

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

**Appendix 12.1.7 – Woodland Report Parcel 13024,
Lovat**



APPENDIX 12.1.7– Woodland Report Parcel 13024, Lovat

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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 effects of the Proposed Development on Parcel 13024, Lovat Estates. 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 hectare (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 12.1.7a: Parcel 13024 Location Map**. The woodland parcel is situated approximately 1.7 km southwest of Beauly and 2.7 km north of Kiltarlity, within the Highland Council region (NH 511651 442882). The woodland landscape is characterised by a mix of mature and semi-mature tree stands, interspersed with remnants of historical field boundaries that contribute to the estate's cultural and environmental heritage. The woodlands include long-established plantation origins (LEPO)¹, as recorded within Nature Scots Ancient Woodland Inventory.

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) 2002² and The Electricity Act 1989³. 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

¹ NatureScot (2023). A guide to understanding the Scottish Ancient Woodland Inventory (AWI). Available at: <https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi>

² UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: [The Electricity Safety, Quality and Continuity Regulations 2002](#)

³ UK Gov (1989). Electricity Act 1989. Available at: [Electricity Act 1989](#)

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; and

- 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 within Woodland Parcel 13024 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.7.1b: Parcel 13024 Proposed Felling Requirements**.

3.2 Access Track Route Design

- 3.2.1 Temporary access tracks will be created through the woodland areas to tower BC2-4A.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in February 2025. The Proposed OHL Alignment and access tracks cut through sections of mature and semi mature broadleaved woodland. The woodland consists of Downy birch (DBI), Sessile oak (SOK), and some semi mature Scots pine (SP). These are designated within Nature Scots Ancient Woodland Inventory as LEPO.
- 4.1.2 The area is sheltered with a maximum Detailed Aspect Method of Scoring (DAMS) score of 9^{4,5}.
- 4.1.3 The National Soil Map of Scotland⁶ indicates the dominant soil type within the site are mineral alluvial soils as often found in river valleys and floodplains.
- 4.1.4 The Ecological Site Classification (ESC)⁷ identifies the site as having a warm, sheltered, and moist climate. The soils have a very moist moisture status and medium nutrient status.
- 4.1.5 The woodlands appear in the Native Woodland Survey of Scotland⁸.

⁴ Forest Research (n.d.). 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.

⁶ Scotland's Soils (n.d.). National Soil Map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

⁷ Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁸ Scottish Forestry (n.d.). Native Woodland Survey of Scotland. Available at: <https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss>

- 4.1.6 The proposed section of Proposed OHL Alignment consists of a section of OC between towers BC2-4A and BC2-5A. Temporary access tracks will be created through the mature woodland.
- 4.1.7 The closest public road suitable for haulage of timber within the ownership is the U1604, Kiltarlity Road, and the A831. The U1604 is classified as a Consultation Route⁹ by the Timber Transport Forum¹⁰. The existing internal forest and wider estate infrastructure can be utilised for access and extraction purposes. Considering the quality and quantity of the material and the landform operations can be carried out by harvester / forwarder combinations.

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 NH 511481 442912 looking west into the well-established birch and oak woodland. Significant specimens of sessile oak throughout the woodland.



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

Photo 2: View at NH 511941 443032 looking northeast along the estate road. Historical roadside planting of Sessile oak.



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 **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 outwith 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)¹¹ for the implementation of the works required.
- 5.1.2 There is minimal risk of windblow as a result of the proposed felling, as indicated by the DAMS score and the topography of the site.

¹¹ Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs> (Accessed 15 August 2025).

6 Woodland Management Impact

- 6.1.1 While tree felling within the OC will result in a slight reduction in the total area of woodland, this loss is marginal and should not significantly affect overall forest management, or access at a larger scale.
- 6.1.2 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 (Forest Industry Safety Accord, FISA 804 "Electricity at Work: Forestry"¹²).
- 6.1.3 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 1.18 ha.

7 Mitigation Opportunities

7.1 Protection of Mature Trees

- 7.1.1 The trees within the LEPO woodland (see **Figure 12.1.7b: Parcel 13024 Proposed Felling Requirements**) represent important mature specimens with developing veteran characteristics, ecological value, and landscape significance. 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 root protection area, RPA¹³) around notable trees to protect roots and soil structure; and
 - avoiding soil compaction through the use of temporary track matting during construction.
- 7.1.2 If trees must be felled, compensatory planting should include native species of local provenance, (e.g., SOK / DBI).

7.2 Restructuring

- 7.2.1 The section of forest within this parcel is single aged and will likely be felled all at once. Therefore, there is no positive or negative impact of the felling on the structure within the ownership.
- 7.2.2 The felling of the OC for the Proposed Development will create a new green edge, allowing the landowner to carry out future clear fell more safely in proximity to the Proposed OHL Alignment.

7.3 Restocking

- 7.3.1 It is anticipated that native broadleaved regeneration is likely to occur within the OC between towers BC2-4A and BC2-5A, 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 BC2-4A and BC2-5A. They detail the areas designated for clear felling, within the OC and forest design considerations.

¹² Forest Industry Safety Accord (2025). FISA Safety Guide 804 – Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804> (Accessed: 15 August 2025).

¹³ British Standards Institute (2012). British Standard BS5837 Trees in relation to design, demolition, and construction. Available at: <https://landingpage.bsigroup.com/LandingPage/Undated?UPI=000000000000258384>

Table 8.1: Woodland removal for Infrastructure, within OC.

Item	Woodland Type	Area (ha)
OC felling	Native Broadleaved Woodland (70 m)	1.04
Access Track Felling	Native Broadleaved Woodland	0.14
Total area		1.18

Table 8.2: Compensatory Planting

	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland	1.18
Total area		1.18

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	1.18
Total Compensatory Planting Area	1.18
Total Net Loss of Woodland Area	0.00

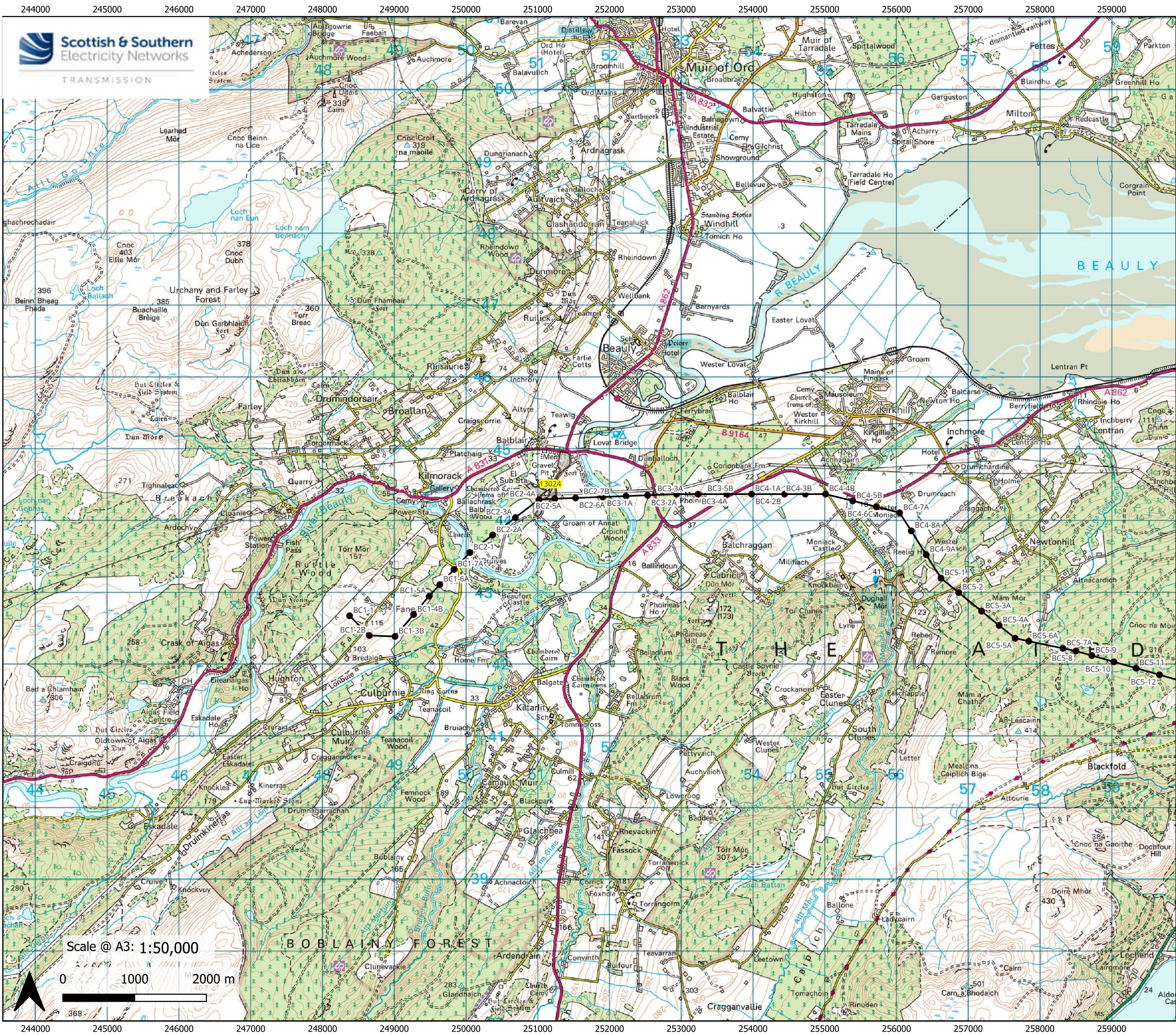
Table 8.4: Woodland removal for Management Felling, outwith OC.

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)¹⁴. 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 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 1.18 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.

¹⁴ 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

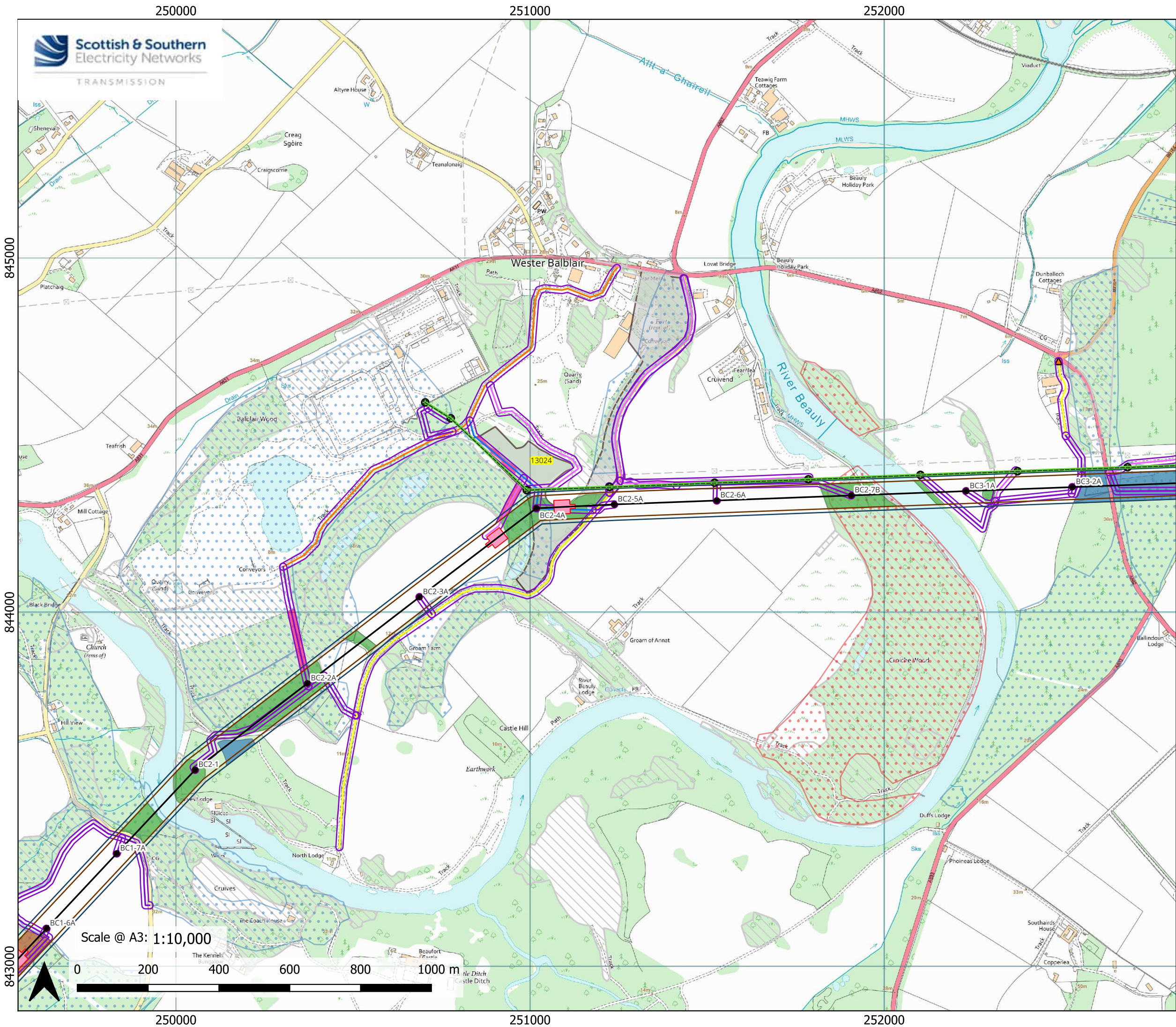
- Proposed Tower - 400 kv
- Proposed OHL Alignment - 400 kv
- ▭ Landownership Boundary/Parcel

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

Title:
Figure 12.1.7a Parcel 13024 Location Map

Drawn by: LA



Legend

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

Proposed Bellmouth

- Proposed Bellmouth - Upgrade

Proposed Access Tracks

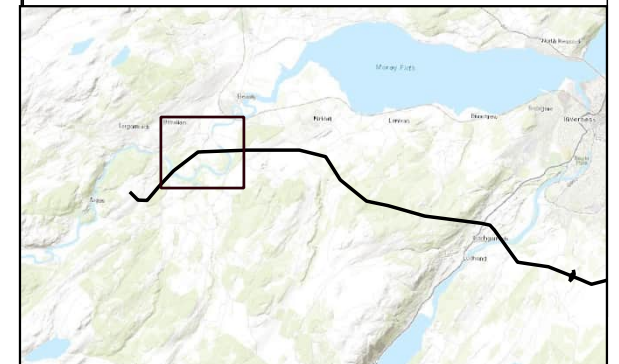
- Existing Access - Upgrade - Good/Fair Condition
- Existing Access - Upgrade - Poor Condition
- Proposed Access - ATV or Temporary Trackway
- Proposed Access - Permanent
- Proposed Access - Temporary

Proposed Felling Requirements

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

Ancient Woodland Inventory

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



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

Title: **Figure 12.1.7b** Parcel 13024 Proposed
Felling Requirements

Drawn by: LA