

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

**Appendix 12.1.8: Woodland Report Parcel 13042,
Dunballoch Farm**



APPENDIX 12.1.8: Woodland Report Parcel 13042, Dunballoch Farm

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.....	9
7.1	Woodland Mitigation Measures.....	9
7.2	Restructuring	9
7.3	Restocking	9
8	Net Effect / Summary.....	9
9	Compensatory Planting	10

Appendix Figures

Figure 12.1.8a: Parcel 13042 Location Map

Figure 12.1.8b: Parcel 13042 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 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 Overhead Line (OHL) 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 13042, Dunballoch Farm. 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 12.1.8a: Parcel 13042 Location Map**. The Dunballoch Farm woodlands are located 2 km southeast of Beauly on the A831 within the Highland Council region (NH 525601 443632).
- 2.1.2 The woodland landscape is characterised by a mix of mature and semi-mature tree stands, interspersed with remnants of historical field boundaries. While much of the woodland remains undisturbed, small sections of these historic field boundaries will be affected by the Proposed Development. Additionally, the A831 public road runs along the north of the site, serving as a key access route while also influencing land management and development considerations.

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

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](#)

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.

- 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 throughout the commercial conifer woodland within Woodland Parcel 13042 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.8b: Parcel 13042 Proposed Felling Requirements**.

3.2 Access Track Route Design

3.2.1 Temporary access tracks will be created across agricultural ground to facilitate access.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

4.1.1 The woodland was surveyed in November 2024. The Proposed OHL Alignment cuts through two small shelter belts of semi mature and young broadleaved woodland. The woodland consists of Downy birch (DBI), Sessile oak (SOK), willow (WL) Common alder (CAR) and ash (AH).

4.1.2 The AH is showing signs of Ash Dieback disease.

4.1.3 Between towers BC3-2A and BC3-3A, the OC cuts through mature commercial forest plantation mainly consisting of Sitka spruce (SS) and Douglas fir (DF). There are several mature native broadleaves present along the western boundary including Sessile oak, Downy birch, and ash (AH). This woodland is partially classed within the NatureScot Ancient Woodland Inventory as Long Established of Plantation Origin (LEPO)³, reflecting its historical use as a plantation site, but with some native woodland remnants.

4.1.4 The OC intersects areas of active wildlife use, including badger setts with signs of recent activity. Additionally, red squirrels are present within the woodland.

4.1.5 A significant stone wall runs along the western boundary of the woodland. This wall is a key historical feature and may be part of a larger estate landscape.

³ 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>

- 4.1.6 The area is sheltered with a maximum Detailed Aspect Method of Scoring (DAMS) score of 10^{4,5}.
- 4.1.7 The Ecological Site Classification⁶ describes the site as having a warm, sheltered and moist climate. The soils have a very moist moisture status and are of a medium nutrient status.
- 4.1.8 The Soil Map of Scotland⁷ identifies the soils as being predominantly mineral alluvial soils as often found in river valleys and floodplains. Water retention in these soils leads to the ground being very wet and boggy, creating challenging access conditions for forestry operations, particularly for heavy machinery. Given the site's historical use as agricultural land, it is likely that the natural soil structure has been altered over time through ploughing, drainage modifications, and past land management practices. This could have compacted certain areas, affecting root development and water movement.
- 4.1.9 The proposed section of OHL consists of a section of OC between towers BC2-7B and BC3-3A.
- 4.1.10 The closest forest road suitable for haulage within the ownership is the A831. This is classed as a Consultation Route⁸ by the Timber Transport Forum⁹. The existing internal forest and wider estate infrastructure can be utilised for access and extraction purposes. Given the poor ground conditions, it is recommended to use low-impact forestry machinery, such as tracked harvesters, to reduce soil disturbance. Additionally, temporary matting or corduroy roads should be implemented in particularly wet sections to minimise ground damage.

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 Forest Research (2025). 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 Ecological Site Classification, Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁷ National Soil Map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

⁸ 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).

⁹ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

Photo 1: View at NH 523281 442334 looking east. Showing signs of Ash Dieback disease within the ash.



Photo 2: View at NH 522661 443312 at tower BC3-1A looking east. Showing various age classes of native woodland.



Photo 3: View at NH 522661 443312 at tower BC3-1A looking west towards the river Beaully at riparian woodland habitat. Again, ash showing signs of crown dieback indicating Ash Dieback disease.



Photo 4: View at NH 524581 443712 looking east. Showing mature broadleaved edge to the commercial woodland at towers BC3-2A and BC3-3A.



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 Forestry Chapter 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) for the implementation of the works¹⁰ 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.

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.

¹⁰ 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 OHL 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”¹¹).
- 6.1.3 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.30 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 Planting opportunities might exist south of the Proposed OHL Alignment and should be discussed with the landowner.

7.2 Restructuring

- 7.2.1 The commercial section of forest within this ownership 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 development, will create a new 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, 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 BC2-7B and BC3-3A. 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	Woodland Type	Area (ha)
OC felling	Native Broadleaved Woodland (70 m)	0.30
OC felling	Mature Conifer Plantation (90 m)	0.57
Total area		0.87

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland	0.30
Compensatory Planting Area	Mature Conifer Plantation	0.57
Total area		0.87

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

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	0.87
Total Compensatory Planting Area	0.87
Total Net Loss of Woodland Area	0.00

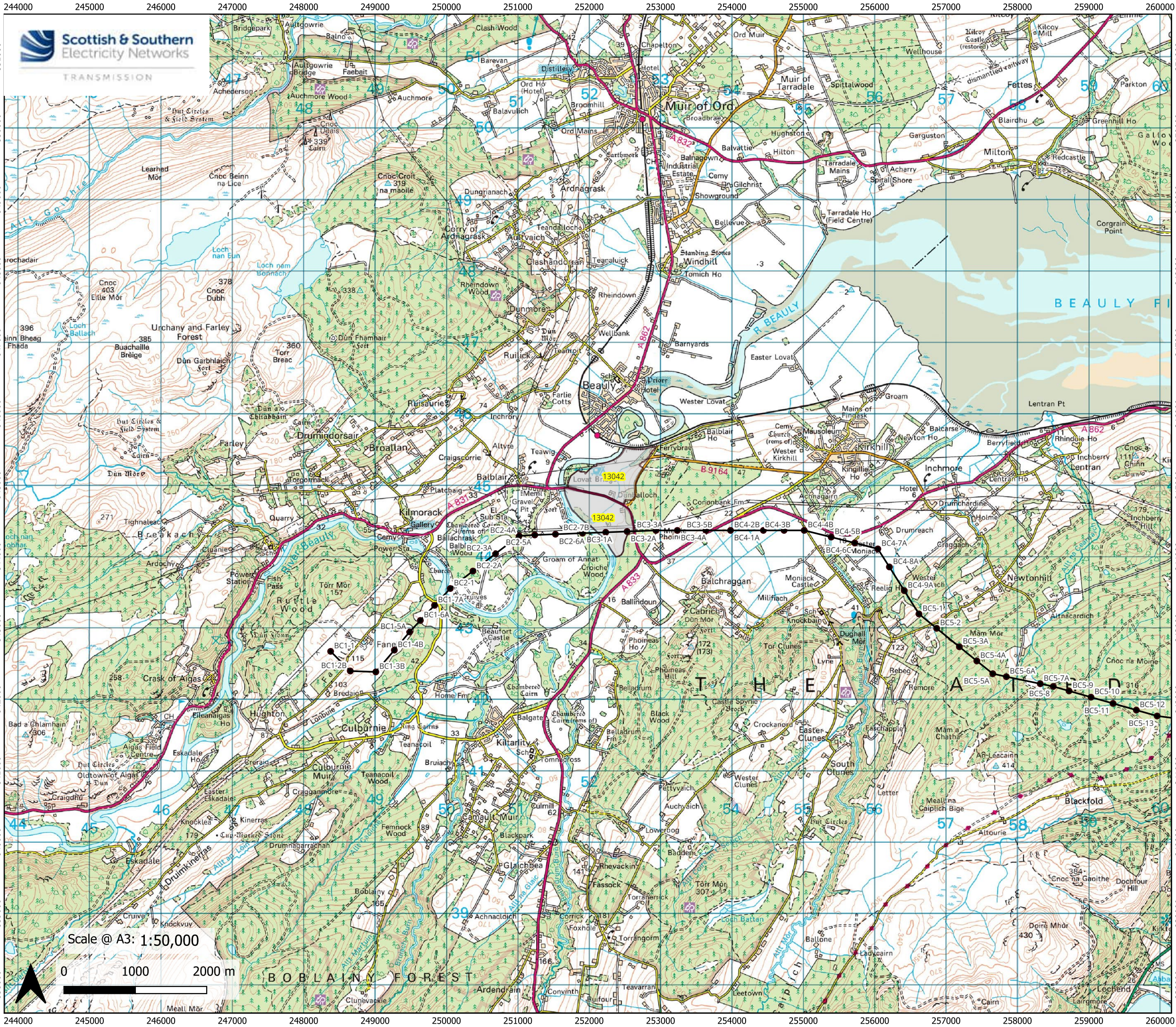
Table 8.4: Woodland removal for Management Felling, outwith OC.

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)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 0.87 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.

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

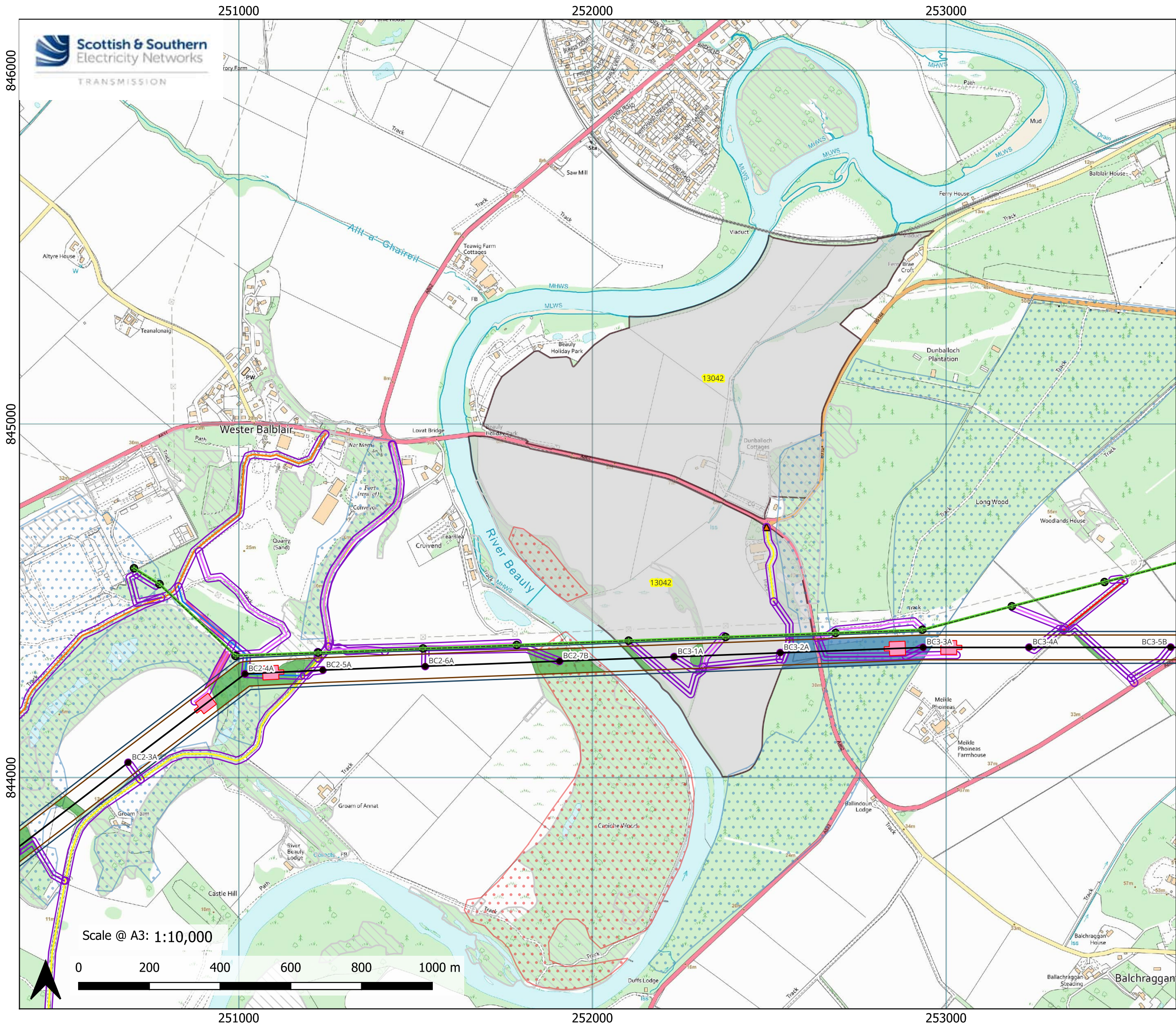
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- ▭ Landownership Boundary/Parcel

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

Title:
Figure 12.1.8a Parcel 13042 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

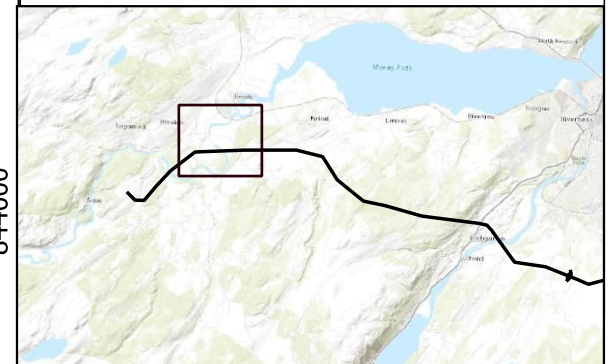
- Existing Access - Upgrade - Good/Fair Condition
- Existing Access - Upgrade - Poor Condition
- Existing Access - Upgrade - Very Poor Condition
- Proposed Access - ATV or Temporary Trackway
- Proposed Access - Permanent
- Proposed Access - Temporary

Proposed Felling Requirements

- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- 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:
Beaulieu to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title: **Figure 12.1.8b** Parcel 13042 Proposed
Felling Requirements

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