

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

**Appendix 12.1.43: Woodland Report Parcel 3222,
Cawdor**



APPENDIX 12.1.43: Woodland Report Parcel 3222, Cawdor

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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 3222, Cawdor. 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 12.1.43a: Parcel 3222 Location Map**. The Cawdor woodlands consist of a mixture of planted native pinewoods, commercial conifer woods, and native broadleaved, in a wider matrix of farmland and moorland. The woodlands are located to the south and southeast of the village of Cawdor and situated approximately 9.9 km southwest to southeast of Nairn in the Highland council area (NH 882545 470436). The Operational Corridor (OC) comes in from Rehiran in the west, passing through Cawdor Estates to Redburn in the east.

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 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; 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 native broadleaved woodland and 90 m in width is required throughout the commercial conifer woodland within Woodland Parcel 3222 and taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.43b: Parcel 3222 Proposed Felling Requirements**.

3.2 Access Track Route Design

- 3.2.1 Existing access tracks will be upgraded to access CB4-15 and CB4-16. A permanent access track is proposed within the OC between CB4-13 and CB4-16, and between CB4-17 and CB4-22A. A temporary track will be created out with the OC to access CB5-5. A temporary bellmouth off the C1154 and within the OC is proposed to the east of CB5-6 to access CB5-6. Temporary accesses within the OC are proposed to access CB5-8, CB5-9 and CB5-10. A temporary bellmouth off the U3114 and within the OC is proposed to access CB5-14A.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodlands were surveyed in January 2025. The OC traverses a wide variety of habitats, from open hill, farmland, and commercial conifer and native conifer and native broadleaved woodland.
- 4.1.2 Between Towers CB4-13 and CB4-14 are stands of thicket stage planted Scots pine (SP) planted under Forestry Grant Scheme Reference 4351715 (Braevall Wood) and estimated to be planted in 2016/17.
- 4.1.3 Directly to the west of the Riereach Burn, between CB4-16 and CB4-17 are areas of native broadleaved woodland identified as upland oakwood in the Native Woodland Survey of Scotland³, and having 70% canopy cover. The OC then continues to pass through the Braevall Wood native pinewood planting scheme at Carn Mor, which is thicket stage planted SP, between Towers CB-17 and CB4-21.
- 4.1.4 Moving to the east of this parcel, between towers CB5-6 and CB5-8 the OC travels through Clunas Wood and through an area of thicket stage Sitka spruce (SS) restocking, lying directly to the west of the C1154 county road.

³ Native Woodland Survey of Scotland, [Scottish Forestry - Native Woodland Survey of Scotland](#)

- 4.1.5 Between Towers CB5-8 and CB5-9 the OC passes through similarly thickets to pole stage SS before crossing the Marybrach burn and traversing mature Downy birch (DBI) woodland, identified as native upland birchwood with 80% canopy cover in the Native Woodland Survey of Scotland.
- 4.1.6 Between Towers CB-13 and CB5-16A the OC passes through an area of mature self-regenerated SP lying directly to the east of CB5-13, and areas of upland birchwood persisting in farmland on either side of the U3114 county road. Thereafter the OC crosses the Muckle Burn passing through further upland birchwood identified as having 50% canopy cover with mature structure in the Native Woodland Survey of Scotland.
- 4.1.7 This section of Proposed OHL Alignment is moderately exposed ranging from a Detailed Aspect Method of Scoring (DAMS) of 12⁴ in the eastern compartments to 15 in the west.
- 4.1.8 The Ecological Site Classification⁵ describes the woodlands as having a cool, moderately exposed and moist to wet climate. The soils have a slightly dry moisture status and a very poor nutrient status in the east and a wet moisture status and very poor nutrient status in the west.
- 4.1.9 The Soil Map of Scotland⁶ identifies the soils as being predominantly peaty gleyed podzols with podzolic rankers with peaty rankers at Braevall Wood in the west and humus-iron podzols in the eastern compartments.
- 4.1.10 No environmental designations apply to this parcel.
- 4.1.11 The woodlands at Clunas Wood are identified as Long Established of Plantation Origin, in the Ancient Woodland Inventory⁷ (AWI).
- 4.1.12 The woodlands are currently managed under Long-Term Forest Plan Reference 489992, Cawdor Maintenance Trust.
- 4.1.13 There is existing access infrastructure into these compartments. In younger crops, tree removal is most easily achieved through hand felling or mulching after which material can be left on-site or extracted using small machinery.

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 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

⁵ Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: <http://www.forestdss.org.uk/geoforestdss/>

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 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>

Photo 1: Native broadleaved woodland in foreground with young native Scots pinewood at Braevall within the OC, between towers CB4-15 and CB4-17 (NH 848661 462292, looking southwest)



Photo 2: Young native Scots pinewood at Carn Mor between towers CB4-17 and CB4-19 within the OC (NH 849011 462664, looking northeast)



Photo 3: Thicket stage mixed conifer stand within the OC (NH 880593 469262, looking northeast)



Photo 4: Thicket stage Sitka spruce crop in the OC (NH 888659 468452, looking east)

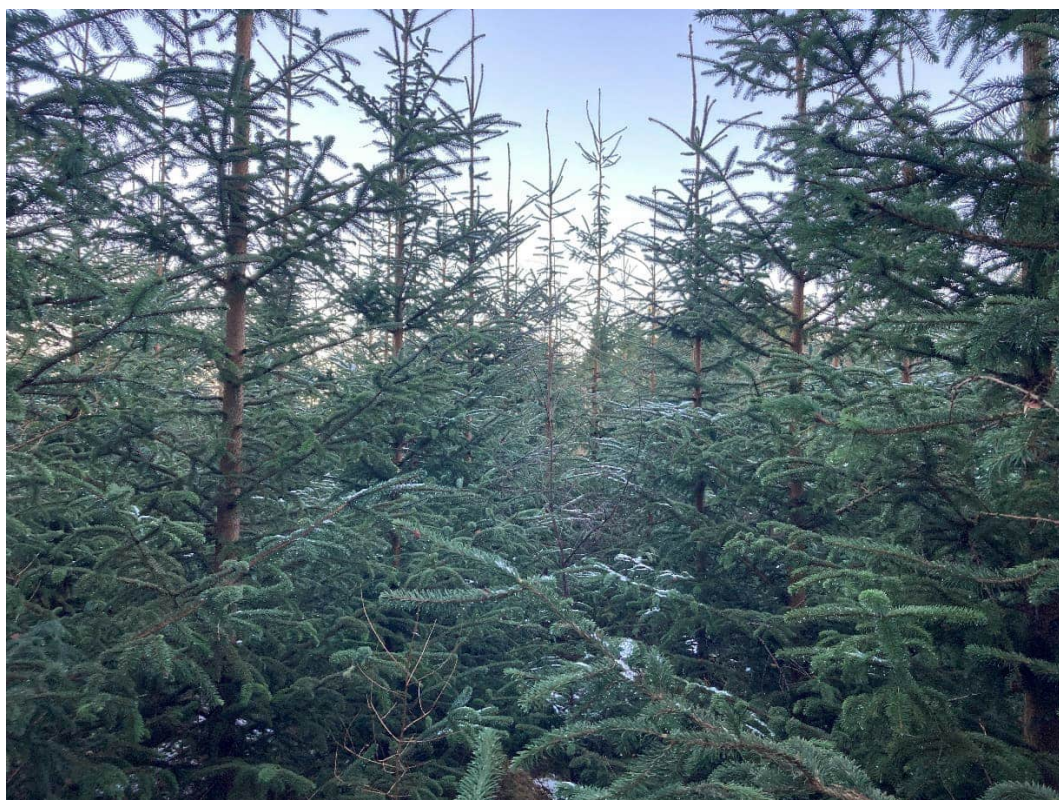


Photo 5: Mature birchwood east of Marybruach Burn, within the OC (NH 890574 468283, looking east)



Photo 6: Eastern edge of mature birchwood east of Marybruach Burn within the OC (NH 893206 468528, looking west)



Photo 7: Stand of Scots pine at woodland edge in grazed field, within the OC (NH 909012 467356, looking east)



Photo 8: Stand of native woodland at road and field boundary within the OC, (NH 91144 1467805, looking west)



Photo 9: Birchwood in grazed field within the OC, (NH 911504 467602, looking east)



Photo 10: Mature birchwood on the west bank of the Muckle Burn within the OC (NH 914888 467194, looking east)



Photo 11: Edge of commercial Sitka spruce crop at proposed access track (NH8793447050, looking northeast)



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 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 There is a risk of windblow within this Woodland Parcel to adjacent mature conifer woodland at Knockaneorn Wood (NH 911595 470253), adjacent to the U3114 road.

6 Woodland Management Impact

- 6.1.1 The impact on younger woodland design and future management will be significant, creating permanent wayleaves through establishing native pinewood and commercial conifer restock areas. The landowner will have reduced production of due to a loss of productive ground, and potentially higher management effort in negotiating wayleaves.
- 6.1.2 The infrastructure built for this section of the OHL could provide a minor benefit to the landowner for future forest management as it could provide greater long-term access. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s). The wayleave will introduce a green edge in younger crops which may provide greater flexibility in coupe scale in forest design.
- 6.1.3 The powerline 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 9.63 hectares (ha).
- 6.1.5 The total loss of Commercial conifer woodland resulting from the proposed alignment is 10.72 hectares (ha).

7 Mitigation Opportunities

7.1 Restructuring

- 7.1.1 The forest is diverse with in terms of species and age class structure. The OC will cut through native woodlands which is likely negative for the environmental value of these woodlands at a local scale. In the immediate locality and at the regional scale, significant areas of similar woodland will be retained, preserving a varied woodland structure over a wider area.
- 7.1.2 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.

⁸ 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).

⁹ 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).

7.2 Restocking

7.2.1 Management felling is suggested in this section of Proposed OHL Alignment therefore there will be a restock obligation on the landowner, should they proceed.

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 CB4-12 and CB4-21; CB5-5 and CB5-6; CB5-8 and CB5-10, and CB5-13 and CB5-16A. It details 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 broadleaves (70 m)	9.63
OC felling	Commercial conifers (90m)	10.40
Track felling	Commercial conifers	0.32
Total area		20.35

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native broadleaves	9.63
	Commercial conifer	10.72
Total area		20.35

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	20.35
Total Compensatory Planting Area	20.35
Total Net Loss of Woodland Area	0.00

Table 8.4: Woodland removal for Management Felling, outwith OC

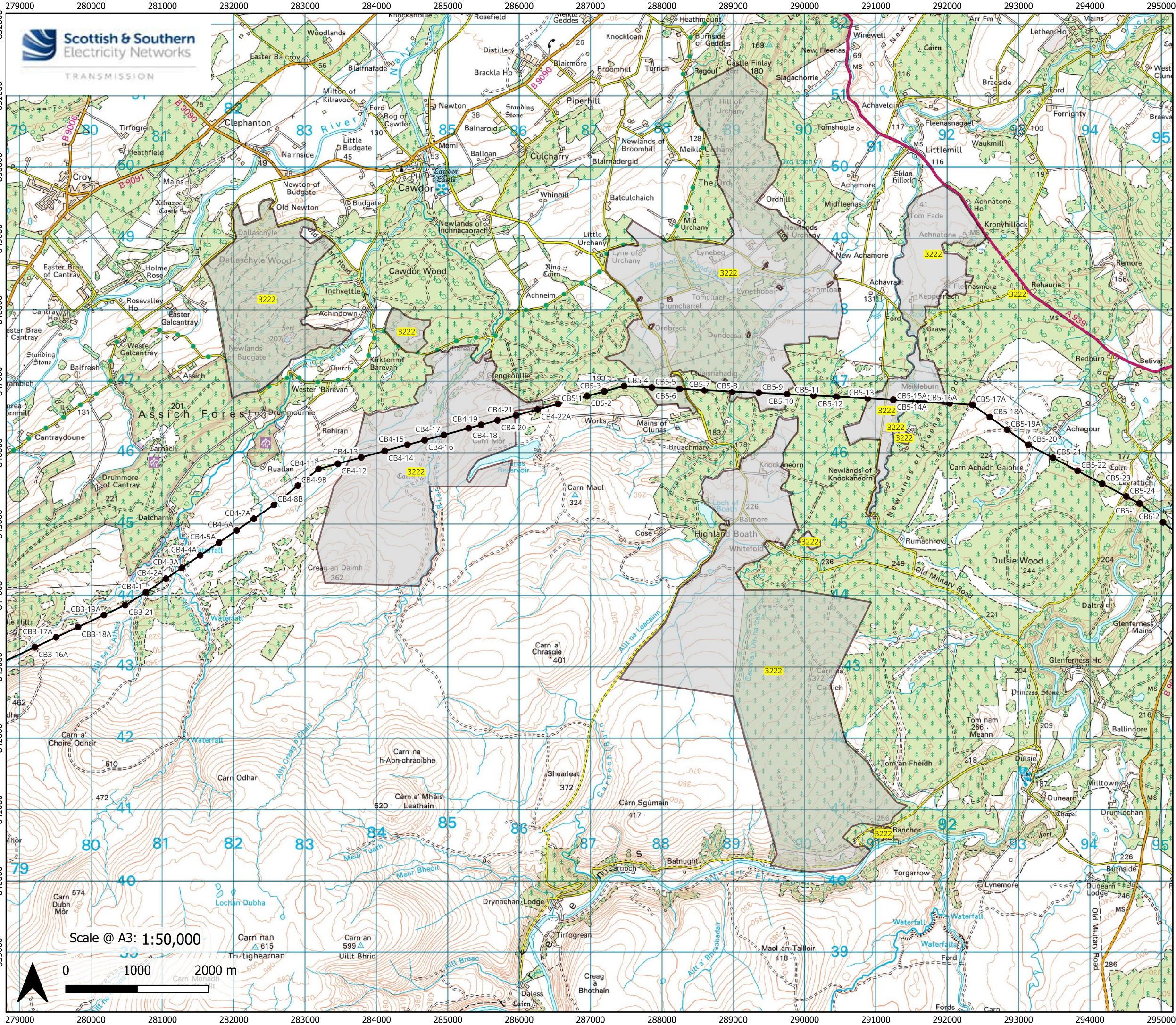
Item	Woodland Type	Area (ha)
Management Felling	Commercial conifers	1.44
Replanting / Restocking Opportunities	Commercial conifers	1.44
Net Loss of Woodland Area		0.00

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**.

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>

- 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 20.35 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.



Legend

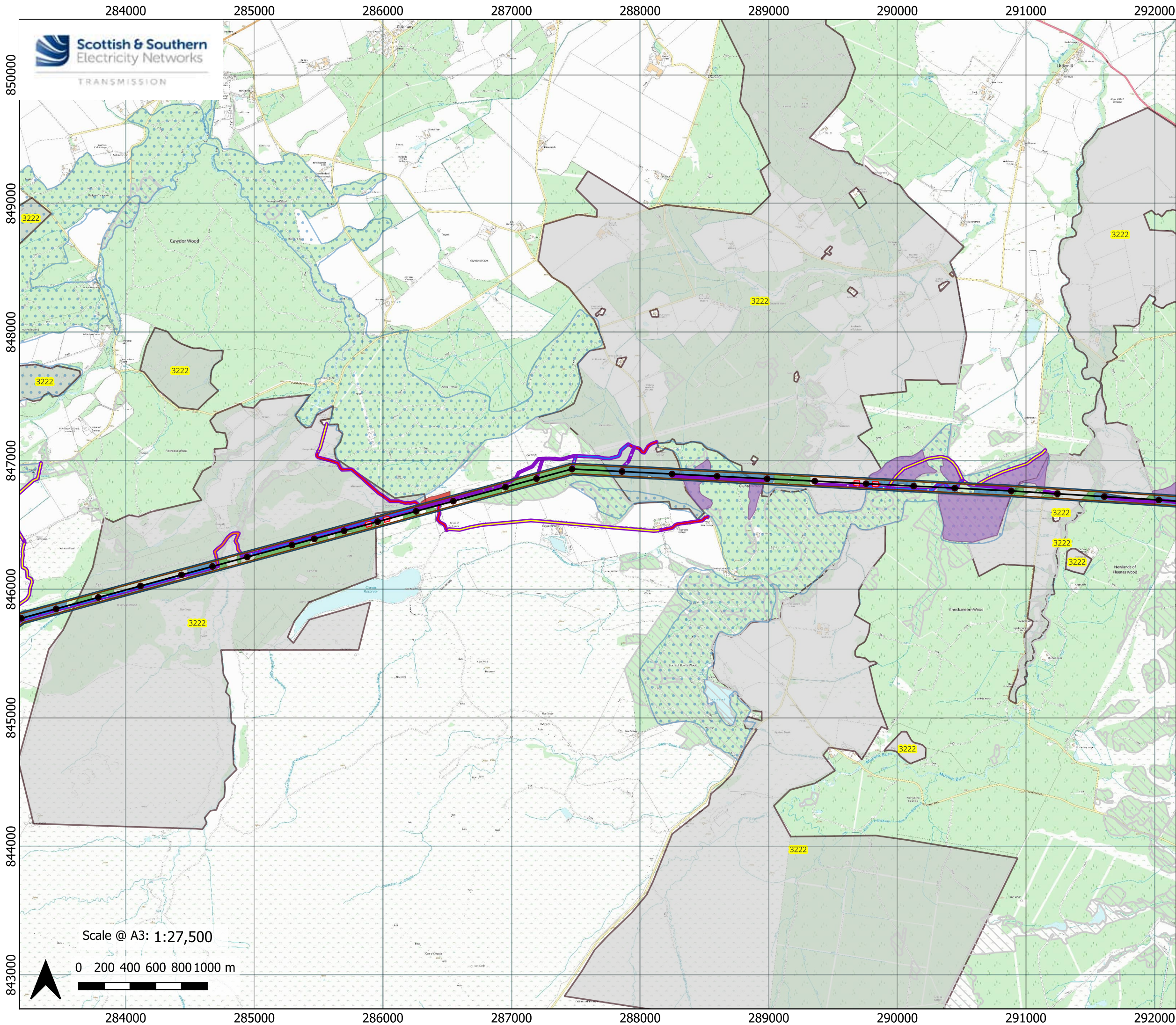
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- Landownership Boundary/Parcel

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

Title:
Figure 12.1.43a Parcel 3222 Location Map

Drawn by: LA



Scale @ A3: 1:27,500



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

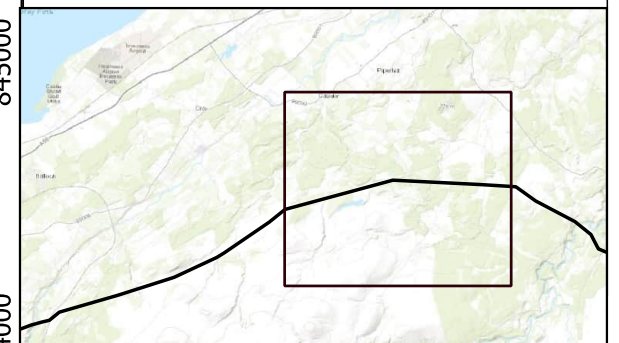
- Existing Access – Upgrade – Good/Fair Condition
- Existing Access – Upgrade – Poor Condition
- Existing Access – Upgrade – Very Poor Condition
- Proposed Access – Permanent
- Proposed Access – Permanent Floated
- Proposed Access – Temporary
- Proposed Access – Temporary Floated

Proposed Felling Requirements

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

Ancient Woodland Inventory

- 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 12.1.43b** Parcel 3222 Proposed
Felling Requirements

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