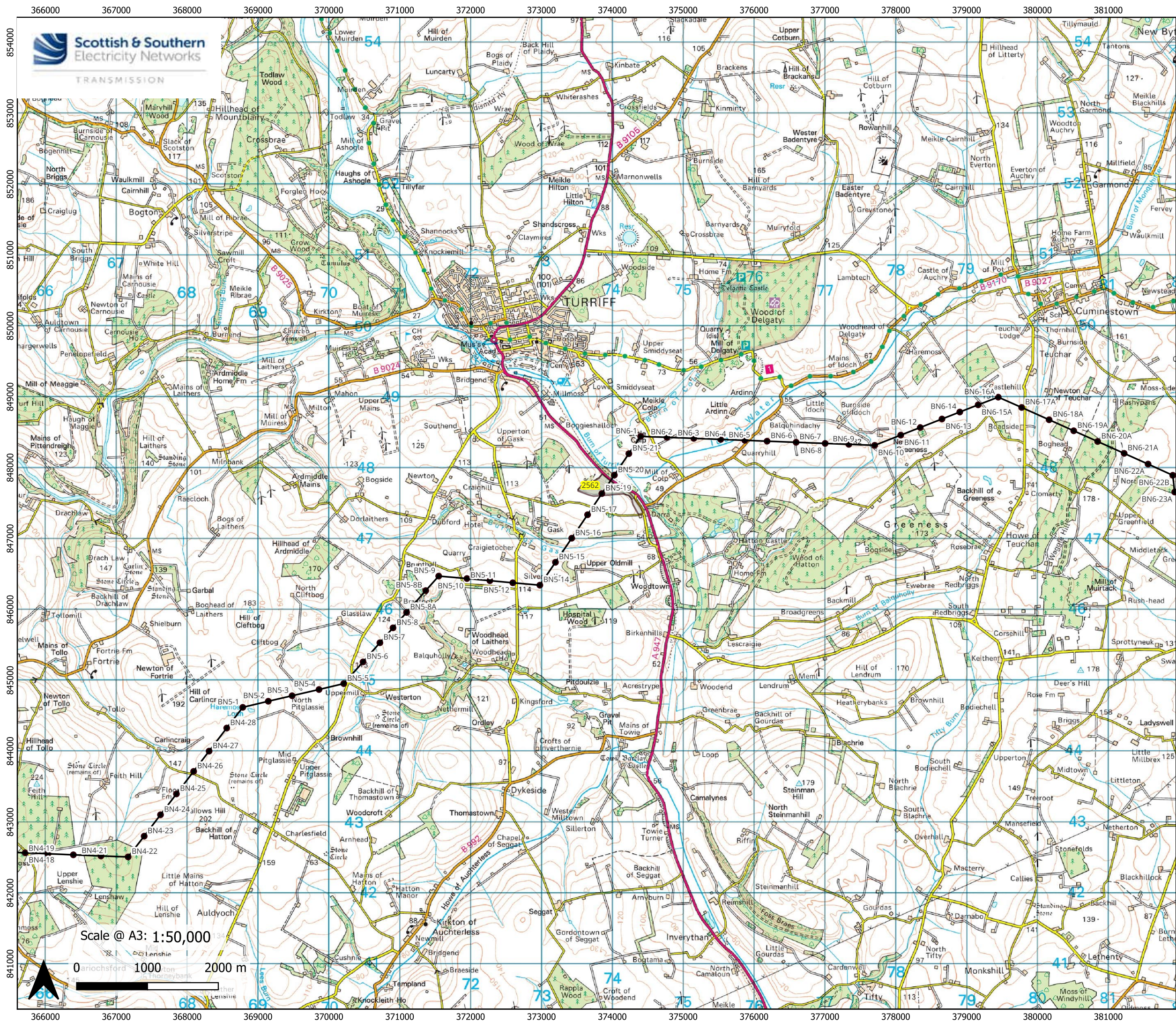
Table 8.4: Woodland removal for Management Felling, outwith OC.

Item	Woodland Type	Area (ha)
Management Felling	Mixed Conifer	5.51
Replanting/Restocking Opportunities	Mixed Conifer	5.51
Net Loss of Woodland Area		0.0

9 Compensatory Planting

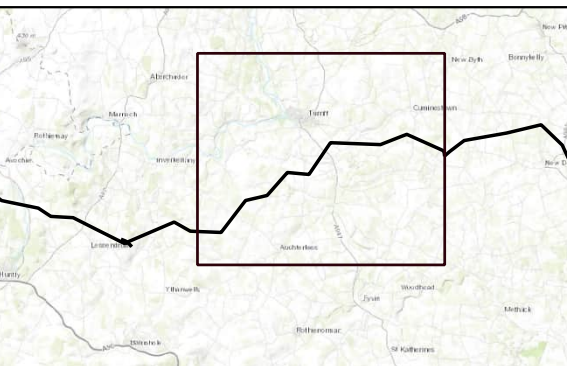
- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹². This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically 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 2.31 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.

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

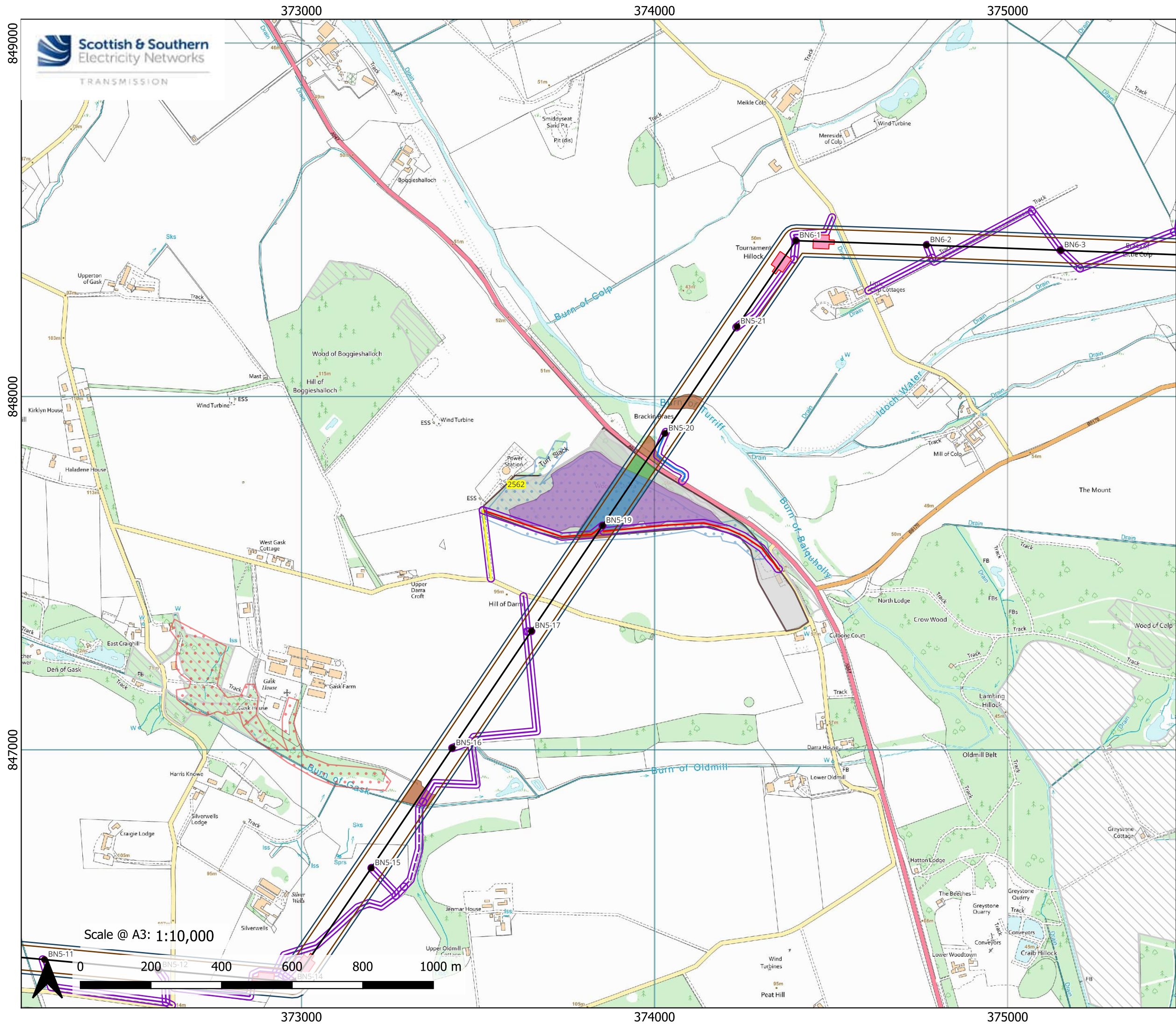


Reproduced by permission of Ordnance Survey on behalf of HMSO.
Crown copyright and database right 2025 all rights reserved.
Ordnance Survey Licence number 010002432.
SSEN Transmission take no responsibility for the release or accuracy of latest
version Basemaps from Ordnance Survey

Project:
Beaulieu to Blackhilllock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.113a Parcel 2562 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

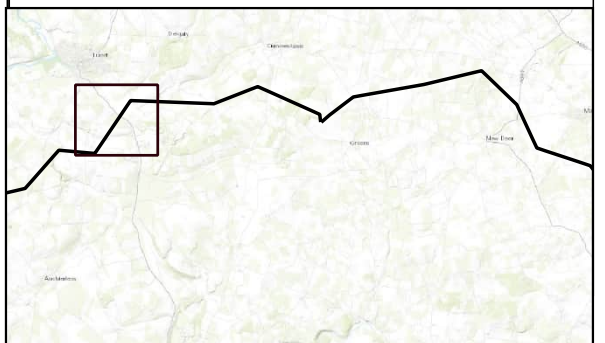
- Existing Access - Upgrade - Good/Fair Condition
- Existing Access - Upgrade - Very Poor Condition
- Proposed Access - ATV or Temporary Trackway
- Proposed Access - Permanent
- Proposed Access - Temporary
- Proposed Access - Temporary Floated

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

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



Reproduced by permission of Ordnance Survey on behalf of HMSO.
Crown copyright and database right 2025 all rights reserved.
Ordnance Survey Licence number 0100022432.
SSEN Transmission take no responsibility for the release or accuracy of latest version Basemaps from Ordnance Survey

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

Title: **Figure 12.1.113b** Parcel 2562 Proposed
Felling Requirements

Drawn by: LA