VOLUME 4: APPENDIX V1-7.8: CONNAGILL CLUSTER OUTLINE HABITAT MANAGEMENT PLAN

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Prepared by:

RPS

Stephen Lockwood
Director - Ecology

[redacted]

T [redacted]
E

Prepared for:

ASH design+assessment Ltd

Louise Smith
Associate

[redacted]

T [redacted]
E

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1 BACKGROUND

1.1 Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission have received requests to provide new transmission infrastructure to connect a number of renewable energy developments to the existing transmission network at Connagill 275/132 kV substation, located in Strath Halladale. These grid connections are collectively referred to as the 'Connagill Cluster Grid Connections'[1] and consist of a mixture of overhead lines (OHL) and underground cables. These are shown on **Figure 1**.

This outline Habitat Management Plan (HMP) aims to combine the HMPs of the Connagill Cluster Grid Connection projects, to mitigate the cumulative losses of habitat resulting from the construction of the grid connections, in line with the existing HMPs for the associated renewable energy developments.

The renewable energy developments to be connected to the existing Connagill 275/132 kV Substation include:

- Strathy Wood Wind Farm
- Strathy South Wind Farm
- Strathy North Wind Farm (the windfarm is already operational, benefitting from an existing OHL connection to Connagill Substation)
- Melvich Wind Energy Hub
- Kirkton Energy Park

All renewable energy developments listed above have Habitat Management Plans (HMPs) associated with them that are, or will be pending consent and development construction, implemented, and which seek to compensate for the effects to ecological and ornithological receptors from each development, and cumulatively from the surrounding developments where these were known about at the time of each submission. **Figure 1** provides an overview of the current proposals for the grid connections and the associated developments and includes both the Proposed Development with the Proposed Alignment and the Proposed Development with the Alternative Alignment.

The area surrounding the developments is sensitive, being within or in close proximity to the Caithness and Sutherland Peatlands Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site, along with the associated underlying Sites of Special Scientific Interest (SSSIs). The majority of the area which the grid connections would pass through is also designated as a UNESCO World Heritage Site (WHS) (the Flow Country World Heritage Site), recognised for the landscape, habitats and species of outstanding value that are present.

1.2 Document Purpose

This document seeks to:

- Provide an overview of the developments included as part of Connagill Cluster Grid Connections.
- Summarise the potential impacts and associated effects from both the renewable energy developments as predicted through their individual planning applications to ecological and ornithological receptors of the area, particularly those associated with the surrounding designated sites, and those for the Connagill Cluster Grid Connections.
- Summarise the proposed and implemented HMPs for the renewable energy developments and the location of these works across the wider landscape.

[1] The proposed Armadale Wind Farm was originally included within the Connagill Cluster Grid Connections project. However, in May 2024 the developer of the proposed Armadale Wind Farm withdrew the section 36 application and consequently no longer require a grid connection. As such, this project has been removed from the Connagill Cluster Grid Connections.

- Provide an outline HMP strategy for the Connagill Cluster Grid Connections as a whole to compensate and enhance habitat quality to benefit ecological and ornithological receptors, in line with the existing HMPs for the renewable energy developments.
- Outline that a robust HMP strategy can be delivered which would provide significant benefits to biodiversity over and above any potential effects in line with current National Planning Framework (NPF) 4 planning policy of a 10% Biodiversity Net Gain (BNG) uplift.

1.2.1 Assumptions

The approach to calculating indicative compensation requirements in this outline HMP from the Connagill Cluster Grid Connections has used information available at the time of finalising this document (January 2025). This outline HMP should therefore be treated as a live document, and further updates to identify the compensation requirements for the cluster as a whole will be required as design details for other elements of the cluster become known.

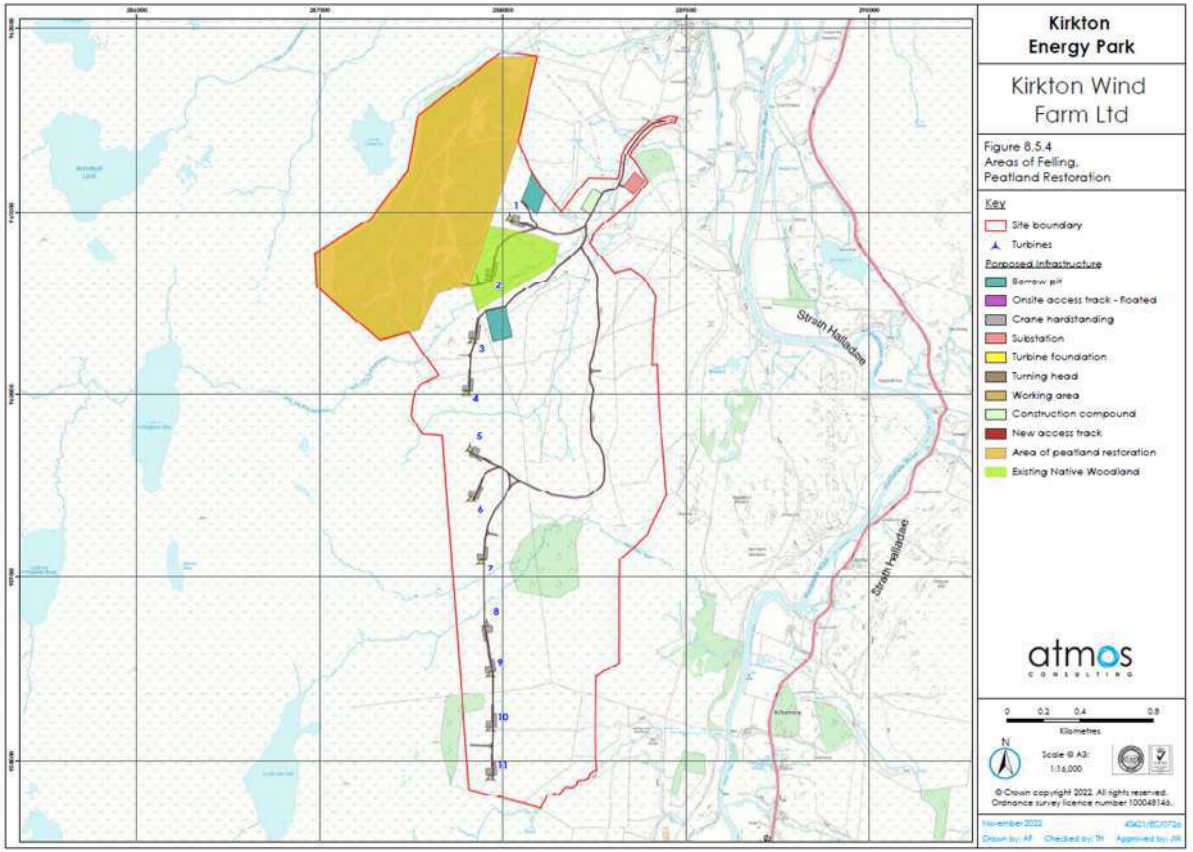
2 HABITAT MANAGEMENT PLAN SUMMARY OF RENEWABLE ENERGY DEVELOPMENTS TO BE CONNECTED BY THE CONNAGILL CLUSTER

Table 1 provides an overview of each wind farm development and their associated HMPs. What is clear from the summary is that the primary aims of the HMPs are related to restoration of peatland habitats, as well as other habitat enhancement for certain species of birds. The HMPs have a particular emphasis on protection, mitigation, compensation and enhancement to the qualifying species of the Caithness and Sutherland Peatlands SAC and SPA, and these habitats are also part of the unique landscape and natural heritage of the Flow Country WHS.

Table 1: Summary of the Habitat Management Plans of the wind farms to be connected by the Connagill Cluster

Table 1: Wind Farm Habitat Management Plans	
Receptors & Impacts	**HMP Compensation / Mitigation**
Kirkton Energy Park	
• Effects to habitats. • Conserve, enhance and restore important habitats for golden plover and hen harrier.	a) All habitat management works to be completed within the red line boundary of the development. b) Reduce peatland degradation by removal of forestry plantation, up to 88 ha for restoration to blanket bog. Increasing the extent and diversity of blanket bog habitat in areas where suitable hydrological regimes can be created to support bog habitat. The ultimate aim of increasing blanket bog extent is to buffer the adjacent Caithness and Sutherland Peatlands SAC, and provide opportunities for expansion of peatland floral species while returning former forested areas to a more natural landscape. c) Hydrological management: block drainage ditches to aid in water retention. d) Management of restoration areas to increase attractiveness to key raptor species such as tree removal, sward cutting to reduce sward height and subsequent suitability for nesting raptor species. e) Habitat enhancement for golden plover and hen harrier. Actions will be defined by ongoing monitoring of the area. f) A Condition Site Monitoring (CSM) point survey, including the percentage cover of each plant and moss species and vegetation heights. In addition to habitat surveys, and specifically in relation to hen harrier, prey abundance surveys would also be carried out to provide further information of the importance of habitats within the site for hen harrier. This survey information would be used to assess the suitability of habitats present for nesting and foraging golden plover and hen harrier, to assess any processes or pressures affecting suitability and to define any supplementary habitat management prescriptions required to facilitate improvements. g) Ornithological, and vegetation in the area of the blanket bog restoration, monitoring post-construction will take place in Year 1, 3 and 5 following commencement of the operation with the aim of ensuring the wind farm is not having adverse effects on the bird populations present onsite and ensure the HMP is effective in supporting them.

Table 1: Wind Farm Habitat Management Plans	
Receptors & Impacts	**HMP Compensation / Mitigation**



Receptors & Impacts	HMP Compensation / Mitigation
Melvich Wind Energy Hub	
• Loss of peatland habitats including dry and wet heath, and blanket bog habitats.	a) To restore and enhance a minimum of 141 Ha of modified bog habitats within the site (Habitat Management Areas (HMAs) 1, 2 and 3). b) To expand restoration up to 220 Ha of improved habitat within the 10 years of commissioning the development (HMAs 4, 5 and 6).

Table 1: Wind Farm Habitat Management Plans	
Receptors & Impacts	**HMP Compensation / Mitigation**
	c) Restore and manage localised areas of modified bog habitats that show signs of degradation and erosion through slope-reprofiling, seeding and damming. The management will commence with construction works and be ongoing throughout the development. d) Continually assess deer numbers onsite and initiate a deer management plan if required to improve the chance of successful habitat restoration

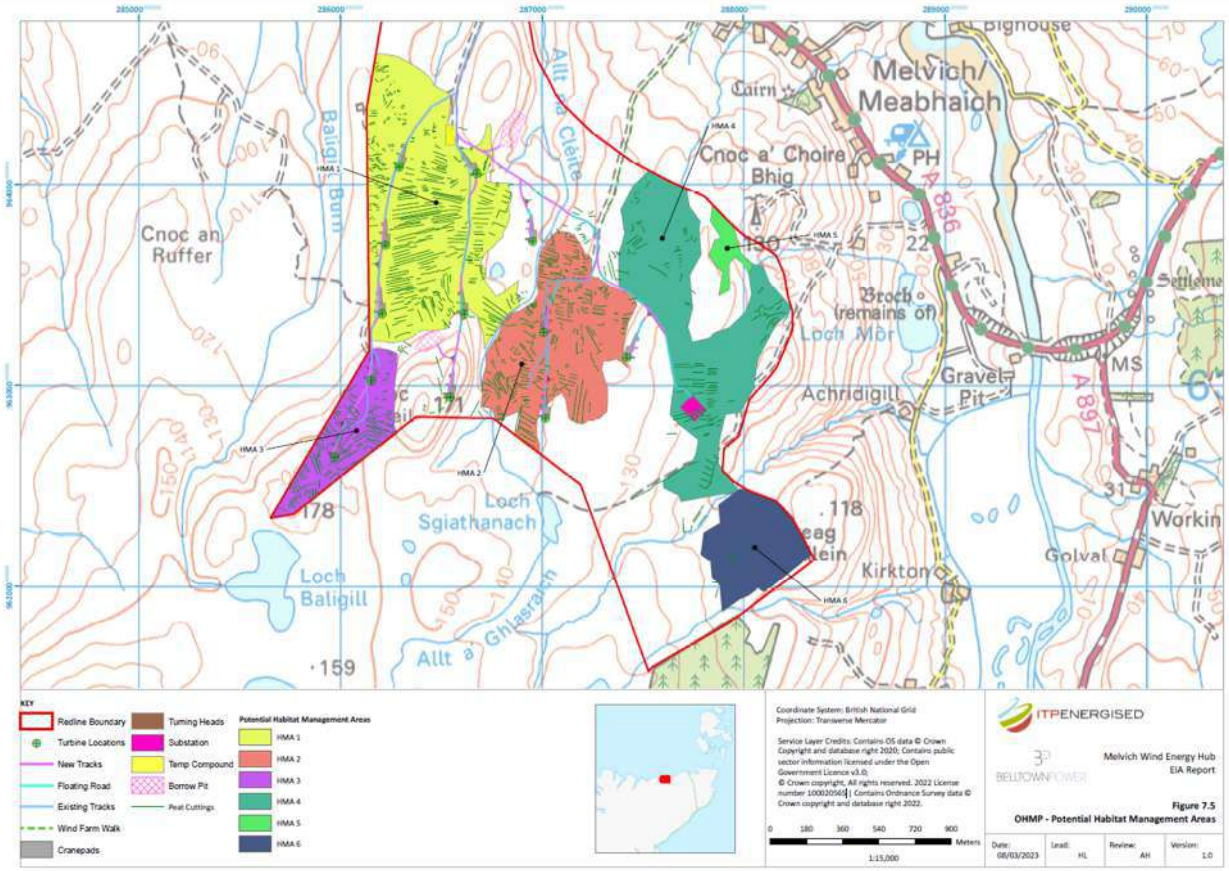
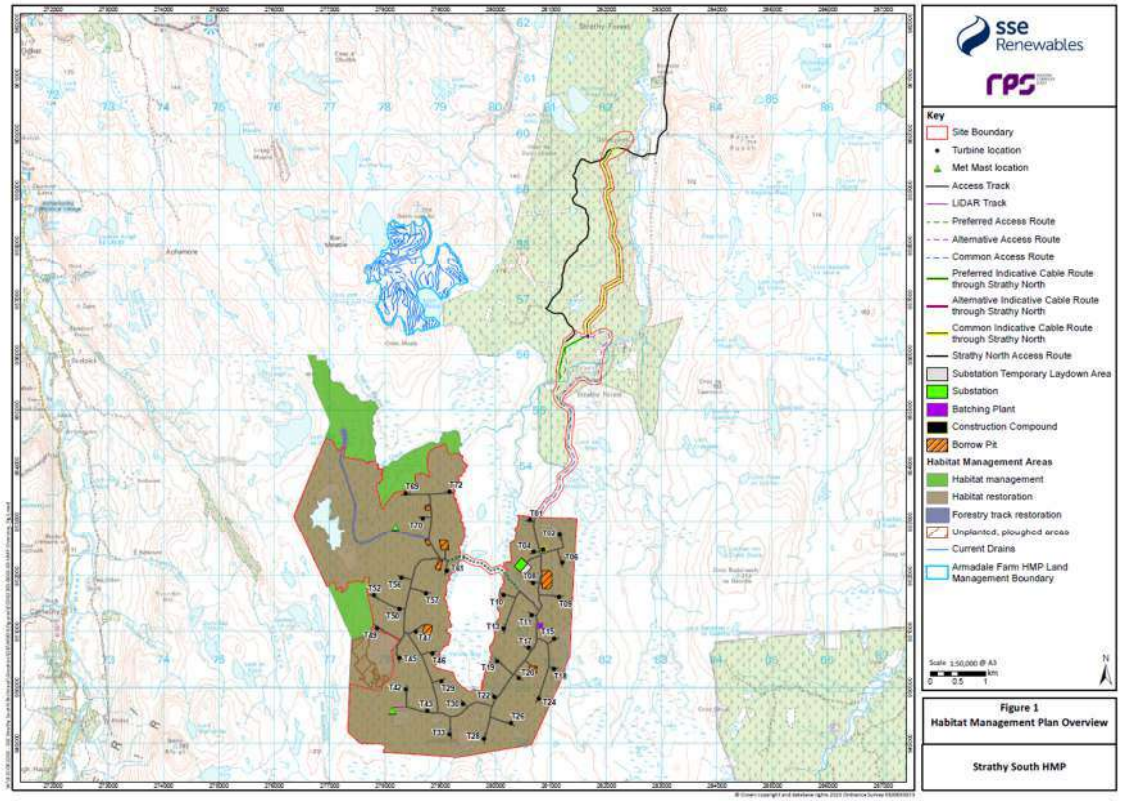
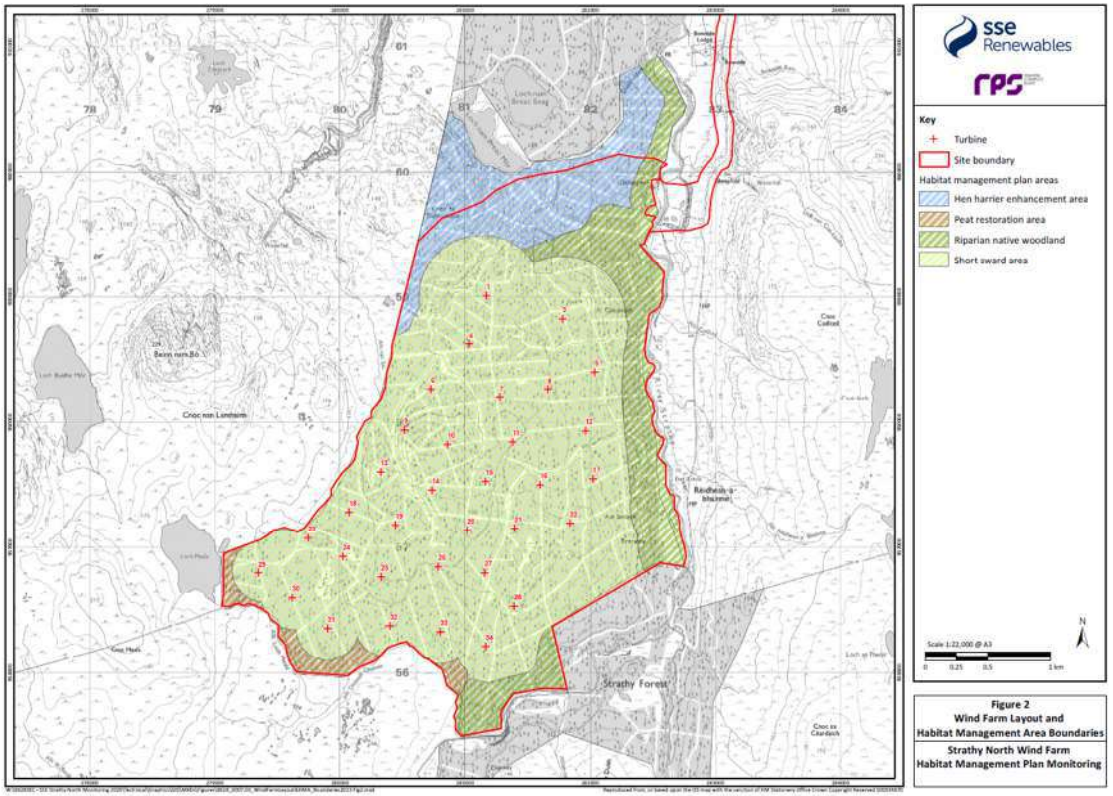


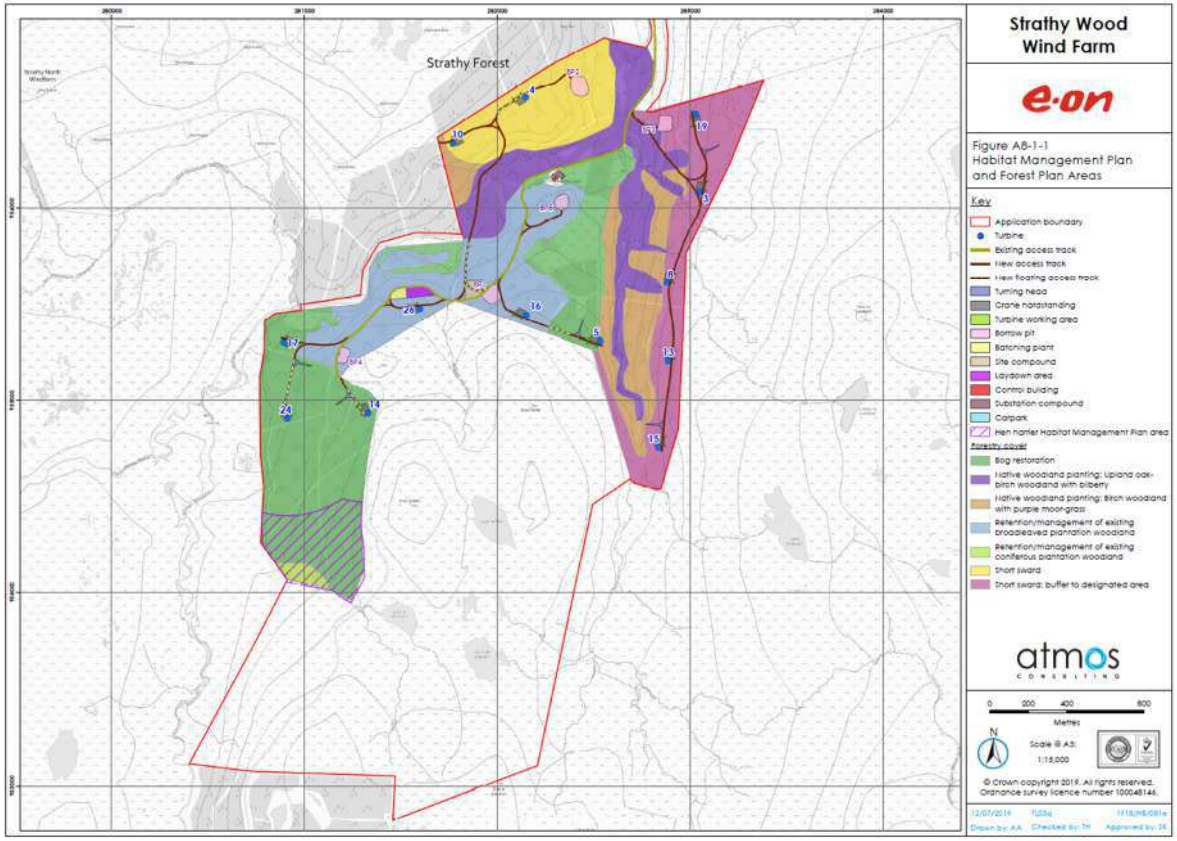
Table 1: Wind Farm Habitat Management Plans	
Receptors & Impacts	**HMP Compensation / Mitigation**
Strathy South Wind Farm	
• Loss of habitats beneath the footprint of the development. • Effects to the surrounding Caithness and Sutherland Peatlands SAC through dispersal of deer from the conifer plantation to the open habitats of the SAC. • Collision risk to species associated with the SPA.	a) Habitat Management Areas include the site boundary, areas in proximity to the site boundary and areas identified on Armadale Farm. b) Removal of conifer plantation and restoration of peatland habitats where appropriate. c) Improve peatland habitats within land adjacent to the development area. d) Enable peatland restoration activities to be completed on ground at Armadale Farm to compensate for potential effects to the SPA / SAC. e) Undertake bird and deer monitoring activities across the site and wider area. f) Control vegetation in close proximity to turbines to avoid attracting nesting hen harrier and waders therefore reducing collision risk.



Receptors & Impacts	HMP Compensation / Mitigation
Strathy North Wind Farm	
• Loss of habitat and effects to peat from construction of the development. • Loss of foraging opportunities to species associated with the SPA including hen harrier and Scottish cross bill. • Potential effects to the aquatic receptors of the River Strathy. • Collision risk to qualifying species of the Caithness and Sutherland Peatlands SPA. • Effects to the surrounding SAC from disbursal of deer from the conifer plantation at the time of felling to the SAC qualifying habitats.	a) The Habitat Management Area includes all land within the development's red line boundary. b) Creation of a Hen Harrier Enhancement Area in the north of the development area away from the turbine envelope and potential areas of collision risk. c) Creation of a short sward area within the turbine envelop and an appropriate buffer to limit the opportunities for forage and nest creation by sensitive ornithological receptors. d) Undertake peatland restoration where peat depths are amenable, to tie ground back into the surrounding Caithness and Sutherland Peatlands SAC. e) Create areas of riparian native woodland in the east of the site in proximity to the River Strathy to improve water quality of the watercourse.



Receptors & Impacts	HMP Compensation / Mitigation
Strathy Wood Wind Farm	
• Loss of habitats from footprint of the development • Effects to hen harrier through collision risk • Loss of foraging and nesting habitat to hen harrier • Effects to species associated with the surrounding Caithness and Sutherland Peatlands SPA / SAC	The Habitat Management Area is within the red line boundary of the development but excludes areas that fall within the Caithness and Sutherlands Peatlands SPA / SAC. Primary aim to restore peatland and wet heath habitats within the HMA where suitable conditions are present and maintain habitat suitable for hen harrier and other notable species in appropriate areas of the development, this includes: a. creation of short sward areas to decrease attractiveness of habitats in proximity to the turbine envelope. b. creation of a Hen Harrier Enhancement Area to increase suitable nesting and foraging habitat for hen harrier. c. use of Native Woodland Restoration to increase habitat suitability away from areas of risk. Implementation of a Forest Plan to encourage the suitable management of the woodland resources on the proposed development. The plan includes the natural regeneration out with areas of native woodland planting associated with the HMP and the management of existing and former forestry. d. Inclusion of bat and bird boxes to increase additional benefits to such species. e. Reduce total woodland coverage by approximately 50%, which is dominated by non-native plantation such as Sitka spruce, larch and lodgepole pine. Felled timber can then be used for drain blocking. f. Deer management plan to prevent overgrazing and maintain habitat diversity. Ideally, the deer population will be at a level where fencing is not required. g. Manage suitable habitat to maintain hen harrier in the area that is situated at least 500 m away from any proposed turbines to minimise collision risk. h. Increase the extent and diversity of blanket bog habitat. Note, that post submission of the above Habitat Management Plan and below figure, the development has removed two turbines to reduce effects to environmental receptors. As part of the ongoing development of the HMP for the site, an element of native woodland regeneration and management will be incorporated into the scheme.


Strathy Forest
Strathy Wood Wind Farm
e·on
Figure A8-1-1
Habitat Management Plan and Forest Plan Areas
Key
Application boundary
Turbine
Existing access track
New access track
New floating access track
Turning head
Crane hardstanding
Turbine working area
Borrow pit
Batching plant
Site compound
Laydown area
Control building
Substation compound
Carpark
Hen harrier Habitat Management Plan area
Forestry cover
Bog restoration
Native woodland planting: Upland oak-birch woodland with bilberry
Native woodland planting: Birch woodland with purple moor-grass
Retention/management of existing broadleaved plantation woodland
Retention/management of existing coniferous plantation woodland
Short sward
Short sward: buffer to designated area
atmos
CONSULTING
0 200 400 800
Metres
N
Scale @ A3: 1:15,000
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3 SUMMARY OF EFFECTS FROM STRATHY SOUTH WIND FARM GRID CONNECTION

An application under section 37 of the Electricity Act 1989 will be submitted to the Energy Consents Unit (ECU) of the Scottish Government for consideration in Febraury 2025 for Strathy South Wind Farm Grid Connection, the second of the Connagill Cluster Grid Connection projects following the submission of a section 37 application for Strathy Wood Wind Farm Grid Connection which was submitted to ECU in November 2024.

An overview of the Strathy South Wind Farm Grid Connection is shown in **Figure 2**. This connection comprises a Proposed Alignment (the Applicant's preference) and an Alternative Alignment (see definitions in **Volume 1: Chapter 3: The Proposed Development**). The decision taken by the Applicant to include both options within the consent application has been made given the route of the Proposed Alignment passes through the footprint of the proposed Melvich Wind Energy Hub and the minimum distance required between the proposed wind turbines and an OHL capable of operating at 275 kV could not be maintained along the route of the Proposed Alignment and therefore, should Melvich Wind Energy Hub be granted consent, an alternative OHL alignment would need to be considered.

The Proposed Alignment would comprise approximately 10.5 km of double circuit overhead line (OHL) supported by steel lattice towers from Strathy North 'T' (near Dallangwell) to a new CSE compound, prior to connecting into Connagill 275/132 kV substation via two short sections of single circuit 132 kV UGC. The Alternative Alignment is approximately 13.5 km in length and would deviate away from the Proposed Alignment between Towers 31 and 48 but would otherwise follow the same alignment as the Proposed Alignment. To allow for futureproofing, it is proposed that a section of this grid connection would be capable of operating at 275 kV in the future, if required.

Although it is predicted that the construction and operational phases of the development for this section of OHL would have effects on ecological and ornithological receptors, no significant effects were identified to ecological or ornithological receptors, singularly or cumulatively with other developments in the Connagill Cluster (see **Volume 1: Chapter 7 – Ecology**, **Volume 1: Chapter 8 – Ornithology, Volume 5: Chapter 5 – Ecology** and **Volume 5: Chapter 6: Ornithology**).

The Shadow Habitats Regulations Appraisals (SHRAs) completed for the project could not determine no Likely Significant Effects (LSE) on the Caithness and Sutherland Peatlands SAC / Ramsar / SPA during the Stage 1 Screening process. However, taking into account the minor magnitude of the habitat impacts, through appropriate mitigation and implementation of this HMP Strategy, it is determined that there would be no adverse effects to the integrity of the Caithness and Sutherland Peatlands SAC / Ramsar /SPA, or their qualifying features.

For the purposes of this Outline HMP which seeks to support all developments within the Connagill Cluster Grid Connections projects, and to be consistent with the approach adopted for the Strathy Wood Wind Farm Grid Connection section 37 submission[2] which included submission of this Connagill Cluster Outline HMP, the Strathy Wood Wind Farm Grid Connection has continued to be used to predict effects to habitats across the cluster. However, as the Strathy South Wind Farm Grid Connection habitat loss calculations are now available, information within this document has been updated. To take a conservative approach to the information provided, the Alternative Alignment (which is longer than the Proposed Alignment) has been used in this document.

The Strathy Wood Wind Farm Grid Connection would comprise approximately 4.5 km of double circuit overhead line (OHL) supported by (predominately) steel lattice towers between a new cable sealing end (CSE) compound near the Strathy Wood Wind Farm on-site substation to the existing network initially via a 'T' onto the existing Strathy North Wind Farm 132 kV trident 'H' wood pole OHL which would transport

[2] Strathy Wood Wind Farm Grid Connection (ECU Reference ECU00005221)

the electricity generated from Strathy Wood Wind Farm to the existing Connagill 275/132 kV substation for onward transmission. **Figure 3** provides an overview of this development.

Table 2 summarises the predicted habitat loss anticipated from the construction of the Strathy Wood Wind Farm Grid Connection that have been considered during this process (combined summary of Tables 7.7 and 7.8 in **Volume 1: Chapter 7 – Ecology** of the Strathy Wood Wind Farm Grid Connection EIA Report[2]).

Table 2: Summary of Direct and Indirect Habitat Loss from Strathy Wood Wind Farm Grid Connection within SAC

Habitat	Corresponding NVC Habitat Type	Areas (ha)			
		Direct Permanent Loss	Indirect Permanent Loss due to Habitat Change	Temporary Loss	Total (by habitat type)
Acid grassland	U20	0.010	0.040	0.028	0.078
Bog	M15, M15b, M15c, M17, M17a, M17b, M20, M25, M25a, M25b	1.510	2.040	3.810	7.360
Dwarf shrub heath	H10	0.012	0.040	0.030	0.082
Fen, marsh and swamp	M6, M6c	0.000	0.005	0.000	0.005
Other coniferous woodland	N/A	0.650	0.000	0.000	0.650
Purple moor-grass and rush pasture	M23b	0.006	0.000	0.000	0.006
Total (all habitats)		**2.188**	**2.125**	**3.868**	**8.181**

Losses to habitats within the SAC / Ramsar are calculated as 2.57 ha, which constitutes 0.42 ha of direct loss beneath the tower footprints, 1.07 ha of indirect change through alterations to the hydrology of peatland habitats, and 1.08 ha of temporary loss during the construction phase of the development, which would be re-instated in compliance with best practice.

It should be noted that the predicted habitat losses to the SAC / Ramsar from the construction and operation of the proposed development equates to c. 0.002% of the total area of the designated site. The condition of the habitats across the area have been heavily affected by both drainage and impacts from deer, and the forms of the peatland habitats identified through botanical survey are atypical from those described in relevant literature such as the communities described in the National Vegetation Classification (NVC) nomenclature (Rodwell, J.S (1992))[3].

Effects to ornithological interests have been similarly assessed for the Strathy Wood Wind Farm Grid Connection (see Volume 1: Chapter 8 – Ornithology of the Strathy Wood Wind Farm Grid Connection EIA Report[2]). These identified potential effects to qualifying species of the Caithness and Sutherland Peatlands SPA, and effects through displacement from habitat loss during construction and operational disturbance to hen harrier, plus collision risk to hen harrier and red-throated diver during operation.

[3] Rodwell, J.S (1992) National vegetation classification field guides

4 CONSIDERATION OF OTHER CONNAGILL CLUSTER PROJECTS

As noted, the overarching HMP will include all Connagill Cluster Grid Connections. Given other detailed design elements of the cluster are still being developed, the approach to considering indicative habitat losses for other Connagill Cluster Grid Connection projects has taken a relatively simplistic approach for the purposes of this outline HMP. This approach has involved taking the length of the Strathy Wood Wind Farm Grid Connection and providing a ratio of habitat loss depending on the connection length of the other grid connections compared to that for Strathy Wood Wind Farm Grid Connection. This is considered appropriate as habitats throughout the Connagill Cluster are typical of the upland environment (peatlands, heath and flush).

The overarching HMP will also need to meet the requirements of NPF4 and other relevant commitments to providing net gain to biodiversity of at least 10% through enhancement measures, and where peatlands are affected, a 1:10 ratio of compensation / enhancement.

As detailed in Section 3, information surrounding the potential habitat loss associated with the Strathy South Wind Farm Grid Connection is now available and this has been used in **Table 3** below, rather than using a predictive method and the Strathy Wood Wind Farm Grid Connection as a proxy.

Table 3: Predicted Habitat Loss of the Connagill Cluster Grid Connections

Predicted Habitat Loss					
	Grid Connection				
Habitat	**Kirkton**	**Melvich**	**Strathy South[4]**	**Strathy Wood**	**Totals (Ha)**
Acid grassland	0.00	0.01	0.95	0.08	1.04
Bog	0.29	0.81	29.79	7.36	38.25
Dwarf shrub heath	0.00	0.01	0.33	0.08	0.42
Fen, marsh and swamp	0.00	0.00	1.89	0.01	1.9
Other coniferous woodland	0.03	0.07	0.03	0.65	0.88
Purple moor-grass and rush pasture	0.00	0.00	0.00	0.01	0.01
Other habitats	0.00	0.00	1.02	0.00	1.02
Totals (all habitats)	**0.33**	**0.90**	**34.01**	**8.18**	**43.42**

Table 4 below provides the indicative grid connection lengths and the associated multiplying factors (when compared to Strathy Wood Wind Farm Grid Connection) that have been used to calculate the potential habitat loss from each development.

Table 4: Indicative Grid Connection Lengths and the Associated Multiplying Factors

Grid Connection Lengths and Multiplying Factors		
Grid Connection	**Grid Connection Length (km)**	**Multiplying Ratio**
Kirkton	0.18	0.04
Melvich	0.48	0.11
Strathy South[4]	N/A	N/A
Strathy Wood	4.47	1.00

[4] Using the Alternative Alignment of the Strathy South Wind Farm Grid Connection

For Strathy South Wind Farm Grid Connection, the assessment of ornithological receptors has considered effects both singularly and cumulatively from all developments in the area including the Connagill Cluster Grid Connections and their associated wind farms plus others in the wider landscape (see **Volume 1: Chapter 8 – Ornithology** and **Volume 5: Chapter 6: Ornithology – Alternative Alignment**); this assessment has been considered in developing appropriate aims and objectives of this outline HMP.

5 AIMS AND OBJECTIVES OF THE HMP

The indicative aggregate value of potential habitats affected by the Connagill Cluster Grid Connections is approximately 43.42 ha. The majority of the habitats affected are peatland habitats; bog and dry and wet heath (c.41.61 ha), along with some small losses to woodland and grassland habitats. The focus of the overarching Outline HMP would therefore be compensation for the loss of these habitats.

Taking NatureScot's standing advice into account with regards to compensation for the loss of these habitats, this recommends a 1:10 ratio for compensation to effects to peatland habitats. As such, for the purpose of this HMP strategy, a target of delivering above 550 ha of peatland restoration in the area has been proposed.

In addition to the peatland restoration, compensatory planting for the loss of woodlands would be completed. Although compensatory planting is recommended on a like for like basis in some guidance, NPF4 requires an improvement to biodiversity by development. It is therefore proposed that an area of at least double that potentially lost to the development of the Connagill Cluster Grid Connections is identified for woodland planting (c.2 - 3 ha).

Further to the habitat improvement measures, it is proposed that artificial nest rafts are installed at one or more suitable lochs within the wider area to provide additional nesting opportunities for breeding red-throated and black-throated divers.

Potential Aims and Objectives of the Connagill Cluster Overarching HMP are therefore:

- **Aim 1** – To undertake peatland restoration of over 550 ha of peatland habitat in the local area.
    - **Objective 1.1** – Re-use of peat generated through construction of the developments in a sensitive manner at appropriate receptor locations in close proximity to the areas of excavation.
    - **Objective 1.2** – To undertake c.550 ha of peatland restoration in the wider landscape including within the Caithness and Sutherland Peatlands SAC. Restoration would seek to improve the quality of habitats present, aiding in maintaining the Favourable Conservation Interests of relevant qualifying interests of the SAC.
- **Aim 2** - To undertake c. 2-3 ha of woodland planting to compensate for loss of woodland habitats.
    - **Objective 2.1** – At appropriate locations across the Connagill Cluster identify and implement riparian woodland planting surrounding watercourses to improve biodiversity and water quality within watercourses in the catchment of the developments.
- **Aim 3** – To provide additional nesting habitats for divers and common scoters through the provision of diver rafts.
    - **Objective 3.1** – Identification of appropriate lochans in the Caithness and Sutherland Peatland SPA which would be suitable to locate diver/ common scoter rafts on, thereby improving habitats available to nesting divers.

5.1 Aim 1 – Peatland Restoration

Aerial photography would be reviewed to identify potential peatland restoration areas along the lengths of the Connagill Cluster Grid Connections, along with the wider opportunities within the Caithness and Sutherland Peatland SAC. The wider restoration area would take account of the HMPs for the consented

and proposed wind farm developments, as summarised in **Table 1** of this document. This seeks to ensure that, where possible, the Connagill Cluster Overarching HMP provides additionality to the measures already underway in the area.

Figure 1 provides an overview of the routes of the proposed Connagill Cluster Grid Connections. Within this, areas of peatland that have been affected by peat cutting and drainage have been identified. It is proposed that peat that would be generated from construction of the Connagill Cluster Grid Connections would be used in the restoration of these areas. The re-use of peat will be detailed within the Peat Management Plans submitted as part of each development's section 37 application and will mesh with the requirements of this overarching Connagill Cluster HMP. As construction plans and the alignment of each development are finessed, mitigation through design will seek to limit the effects to peatland habitats. This would limit peat generated through the construction process, but in planning the construction of each development, it will also become clearer where impacts are unavoidable. As these issues become clearer, further review of the potential peat restoration areas within the Limits of Deviation (LoD) for each grid connection would be completed to plan in detail the restoration of appropriate areas to ensure peat is sensitively re-used.

Additional potential wider peatland restoration areas that could be taken forwards across the wider landscape are currently under consideration, but require landowner agreement before these can be progressed for inclusion in the HMP.

5.2 Aim 2 – Woodland Creation

Consideration of the ground conditions and the context of the proposed riparian woodland planting in the landscape will need to be given to identify the species, spacing and design of any planting to ensure it is appropriate for the locations proposed. At this time, it is envisaged that planting would be limited to areas surrounding watercourses to aid in water quality improvement, and the species used would mirror those of other watercourses in the area (alder, birch, willow, rowan) and would be planted at appropriate densities.

5.3 Aim 3 – Diver / Common Scoter Rafts

There is strong evidence from work in Argyll and Bute that diver rafts can be successfully used for both red and black divers to provide safe nesting habitat away from predators and areas at risk of flooding, which in turns increases breeding success. The provision of such measures were initially considered for the Strathy South Wind Farm but were not included in the final HMP for implementation.

Further consideration of appropriate locations for rafts would be given to maximise the benefit these might bring to both diver species and common scoter within the landscape. This will consider all information available from the developments in the surrounding areas. Further field survey would be required to assess any proposed locations to gauge their suitability for rafts to be installed along with landowner agreement for the works.

6 CONCLUSION

It is considered that the three Aims and associated Objectives outlined in this Outline HMP would provide significant compensation for the effects of the Connagill Cluster Grid Connections to sensitive ecological and ornithological receptors of the area in line with the Applicant's aspirations to provide at least 10% Biodiversity Net Gain across all developments, and in accordance with the requirements of current NPF4 planning policy.

Furthermore, the scale of the works provides significant enhancement to habitats through peatland restoration, woodland planting and provision of additional breeding habitats for key species of the Caithness and Sutherland Peatlands SPA.

Consideration has been given to the existing commitments and activities of the associated wind farms to ensure landscape scale management is implemented, with this additionality providing benefits to sensitive receptors which cannot be qualified but are clearly of greater benefit than the individual sum of their parts.

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Notes
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Legend

- Strathy Wood Wind Farm Grid Connection
- Strathy South Wind Farm Grid Connection (Proposed Alignment)
- Strathy South Wind Farm Grid Connection (Alternative Alignment)
- Melvich Wind Energy Hub Grid Connection
- Kirkton Energy Park Grid Connection
- Strathy North Wind Farm Grid Connection

Site Boundaries

- Strathy Wood Wind Farm
- Strathy South Wind Farm
- Melvich Wind Energy Hub
- Kirkton Energy Park
- Strathy North Wind Farm

Turbine Layouts

- Strathy Wood Wind Farm
- Strathy South Wind Farm
- Melvich Wind Energy Hub
- Kirkton Energy Park
- Strathy North Wind Farm

Rev	Description	By	CB	Date

MAKING COMPLEX EASY
A TETRA TECH COMPANY
Atholl Exchange, 1st Floor, 6 Canning Street, Edinburgh, EH3 8EG
T: +44(0)131 555 5011 E: rpsed2@rpsgroup.com

Client: SSEN Transmission

Project: Connagill Cluster Habitat Management Plan

Title: Overview of Grid Connections and Proposed Developments

Status	Drawn By	PM/Checked By
Issue	LM	SL
Project Number	**Scale @ A3**	**Date Created**
ECO20456	1:75,000	18/09/24
Figure Number		**Rev**
1		04

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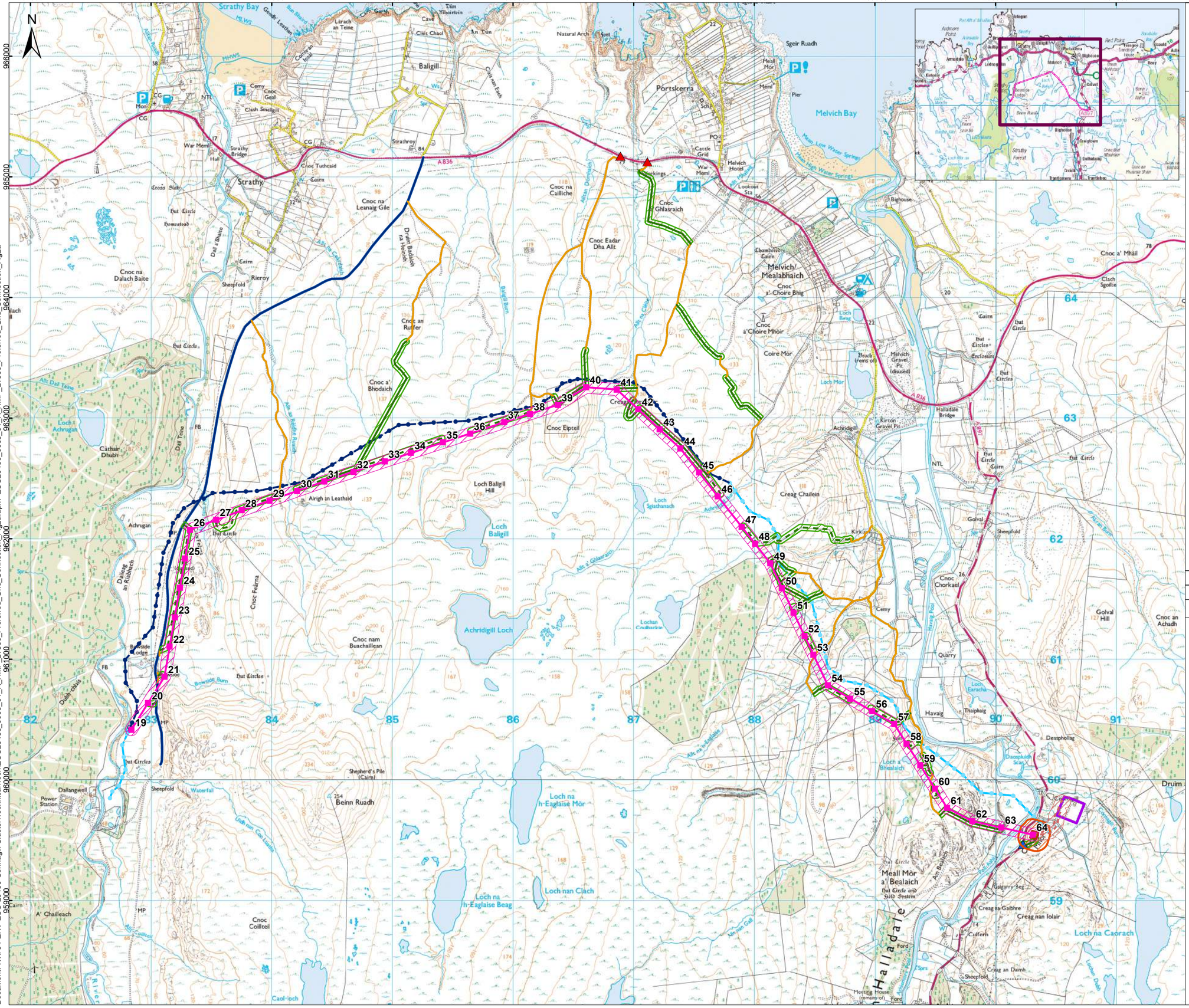
0 0.5 1 1.5 2km

Document: W:\794-ENV-ECO-20456 Connagill Cluster\Technical\Tech\ECO20456_0028_04_R_HMP_GridConnections_ProposedDev_Fig1.aprx ECO20456_0028_04_R_HMP_GridConnections_ProposedDev_Fig1



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Legend

- Proposed Steel Lattice Tower
- Existing Bellmouth (To Be Upgraded)
- New Bellmouth
- Existing Wood Pole (H Pole) (To Be Dismantled)
- Proposed* Wood Pole (H Pole) (To Be Dismantled)
- Existing Wood Pole (H pole) (To Be Retained)
- Proposed* Wood Pole (H pole) (To Be Retained)
- Proposed OHL Alignment
- Proposed Underground Cable (UGC)
- Proposed Cable Sealing End (CSE) Compound
- Existing Access Track (To Be Upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Existing 132kV OHL (To Be Dismantled)
- Existing Access Track
- Connagill 275/132 kV Substation
- Existing 132kV OHL (To Be Retained)
- Limit of Deviation (OHL)
- Limit of Deviation (UGC)
- Limit of Deviation (CSE Compound)
- Limit of Deviation (Access Tracks)

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Client: SSEN Transmission

Project: Connagill Cluster Habitat Management Plan

Title: Overview of the Strathy South Wind Farm Grid Connection Proposed Alignment

Status	Drawn By	PM/Checked By
Issue	LM	SL
Project Number	**Scale @ A3**	**Date Created**
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Figure Number		**Rev**
2a		**01**

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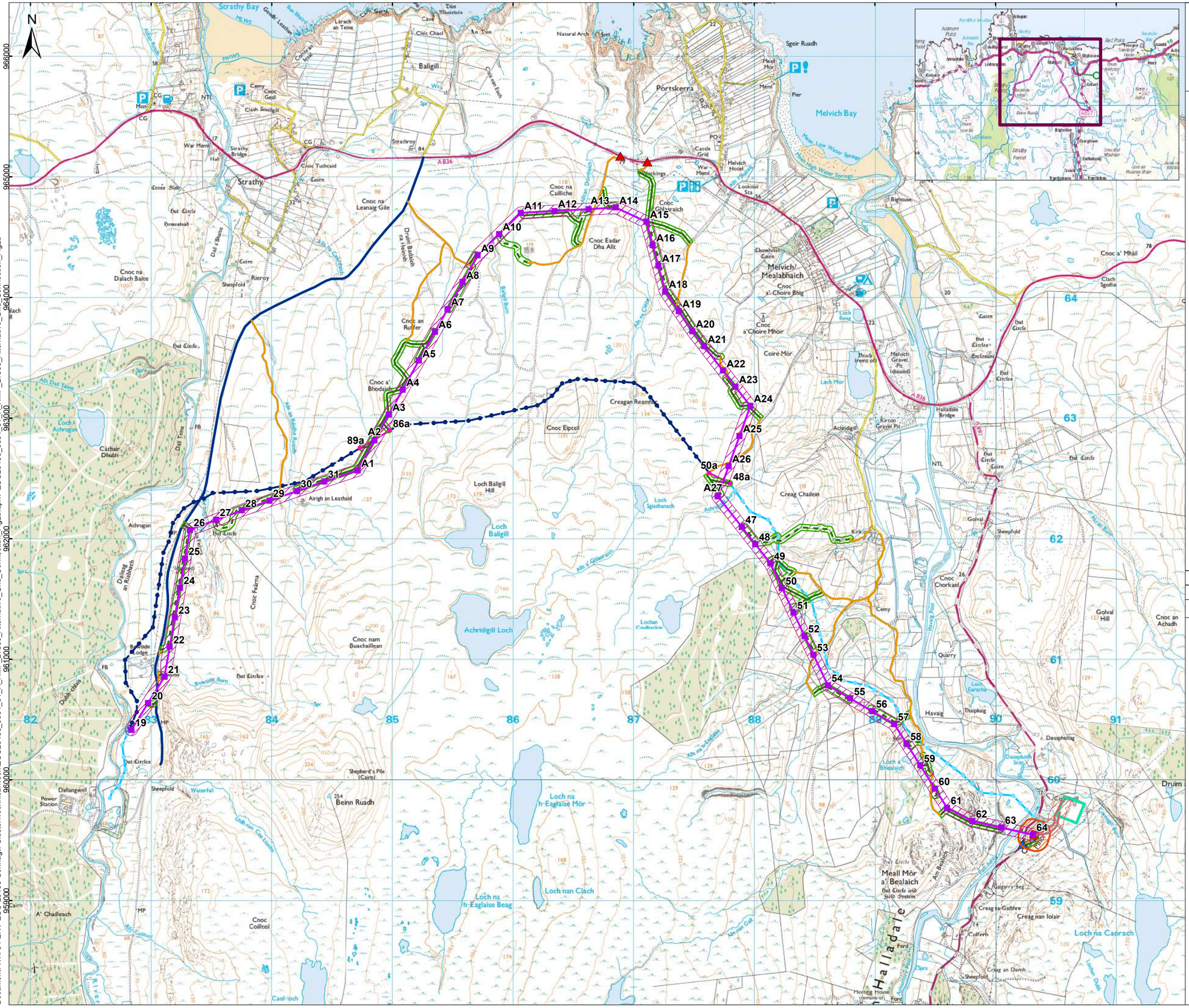
Document: W:\794-ENV-ECO-20456 Connagill Cluster\Technical\Tech\ECO20456_0063_01_R_HMP_LT560_Preferred_Grid_Connection_Fig2a\ECO20456_0063_01_R_HMP_LT560_Preferred_Grid_Connection_Fig2a.aprx ECO20456_0063_01_R_HMP_LT560_Preferred_Grid_Connection_Fig2a



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Legend

- Alternative Steel Lattice Tower
- Proposed Temporary Wood Pole (H Pole)
- Existing Bellmouth (To Be Upgraded)
- New Bellmouth
- Existing Wood Pole (H Pole) (To Be Dismantled)
- Proposed* Wood Pole (H Pole) (To Be Dismantled)
- Existing Wood Pole (H Pole) (To Be Retained)
- Proposed* Wood Pole (H Pole) (To Be Retained)
- Alternative OHL Alignment
- Proposed Underground Cable (UGC)
- Proposed Cable Sealing End (CSE) Compound
- Existing Access Track (To Be Upgraded)
- Proposed Permanent Access Track
- Proposed Temporary Access Track
- Existing Wood Pole (H Pole) (To Be Dismantled)
- Proposed Temporary UGC Alignment
- Existing Access Track
- Connagill 275/132 kV Substation
- Existing OHL (To Be Retained)
- Limit of Deviation (Alternative OHL)
- Limit of Deviation (UGC)
- Limit of Deviation (CSE Compound)
- Limit of Deviation (Access Tracks)

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Client: SSEN Transmission

Project: Connagill Cluster Habitat Management Plan

Title: Overview of the Strathy South Wind Farm Grid Connection Alternative Alignment

Status	Drawn By	PM/Checked By
Issue	LM	SL
Project Number	**Scale @ A3**	**Date Created**
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2b		**01**

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Document: W:\794-ENV-ECO-20456 Connagill Cluster\Technical\Tech\ECO20456_0064_01_R_HMP_LT560_Alternative_Grid_Connection_Fig2b aprx ECO20456_0064_01_R_HMP_LT560_Alternative_Grid_Connection_Fig2b

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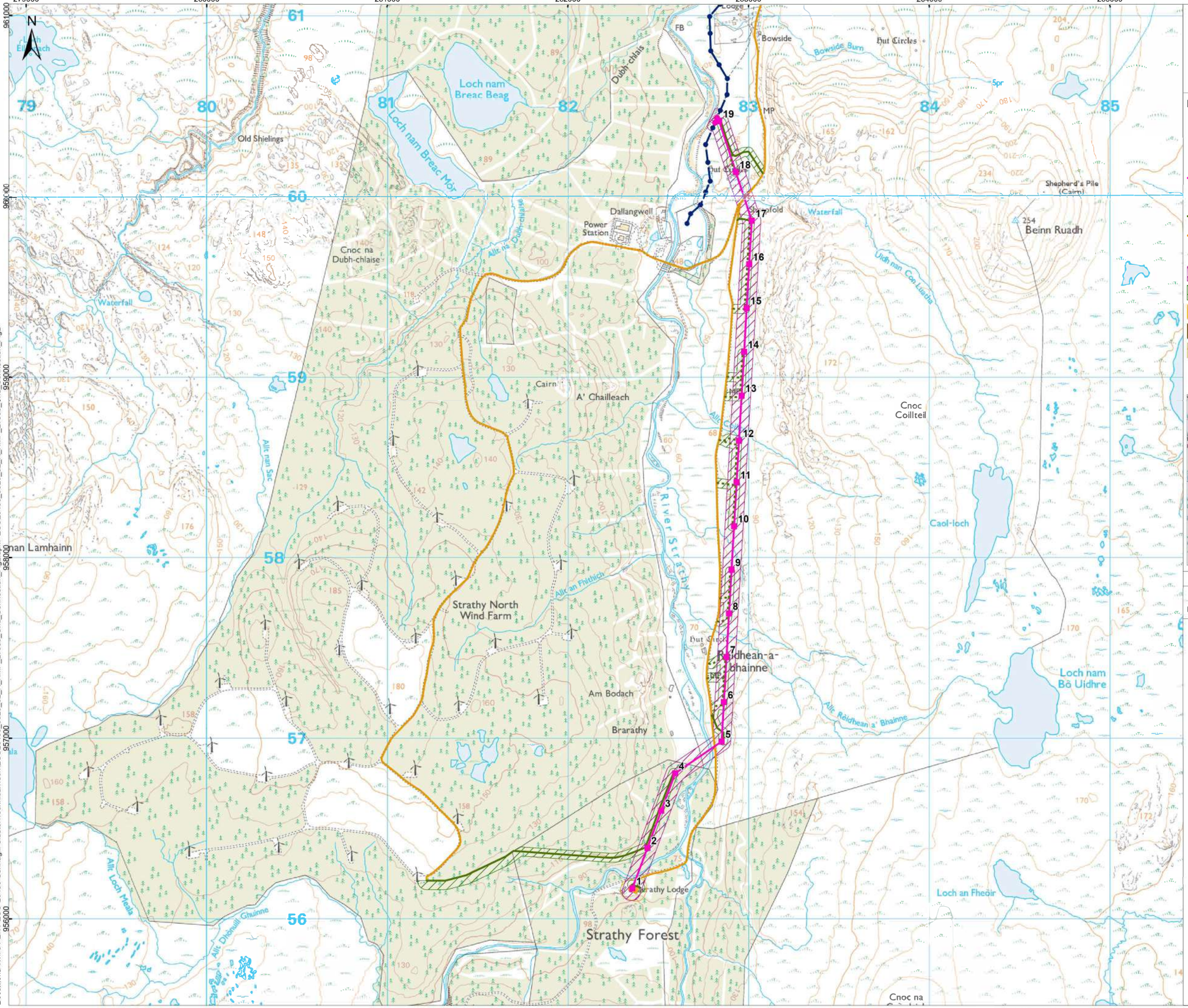

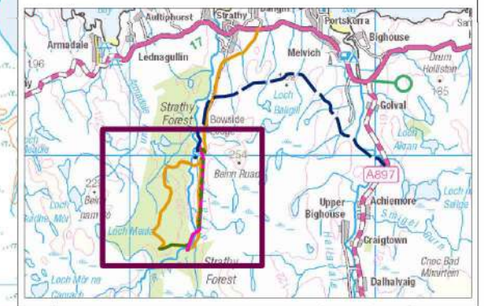

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Legend

- Proposed Steel Lattice Tower
- Proposed Wood Pole (H Pole)
- Existing Wood Pole (H Pole)
- Proposed OHL Alignment
- Existing 132 kV OHL (Wood Pole)
- New Permanent Access Track
- Existing Access Track
- New Temporary Access Track
- Limit of Deviation (OHL)
- Limit of Deviation (Access Track)
- Proposed Sealing End Compound
- CSE Compound Earthworks
- Limit of Deviation (CSE Compound)

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0 0.5 1 km