

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

**Appendix 12.1.30: Woodland Report Parcel 216,
Leys**



APPENDIX 12.1.30: Woodland Report Parcel 216, Leys

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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 216, Leys Estate. 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 12.1.30a: Parcel 216 Location Map**. The woodland parcel is situated approximately 1.86 km south of Inverness, within the Highland Council region (NH 663061 391822). The landholding includes a mix of woodland areas, pastoral farmlands, and open moorlands. These woodlands include shelter belts identified as long-established plantation origins (LEPO)¹, mixed woodlands planted in the 1990s under the Woodland Grant Scheme, policy woodlands, and areas of native woodland associated with the watercourse, Big Burn.

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. 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.

- 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 90 m within the commercial woodlands within Woodland Parcel 216 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.30b: Parcel 216 Proposed Felling Requirement**.

3.2 Access Track Route Design

3.2.1 A temporary access track will be created between CB1-12 and CB2-1 within the OC. A permanent access track will be created between CB2-1 and the parcel boundary between CB2-9 and CB2-10. A temporary bellmouth will be created off the B861 road for access southwest, and a permanent bellmouth will be created off the B861 for access northeast, all within the OC.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

4.1.1 The woodland was surveyed in January 2025. The Proposed OHL Alignment cuts through an area of predominantly native woodland on the steep eastern bank of the Big Burn between gantry 401A and tower CB1-12. The mixed woodland consists of Downy Birch (DBI), Sessile Oak (SOK), Hazel (HAZ), Rowan (ROW), Eared Willow, (EW) and Juniper (JUN). Within this native woodland are a number of individual, mature European Larch (EL). The woodland lies adjacent to a woodland within the NatureScot Ancient Woodland Inventory (AWI) as Ancient of semi-natural origin. Several of the trees present (shown in **Figure 12.1.30b: Parcel 216 Proposed Felling Requirement**) exhibit Notable Tree characteristics⁴ including:

- larger than average for its species in the local context, these trees may be approaching veteran status;
- displays early-stage veteran features such as deadwood, cavities, or a hollowing trunk, but not extensively;
- highly visible in the local area, contributing to woodland structure, hedgerows, or historical features;
- biodiversity value, including habitat provision for insects, bats, and fungi; and

⁴ Woodland Trust (2008). What are ancient, veteran and other trees of special interest. Available at: <https://www.woodlandtrust.org.uk/media/1836/what-are-ancient-trees.pdf>

- the woodland is associated with historic field boundaries, estate plantings, or traditional coppicing / pollarding.

- 4.1.2 The woodland slopes steeply down to the Big Burn, making this section a sensitive area for both ecological and logistical reasons.
- 4.1.3 Between towers CB1-12 and CB2-1, the OC cuts through an area of mature Scots pine (SP) shelter belt. This woodland is classed as LEPO, reflecting its historical use as a plantation site, primarily for stock shelter.
- 4.1.4 Between towers CB2-5A and CB2-6A is a small stand of thicket stage DBI regeneration with three thick stage Sitka spruce (SS).
- 4.1.5 All woodlands are subject to agriculture grazing.
- 4.1.6 The area is moderately exposed with a maximum Detailed Aspect Method of Scoring score (DAMS) of 15^{5,6}.
- 4.1.7 The National Soil Map of Scotland⁷ indicates the dominant soil type within the site are humus -iron podzols.
- 4.1.8 The Ecological Site Classification (ESC)⁸ identifies the site as having a cool, moderately exposed and wet climate. The soils have a moist moisture status and poor nutrient status.
- 4.1.9 The woodlands appear in the Native Woodland Survey of Scotland⁹.
- 4.1.10 The closest public road suitable for haulage of timber within the ownership is the B861, Inverness-Leys-Inverarnie road. The B861 heading south is classified as a Consultation Route by the Timber Transport Forum^{10,11}. However, the Big Burn presents a significant constraint to forest management and access between Gantry 401A Tower CB1-12, due to the steep gradient of the terrain and potential risks to water quality. Given the steep slope in this section, timber extraction may require the use of a winch system to transport material to the nearest access point. While this method can reduce the environmental footprint, it introduces a risk of pollution from accidental spills or runoff into the river. As such, all timber extraction activities must be carefully planned to include appropriate mitigation measures, such as spill response protocols and erosion control. In contrast, for the section between CB1-12 and CB2-1, timber extraction can be conducted more efficiently using harvester-forwarder combinations, given the more manageable terrain and accessibility.

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.

⁵ Forest Research (2025). Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁶ 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.

⁷ Scottish Government (2024). National soil map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

⁸ Forest Research Decision Support Tools. Ecological Site Classification. Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁹ 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>

¹⁰ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

¹¹ 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 at NH 669831 393142 looking northeast, showing mature Downy birch and Downy birch regeneration.



Photo 2: View at NH 659781 393310 looking south. Showing predominantly upland birch woodland with deadwood features and individual non-native specimens.



Photo 3: View at NH 669719 393009 looking southeast. Showing small stand of upland birchwood with Juniper and Gorse in the shrub layer.



Photo 4: View at NH 659480 393054 looking northwest. Showing mature Scots pine shelterbelt woodland between towers CB1-12A and CB2-1.



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 **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)¹² for the implementation of the works required.
- 5.1.2 There is significant risk of windblow as a result of the proposed felling at the SP shelterbelt, as indicated by the DAMS score and the age and condition of the woodland.

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.

¹² Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs>

- 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”¹³).
- 6.1.3 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.59 ha.

7 Mitigation Opportunities

7.1 Protection of Notable Trees

- 7.1.1 The notable trees within the native woodland (see **Figure 12.1.30b: Parcel 216 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, RPA¹⁴) 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 notable 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 conifer woodland 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 gantry 401A and tower CB1-12 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 gantry 401A and CB2-6A. 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)
OC felling	Native Broadleaved Woodland (70 m)	0.59
OC felling	Mature Conifer Woodland (90 m)	1.26
Total area		1.85

¹³ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804>

¹⁴ British Standard BS5837 Trees in relation to design, demolition, and construction. (2012). Available at: [BS 5837 - Trees in relation to design, demolition and construction. Recommendations](#)

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland	0.59
Compensatory Planting Area	Mature Conifer Woodland	1.26
Total area		1.85

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	1.85
Total Compensatory Planting Area	1.85
Total Net Loss of Woodland Area	0.00

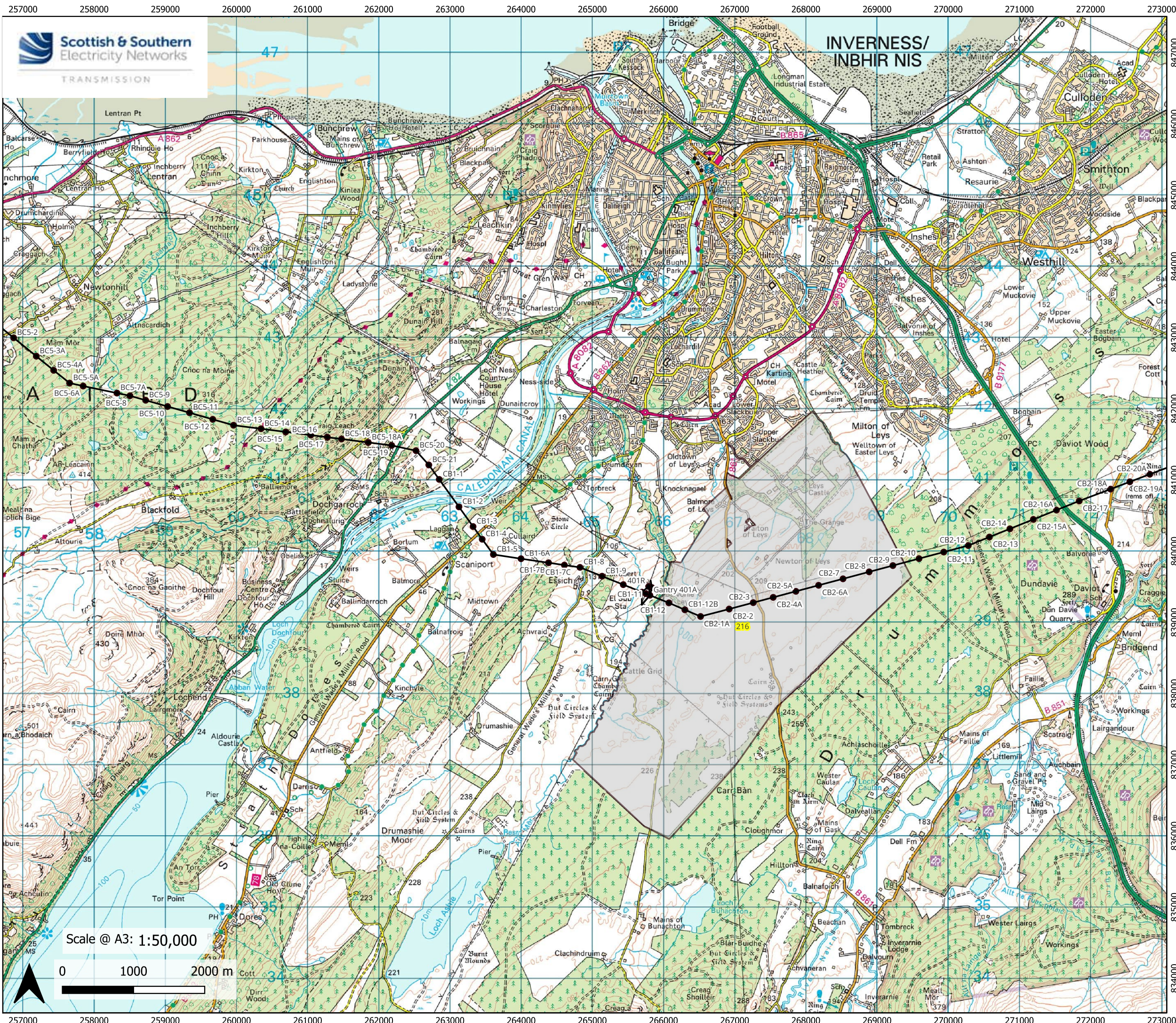
Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling	Conifer Woodland	0.50
Replanting / Restocking Opportunities	Conifer Woodland	0.50
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)¹⁵. 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 1.85 ha.
- 9.1.4 In order to provide greater balance, limiting long-term impacts on woodland 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.

¹⁵ 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

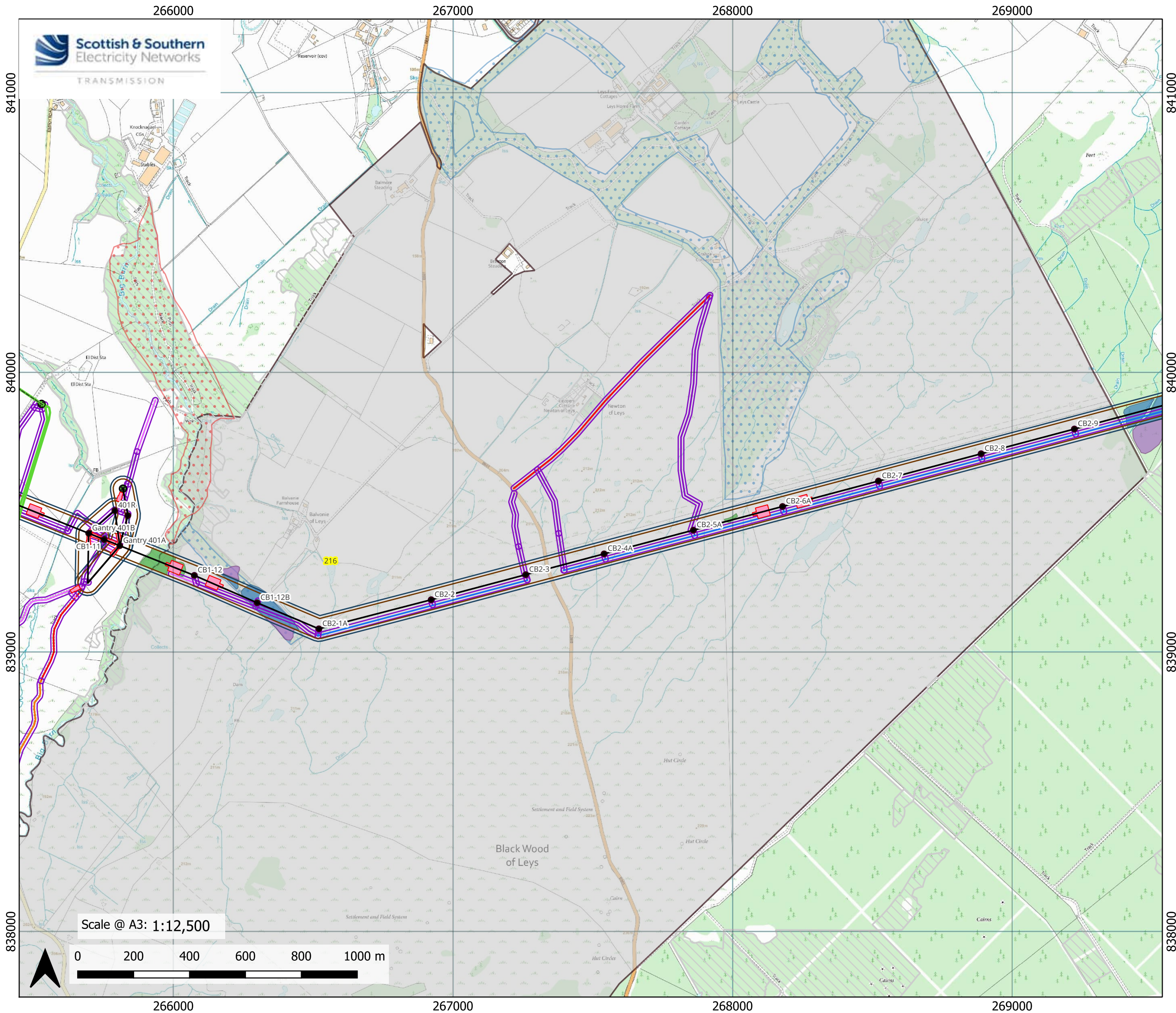
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- ▭ Landownership Boundary/Parcel

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

Title:
Figure 12.1.30a Parcel 216 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
- Cable to be Removed

Proposed Access Tracks

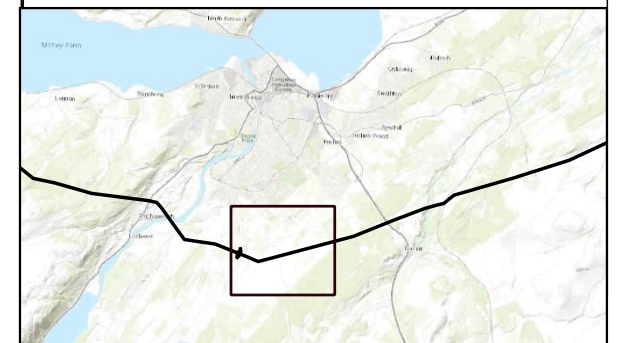
- Existing Access - Upgrade - Poor Condition
- Existing Access - Upgrade - Very Poor Condition
- Proposed Access - ATV or Temporary Trackway
- Proposed Access - Permanent
- Proposed Access - Temporary

Proposed Felling Requirements

- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management Felling
- Native Woodland 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 12.1.30b** Parcel 216 Proposed
Felling Requirements

Drawn by: LA