Scottish & Southern Electricity Networks

TRANSMISSION

Spittal to Loch Buidhe to Beauly 400 kV OHL Connection

Environmental Impact Assessment

Volume 5 | Technical Appendix

Appendix 8.7 | Report to Inform Habitat Regulations Appraisal (Caithness and Sutherland Peatlands SAC)

July 2025

Scottish & Southern Electricity Networks

TRANSMISSION

Spittal – Loch Buidhe – Beauly 400 kV OHL Connection

Habitats Regulations Appraisal (HRA)

Report to inform Appropriate Assessment

Caithness and Sutherland Peatlands Special Area of Conservation and Ramsar

July 2025

Scottish & Southern Electricity Networks

TRANSMISSION

CONTENTS

Figures

1 INTRODUCTION

1.1.1 This report has been produced to inform the Habitats Regulations Appraisal (HRA) process for Scottish and Southern Electricity Networks Transmission ("SSEN Transmission") application for consent to construct and operate the Spittal to Loch Buidhe to Beauly 400 kV Overhead Line (OHL) Connection (Proposed Development). The project description and overview of the HRA process are presented in the HRA Screening Assessment Report (Screening Assessment) (**Volume 5, Appendix 8.7**). The Screening Assessment presents the HRA Stage 1 Screening Stage assessment of the Proposed Development with respect to its potential to have a Likely Significant Effect (LSE) on European and Ramsar sites of nature conservation importance, either alone or in-combination with other plans or projects.

1.1.2 Separate reports have been produced for each European or Ramsar site identified in the HRA Screening Report as requiring further assessment.

1.1.3 This report provides information to allow the Competent Authority (i.e. the Scottish Ministers for the Proposed Development) to undertake an HRA Stage 2 Appropriate Assessment (AA) for the Caithness and Sutherland Peatlands Special Area of Conservation (SAC) and non-bird interests of the Ramsar designation. Ornithological interests are considered separately in the Caithness and Sutherland Special Protection Area (SPA) and Ramsar AA.

1.1.4 Caithness and Sutherland Peatlands SAC is 145,960.53 ha and forms the largest peat mass in the UK. The scale and diversity of the Caithness and Sutherland peatlands make them unique in Europe. The SAC is designated[1] for supporting a range of Annex I habitats and Annex II species. The site is primarily designated for the presence of Annex I habitats include oligotrophic to mesotrophic standing waters, natural dystrophic lakes and ponds, and blanket bogs, and also supports the Annex II species marsh saxifrage (*Saxifraga hirculus*) and otter (*Lutra lutra*). Other Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site, include Northern Atlantic wet heaths with *Erica tetralix*; transition mires and quaking bogs; and depressions on peat substrates.

1.1.5 Caithness and Sutherland Peatlands Ramsar site[2] covers the same area as the SAC. The Ramsar qualifies under Criterion 1 for supporting a range of wetland habitats as described above; and Criterion 2 for the nationally scarce plants *Sphagnum lindbergii*. *S. majus* and bog orchid (*Hammarbya paludosa*), its population of otter, the nationally rare water beetle (*Oreodytes alpinus*) and freshwater pearl mussel (*Margaritifera margaritifera*). The Ramsar also qualifies for under Criterion 2 and 4 for its diverse assemblage of breeding birds that is of international importance.

1.2 Preferred Alignment and Alternatives Considered

1.2.1 The preferred alignment of the Proposed Development has been informed by a robust selection process, taking into account identification of subsequently more detailed corridor, route and alignment options. The approach to alignment selection has been informed by SSEN Transmission's guidance 'Procedures for Routeing OHLs and Underground Cables of 132 kV and above[3]. This guidance considers within it the Holford Rules[4], which sets out a hierarchical approach to routeing which advocates avoiding areas of high amenity value, minimises

[1] NatureScot Site Link – Caithness and Sutherland Peatlands SAC Qualifying Interest List https://www.nature.scot/sites/default/files/special-area-conservation/8218/sac-qualifying-interest-list.pdf
[2] NatureScot Site Link – Caithness and Sutherland Peatlands Ramsar Citation https://www.nature.scot/sites/default/files/ramsar-site/8412/ramsar-site-citation.pdf
[3] SSEN Transmission (September 2020). Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above. Revision 2.
[4] Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines with NGC 1992 and SHETL 2003 Notes.

changes in direction, and takes advantage of topography to minimise visual interaction with other transmission infrastructure.

1.2.2 The Proposed Development terminates in the north at the proposed Banniskirk 400kv Substation and HVDC Converter Station by Spittal in Caithness and Sutherland. The preferred alignment follows the infrastructure corridor of the A9 and existing Spittal-Mybster 132 kV OHL north from Latheron. Two options were then considered to reach Banniskirk, one to the west and one to the east of the existing Halsary Windfarm (see Figure 3). The eastern Option A1.1 was preferred as A1.2 had greater engineering challenges (including multiple crossings of existing roads and OHLs), impacts on Causeymire-Knockfin Flows Wild Land area and the Royal Society for Protection of Birds (RSPB) Forisnaird Flows Reserve, and a potentially greater length through the Caithness and Sutherland Peatlands SAC.

1.2.3 Route Option A1.1 was further refined at the alignment selection stage. The preferred alignment is located to the east of the A9 to avoid additional crossings of the A9 and existing Spittal-Mybster 132 kV OHL, and to avoid passing through the Caithness and Sutherland Peatlands SAC west of Crofts of Benachielt and Loch Rangag. For Option 1.1 to maintain sufficient stand-off distance from the Halsary Wind farm, the alignment has to cross the SAC at Halsary. The original alignment of Option 1.1 (see Figure 4) comprised a longer ‘dog leg’ section passing to the east of Acharole before swinging north to head towards Banniskirk. This alternative alignment ran through the SAC for approximately 6.4 km included 18 tower locations. The preferred alignment was selected, which passes through the SAC for approximately 3.6 km including 10 tower locations. Access to the construction corridor for the Proposed Development has been refined with temporary access used wherever possible.

2 METHODOLOGY

2.1 Introduction

The approach to the HRA has followed that set out in the Conservation of Habitats and Species Regulations 2017, as amended ('The Habitats Regulations') and NatureScot guidance on the consideration of plans or projects affecting SACs and SPAs [5, 6, 7]. It has also taken account of a range of other guidance material including the DTA Publications HRA Handbook [8] and that produced by the European Commission (EC) 2018a[9], 2018b[10], 2007[11], 2002[12].

2.2 Overview of the HRA Process

2.2.1 The HRA process comprises four main stages:

- **Stage 1 Screening** to identify the likely effects of a project on a European site and consider whether the effects are likely to be significant.
- **Stage 2 Appropriate Assessment** to determine whether the integrity of the European site will be adversely affected by the Project.
- **Stage 3 Assessment of Alternative Solutions** to establish if there are any that will result in a lesser effect on the European site.
- **Stage 4 Imperative Reasons of Overriding Public Interest (IROPI)** and **Compensatory Measures** to establish whether it is necessary for the project to proceed despite the effects on the European site, and to confirm that necessary compensatory measures are in place to maintain the coherence of the National Site Network.

2.2.2 The term "Habitats Regulations Appraisal" encompasses both the initial screening stage and, where required, the follow-on Stages 2 – 4. Stage 1 Screening was described in the HRA Screening Report and will not be considered in this report. Stage 2 is discussed in more detail in the following section.

2.3 Stage 2 – Appropriate Assessment

2.3.1 An AA is undertaken by the Competent Authority to determine potential effects of a project upon the integrity of European sites. As the person applying for consent, the Applicant should provide and analyse sufficient information to allow the Scottish Ministers to determine whether the aspects of the project pertinent to their consents will or will not adversely affect the integrity of European sites.

2.3.2 AA should exclusively focus on the qualifying features of the European site, and it must consider any impacts on the conservation objectives of those qualifying interests. It should also be based on and supported by evidence that can stand up to scientific scrutiny. EC guidance states that without proper reasoning the assessment does not fulfil its purpose and cannot be considered 'appropriate' and therefore the development

[5] NatureScot (Updated 2025) Habitats Regulations Appraisal (HRA) Guidance. Accessed July 2025 at https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra

[6] NatureScot (2022). European Site Casework Guidance – How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

[7] NatureScot (2019). Guidance Note - The handling of mitigation in Habitats Regulations Appraisal - the People Over Wind CJEU judgement.

[8] Tyldesley, D. and Chapman, C. (2013) The Habitats Regulations Assessment Handbook, December 2024 edition UK, DTA Publications Limited.

[9] European Commission (2018). Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

[10] European Commission (2018). Guidance on energy transmission Infrastructure and EU nature legislation.

[11] European Commission (2007). Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC.

[12] European Commission (2002). Assessment of plans and projects significantly affecting Natura 2000 sites.

cannot be consented. In terms of what is reasonable, guidance states "*to identify the potential risks, so far as they may be reasonably foreseeable in the light of such information as can be reasonably obtained*" [13].

2.3.3 In undertaking an AA, there are two phases:

- a scientific evaluation of all the likely significant effects of the project on the relevant qualifying interests of a European site; and
- a conclusion based on outcomes of the scientific evaluation whether the integrity of a European site will be compromised.

2.3.4 The initial onus when carrying out an AA is to prove that no adverse impacts due to a project will occur, either alone or in-combination with other projects, which would compromise a European sites integrity (Section 63(5) & (6) of the Habitats Regulations. Site integrity can be defined as: "*The coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified*" [14].

2.3.5 The assessment will also consider any avoidance or mitigation measures which will be implemented to avoid or reduce the level of impact from the project. The Competent Authority may also consider the use of conditions or restrictions to help avoid adverse effects on site integrity.

2.3.6 If the AA concludes that the integrity of the European site would be adversely affected, consent can only be granted if there are no alternative solutions, IROPI is applicable and compensatory measures have been secured (Section 64 of the Habitats Regulations).

[13] NatureScot (2001). Natura casework guidance: Consideration of proposals affecting SPAs and SACs.

[14] NatureScot (2014). Natura casework guidance: How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

3 INFORMATION TO INFORM THE APPROPRIATE ASSESSMENT

3.1 Introduction

3.1.1 The Screening Assessment determined that an AA was required for the Caithness and Sutherland Peatlands SAC and Ramsar because the potential for LSEs cannot be ruled out for the following qualifying interest features:

- Peatland and associated habitats, namely:
  - Blanket bog;
  - Oligotrophic to mesotrophic standing waters (commonly known as Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels;
  - Natural dystrophic lakes and ponds (Acid peat-stained lakes and ponds);
  - Northern Atlantic wet heaths with *Erica tetralix* (Wet heathland with cross-leaved heath);
  - Transition mires and bogs (Very wet mires often identified by an unstable 'quaking' surface); and
  - Depressions on peat substrates.
- Marsh saxifrage (*Saxifraga hirculus*);
- Nationally Scarce *Sphagnum majus* (Ramsar only);
- Nationally Scarce Bog Orchid *Hammarbya paludosa* (Ramsar only); and
- Otter (*Lutra lutra*).

3.1.2 The LSEs on these qualifying interest features are considered to result from:

- Direct loss of habitats and habitat fragmentation within the SAC / Ramsar site;
- Indirect loss of habitats and habitat fragmentation relating to de-watering of peat within the SAC / Ramsar site;
- Indirect loss of otter habitat within the SAC / Ramsar site due to disturbance and displacement; and
- Direct loss / mortality of individuals (for plants and otter).

3.1.3 Potential LSEs identified for the individual qualifying interests of Caithness and Sutherland Peatlands SAC / Ramsar site in the HRA Screening Report are summarised in **Table 3-1** below.

Table 3-1 Caithness and Sutherland Peatlands SAC and Ramsar – features for which potential LSEs have been identified

Feature	Project Phase: Construction (C) Operation (O)	Potential LSEs		
		Direct habitat loss	Indirect habitat loss	Accidental mortality
Peatland and associated habitats	C, O	✓	✓	
Otter, resident breeder	C	✓	✓	✓
Marsh saxifrage	C, O	✓		✓
Nationally scarce *Sphagnum majus*	C, O	✓	✓	✓
Nationally scarce bog orchid	C, O	✓	✓	✓

3.1.4 This section assesses the impacts of the Proposed Development on the qualifying interest features in relation to the conservation objectives for the site. The aim is to identify whether no adverse effect can be concluded (as described in **Section 2**), or whether there will be adverse effects on the integrity of the Caithness and Sutherlands Peatlands SAC.

3.1.1 The assessment has drawn on the ornithology survey findings which are presented within **Volume 2, Chapter 9: Ornithology** of the Environmental Impact Assessment Report ("EIA Report") and associated Technical Appendices in **Volume 5**.

3.2 Conservation Objectives and Site Condition

3.2.1 The Conservation Objectives (COs)[15] for the qualifying interest features of Caithness and Sutherland Peatlands SAC are set out in **Table 3-2**. There are no COs for Ramsar sites.

Table 3-2 Conservation Objectives for Caithness and Sutherland Peatlands SAC

Qualifying Interest Feature	Conservation Objectives
Overarching COs for all habitat features of Caithness and Sutherland Peatlands SAC	• 1. To ensure that the qualifying features of Caithness and Sutherland Peatlands SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. • 2. To ensure that the integrity of Caithness and Sutherland Peatlands SAC is restored by meeting objectives 2a, 2b and 2c for all qualifying features.
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels (Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* [H3130])	• 2a. Maintain the extent and distribution of the 'clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels' habitat within the site. • 2b. Restore the structure, function and supporting processes of the 'clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels' habitat. • 2c. Restore the distribution and viability of typical species of the 'clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels' habitat.
Acid peat-stained lakes and ponds (Natural Dystrophic lakes and ponds [H3160])	• 2a. Maintain the extent and distribution of the acid peat-stained lakes and ponds (also known as dubh lochans) within the site. • 2b. Maintain the structure, function and supporting processes of the acid peat-stained lakes and ponds (also known as dubh lochans). • 2c. Maintain the distribution and viability of typical species of the acid peat-stained lakes and ponds (also known as dubh lochans).
Wet heathland with cross-leaved heath (Northern Atlantic wet heaths with *Erica tetralix* [H4010])	• 2a. Maintain the extent and distribution of the wet heathland with cross-leaved heath habitat within the site. • 2b. Restore the structure, function and supporting processes of the wet heathland with cross-leaved heath habitat. • 2c. Restore the distribution and viability of typical species of wet heathland with cross-leaved heath.
Blanket bog [7130]	• 2a. Maintain the extent and distribution of blanket bog within the site.

[15] NatureScot Site Link – Caithness and Sutherland Peatlands SAC Conservation Advice Package https://www.nature.scot/sites/default/files/special-area-conservation/8218/conservation-advice-package.pdf

Qualifying Interest Feature	Conservation Objectives
	• 2b. Restore the structure, function and supporting processes of the blanket bog habitat. • 2c. Restore the distribution and viability of typical species of the blanket bog habitat.
Very wet mires often identified by an unstable 'quaking' surface (Transition mires and quaking bogs [H7140])	• 2a. Maintain the extent and distribution of the very wet mires often identified by an unstable 'quaking' surface (also known as ladder fen) within the site. • 2b. Restore the structure, function and supporting processes of the very wet mires often identified by an unstable 'quaking' surface (also known as ladder fen). • 2c. Restore the distribution and viability of typical species of the very wet mires often identified by an unstable 'quaking' surface (also known as ladder fen).
Depressions on peat substrates [H7150]	• 2a. Maintain the extent and distribution of the depressions on peat substrates habitat within the site. • 2b. Restore the structure, function and supporting processes of the depressions on peat substrates habitat. • 2c. Maintain the distribution and viability of typical species of the depressions on peat substrates habitat.
Otter [S1355]	• 2a. Restore the population of otter as a viable component of the site. • 2b. Maintain the distribution of otter throughout the site. • 2c. Maintain the habitats supporting otter within the site and availability of food.
Marsh saxifrage [S1528]	• 2a. Maintain the population of marsh saxifrage as a viable component of the site. • 2b. Maintain the distribution of marsh saxifrage throughout the site. • 2c. Maintain the habitats supporting marsh saxifrage within the site.

3.2.2 The latest assessed site condition of the qualifying interest features of the SAC are listed in **Table 3-3**, as detailed on the NatureScot SiteLink[16] site.

Table 3-3 Summary of Site Condition

Qualifying Interest Feature	Latest Assessed Condition*	Date of Assessment	Negative Pressures
Acid peat-stained lakes and ponds	Favourable Maintained	04 Aug 2004	• Forestry operations
Blanket bog	Unfavourable No Change	08 Jun 2017	• Burning • Game / fisheries management • Invasive species (conifers, exotic conifers) • Trampling
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Unfavourable Declining	16 Aug 2015	• Forestry operations • Water quality
Depressions on peat substrates	Unfavourable No Change	08 Jun 2017	• Burning • Game / fisheries management • Trampling

[16] NatureScot 2025. Caithness and Sutherland Peatlands SAC. Accessed Feb 2025 at: https://sitelink.nature.scot/site/8218

Qualifying Interest Feature	Latest Assessed Condition*	Date of Assessment	Negative Pressures
Very wet mires often identified by an unstable 'quaking' surface	Favourable Declining	08 Jun 2017	No negative pressures listed
Wet heathland with cross-leaved heath	Unfavourable No Change	08 Jun 2017	• Burning • Game / fisheries management • Trampling
Marsh saxifrage (*Saxifraga hirculus*)	Favourable Maintained	24 Aug 2007	No negative pressures listed
Otter (*Lutra lutra*)	Unfavourable Declining	09 Sept 2011	• Forestry operations • Natural event

*Assessed Condition refers to the condition of the SAC feature assessed at a site level as part of NatureScot's Site Condition Monitoring (SCM) programme.

3.3 Potential Impacts and Relevant Mitigation Measures

3.3.1 Figures 1 and 2 illustrate the points where the Proposed Development crosses the edge of one of the most easterly sections of the Caithness and Sutherland Peatlands SAC and Ramsar site near Wick. The preferred alignment has been optimised to avoid the SAC as much as possible within the limitations of existing constraints (see **Section 3.4**). The Proposed Development will result in permanent and temporary infrastructure within the designated site in this location.

3.3.2 The Screening Assessment, taking a precautionary approach, concluded that in the absence of mitigation construction and operational activities could result in LSEs on the SAC and Ramsar site from direct and indirect impacts on the SAC and Ramsar site qualifying interest features.

3.3.3 Embedded project mitigation measures are set out in the Environmental Impact Assessment Report (EIAR) and the General Environmental Management Plans (GEMPs) (**Volume 5, Appendix 3.3: GEMPs**), Species Protection Plans (SPPs) (**Volume 5, Appendix 3.4: SPPs**) and will be further reinforced in the final Construction Environmental Management Plan (CEMP) (an outline CEMP has been included in **Volume 5, Appendix 3.6**). Relevant measures that will be adhered to include:

- protocols for oil and fuel storage & operations on site;
- protocols for surface water and run-off management;
- working areas will be minimised and soil management will minimise erosion of exposed soils;
- water will be prevented from leaving site prior to treatment;
- adequate buffer zones will be identified between working areas and surface waters;
- bulk and bagged cement and concrete additives will be stored at least 30 metres away from watercourses, gullies and drains in properly secured, covered and bunded areas;
- dust from storage areas will be controlled. Stockpiles of cementitious materials such as CBS will be securely covered with a tarpaulin, or non-permeable sheeting;
- diversion drains will be used to catch sediment laden run-off and direct it to treatment facilities such as settlement ponds (where necessary these can be lined), silt fences (not to be installed in watercourse), settlement tanks etc (see CIRIA C6848); and
- all mitigation measures will be maintained regularly to ensure their effectiveness.

3.3.4 The embedded mitigation measures set out in the EIAR follow industry best practice and are routinely deployed on SSEN Transmission projects. They will be stipulated in construction contracts and the implementation and audit of these measures will be overseen by a suitably qualified and experienced Environmental / Ecological Clerk of Works (ECoW).

Peatland Mitigation

3.3.5 SSEN Transmission has detailed embedded mitigation in place for working in peatlands. The GEMP for Working in Sensitive Habitats details the general embedded mitigation measures that will be used to reduce the potential effects on peatland as far as possible, including general compliance requirements, access track construction and peat management.

3.3.6 These approaches are expanded on in the Geology chapter (**Volume 2, Chapter 11: Geological Environment**) and the outline Peat Management Plan (oPMP) (**Volume 5, Appendix 11.2: oPMP**) which set out the proposed peat and soil management approaches to be employed during construction of the Proposed Development. The oPMP will ensure that construction will comply with best practice guidance and sets out methods for peat excavation and reuse, restoration potential and sensitive handling and storage. All excavated peat will be reused across the Proposed Development itself.

3.3.7 Additional mitigation for peat in Section A is described in detail in the Geology chapter. This includes mitigation specific to the disturbance of deep peat (>1m) such as:

- avoid loading of materials on deep peat; and
- micro-siting of Proposed Development infrastructure within the LoD based on the findings of site surveys where deep peat is identified.

3.3.8 Additional mitigation specific to peat stability includes:

- visual inspections to be completed in areas of moderate risk during construction and for a period after and during heavy rainfall events to identify risk to slope stability; and
- micro-siting of Proposed Development infrastructure within the LoD based on the peat data collected that identifies increased stability risk, e.g., due to localised topography or ground conditions.

3.3.9 Additional mitigation specific to the loss and compaction of peat includes:

- Use of the LoD to aid micro-siting of Proposed Development infrastructure based on the findings of site surveys where deep peat was identified.
- Reuse of surplus peat that is removed from in situ conditions to other areas within the development.

Otter Mitigation

As noted above, SSEN Transmission have well-established SPPs for protected species, which have been developed in consultation with NatureScot and this includes a specific Otter SPP. Relevant general mitigation measures for otter in the SPP include:

- all works close to waterbodies and watercourses showing signs of regular use by otters will not take place at night or within 2 hours of sunset / sunrise, if possible;
- where works close to waterbodies and watercourses are required at night, lighting will be directed away from riparian areas;
- all works close to water courses and waterbodies must follow best practice measures to ensure their protection against pollution, silting and erosion;
- any temporarily exposed pipe system will be capped when staff are off site to prevent otters from gaining access;

- all exposed trenches and holes will be provided with mammal exit ramps e.g. wooden planks or earth ramps when Contractors are off site;
- an emergency procedure will be implemented by site workers if otter / otter shelters are unexpectedly encountered. All work within 30 m (100 m for high noise/vibration activities) or 200 m for breeding sites will cease until a suitably qualified and experienced ecologist has inspected the site and determined the appropriate course of action; and
- an exceptional circumstance procedure will be implemented should mitigation options not prove satisfactory in a particular case. Works will be halted whilst mitigation is determined (under consultation with NS if required).

3.3.10 No additional mitigation measures are deemed necessary for otter.

3.4 Assessment of Effects – Peatland and Associated Habitats

Results of Habitats and Protected Species Surveys

3.4.2 The Proposed Development crosses the edge of an eastern section of Caithness and Sutherland Peatlands SAC and Ramsar and will result in permanent and temporary infrastructure within the designated site.

3.4.3 UK Habitat Classification (UKHab) and National Vegetation Classification (NVC) habitat surveys have been completed for the Proposed Development within the SAC / Ramsar site, covering the Limit of Deviation (LoD) of 100m either side of the preferred alignment and a 250 m buffer either side of the LoD to give a total survey area of 350m either side of the preferred alignment (the Survey Area). The following UKHab habitats were recorded within the Survey Area in the SAC:

- f1a5 - Blanket bog (Annex I habitat);
- f1a6 - Degraded blanket bog;
- f2b - Purple moor-grass and rush pastures;
- g1b - Acid grassland;
- g1b - Upland acid grassland; and
- g3c8 - *Holcus-Juncus* neutral grassland.

3.4.4 These habitats are illustrated on pages 4 – 5 of **Volume 3, Figure 8.3 UK Habitat within Designated Sites**. The only qualifying interest habitat of Caithness and Sutherland SAC and Ramsar recorded in this area was blanket bog. All other qualifying interest habitats do not occur in this location and will not be affected by the Proposed Development. Additionally, no observations of any qualifying interest features plant species were recorded during baseline surveys.

3.4.5 Surveys recorded both active peat forming blanket bog, and degraded blanket bog: impacts are presented separately for these two habitat types. Degraded blanket bog included areas of felled coniferous plantation woodland on blanket bog. In areas of active blanket bog, potential pressures on habitat condition were recorded in some areas, including encroachment on bog habitats by self-set trees.

3.4.6 Blanket bog within the SAC is currently considered to be in unfavourable condition as a result of a range of pressures, principally fire damage, grazing and trampling, conifer encroachment and drainage. The part of the SAC that the Proposed Development passes through, Sheilton Peatlands SSSI, is considered to be in favorable condition. However, pressures are widespread across the wider SAC with drainage considered to affect around

a quarter of peatlands within the wider Flow Country and 2,300ha of land approved for conversion from forest to peatlands over the next ten years[17].

Predicted Impacts from Proposed Development

3.4.7 Construction of the Proposed Development will require installation of 10 steel lattice towers within the boundary of the Caithness and Sutherland Peatlands SAC and Ramsar. Temporary construction compounds will be required at each tower location, and sections of permanent and temporary access track will be required to access tower locations. Temporary pulling locations will be required at angle towers to install the conductors, with two locations located within the SAC.

3.4.8 Impacts on habitat from the Proposed Development have been calculated based on the current design. Impacts to habitat relate to:

- Direct habitat loss from permanent tower bases;
- Direct habitat loss under temporary tower construction compounds;
- Direct habitat loss under temporary pulling locations;
- Direct habitat loss under temporary access tracks;
- Direct habitat loss under permanent access tracks; and
- Indirect habitat impacts relating to de-watering of peat along permanent access tracks.

3.4.9 Direct habitat loss has been calculated under the footprint of the proposed infrastructure and is presented in **Table 3-4**. Indirect habitat impacts have been calculated for wetland and peatland habitats, based on a 30 m buffer around permanent access tracks, assuming that associated drainage will disrupt hydrological connectivity, resulting in a lowering of the water table within this ZoI. Indirect impacts to wetland and peatland habitat around other infrastructure, e.g. tower bases have been calculated based on a 10 m buffer. Indirect impacts to other habitat types are not predicted. For the purposes of assessing designated sites, on a precautionary basis, indirect impacts are assumed to result in habitat loss. The duration of works in any one location within the SAC has been assumed as approximately 6 months.

[17] The Flow Country Partnership (2023) The Flow Country. Nomination as a World Heritage Site. Nomination Document 2023.

Table 3-4 Calculated Temporary and Permanent Blanket Bog Habitat Loss within the SAC and Ramsar

Habitat	Permanent Habitat Loss within SAC			Temporary Habitat Loss within SAC			Total Habitat Loss
	Permanent Direct Impact (ha)	Permanent Indirect Impact (ha)	Total Permanent (ha)	Temporary Direct Impact (ha)	Temporary Indirect Impact (ha)	Total Temporary (ha)	Total (ha)
f1a6 Degraded Blanket Bog	0.01	0.08	0.09	0.51	1.18	1.69	**1.78**
f1a5 Blanket Bog	0.16	0.97	1.13	6.57	14.8	21.37	**22.5**
Grand Total	**0.17**	**1.05**	**1.22**	**7.08**	**15.98**	**23.06**	**24.28**

3.4.10 **Table 3-5** and **Table 3-6** present the calculated areas of habitat loss as percentages of the total area of the SAC, and the area of blanket bog within the SAC as stated in the conservation objectives for the site.

Table 3-5 Blanket bog habitat loss relative to the total area of the SAC

Total Area of SAC (ha)	145,960.53
Permanent loss as % of total area of SAC	0.0008
Temporary loss as % of total area of SAC	0.016
Total loss as % of total area of SAC	0.017

Table 3-6 Blanket bog habitat loss relative to the total area of blanket bog within the SAC

Total Area of Blanket Bog within SAC (ha)	116,008
Permanent loss as % of total area of blanket bog within SAC	0.001
Temporary loss as % of total area of blanket bog within SAC	0.02
Total loss as % of total area of blanket bog within SAC	0.021

Assessment against Conservation Objectives of the SAC

3.4.11 The conservation objectives (COs) for the SAC are summarised in **Section 3.2**. As set out in the full COs, the blanket bog within the SAC is currently in unfavourable condition due to a range of wider historic and ongoing pressures, principally:

- damaged by large, uncontrolled fires,
- trampling and grazing/browsing by red deer and livestock
- ploughing and planting with non-native conifers;
- encroachment by self-seeded conifers; and
- active drainage from existing drains.

3.4.12 To meet the COs of the SAC, blanket bog habitat must be restored through a range of active management measures set out in the full conservation objectives that will allow areas of blanket bog to recover. The COs state that, '*any impacts on the objectives shown in 2a, 2b, or 2c … must not persist so that they prevent the achievement of this overall aim.*'

3.4.13 All works for the OHL will be undertaken in line with SSENs GEMPs and oPMP which includes specific guidelines for minimising impacts on peat (see **Section 3.3**).

3.4.14 With the measures in the GEMP and oPMP in place, including post-construction reinstatement, temporary impacts from the Proposed Development will not persist such that they impact the objectives to maintain the extent and distribution, restore the structure, function and supporting processes and restore the distribution and viability of typical species of blanket bog.

3.4.15 Permanent impacts from the Proposed Development are estimated to result in the loss of 1.22 ha under the permanent infrastructure and from indirect effects, comprising 0.001 % of the area of blanket bog in the SAC as defined by the SAC citation. Any peat, including volumes of peat excavated and turfs of active peat forming vegetation removed as part of the construction activities would be reused on site, and could be used to restore areas of degraded peat identified during baseline surveys within the SAC, as part of SSENs embedded mitigation measures. The locations for peat re-use would be identified prior to construction in consultation with NatureScot. Peat re-use and restoration of degraded peat will be undertaken as part of construction re-instatement so that at the end of construction there would be no net loss of active blanket bog.

3.4.16 Over the lifetime of the OHL, operational maintenance will also contribute to the COs of the SAC. Management of the operational corridor under the constructed OHL will be required during operation, which will include the removal of trees. Surveys recorded areas of blanket bog within the operational corridor where young self-set spruce trees were encroaching within the SAC. Although currently relatively young, over time these trees will impact on the ability to restore the structure, function and restore the distribution and viability of typical species of the blanket bog habitat. Removal of trees would support the conservation objectives of the site, particularly in relation to objective 2b.

3.4.17 Over the lifetime of the Proposed Development, embedded peatland mitigation and re-instatement measures, and operational management of the wayleave are considered to mitigate for the loss of blanket bog under the tower bases. This would be confirmed through habitat loss and gain calculations being undertaken as part of the EIA and SSEN's Biodiversity Net Gain Toolkit calculations.

3.4.18 Taking into account the embedded mitigation measures and operational management that will be required for the OHL, the impacts on blanket bog will be mitigated such that there will be no net loss of blanket bog that will persist, and therefore no adverse effect on site integrity in relation to the conservation objectives of the SAC is predicted.

3.5 Predicted Impacts on Plant Species and Otter

Marsh Saxifrage

3.5.2 Marsh saxifrage was not recorded during the detailed NVC surveys for the Proposed Development. Marsh saxifrage has particular habitat requirements with suitable habitat only found at the head of a few slightly base-rich springs that are surrounded by blanket bog. The NatureScot Conservation Advice Package[18] for the SAC notes that this flushed mire habitat is unusual within the SAC, resulting in marsh saxifrage having a restricted distribution with the plant only known to occur at two locations: within Shielton Peatlands SSSI and near Loch Ruard on the Blar nam Faoileag SSSI / Coire na Beinne Mires SSSI boundary.

3.5.3 Figure 5 shows the location of marsh saxifrage records within these SSSIs received from the Royal Botanic Gardens Edinburgh (RBGE) in August 2024; marsh saxifrage is one of the focus species of the RBGE Scottish Plant Recovery project[19]. The marsh saxifrage population is currently in favourable condition within the SAC. All existing records are located over 4 km from the Proposed Development (most are at a greater distance) and will not be affected.

3.5.4 No direct loss of individual plants or habitat supporting marsh saxifrage has been identified. No flush habitats suitable for marsh saxifrage were recorded within the Survey Area. Potential effects on blanket bog habitat will be managed through embedded mitigation measures (as detailed in **Section 3.3**). As there are no records of marsh saxifrage or suitable flush habitat in the vicinity of the Proposed Development, no adverse effects on marsh saxifrage in relation to the conservation objectives for the species are predicted.

Nationally Scarce Sphagnum majus and Bog Orchid Hammarbya paludosa (Ramsar feature only)

3.5.5 The nationally scarce moss species *Sphagnum majus* and the plant Bog Orchid *Hammarbya paludosa* are associated with blanket bog and mire habitats. These species were not recorded during the NVC surveys undertaken where the Proposed Development crosses the Ramsar. The only nearby records of *S. majus* on the online NBN Atlas[20] lie approximately 1.5 km and 2 km to the east of the Proposed Development respectively (two records from 2012), associated with a large dubh lochan system which will not be affected by the

[18] NatureScot. Caithness and Sutherland Peatlands SAC Conservation Advice Package. Accessed at https://sitelink.nature.scot/site/8218 Accessed 13.02.25
[19] https://stories.rbge.org.uk/archives/37447
[20] https://scotland.nbnatlas.org/ Accessed Feb 2025.

Proposed Development. There were no records of Bog Orchid within 2 km of the Proposed Development identified during the desk study.

3.5.6 While there is potential for these species to be present in the blanket bog habitat being affected by the Proposed Development, there is unlikely to be a significant population present given that they were not identified during the botanical surveys. Therefore no adverse effect on *Sphagnum majus* and Bog Orchid are predicted.

Otter

3.5.7 Signs of otter activity (spraints) were recorded on the Halsary Burn, which forms the boundary of Caithness and Sutherland Peatlands SAC / Ramsar site in this location, and on the Burn of Tacher which passes through the SAC / Ramsar site (see figure in **Volume 5, Appendix 8.4: Protected Species Technical Report**). No otter holts (underground shelters) or couches (temporary shelters) were recorded in this area.

3.5.8 As otters are active in the local area, there is the potential for adverse effects on the species where watercourses pass through or in close proximity to the Proposed Development. Potential impacts on otters relate to:

- direct loss of supporting habitat within the SAC / Ramsar site;
- indirect loss of habitat within the SAC / Ramsar site due to disturbance and displacement; and
- direct mortality.

3.5.9 Direct loss of supporting habitat within the SAC / Ramsar site is not expected. The watercourses will not be directly affected by the Proposed Development as they are over sailed by the OHL. There is the potential for temporary construction related disturbance and displacement of otter from the surrounding habitat, and mortality risk during works, as the species is wide-ranging and highly mobile. SSEN Transmission will utilise mitigation measures, including their Otter SPP and GEMPs (e.g. Water Crossings) to minimise the impacts on any otters using the surrounding area.

3.5.10 The otter population is currently in unfavourable condition in the SAC as otter activity had declined in the most recent site condition monitoring survey. Key factors which had led to population decline in the past were pollution and persecution. The Proposed Development will not lead to significant additional pressure. Pollution will be negligible as the watercourses in the SAC / Ramsar site will not be directly affected and mitigation measures will be in place to avoid run-off. All works will be over 30 m from the watercourse in line with the SEPA Recommended Riparian Corridor buffer zone[21]. Therefore, no adverse effect on otters in relation to the conservation objectives for the species are expected.

3.6 In-combination Effects

3.6.1 The approach to the cumulative effects assessment for the Proposed Development is detailed in **Volume 2, Chapter 5: EIA Process and Methodology**. This chapter identifies a list of EIA developments within 30 km of the Proposed Development which will be considered for potential cumulative effects.

3.6.2 In-combination effects for the AA are limited to potential cumulative impacts on the blanket bog qualifying interest feature of Caithness and Sutherland Peatlands SAC / Ramsar site. With mitigation in place, impacts on otter relate to localised disturbance only and are not expected to combine with other projects for a significant in-

[21] SEPA (2024) Recommended Riparian Corridor Layer for use in Land Use Planning. Link: recommended-riparian-corridor-note.docx

combination effect given the spatial separation of the projects. Therefore in-combination effects on otter are assessed as negligible.

3.6.3 The full list of developments was reviewed to identify other projects that may result in in-combination effects on Caithness and Sutherland Peatlands SAC / Ramsar site alongside the Proposed Development. The 30 km search area encompasses the majority of Caithness and Sutherlands SAC / Ramsar site. The Proposed Development will result in loss of blanket bog habitat from within the SAC. Any other projects directly affecting the SAC or situated adjacent to it with potential connectivity were considered to identify the potential for any in-combination effects on the blanket bog resource. Projects at early development or scoping stage where insufficient information was available to determine potential effects were excluded from the analysis.

3.6.4 Sixteen relevant projects were identified within 30 km of the Proposed Development and were reviewed in **Table 3-7**. Development locations are illustrated in **Volume 3, Figure 5.1 Cumulative Developments.**

Table 3-7: In-combination assessment of developments submitted or approved for EIA within or adjacent to Caithness and Sutherland Peatlands SAC and Ramsar

Project and Planning Ref	Distance from Proposed Development	Evaluation of Potential Effects on Qualifying Interest Blanket Bog Habitat of Caithness and Sutherland Peatlands SAC and Ramsar site	In-combination Effect with Proposed Development Predicted?
Achany Extension Wind Farm 21/03695/S36	10 km north	The Achany Extension comprises a 20 wind turbine wind farm, substation and ancillary infrastructure. The Caithness and Sutherland Peatlands SAC / Ramsar is situated approximately 30 m to the north-east of the nearest access track and 45 m to the north-east of the nearest turbine construction area. No direct habitat loss within the SAC / Ramsar is expected. Additionally, no indirect habitat loss in anticipated given that all works are downslope and in the Cassley catchment which has no hydrological connection to the blanket bog and wet heath habitats in the SAC / Ramsar. The potential for deer displacement during construction was concluded to be a potential temporary effect and of low magnitude, with no significant adverse effect on the blanket bog and wet heath habitats within the SAC / Ramsar. As no deer management issues have been identified for the Proposed Development, no in-combination effects on the qualifying blanket bog resource are expected.	No
Ackron Wind Farm 23/06023/SCOP	25 km west	The Ackron Wind Farm proposal includes an 11 turbine wind farm, possible battery storage system and ancillary infrastructure. The eastern boundary of the project lies adjacent to Caithness and Sutherland Peatlands SAC / Ramsar. The project will result in the loss of a small area of blanket bog habitat outside of the SAC but no direct habitat loss or indirect effects on blanket bog habitat within the SAC / Ramsar were predicted. With embedded mitigation in place, indirect effects from pollution and sediment run off were considered negligible. No adverse effects in-combination with the Proposed Development are expected.	No
Camster II Wind Farm 19/03015/FUL	10 km east	Camser II is an 11 turbine wind farm development. Part of the site boundary lies close to part of Caithness and Sutherland Peatlands SAC / Ramsar. However, the nearest infrastructure to the SAC / Ramsar (a met mast and small temporary quarry) are 0.9 and 1 km to north of SAC respectively and the majority of the development is located further away. Habitat within the development site is dominated by coniferous plantation, removal of which will benefit blanket bog habitat. 0.1 ha of blanket bog will be lost by the development, over 1 km from the SAC. The EIAR for the project did not find any hydrological connection to the SAC blanket bog and the potential for direct or indirect impacts on the SAC was considered unlikely. As no effect on blanket bog from the SAC / Ramsar was identified for the project, no adverse effects in-combination with the Proposed Development are expected.	No
Creag Riabhach Wind Farm Extension	28 km north	The boundary for Creag Riabhach Wind Farm Extension is adjacent to a section of Caithness and Sutherland Peatlands SAC / Ramsar. With mitigation in place, no direct or indirect impact to habitat features was anticipated and no LSE were expected. No adverse effects on blanket bog in-combination with the Proposed Development are expected.	No

Project and Planning Ref	Distance from Proposed Development	Evaluation of Potential Effects on Qualifying Interest Blanket Bog Habitat of Caithness and Sutherland Peatlands SAC and Ramsar site	In-combination Effect with Proposed Development Predicted?
23/02936/S36			
Creag Riabhach Wind Farm Connection 20/01014/S37	13 km north	A 132 kV overhead electric line, the Creag Riabhach Wind Farm Connection over sails a section of Caithness and Sutherland Peatlands SAC / Ramsar. The closest pole location is 36 m from the SAC boundary and this location is not hydrologically connected to the SAC. The AA for the scheme concluded that, with mitigation in place, potential contamination of SAC habitats through oil/chemical spills and/or pollution from surface water run off was unlikely and residual effects on habitat were not considered to be significant. No effect on blanket bog from the SAC / Ramsar was identified, so no adverse effects in-combination with the Proposed Development are expected.	No
Goticlay Wind Farm Redesign 23/05188/S36	2 km east	Goticlay Wind Farm is a 13 turbine development, including a substation and ancillary infrastructure that lies immediately adjacent to the boundary of Caithness and Sutherland Peatlands SAC / Ramsar. The EIAR for the project stated that the nearest infrastructure is located approximately 0.5 km south of the designated site and no direct or indirect impacts on SAC habitats are expected during construction. Habitat loss outwith the SAC / Ramsar will include the permanent loss of 0.06 ha of blanket bog habitat; habitats within the Project footprint are degraded through extensive forestry practices and are likely to have limited hydrological connectivity to the SAC. As no blanket bog within the SAC is affected, there is no potential for in-combination effects on blanket bog with the Proposed Development.	No
Hollandmey Energy Development 21/05591/S36	15 km north east	The Hollandmey Energy Development lies 0.8 km north of Caithness and Sutherland Peatlands SAC / Ramsar. No direct impacts on the designated site are expected. With mitigation in place (including a Pollution Prevention Plan) to prevent indirect effects such as construction related pollution and siltation from affecting SAC habitats downstream, it was concluded that the project will not adversely affect the integrity of the SAC / Ramsar. As effects on blanket bog within the SAC / Ramsar are unlikely, no in-combination effects with the Proposed Development are predicted.	No
Kirkton Energy Park 22/05533/S36	25 km west	Kirkton Energy Park includes an application for a wind farm (11 turbines), battery energy storage system, substation and associated development. It is located immediately adjacent to the boundary of Caithness and Sutherland Peatlands SAC / Ramsar. No direct habitat loss from the designated site is predicted and a Habitat Management Plan is proposed to mitigate the potential pressure of increased deer grazing on the SAC from displaced herds following forestry removal outside of the designated site. The assessment concludes that will be no impact from deer browsing on qualifying SAC / Ramsar habitats. As the blanket bog habitats within the SAC will not be affected, there is no potential for effects in-combination with the Proposed Development.	No

Project and Planning Ref	Distance from Proposed Development	Evaluation of Potential Effects on Qualifying Interest Blanket Bog Habitat of Caithness and Sutherland Peatlands SAC and Ramsar site	In-combination Effect with Proposed Development Predicted?
Limekiln Wind Farm 21/03750/S36	17 km north west	Limekiln Wind Farm project extends the consented wind farm from 15 to 21 turbines. The site boundary is adjacent to a section of Caithness and Sutherland Peatlands SAC / Ramsar but the nearest construction area lies 400 m from the designated site. Indirect effects on wetland habitats within the SAC were not predicted at this distance. As no LSE on wetland habitats were identified, there is no potential for adverse effects on blanket bog in the SAC in-combination with the Proposed Development.	No
Melvich Wind Energy Hub 23/02320/S36	27 km north west	Melvich Wind Energy Hub includes a 12 turbine wind farm and ancillary infrastructure. Caithness and Sutherland Peatlands SAC / Ramsar lies adjacent to the site boundary to the south of the development. No direct habitat loss within the designated site is expected. The SAC / Ramsar may be hydrologically connected to the project by the extensive peatlands which are present. The AA for the scheme found that the project lay over 80 m from the SAC / Ramsar boundary, with the exception of a floating footpath 20 m from the boundary. Qualifying blanket bog habitat within the SAC / Ramsar was 130 m away at its closest point. At these distances it was considered that hydrological effects on qualifying blanket bog were negligible. Blanket bog within the project site was considered to be supporting habitat for the SAC / Ramsar: a total of 0.01 ha of blanket bog will be directly lost and 0.14 ha of indirect habitat loss may also occur. Due to the very small areas of blanket bog loss, located outside of the designated site, it was considered highly unlikely that significant effects on supporting SAC / Ramsar habitat would occur. As no blanket bog will be affected within the SAC / Ramsar in this location, and supporting blanket bog habitat loss is so low, in-combination effects on blanket bog with the Proposed Development are still considered to be negligible in the context of the scale of these habitats across the SAC / Ramsar.	No
Sallachy Wind Farm 21/01615/FUL	25 km north west	Sallachy Wind Farm is a 9 wind turbine development and ancillary infrastructure which lies adjacent to Caithness and Sutherland Peatlands SAC / Ramsar. The closest turbine lies approximately 350 m from the boundary. No direct habitat loss within the designated site is expected and the development lies in a different water catchment to the SAC / Ramsar in this location. Therefore, with standard pollution prevention measures in place, no direct or indirect effects on SAC / Ramsar habitats were predicted. No potential for adverse in-combination effects on the SAC / Ramsar has been identified.	No
Slickly Wind Farm 19/0561124/FUL	16 km north east	Slickly Wind Farm is an 11 wind turbine development which is located immediately adjacent to Caithness and Sutherland Peatlands SAC / Ramsar at the northern and southern boundaries of the project. No likely significant effects on Caithness and Sutherland Peatlands SAC were predicted in the EIAR, and beneficial effects through peatland restoration proposals were noted. An AA was not required. As no likely significant effects were identified in the HRA screening, there is no potential for adverse effects in-combination with the Proposed Development.	No

Project and Planning Ref	Distance from Proposed Development	Evaluation of Potential Effects on Qualifying Interest Blanket Bog Habitat of Caithness and Sutherland Peatlands SAC and Ramsar site	In-combination Effect with Proposed Development Predicted?
Strathy South Wind Farm Grid Connection 24/01442/SCOP	25 km west	The Strathy South Wind Farm Connection comprises an overhead electricity transmission line which will form part of a wider connection strategy for renewable energy in the area, referred to as the Connagill Cluster Grid Connections. One tower of the transmission line and its associated access track are located just within Caithness and Sutherland Peatlands SAC and Ramsar. The area of SAC / Ramsar affected is 0.16 ha of habitat including Northern Atlantic wet heath. Blanket bog was not present within the Zone of Influence (ZoI) for the project. The HRA for the project concluded that there will be no adverse effects on the integrity of the SAC / Ramsar, either alone or in-combination with other projects. As no likely significant effects on blanket bog were predicted, there will be no effects on blanket bog in-combination with the Proposed Development.	No
Strathy Wood Wind Farm Grid Connection 24/05153/S37	25 km west	The overhead line grid connection for Strathy Wood Wind Farm crosses a section of Caithness and Sutherland Peatlands SAC. A total of 13 of the 19 lattice towers will be located within the SAC boundary. Likely significant effects on blanket bog and Northern Atlantic wet heath habitat were predicted. 2.57 ha of habitat will be lost within the SAC, of which 2.49 ha is qualifying interest blanket bog habitat. An AA concluded that the project would have no adverse effects on the integrity of the SAC / Ramsar, either alone or in-combination with other projects. In-combination with the Proposed Development, very small areas of blanket bog on the edge of the SAC / Ramsar will be affected at a distance of 25 km apart. The combined effects on blanket bog are not predicted to have an adverse effect on Caithness and Sutherland Peatlands SAC / Ramsar.	No
Tormsdale Wind Farm 21/04984/S36	2 km west	The proposed development at Tormsdale Wind Farm comprises of 10 wind turbines and ancillary infrastructure. Part of the Tormsdale Wind Farm project is located within the periphery of Caithness and Sutherland Peatlands SAC, resulting in total habitat loss within the SAC of 7.3 ha of habitats including heath, marshy and acid grassland, modified bog and flushes. The only qualifying interest habitat directly impacted is wet heath, of which 2.4 ha will be lost. No blanket bog was recorded within the Project footprint so will not be impacted. As no effect on blanket bog was identified, there is no potential for in-combination effects on blanket bog with the Proposed Development.	No
Watten Wind Farm 23/04113/S36	Adjacent	The proposed seven turbine wind farm at Watten slightly overlaps the Caithness and Sutherland Peatlands SAC boundary in this area. However, the EIAR for the project scoped out potential effects on the designated site, because the project only oversails the boundary and there will be no habitat loss within the SAC. There is no hydrological connection between the project and SAC habitats due to the separation provided by the Burn of Acharole. No effects on the blanket bog habitat of the SAC are predicted and there is no potential for in-combination effects with the Proposed Development.	No

Overall In-combination Effects

3.6.5 The Proposed Development will impact a total of 31.96 ha of blanket bog habitat within Caithness and Sutherland Peatlands SAC / Ramsar site. This represents 0.022% of the total SAC area, 0.028% of the blanket bog resource within the designated site and has been assessed as having no adverse effect on site integrity. The vast majority of other projects located within or adjacent to the SAC / Ramsar site do not affect blanket bog habitat. The only other project identified that predicted a likely significant effect on blanket bog habitat within the SAC / Ramsar site was Strathy Wood Wind Farm Grid Connection. Total loss of blanket bog habitat from both projects is summarised in **Table 3-8**.

Table 3-8: Blanket Bog Habitat Loss within Caithness and Sutherland Peatlands SAC / Ramsar

Project	Distance from Proposed Development	Direct Permanent Habitat Loss	Indirect Permanent Habitat Loss	Temporary Habitat Loss	Total Area of Blanket Bog	% of the Total Area of Blanket Bog within the SAC
Proposed Development	-	0.17 ha	1.05 ha	23.06 ha	24.28 ha	0.021%
Strathy Wood Wind Farm Grid Connection	~25 km west	0.41 ha	1.02 ha	1.06 ha	2.49 ha	0.002%
Total		**0.58 ha**	**5.18 ha**	**24.15**	**26.77 ha**	**0.023%**

3.6.6 The total permanent and temporary loss of blanket bog from both projects is 26.77 ha, which is 0.023% of the total blanket bog resource within the SAC / Ramsar site. In the context of the large size of the designated site, this habitat loss is minimal. The projects are spread out spatially so that the habitat loss occurs in discrete locations, and in both cases on the edge of the designation where habitats are less pristine. Both projects are assessed as having a negligible effect on the SAC / Ramsar site, and in-combination with the Proposed Development the cumulative contribution is expected to have a negligible impact, with no adverse effect on the qualifying interest blanket bog habitat within the SAC / Ramsar site.

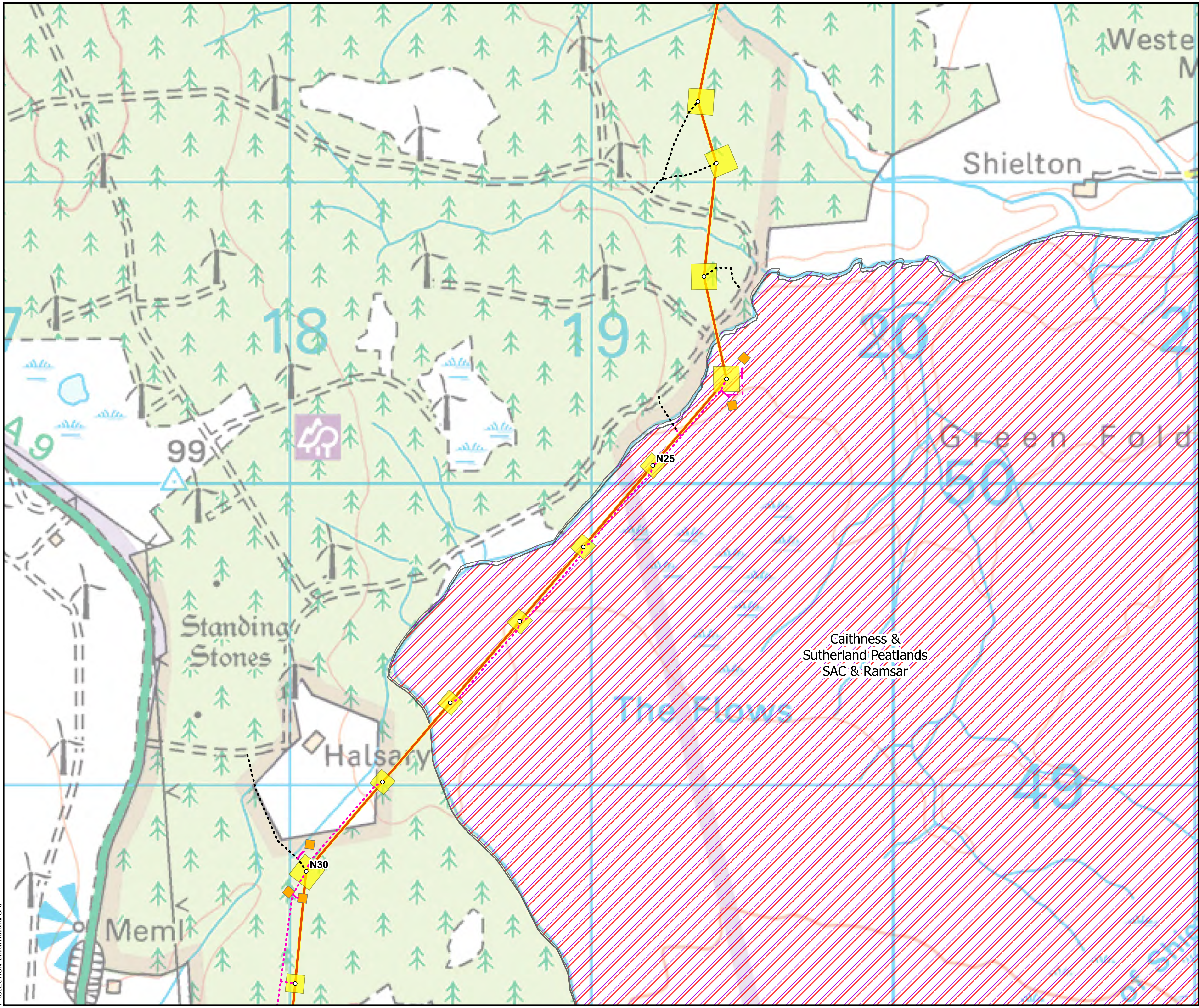
3.7 Summary of Effect on Site Integrity

A summary of the qualifying interest features for which LSE has been identified, and the assessment of potential effects on the integrity of Caithness and Sutherland Peatlands SAC and Ramsar site (non-bird interests) is presented below in **Table 3-9**. No adverse effect on the integrity of the Caithness and Sutherland Peatlands SAC and Ramsar site is predicted as a result of the Proposed Development, either alone or in-combination with other projects.

Table 3-9 Summary of Appropriate Assessment for Caithness and Sutherland Peatlands SAC and Ramsar

Designated Site	Feature	Adverse Effect on Site Integrity?
Caithness and Sutherland Peatlands SAC and Ramsar	Peatland and associated habitats, namely: • Blanket bog • Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels; • Acid peat-stained lakes and ponds	No

Designated Site	Feature	Adverse Effect on Site Integrity?
	• Wet heathland with cross-leaved heath; • Very wet mires often identified by an unstable 'quaking' surface; and • Depressions on peat substrates.	
Caithness and Sutherland Peatlands SAC	Marsh saxifrage	No
Caithness and Sutherland Peatlands Ramsar	Nationally Scarce *Sphagnum majus*	No
Caithness and Sutherland Peatlands Ramsar	Nationally Scarce Bog Orchid	No
Caithness and Sutherland Peatlands SAC and Ramsar	Otter	No



Tower Location
Alignment Section A
Temporary Tower Compound Area
Equipotential Zone (EPZ) (Pulling Position)
Temporary Access Track - EPZ
Temporary Access Track - Floating
Permanent Access Track - Floating
Special Area of Conservation (SAC)
Ramsar

0 0.1 0.2 0.3 0.4 0.5
Kilometres
N

SCALE: See Scale Bar	VERSION: A03
SIZE: A3	DRAWN: CI
PROJECT: 0652629	CHECKED: PW
DATE: 8/11/2025	APPROVED: KG

Figure 1.1
Spittal - Loch Buidhe - Beauly 400 kV OHL Connection
Caithness and Sutherland Peatlands SAC (North)

ERM
Scottish & Southern Electricity Networks
TRANSMISSION

PROJECTION: British National Grid

Path: \\uksprdgisfs01\Data\London\Projects\0652629 - SSE Beauly to Loch Buidhe\Maps\0720281 - SLBB - Designated Sites.aprx / 0720281 - SLBB - HRA - 05a - Caithness and Sutherland Peatlands SAC - A03

Little River

102

Tacher

N35

Burn of Tacher

Caithness &
Sutherland Peatlands
SAC & Ramsar

Rhianacoil

Standing
Stone

128

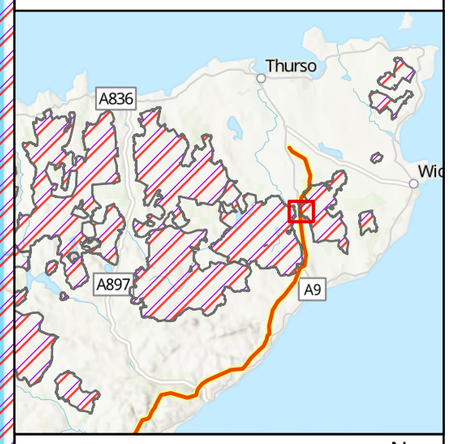
N40

Shinvall

Standing

Stemster

- Tower Location
- Alignment Section A
- Temporary Tower Compound Area
- Temporary Access Track - Cut/Fill
- Temporary Access Track - Floating
- Special Area of Conservation (SAC)
- Ramsar



0 0.1 0.2 0.3 0.4 0.5
Kilometres

N

SCALE: See Scale Bar	VERSION: A03
SIZE: A3	DRAWN: CI
PROJECT: 0652629	CHECKED: PW
DATE: 8/11/2025	APPROVED: KG

Figure 1.2
Spittal - Loch Buidhe - Beauly 400 kV OHL Connection
Caithness and Sutherland Peatlands SAC (South)

ERM

Scottish & Southern Electricity Networks
TRANSMISSION

PROJECTION: British National Grid

Path: \\uksprdgisfs01\Data\London\Projects\0652629 - SSE Beauly to Loch Buidhe\Maps\0720281 - SLBB - Designated Sites.aprx / 0720281 - SLBB - HRA - 05b - Caithness and Sutherland Peatlands SAC - A03

Figure 1.3: Route alternatives around the Caithness and Sutherland Peatlands SAC and Ramsar

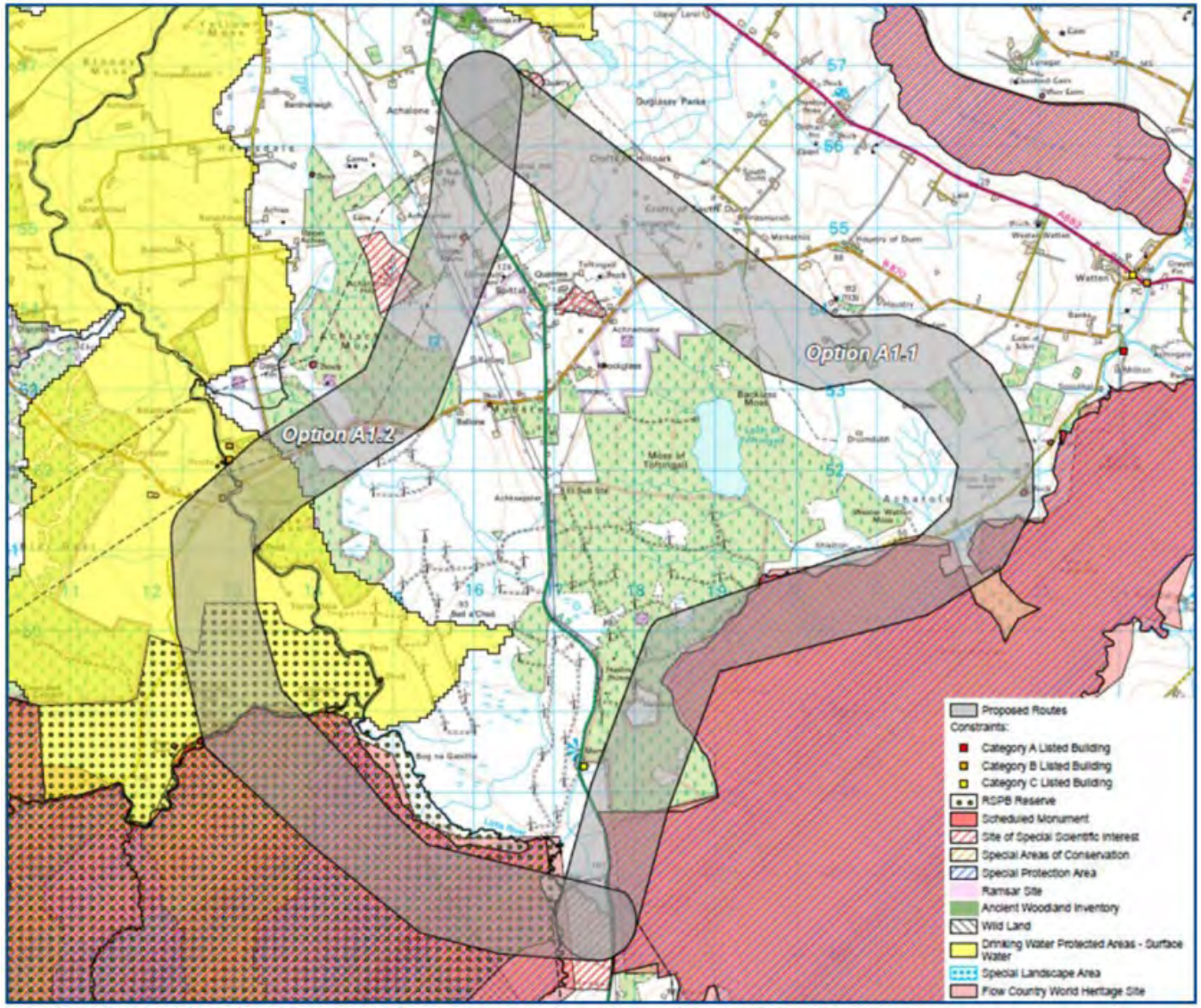
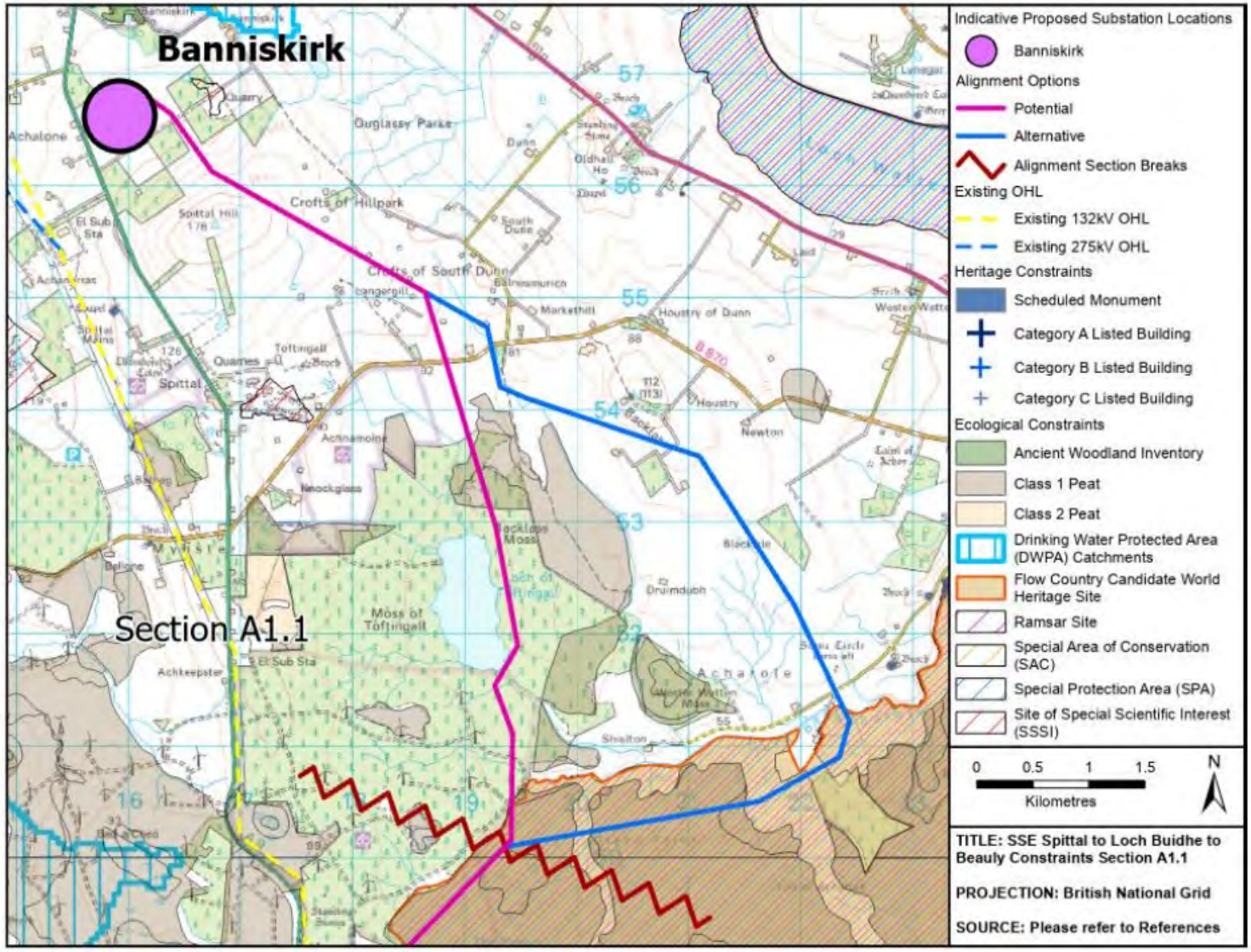


Figure 1.4: Alignment alternatives around the Caithness and Sutherland Peatlands SAC and Ramsar



N15
N20
N25
N30
N35
N40
N45
N50
N55
Caithness &
Sutherland Peatlands
SAC & Ramsar

Tower Location
Alignment Section A
Temporary Tower Compound Area
Equipotential Zones (EPZs) (Pulling Locations)
Temporary Access Track - Cut/Fill
Temporary Access Track - Floating
Permanent Access Track - Cut/Fill
Permanent Access Track - Floating
Marsh Saxifrage
Special Area of Conservation (SAC)
Ramsar

A836
A99
A9

0 0.5 1 1.5 2
Kilometres

N

SCALE: See Scale Bar	VERSION: A03
SIZE: A3	DRAWN: CI
PROJECT: 0652629	CHECKED: PW
DATE: 8/11/2025	APPROVED: KG

Figure 1.5
Spittal - Loch Buidhe - Beauly 400 kV OHL Connection
Records of Marsh Saxifrage Locations within Caithness and Sutherland Peatlands SAC and Ramsar

ERM

Scottish & Southern Electricity Networks TRANSMISSION

PROJECTION: British National Grid

Path: \\uksprdgisfs01\Data\London\Projects\0652629 - SSE Beauly to Loch Buidhe\Maps\0720281 - SLBB - Designated Sites.aprx / 0720281 - SLBB - HRA - 13 - Marsh Saxifrage - Caithness and Southerlands Peatlands SAC - A03