



Scottish & Southern
Electricity Networks

TRANSMISSION

Report on Consultation

Sheirdrim 132 kV Wind Farm Connection

September 2022

Reference: LT000266



CONTENTS

CONTENTS	I
GLOSSARY	II
EXECUTIVE SUMMARY	V
1. INTRODUCTION	1
1.1 Purpose of Document	1
1.2 Document Structure	1
2. THE PROPOSALS WITHIN THE CONSULTATION	2
2.1 Project Context	2
2.2 Project Description	2
2.3 Route Options	5
2.4 Key Challenge Comparison of Routes	5
2.5 Selection of Preferred Route	5
3. THE CONSULTATION PROCESS	7
3.1 Consultation History	7
3.2 Methods of Consultation	7
3.3 Statutory and Non-Statutory Consultees	8
3.4 Consultation Questions	9
4. STAKEHOLDER CONSULTATION RESPONSES	9
4.1 Summary of Engagement from the Virtual Exhibition	9
4.2 Summary of Feedback – Virtual Consultation, Webinar and Feedback Forms	9
4.3 Summary of Feedback - Statutory and Non-Statutory Stakeholders	10
4.4 Summary of Feedback – SSEN Argyll Projects Interface	26
5. DESIGN RESPONSE TO FEEDBACK	27
5.1 Refinement of Preferred Route	27
5.2 Proposed Route	27
6. NEXT STEPS	27
6.1 Route Alignment Selection	27
APPENDIX 1: CONSULTATION BROCHURE	28
APPENDIX 2: ENVIRONMENTAL, ENGINEERING AND COST APPRAISAL	29
6.2 Route A	29
6.3 Route B	33
6.4 Route C	37

GLOSSARY

Term	Definition
ABC	Argyll and Bute Council
Alignment	A centre line of an overhead line route, along with location of key angle structures.
Amenity	The natural environment, cultural heritage, landscape, and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
Ancient Woodland	Woodland which has been in continuous existence since before 1750 in Scotland and is important for biodiversity and cultural identity. Ancient semi-natural woodland is Ancient Woodland composed of mainly locally native trees and shrubs that derive from natural seed fall or coppice rather than from planting.
Baseline Alignment	The Baseline Alignment aims to provide the optimal alignment within the Proposed Route, taking account of engineering criteria as per Table A7 of SSEN Transmission guidance.
Barrier and Collision Effects	Barrier effect is where the development creates an obstacle to regular movements of birds (e.g. to and from breeding sites or migration routes). Collision effects are where the proposed development poses a risk of harm to birds through direct contact.
CEMP	Construction Environmental Management Plan
Centre Line	The linear connection between the central point of each support structure along the length of the overhead line.
Circuit	Overhead line or underground cable consisting of multiple conductors, to carry electric current.
Commercial Forestry	Planting, maintaining and growing trees for commercial timber production.
Conductor	A metallic wire strung from structure to structure, to carry electric current.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies, or programmes of action.
Corridor	A linear area which allows a continuous connection between the defined connection points. The corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.
Desk-based Assessment	A desktop appraisal using existing information (e.g. from online sources, mapping and through information requests to relevant organisations).
European Protected Species	<p>European protected species are those species listed on:</p> <ul style="list-style-type: none"> Habitats Regulations 1994 Schedule 2 – European protected species of animal Habitats Regulations 1994 Schedule 4 – European protected species of plants <p>They comprise species of plants and animals protected by law throughout the European Union.</p>
Environmental Impact Assessment (EIA)	A formal process set down in The Electricity Works (EIA) (Scotland) Regulations 2000 (as amended in 2008) used to systematically identify, predict, and assess the likely significant environmental impacts of a proposed project or development.

Term	Definition
GEMP	General Environmental Management Plan
GWDTE	Groundwater Dependent Terrestrial Ecosystem
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Indicative Alignment	Proposed An alignment for the overhead line identified following public consultation that is taken forward to EIA and detailed design.
Kilovolt (kV)	One thousand volts.
Landscape Type (LCT)	Character Landscape character is defined as the distinct, recognisable and consistent pattern of elements in the landscape. It is these patterns that give each locality its 'sense of place', making one landscape different from another, rather than better or worse.
LOD	Limits of Deviation, an area which defines the practical limits within which micro-siting of the OHL infrastructure can occur within the terms of the s37 consent which is to be sought. The purpose of Limits of Deviation is to allow flexibility within a s37 consent for the final micro-siting of individual towers to respond to localised ground conditions, topography, engineering, and environmental constraints
Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C(s).
Local Nature Conservation Site (LNCS)	LNCSs identify locally important natural heritage that could be affected by development.
Micro-siting	The process of positioning individual structures to avoid localised environmental or technical constraints.
Mitigation	Term used to indicate avoidance, remediation, or alleviation of adverse impacts.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
OPGW	Optical fibre ground wire
PAC	Pre Application Consultation
PAN	Proposal of Application Notice
Plantation Woodland	Woodland of any age that obviously originated from planting.
Proposed Development	The Proposed Development comprises the construction and potation of a 132 kV overhead line (OHL) and underground cable (UGC) to connect the proposed Sheirdrim Wind Farm to Crossaig Substation with an approximate length of 8-11km. The wind farm site and substation are located approximately 11km south-west of Tarbert.
RAG	Red/Amber/Green, rating applied for the comparative appraisal. A high impact is shown as red, a medium impact is shown as amber, and a low impact is shown as green.
Report on Consultation Document	A report that documents the result of a consultation process.
Route	A linear area of approximately 1 km width (although this may be narrower/wider in specific locations in response to identified pinch points / constraints), which provides a continuous connection between defined connection points.

Term	Definition
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.
Semi-natural Woodland	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition
Sites of Special Scientific Interest (SSSI)	Areas of national importance. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Sky-lining	The process of positioning an overhead line along the top of an elevated area.
Span	The section of overhead line between two structures.
Special Area of Conservation (SAC)	An area designated under the EC Habitats Directive to ensure that rare, endangered, or vulnerable habitats or species of community interest are either maintained at or restored to a favourable conservation status.
Special Protection Area (SPA)	An area designated under the Wild Birds Directive (Directive 74/409/EEC) to protect important bird habitats. Implemented under the Wildlife and Countryside Act 1981.
SSEN Transmission	Scottish and Southern Energy Networks Transmission
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Study Area	The area within which the corridor, route and alignment study takes place.
Substation	Part of the electrical transmission and distribution system that transforms voltage from high to low, or the reverse, before switching to another electricity network.
Switching Station	A central node on the network where multiple lines of the same voltage can connect. Switches allow each line in and out to be controlled without affecting the other lines.
Underground Cable (UGC)	An electric line installed below ground.
UXO	Unexploded ordnance
Volts	The international unit of electric potential and electromotive force.
Wayleave	A voluntary agreement entered into between a landowner upon whose land an overhead line is to be constructed and SSEN Transmission.
132 kV	132 kilo-volt capacity electricity power line

EXECUTIVE SUMMARY

Scottish and Southern Electricity Networks (SSEN) Transmission undertook routeing consultation between December 2021 and January 2022 to request comments on proposals to construct and operate a 132kV overhead line connection for an approximate length of 8-11 km from the proposed Sheirdrim Wind Farm substation compound to the existing Crossaig 132kV substation (the 'proposed development'). Three proposed route options are presented comprising both Underground Cable (UGC) and Overhead Line (OHL) and have been appraised against environmental, engineering and cost criteria. This Report on Consultation (RoC), presents a summary of the consultation undertaken; summarises the comments provided by all interested parties, including statutory consultees and member of the public on the three Route Options under consideration, and details SSEN's responses to the feedback received.

The consultation process included the publication of a Consultation Document (December 2021) that describes the route selection and appraisal process of the different routeing options and invited interested parties to provide their views. In addition, SSEN published a Consultation Brochure and Poster, and held a virtual consultation webinar event along with live chat sessions. Through the consultation, comments were sought from members of the public, statutory consultees, and other key stakeholders on the preferred route option, identified as Route Option A.

A total of 13 responses were received along with two questions from the virtual webinar event. In summary key themes of the feedback were:

- The locally sensitive environmental areas require to be correctly identified and assessed to ensure disturbances are minimised and alternative options are considered;
- Within the area, there are golden eagle, greenland white-fronted geese and white-tailed eagles which require further assessment before the project progresses;
- Once the preferred route has been selected, full details of watercourse crossings and locations should be provided due to the potential to impact on downstream flood risk, both directly via changes in forest cover and indirectly through sediment impacts; and
- Most of the consultees agreed with the Preferred Route A.

Communication between project teams highlighted that Unexploded Ordnance (UXO) may be present within the proposed Route Options presented as part of the Sheirdrim Wind Farm consultation. As such, SSEN has undertaken significant surveys to identify UXO risk and to further inform the Routeing Options. The results of the UXO studies illustrated that Preferred Route A falls within a red zone for UXOs as a result of historical records for the preferred route demonstrating that it was used heavily for Naval artillery practice, with bomb craters evident in aerial photography.

Therefore considering the UXO risk, it was concluded that Route Option A is not the preferred option and would not be taken forward to alignment stage. Route Option C has a low UXO risk and is now considered the Preferred Route that will be taken forward to the Alignment Stage.

1. INTRODUCTION

1.1 Purpose of Document

SSEN Transmission, operating under licence held by Scottish Hydro Electric Transmission plc; owns and maintains the electricity transmission network across the north of Scotland and holds a licence under the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

The developer of Sheirdrim Wind Farm is seeking consent under Section 36 of the Electricity Act 1989 for an 84 MW Wind Farm, which has a contracted connection date of April 2025. SSEN Transmission has a statutory duty under Schedule 9 of the Electricity Act 1989 to connect the new development to the transmission network by the contracted connection date.

The development is in line with SSEN Transmission's commitment and licence obligation to facilitate the connection of renewables generators to the grid through an economical, efficient and coordinated approach to transmission reinforcement.

A programme of consultation was designed to engage with key stakeholders including statutory and non-statutory consultees, local communities, landowners, and individual residents to invite feedback on the rationale for and approach to, the selection of the preferred route.

This Report on Consultation documents the consultation on the Proposed Development under consideration by SSEN Transmission. The report describes the key feedback received and details the actions taken by SSEN Transmission in response to the comments provided.

1.2 Document Structure

This report is comprised of six sections as follows:

1. Introduction – sets out the purpose of the Report on Consultation;
2. The Proposals within the Consultation – outlines the background/context to the project and provides a description of the key elements;
3. The Consultation Process – describes the framework for consultation and methods which have been employed;
4. Stakeholder Consultation Responses – summarises the range of responses, key comments and issues arising through the consultation process;
5. SSEN Transmission's Responses to Consultation – describes how the comments and issues raised during consultation will be addressed; and
6. Next Steps – provides a summary of the conclusions reached and actions going forward.

2. THE PROPOSALS WITHIN THE CONSULTATION

2.1 Project Context

The developer of Sheirdrim Wind Farm is seeking consent under Section 36 of the Electricity Act 1989 for an 84 MW Wind Farm, which has a contracted connection date of April 2025. SSEN Transmission has a statutory duty under Schedule 9 of the Electricity Act 1989 to connect the new development to the transmission network by the contracted connection date.

2.2 Project Description

Four types of technology solution have been proposed and appraised as potentially being suitable for the Proposed Development.

- Routes comprised of trident wood pole;
- routes comprised of trident wood pole lines with sections of underground cable;
- routes comprised of steel lattice structures; and,
- routes comprised of steel lattice with sections of underground cable.

The spacing between poles or towers would vary depending on topography, altitude, and land use but would likely be between 30 m to 250 m. If steel lattice towers are used, permanent access tracks are likely to be required to any angle and terminal tower locations, with temporary access tracks used to access all other towers. At this stage, it has been assumed that a typical average (OHL) poles or tower height will be 30 m above ground level. **Figure 1** shows the three routes that were proposed at the Routeing Consultation Document. **Plate 2.1** shows an example of a trident wood pole and steel lattice tower.

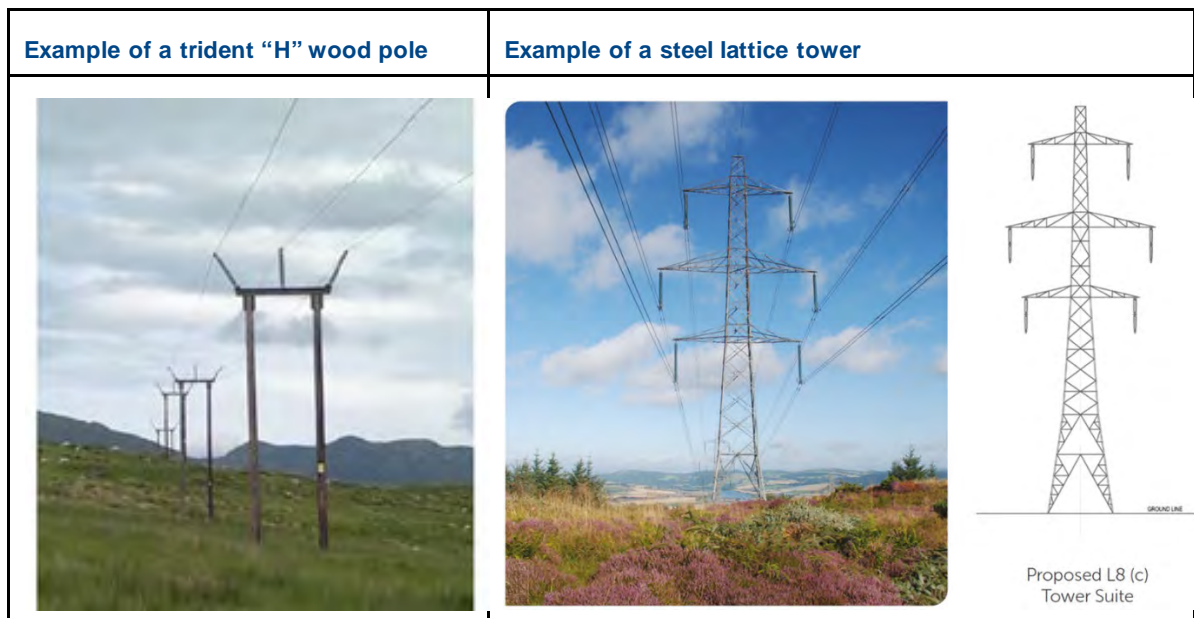
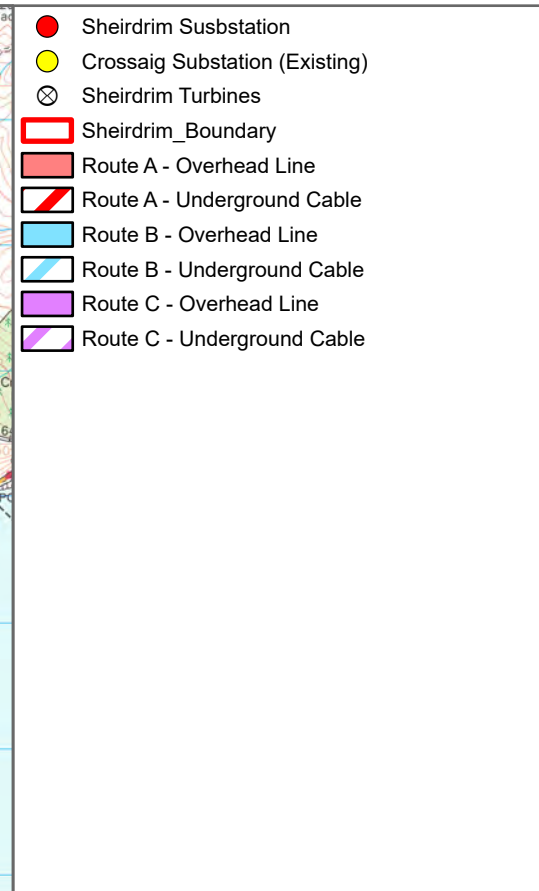
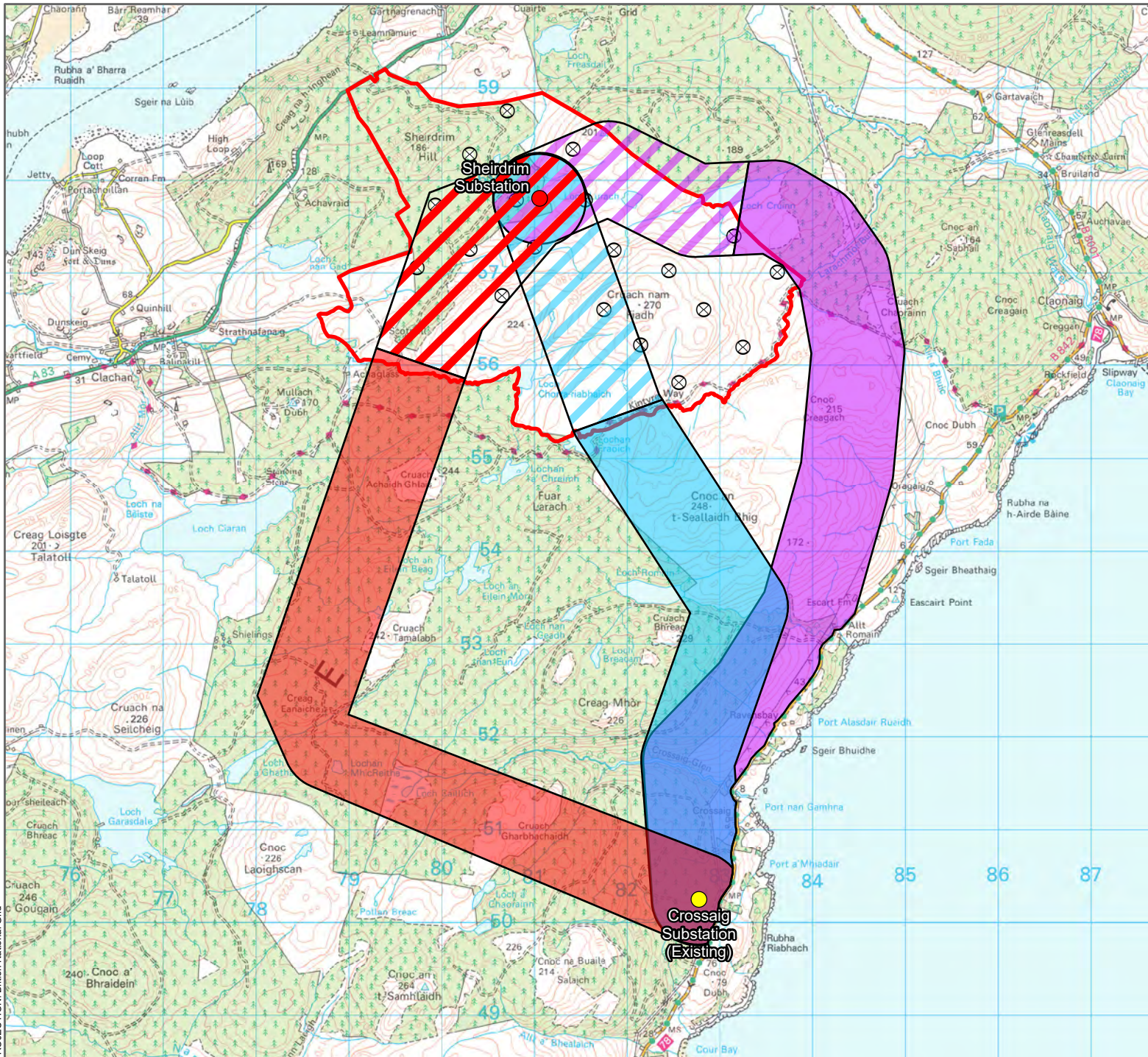
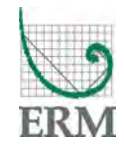


Plate 2.1: ‘H’ Wood Pole and Steel Lattice Tower examples



SCALE: See Scale Bar	VERSION: A01
SIZE: A4	DRAWN: DN
PROJECT: 0612294	CHECKED: SC
DATE: 22/08/2022	APPROVED: KG

Figure 1
Route Options



PROJECTION: British National Grid

Ancillary works will be required for the construction and maintenance of the OHL. This will include tree and vegetation clearance; upgrades of existing or new junction bell-mouths and access tracks; and road and other infrastructure (bridges, culverts etc.) alterations.

2.2.1 Overhead Line Route Selection Process

A full description of the Overhead Line Route Selection process is provided in the Sheidrim Consultation Document, December 2021¹.

Three Routes were identified (see **Figure 1**) and reviewed in terms of cost, engineering, and environment. A summary of the proposed routing options is set out in the section below.

¹ Sheidrim Wind Farm Connection Consultation Document December 2021: <https://www.ssen-transmission.co.uk/projects/sheidrim-wind-farm-connection/>

2.3 Route Options

2.3.1 Route A

Start and end points will be determined through suitable connections from the proposed Sheirdrim Wind Farm and the existing Crossaig Substation. Due to proximity to the proposed turbines at Sheirdrim Wind Farm, Route A comprises OHL and UGC. Route A begins with UGC and travels south-east through the proposed turbines, and after approximately 2.5 km, the route switches to OHL and continues in the same direction towards Creag Eanaiche. Here the route turns to the south east, and continues until it terminates at Crossaig Substation. The OHL section is approximately 9 km long.

2.3.2 Route B

Start and end points will be determined through suitable connection points with the proposed Sheirdrim Wind Farm and the existing Crossaig Substation. Due to proximity to the proposed turbines at Sheirdrim Wind Farm, Route B comprises OHL and UGC. Route B begins with UGC and travels south through the proposed turbines at Sheirdrim Wind Farm for approximately 2.5 km. As the UGC approaches the Kintyre Way, it changes to OHL and continues for 6 km south east, until Crossaig substation. The southern section of the route runs alongside the B842 to the north, and overall Route B is the most direct route to Crossaig Substation.

2.3.3 Route C

Start and end points will be determined through suitable connections from the proposed Sheirdrim Wind Farm and Crossaig Substation. Due to proximity to the proposed turbines at Sheirdrim Wind Farm, Route C comprises OHL and UGC. Route C begins with UGC and travels east through the proposed turbines at Sheirdrim Wind Farm for approximately 2.5 km. After passing Loch Cruinn, Route C switches to OHL and joins with Route B at Crossaig Glen. Both follow south to Crossaig substation, alongside the B842.

2.4 Key Challenge Comparison of Routes

There are environmental and engineering challenges for all routes (see Appendix 2). From an environmental perspective, all route options have the potential to result in barrier and collision effects on Schedule 1 bird species, some of which are associated with nearby Special Protection Areas. All route options have potential to impact semi-natural ancient woodland, however Route B and C corridors intersect a larger area of ancient woodland, which could not be avoided at routeing stage. Routes B and C also pass through a larger area of Class 1 and Class 2 peat in comparison to Route A, with Route B having the larger area of peat within the route corridor. All route options have cultural heritage features within 2 km, that may experience effects to settings, however Route A has the greatest potential due nearby Scheduled Monuments. Route C has the greatest potential for visual impacts due to its position parallel to the B842.

From a technical perspective, Route B is most challenging due to its high elevation and increased risk of ice load. In addition to having the greatest area of peat, Route B also has the poorest access of the three routes, which may mean further disturbance to peatland habitats in order to construct access roads. Routes A and C both have good access, with Route A being the most connected.

From a cost perspective, Routes A and C are more expensive than Route B, most likely due to their longer length, and for Route A, the larger area of commercial forestry that would need to be felled to create an operational corridor.

2.5 Selection of Preferred Route

The optioneering process initially considered three overhead line routes. Following this, an underground cable section within all routes was identified to avoid proposed wind turbines.

From an environmental perspective Route A is preferred. This is because it offers the potential to avoid direct impacts on ancient woodland and of the three options it passes through the smallest area of sensitive habitat, including Class 1 and 2 peat.

From an engineering perspective Route A is preferred. This because it is the route that provides the least challenges, particularly in regards to peat, access, and proximity to windfarms, and provides a more technically viable route.

From a cost perspective Route B is preferred, as it has the lowest cost.

Despite Route B having the lowest cost of the three options, the preferred route for the connection between the proposed Sheirdrim Wind Farm and Crossaig substation is Route A. This is because the environmental and technical benefits of the route outweigh cost considerations.

3. THE CONSULTATION PROCESS

3.1 Consultation History

In accordance with the SSEN Transmission guidelines², a process of consultation on the preferred route option was undertaken. This is described in the sections below.

3.2 Methods of Consultation

4.3.1 Sheirdrim Wind Farm Connection Virtual Consultation

We had originally organised an in person event and a virtual event for Sheirdrim wind farm connection project in conjunction with our Argyll substations. However, due to the changing guidance by Scottish Government on Covid 19 and the rising covid numbers in the Argyll region, we decided to not go ahead with our face to face events and the public consultation was held virtually. SSEN Transmission developed a bespoke virtual consultation platform which allowed stakeholders to visit a virtual consultation room and view the project information at their leisure. The virtual platform was designed to enable stakeholders to experience the full exhibition from home on a computer, tablet or mobile device. It was designed to look and feel like a face-to-face consultation in a community hall, with exhibition boards, maps, and the opportunity to share views on the proposals. As an alternative to face-to-face events which SSEN Transmission would normally hold, a live chat function was available at advertised times to allow attendees to ask questions and get responses from the project team.

The virtual platforms could be accessed from the project website where there was also the consultation brochure available to view for those who preferred this format or struggled with bandwidths for accessing the virtual room.

In addition to our virtual consultation and instant messaging sessions, SSEN Transmission organised a virtual webinar in December 2022 with the project team and invited community councils, local elected members, elected officials and statutory consultees. It allowed the team to present what was in the brochure and take any questions, we had a total of four attendees and 10 questions were asked. This Webinar can be viewed on our project webpage³.

3.2.1 How was the Consultation Promoted?

Snapshot of the Virtual engagement

The consultation period opened on Monday 22nd November 2021 and continued until the 15th January 2022. The responses received during this time were considered by the project team and are included within this report.

Feedback received outside of this timeframe has been considered by the team to assist in determining the Preferred Route and included within the report. Stakeholders were able to view information about the project in the consultation booklet, on the SSEN website and within the virtual consultation room. Live chat sessions were held on the following dates:

- Wednesday 8th December 2021 – 10am to 12 Noon (Session 1); and
- Thursday 9th December 2021 – 5pm to 7pm (Session 2).

Our Virtual webinar was held on

- 14th December 2021 10am –11.30am

² SSEN Transmission Guidelines, 'PR-NET-ENV-501 Procedures for HV OHL and UGC Routing.pdf

³ Argyll and Kintyre 275kV Substations (<https://www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/>)

Promotion of the Virtual Consultation

The virtual consultation was advertised using several methods. We contacted community stakeholders initially in September 2021 to advise them of the upcoming consultation. This changed in November 2021 following the updated government guidance regarding Covid-19. We then made the decision to make the events completely virtual. This communication went to the MSP and MP for the area, Councillors (Mid Argyll and Kintyre and the Islands) and Community Councils (Inveraray, Lochgilphead, West Lochfyne, Furnace, Strachur, East Kintyre and Tarbert and Skipness).

A Mail drop was sent out to the local community in early November initially advising them of the in person events, two weeks later a further maildrop was posted to advise the community that the consultation was still going ahead but would be virtual. An advert promoting the consultation was placed in the Oban Times initially on the 18th and 19th November then this was updated to reflect the changes to the format of the consultation on the 25th and 26th November. Brochures were also posted to local areas to be accessible for local communities.

Updates and information on this consultation could also be found on our project specific website⁴.

The virtual consultation promotion is summarised in **Table 4.1**.

Table 4.1: Promotion of Consultation	
Method	Details
Mail drop - Consultation Brochure (also uploaded to the Project Website (see below))	Sent out to over 2,300 properties in proximity of the proposals.
Email to stakeholders to advise of consultation	MSP, MP, Councillors, Community Councils, and all those who had signed up for project updates.
Press release	Advertised in the Oban Times, Lochaber Times, Campbelltown Courier and Argyllshire Advertiser
	Published on the SSEN Transmission website (https://www.ssen-transmission.co.uk/projects/sheirdrim-wind-farm-connection/) and SSEN Transmission LinkedIn page.

Promotion of Hard Copy Information

Hard copies of the consultation brochure and feedback form were sent out to community councillors for them to distribute on SSEN's behalf to community members who might have trouble accessing online information. Stakeholders who had questions or comments about the project were able to contact the Community Liaison Manager to request additional information about the project, these queries were responded to by the relevant members of the project team.

3.3 Statutory and Non-Statutory Consultees

Comments were sought from a range of stakeholders both with statutory and non-statutory interest in the consenting process. The list of consultees, both statutory and non-statutory, invited to comment as part of the consultation on the Preferred Route is provided in **Table 4.2**.

Table 4.2: List of Statutory and Non-Statutory Consultees	
Statutory Consultee	
Argyll and Bute Council (ABC)	Scottish Forestry (SF)
Historic Environment Scotland (HES)	Scottish Government (Energy Consents Unit)
NatureScot	Scottish Water

⁴ SSEN, (2022), 'Sheirdrim Wind Farm Connection' available online at: <https://www.ssen-transmission.co.uk/projects/sheirdrim-wind-farm-connection/>

Table 4.2: List of Statutory and Non-Statutory Consultees	
Scottish Environment Protection Agency (SEPA)	Transport Scotland
Non-Statutory Consultee	
Argyll District Salmon Fishery Board (ADSFB) / Argyll Fishery Trust (AFT)	Sustrans
Royal Society for the Protection of Birds (RSPB)	West of Scotland Archaeology Service (WoSAS)
Scotways	Kintyre Way

3.4 Consultation Questions

SSEN Transmission asked participants in the consultation to consider the following five questions:

1. Do you feel sufficient information has been provided to enable you to understand what is being proposed and why?
2. Which of the three Options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.
3. Which of the three Options would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation of your answer.
4. Are there any potential risks or benefits associated with this project, that you believe have not been included in the Consultation Document?
5. Do you have any other comments on the Proposed Development?

4. STAKEHOLDER CONSULTATION RESPONSES

In developing the Project, we consider environment, engineering, and cost constraints on the design and safe operation of the electricity infrastructure along with views expressed by stakeholders. Gathering views from a variety of stakeholders is vital to developing and shaping a balanced solution. To ensure that we are transparent throughout our consultation process it is vital that we provide the opportunity to share the feedback we have received from stakeholders on the proposals we have presented.

4.1 Summary of Engagement from the Virtual Exhibition

Table 5.1 provides a summary of the engagement with the Virtual Exhibition over the five-week consultation period.

Table 5.1: Summary of Engagement – Virtual Consultation	
Category	Number
Visitors to the virtual consultation room over the consultation period (Unique/ Total)	48 / 81
Visitors to SSEN project website since the first broad advertising of consultation on 22nd November (Unique/ Total)	44 / 63
Number of visitors asking questions during the live chat events	2
Completed feedback forms	0

4.2 Summary of Feedback – Virtual Consultation, Webinar and Feedback Forms

A total of two questions relating to the Sheirdrim Wind Farm Connection were received through the virtual webinar (see Table 5.2).

Table 5.2: Summary of Questions		
Consultee	Question	Response
East Kintyre Community Council	By which route do you propose the timber extraction from Sheridrim Wind Farm?	Sheirdrim Wind Farm is not an SSEN Transmission development. However, it is SSEN's understanding that timber would be extracted along the agreed timber haul routes as part of the agreed traffic management plan for ABC. The detail of this is not available at this early stage of development but will be a key consideration as the project develops due to the need to ensure the local road network is not adversely affected. Things that will need to be considered include extraction by boat as has been done in other felling operations in the region, that we have undertaken.
East Kintyre Community Council	If all the windfarms want to export their electricity how much in kvs is expected?	In total, not in kV but in megawatts, it is anticipated that 412MW will be connected in the Argyll peninsula.

No feedback Forms were received, and no questions were asked during the virtual consultation chat sessions.

4.3 Summary of Feedback - Statutory and Non-Statutory Stakeholders

Table 5.3 confirms the responses received from stakeholders in response to the Consultation Document.

A total of 13 written consultation responses to the Consultation Document were received from stakeholders during the consultation period from Monday 22nd November 2021 to 15th January 2022. **Table 5.4** provides a summary of stakeholder feedback along with a reply from SSEN Transmission regarding how comments will be considered as the Proposed Development moves forward into the next phase of development.

Table 5.3: Statutory and Non-Statutory Consultee Respondents	
Consultee	Response Received
Argyll and Bute Council	No response received
Argyll District Salmon Fishery Board (ADSFB)	12.01.2022
Argyll Fisheries Trust (AFT)	13.01.2022
Energy Consents Unit (ECU)	07.12.2021
Historic Environment Scotland (HES)	31.01.2022
Kintyre Way	05.05.2022
Nature Scot	16.12.2021
Royal Society for the Protection of Birds (RSPB)	No response received

Table 5.3: Statutory and Non-Statutory Consultee Respondents	
Scottish Environment Protection Agency (SEPA)	17.01.2022
Scottish Forestry (SF)	25.01.2022
Scottish Water	15.01.2022
Sustrans	Cannot provide response due to resource constraints
Scotways	14.01.2022
Transport Scotland	22.12.2021
West of Scotland Archaeology Services	13.01.2022

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

Organisation	Comment	SSEN Transmission Response
Argyll Fisheries Trust	Can confirm that the Board do not have any comments, the proposed route does not affect any salmon or sea trout habitat.	Noted.
Argyll District Salmon Fishery Board (ADSFB)		
Argyll and Bute Council	No response received	N/A
ECU	Scottish Ministers hope that further engagement with the local community can still take place face-to face in a physical location when the opportunity arises again to inform the design of the project you are developing and fully take into account of local sensitives and help demonstrate your consideration of alternatives in the application, allowing those without access to the virtual consultation to participate.	Noted. SSEN are monitoring the regulations around Covid 19 and public events and have recommenced face-to-face events. The alignment consultation to be held in Autumn 2022 will comprise a face to face event.
Historic Environment Scotland (HES)	<p>You should also seek advice from the West of Scotland Archaeology Service (WoSAS) for matters including unscheduled archaeology and category B and C-listed buildings.</p> <p>Route Options</p> <p>We have reviewed the Route Option Corridors (A, B, C) under consideration for the delivery of the new grid connection and offer the below comments on each. We note that the Routeing Consultation Report (December 2021) identifies Route Option A as the preferred option in the instance. While we would highlight that this Route Option raises the greatest potential for impacts on our historic environment interests, we are nevertheless content that these impacts can be minimised following careful design and assessment.</p> <ul style="list-style-type: none"> • Route Option A 	<p>SSEN Transmission have engaged with WoSAS separately regarding unscheduled archaeology and category B and C-listed buildings (see response below).</p> <p>Regarding specific feedback SSEN note that all route options have been subject to an appropriate environmental appraisal from a cultural heritage perspective. In the case of all route options mitigation via design shall be undertaken at the alignment stage in order to minimise impacts on the setting of the above heritage assets. This is likely to require the careful positioning of the overhead line so as to maximise the absorbing effect of the surrounding</p>

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>This Route Option Corridor passes heritage assets in our remit and, consequently, there is a potential for setting impacts to occur. The Talatoll, sheilings 1400 SE of Kintyre (Scheduled Monument, SM3817) is located approximately 300m from this Route Option Corridor, for example, and we note that the Routeing Consultation Report (December 2021) identifies a potential for 'moderate' impacts to occur on its setting. The Loch Ciaran, standing stone 1430m SW of Achaglass (scheduled Monument, SM212), the Dun Skeig, duns and forts (Scheduled Monument, SM2491) and Cour House, Saddell (category A listed building, LB18360) are also located close to this Route Option Corridor. We have provided further detailed information on these heritage assets in the Attached Annex.</p> <p>Should this Route Option be progressed, we recommend that mitigation via design is undertaken to minimise impacts on the setting of the above heritage assets. This is likely to require the careful positioning of the overhead line so as to maximise the absorbing effect of the surrounding landform and to minimise the impact of skylining on inward views. We recommend that this design process should be informed by an assessment of impacts on heritage assets and their settings. Any such assessment should be undertaken by a suitably qualified professional and meeting the requirements of Scottish Planning Policy (SPP, 2014), the Historic Environment Policy for Scotland (HEPS, 2019) and associated Managing Change Guidance Notes. Additional guidance on cultural heritage impact assessment can also be found in the Cultural Heritage Appendix to the EIA Handbook (SNH, HES, 2018).</p> <ul style="list-style-type: none"> • Route Option B 	<p>landform and to minimise the impact of skylining on inward views via micro-siting of towers/poles.</p> <p>It is also noted that whilst HES highlight that Route Option A (the preferred option presented by SSEN) has the greatest potential for impacts on HES historic environment interests' HES are content that these impacts can be minimised following careful design and assessment, which will occur during the alignment and EIA stages.</p> <p>HES note that the Loch Ciaran, standing stone 1430m SW of Achaglass (Scheduled Monument, SM212) has not been identified as part of this appraisal. HES recommend that impacts on this scheduled monument should be reduced or avoided where possible. SSEN will undertake an environmental assessment of the impacts on this standing stone during the alignment phase and choose an alignment that seeks to mitigate any indirect visual impacts as much as possible. Ongoing engagement with HES will be undertaken throughout the alignment phase on this point.</p>
--	---	---

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>This Route Option Corridor passes in the vicinity of Cour House, Saddell (Category A listed building, LB18360) and there may be some potential for impacts on its setting. We therefore recommend that, should this Route Option be progressed, and impacts should be assessed and mitigation by design undertaken if appropriate. Any such assessment should be undertaken by a suitably qualified professional and meeting the requirements of Scottish Planning Policy (SPP, 2014), the Historic Environment Policy for Scotland (HEPS, 2019) and associated Managing Change Guidance Notes. Additional guidance on cultural heritage impact assessment can also be found in the Cultural Heritage Appendix to the EIA Handbook (SNH, HES, 2018).</p> <ul style="list-style-type: none"> • Route Option C <p>This Route Option Corridor passes in the vicinity of the Glenreadell Mains, chambered cairn 200m SE of (Scheduled Monument, SM3281) and Cour House, Saffell (Category A listed building, LB18360). Should this Route Option be progressed, there may be some potential for impacts on the setting of these heritage assets. Any such assessment should be undertaken by a suitably qualified professional and meeting the requirements of Scottish Planning Policy (SPP, 2014), the Historic Environment Policy for Scotland (HEPS, 2019) and associated Managing Change Guidance Notes. Additional guidance on cultural heritage impact assessment can also be found in the Cultural Heritage Appendix to the EIA Handbook (SNH, HES, 2018).</p> <p>Routeing Consultation Report (December 2021)</p> <p>We have reviewed the Consultation Report (December 2021) provided in support of this consultation. We welcome the measures already employed</p>	
--	---	--

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>by SSEN during the identification of Route Options to reduce and avoid impacts on the historic environment where possible. In particular, we note that those areas of highest amenity value *including those covered by historic environment designations) have been avoided and, also, that the sky lining of routes in key views has been avoided.</p> <p>We are also broadly content that the Route Options under consideration have been subject to appropriate environmental appraisal. We note that the Loch Ciaran, standing stone 1430m SW of Achaglass (Scheduled Monument, SM212) has not been identified as part of this appraisal however, and recommend that impacts on this scheduled monument should be reduced or avoided where possible.</p>	
West of Scotland Archaeological Service (WoSAS)	<p>I have had a brief look at the proposals and advise that I would choose the already preferred route of Option A – this is essentially because although there may be a setting issue raised for a scheduled standing stone (HES will advise on this), the rest of the route involves much more already disturbed forestry ground and less open hill ground (where this is potential for buried remains to survive) and directly impacts fewer record sites (assuming a potential direct impact across the full width of the corridors illustrated).</p>	<p>SSEN note that WoSAS agree with the preferred Route Option A from an archaeological perspective.</p>
The Kintyre Way	<p>1.The Kintyre Way</p> <p>1.1.The Kintyre Way is one of Scotland’s great walking trails. It is a 100-mile long-distance path along the Kintyre Peninsula connecting all the larger communities in Kintyre .</p>	<p>1.The Kintyre Way</p> <p>SSEN acknowledges the popularity and importance of The Kintyre Way and that all three of the proposed route options would cross this long-distance footpath. Our initial environmental appraisal notes that there would be close range visual effects for a short section</p>

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>1.2.It is a major contributor to the local economy. In 2015 it was assessed as bringing in around £1m.</p> <p>1.3. Its appeal comes from the land and seascapes visible along the route; the diversity and range of the local wildlife habitats and their residents; the remote and rural nature of the area.</p> <p>Thus, any proposal to add unnatural landscape clutter to the area will inevitably have a negative effect on the popularity of the route. It is a major visitor attraction and needs treating as such by wind farm and infrastructure developers alike.</p> <p>2.The Effects of Wind Farms and Overhead Powerlines</p> <p>2.1.Invariably windfarms and their essential infrastructure do add unnatural clutter to the landscape and are regarded as having a particularly negative effect on the attractiveness and appeal of remote and rural areas like Kintyre. This is true for visitors, residents and potential residents.</p> <p>2.2.Windfarm development along the Kintyre Peninsula is progressing rapidly and will continue to do so for some time.</p> <p>2.3.Public opinion is favourable towards the development of 'Greener' solutions to our power needs and, in that context, tends to look favourably on windfarm development.</p> <p>2.4.However, when it comes to local walkers or visitors who want to enjoy a short break, or longer holiday, they are more likely to choose areas where the landscapes are natural, uncluttered by industrial developments.</p> <p>2.5.Windfarm and infrastructure developers key concern is to build their structures in the most efficient manner, keeping costs to a minimum. Similarly, they are looking for limited maintenance costs thereafter. They do</p>	<p>of the route, and these would be partially viewed in the context of the consented and existing wind turbines. SSEN through its staged design process will consider how potential impacts to The Kintyre Way can be avoided or reduced.</p> <p>2.The Effects of Wind Farms and Overhead Powerlines</p> <p>SSEN will consider, as part of their landscape assessment and mitigation, how viewpoints will be altered by the installation of the proposed development. Opportunities will be identified, where they exist, to promote new views and areas of interest for users of The Kintyre Way (e.g., through appropriate signage on the footpath).</p> <p>3.Making Windfarms and Infrastructure more Visitor Friendly</p> <p>We welcome the suggestions provided to make the area more visitor and user friendly. As a regulated business, we can only commit funding that meets our business objectives and needs to be proportionate to the works in the area. With our business objectives in mind, we can look to discuss some of these ideas further as the project develops.</p> <p>4.Cnoc Breacam windfarm.</p>
--	--	---

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>not take walkers and other visitors into account. The local economy is of little interest to them.</p> <p>2.6. There is generally little, if any, explanation of the windfarm/powerlines other than warning notices.</p> <p>2.7. Similarly tracks leading to these tend to have nothing other than signage such as 'No unauthorised access beyond this point' – not terribly welcoming or visitor friendly!</p> <p>2.8. This is a shame because wind farm development opens up previously inaccessible viewpoints of our beautiful West Highland seascapes and landscapes. Thus, they could be of considerable benefit to the local economy by becoming visitor attractions in their own right.</p> <p>3. Making Windfarms and Infrastructure more Visitor Friendly</p> <p>3.1. The first and most important message in improving visitor attitudes to these structures is to encourage folk to visit them safely.</p> <p>3.2. Make the approach signage welcoming and inviting.</p> <p>3.3. Any section 36 or 37 application requires considerable research about the history, natural history, habitats and geology of the site and its environs. Why not use that data to provide useful and interesting visitor information? Give them plenty of interpretive panels about the wildlife; local history; what can be seen from the site.</p> <p>3.4. Tell them the story of the site, the challenges of constructing it, how it is contributing to reducing Scotland's carbon footprint and saving the planet.</p> <p>3.5. Provide viewpoints, seating, shelter, waste and toilet facilities, perhaps a simple bothy.</p>	<p>No impact is anticipated as the preferred route option selected is not impacted by the Cnoc Breacam windfarm.</p> <p>5. Underground Placement of Line.</p> <p>It's unlikely that re-routeing the Kintyre Way to avoid overhead lines (OHLs) would be feasible given the existing 132kV and 275kV OHLs already present in the wider area that cross the footpath. However, it may be possible to identify OHL alignments within the Proposed Route that are positioned close to the existing OHLs, therefore minimising the extent of the footpath interrupted by the electricity infrastructure.</p> <p>The suggestion to underground the section of 132kV cable so it passes under the footpath is likely to result in more robust OHL infrastructure in the area, i.e. moving from UGC back to OHL includes more substantial infrastructure. This approach may also mean that a significant length of the cable would need to be undergrounded, significantly increasing costs. Undergrounding can be considered where significant landscape and visual issues are identified, these are considered against other environmental issues along with engineering and costs risks to reach a balanced decision on whether UGC should be installed. Whilst not ruling out UGC at this early routeing stage, SSEN Transmission would consider that it is unlikely this option would be feasible to implement.</p>
--	--	---

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>3.6. Make the pylons works of art in their own right. Other countries do.</p> <p>3.7. Ensure that any necessary buildings aren't just sheds/work units but are designed to be sympathetic to the landscape in which they sit.</p> <p>3.8. Provide all-ability access around the site.</p> <p>3.9. Provide cycle access.</p> <p>3.10. Provide parking areas at the start of the path.</p> <p>3.11. Maintain all of the above effectively.</p> <p>The above suggestions would provide a new facility for visitors and locals to gain access to viewpoints suitable for a wider range of ages and abilities, thus assisting the local economy and leaving a favourable impression of the developer.</p> <p>4.Cnoc Breacam windfarm.</p> <p>What effects will the cessation of the Cnoc Breacam windfarm have on the placement of the connection and the routing of the line?</p> <p>5.Underground Placement of Line.</p> <p>We would prefer that the Kintyre Way goes over the underground section of the line rather than have the line crossing above the Kintyre Way. Is it possible to extend the underground section to achieve this, or can the Kintyre Way be re-routed to avoid going under the powerline?</p> <p>6.Construction Phase.</p> <p>The Kintyre Way is in use all year round. Presumably there is a high likelihood of disturbances/closures while the connection is being built. How will these be handled?</p>	<p>6.Construction Phase.</p> <p>Public access will be a key consideration during the construction phase and SSEN will produce an Outdoor Access Plan, to be agreed with the Local Authority. This is likely to include alternative access or measures to ensure safe access along the existing footpath.</p> <p>7.Ice-Fall.</p> <p>The conductors are designed to account for ice build-up, therefore where the conductors may sag more due to ice build-up, sufficient clearance is achieved and ESQC requirements are met.</p> <p>8.Community Engagement.</p> <p>SSEN will hold an Alignment Consultation in early Autumn 2022. Following that consultation, we will issue our Report on Consultation that identifies our Proposed Alignment to take forward to a s37 application for consent. Once the application for consent has been submitted (late spring 2023) stakeholders will have the opportunity to make formal representations to the Scottish Government on SSEN's proposals.</p> <p>9.Marine Tourism - Sea-Routes.</p> <p>Following the alignment stage appropriate viewpoints will be selected to feed into the EA/EIA, for</p>
--	--	---

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>7.Ice-Fall.</p> <p>If the cables must go over the Kintyre Way, what precautions will be taken to minimise the dangers of ice build-up ?.</p> <p>8.Community Engagement.</p> <p>We understand that there will be public community engagement meetings in early 2023 Where will these events take place? What online information will SSEN make available.</p> <p>9.Marine Tourism - Sea-Routes.</p> <p>Tarbert and Campbeltown both rely on marine tourism. Tarbert is the most visited port in the Clyde and relies heavily on this trade. The structures used to link Sheirdrim to Cloanaig are likely to be plainly visible from the key routes from the Clyde ports to Tarbert and Campbeltown. This should be reflected in the choice of viewpoints used to assess the visual impact.</p> <p>10.Ferry Routes</p> <p>Portavadie is a major accommodation provider in the area and accounts for a substantial portion of Tarbert's visitors and walkers. It also provides a link between the Cowal Way and the Kintyre Way. Viewpoints from the Tarbert-Portavadie ferry and from the Portavadie site itself should be provided for visual impact assessment.</p>	<p>assessment. Viewpoints selected for assessment will be consulted on with our statutory consultees.</p> <p>10.Ferry Routes</p> <p>Following the alignment stage appropriate viewpoints will be selected to feed into the EA/EIA, for assessment. Viewpoints selected for assessment will be consulted on with our statutory consultees.</p>
<p>NatureScot</p>	<p>NatureScot note that Option A is the preferred choice and it minimises impact on ancient woodland and nationally important peatland areas. In addition to these environmental sensitivities, we'd like to highlight the following receptors which should be considered as part of the connection project.</p>	<p>SSEN note NatureScot's comments and have requested the range reports in order that these inform future alignment work. Consultation with the ARSG is underway to obtain data in relation to Schedule 1 species and it will be complimented by the ornithological data from previous and current SSEN</p>

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>All the route options are located within the golden eagle range G/KM2 which has a nest site located close to the Crossaig Substation. We have range reports available for this pair of golden eagles which can be issued under licence and we also recommend that you consult with the Argyll Raptor Study Group to determine the location of any known Schedule 1 species within the cable route. You should also avoid siting the OHL within the golden eagle habitat management area associated with the consented High Constellation Wind Farm which is located to the east of Cruach Gharbachaidh.</p> <p>Whilst not designated as part of the Kintyre Goose Roosts SPA, we are aware that Greenland white-fronted geese will roost in a number of small lochs within the Option A cable route (including Lochan MhicReithe) and therefore it is likely the project will have connectivity with the SPA.</p> <p>We are also aware of increasing activity, possibly breeding, by white-tailed eagles as they expand their range into northern/mid Kintyre.</p> <p>We direct you to our guidance on the assessment and mitigation of power lines and guyed meteorological masts on birds also.</p>	<p>surveys, and wind farm projects nearby. The golden eagle habitat management area will be taken into consideration and further consultation with the Wind Farm developer and Nature Scot undertaken to identify a solution in this area.</p> <p>In relation to Greenland white fronted geese, seven potential roost sites, identified through the desk based review of publicly available information, or through ongoing vantage point surveys, will be surveyed monthly from December 2021 – March 2022. Surveys will be undertaken at Loch Tamalabh, Loch Chorra-riabhaich, Loch nan Gad, Loch a Ghatha, Lochan MhicReithe, Loch Garasdale and Loch Laoighscan These lochs are those that have been identified as being used regularly by white-fronted geese in studies for nearby wind farms. The aim of the surveys will be to count total number of geese using each of the potential roosts on each visit.</p> <p>In relation to white-tailed eagles flight activity surveys from vantage points (VPs) will be undertaken to collect data to quantify the level of flight activity and its distribution, in the vicinity of the proposed route.</p>
<p>Royal Society for the Protection of Birds (RSPB)</p>	<p>No response received.</p>	<p>N/A</p>
<p>Scottish Environment Protection Agency (SEPA)</p>	<p>With regard to peat disturbance and waste minimisation the underground options should take into consideration how much will be produced, its nature and suitability for reuse and how it will be reused. It is</p>	<p>SSEN note SEPA's responses and will prepare a peat mass balance calculation once a preferred alignment has been selected. In addition, a Stage 2</p>

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>recommended that peat mass balance calculations information be provided once the preferred option has been selected. We would expect a detailed Stage 2 Peat Management Plan to be provided with the EIAR. Any dewatering of disturbed peat could lead to a peat viability reuse issue and further information will also be expected to be provided on this matter.</p> <p>We require a Phase 1 survey to identify wetlands and identify possible GWDTEs, with a further NVC survey needed if excavation below 1m is planned within 250m of a sensitive receptor.</p> <p>Any use of waste materials for restoration etc. may require an exemption from waste management licensing or a waste management licence. As discussed above the focus should be on prevention.</p> <p>Where commercial forestry is being felled, any intention to use material (e.g., brash) on site will need to be appropriate and not waste disposal. We also ask that the felled areas are checked for any springs or flushes, and infrastructure micro-sited away from these.</p> <p>Any work in or near the water environment has the potential to result in a significant adverse impact and therefore pollution prevention mitigation is required to prevent/minimise sediment pollution for the duration of the works. Work within an active flood plain may require special consideration, particularly with regard to location of marshalling/storage yards and any hazardous substances (i.e., fuel/oil), should a flood event occur. If flood or waterlogged soils (other than peat) is a significant factor than consideration should be given to work in these areas being carried out in preferable weather conditions or outwith times of seasonally high rainfall. The project is likely to require a construction site licence (for surface water management). Further information can be found on our website.</p>	<p>Peat Management Plan will be submitted as part of the S37 to accompany the EIA Report.</p> <p>A Phase 1 survey and NVC survey will be undertaken as per standard SSEN practice.</p> <p>A full suite of hydrological and flood risk assessments will be considered once the final alignment is chosen to mitigate any impacts on the surrounding hydrological environment.</p> <p>As part of the alignment selection process SSEN will consider an alignment that has least impact on watercourse beds and banks and will continue to engage with SEPA as the design is refined.</p>
--	---	--

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>Watercourse crossings may require authorisations under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 depending on what approach is finely decided upon. Level of environmental risk and subsequent level of authorisation required increases the more interference proposed with watercourse bed and banks. Crossing a watercourse overhead or underground being the least likely impact and open cut or laid on the bed being the most likely impact. Once the preferred route has been selected full details of watercourse crossings and locations should be provided. Further information on watercourse crossings and the likely level of authorisation required is contained in the Controlled Activities Regulations (CAR) Practical Guide.</p> <p>If SSEN are to choose an underground route option, then we recommend further discussion takes place before finalisation of the EIAR.</p>	
<p>Scottish Forestry (SF)</p>	<p>1. We advise that both the UK Forestry Standard -4th Edition – 2017 (UKFS) and Scottish Governments Control of Woodland Policy 2009 (CoWRP) apply. Compensatory planting would be required for the woodland lost as a result of development. A quick calculation of Route A at approx. 9km, assuming a 50m width would be around 45ha.</p> <p>2. Route A would also appear to sit partially within the catchment above Clachan Village. ABC have produced a flood study in the Clachan catchment, due to a series of significant flooding events in recent years. Clachan is not currently classified as a PVA but is nominated as part of the NFRA 2 process.</p> <p>UKFS Guideline (Forests and Water) 80, page 186– would apply: Within areas of high flood risk, phase clear-felling to minimise the risk of increasing local flood flows.</p>	<p>Comments from Scottish Forestry are noted.</p> <p>Guidance provided in the UK Forestry Standard -4th Edition – 2017 (UKFS) and Scottish Governments Control of Woodland Policy 2009 (CoWRP) has been and will be adhered to in the development of the proposed design.</p> <p>It is also confirmed that a Forestry Hydrology Assessment will be undertaken. This includes the proposed development felling in relation to any sensitive areas and wider LTFPs in the catchments. Nutrient sensitivities will be discussed in the assessment and consideration will be given to any</p>

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	<p>Activities in the existing woodland have the potential to impact on downstream flood risk, both directly via changes in forest cover and indirectly through sediment impacts. Felling operations are likely to have the greatest scope for increasing flood flows by temporarily removing the existing water use effect, which can amount to as much as 70 m³/ha during a storm event. Its significance greatly depends on the scale of operations and research suggests that it is only likely to be significant/measurable if more than 20% of the catchment area above the community at risk is felled within a 10-year period.</p> <p>A catchment scale calculation is needed to demonstrate that the increased felling proposed will not have a negative impact on the flooding issue. Felling outside the route, but inside the catchment will be relevant to this calculation and so consultation with neighbouring forest managers will be required on area and timing of felling and restocking activities. These calculations were last completed as part of the windfarm application (additional information) and this would be a good baseline document.</p> <p>If an effect is found then, comment may also be required on synchronisation issues with the Allt Mhor Burn.</p> <p>3. SSE should also consider how felling might impact on nutrient sensitive (e.g. fish hatchery on Allt Mhor)</p> <p>Information should be provided on any water bodies which may be sensitive to nutrient enrichment as outlined in UKFS:</p> <p>P180 GFP 42 Where water bodies are sensitive to nutrient enrichment, including shallow coastal lochs designated for shellfish, limit any clear felling to less than 20% of the catchment in any three-year period.</p>	<p>potential synchronisation issues with the Allt Mhor Burn.</p>
--	---	--

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

<p>Scottish Water</p>	<p>Scottish Water have reviewed the shapefiles and can confirm a review of our records indicates that there are not Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity.</p> <p>The catchment is now historic which means it is no longer in use as a public drinking water supply.</p> <p>Scottish Water do think however that it would be useful for SSEN Transmission to contact the Scottish Water High Authorities and Utilities Committee (HAUC) at Hauc.diversions@scottishwater.co.uk to ensure there are no asset conflicts you need to be aware of.</p> <p>Scottish Water attached a list of precautions for assets to help you with this process.</p>	<p>SSEN note Scottish Water's response that there are no known drinking water catchments of water abstraction sources that may be affected by the proposed activity.</p> <p>Contact will be made with HAUC once a preferred alignment has been selected to identify potential asset conflict.</p>
<p>Scotways</p>	<p>Do not have the capacity to provide a response at this time. However, in saying that, note that Argyll & Bute's access officer will have been consulted in relation to possible impacts on the Kintyre Way.</p>	<p>Noted and SSEN will seek to engage with Scotways at the alignment stage.</p>
<p>Transport Scotland</p>	<p>We understand that following an option eering process, three Route Options have been identified and are now under consideration, with Route A being selected as the preferred route.</p> <p>Having examined each of these three routes under consideration, we note that none of them cross or pass close to the trunk road network. In addition, there is no mention of a need for abnormal load deliveries during the construction process.</p> <p>We can confirm therefore that Transport Scotland considers the potential for any environment impact to the trunk road network to be minimal.</p>	<p>Transport Scotland's comments on the lack of potential for the Proposed Development to impact on trunk roads are noted. A transport assessment will be carried out as part of the S37 submission in order to demonstrate this.</p>

Table 5.4: Statutory and Non-Statutory Consultee Summary of Responses

	Consequently, Transport Scotland has no further comment to make on the CD at this time.	
--	---	--

4.4 Summary of Feedback – SSEN Argyll Projects Interface and Preferred Route Option

During the public consultation process, SSEN continued to hold internal project interface meetings. These meetings bring project teams together where projects overlap or are sited in proximity to each other. The purpose of these meetings is to ensure development teams are considering their project design alongside other teams, building efficiencies into design, avoiding issues or designing mitigation at early stages so that projects work together.

This communication between teams highlighted that Unexploded Ordnance (UXO) may be present within the proposed Route Options presented as part of the Sheirdrim Wind Farm consultation. Through other projects' consultation, Landowners had provided feedback that UXO's were present in some areas in Argyll from past military land use.

As such, over spring and summer 2022, SSEN has undertaken significant surveys across our Argyll project sites, including Sheirdrim Wind Farm, to identify UXO risk and further inform the Routeing Options. The results of the UXO studies have identified that of the three Route Options presented (see Figure 4.1) the Preferred Route A falls within a red zone for UXOs (see Figure 4.1).

The UXO consultant has recommended that SSEN avoids, where possible, the Preferred Route Option A. The historical records for the preferred route show that it was used heavily for Naval artillery practice, with bomb craters evident in aerial photography. Whilst it is possible to undertake construction works within the red zone, the costs to undertake tree felling and complete intensive electromagnetic underground survey with potential need for bomb disposal and continued UXO survey and specialist presence throughout construction, is prohibitive for the length of the affected area, alongside the safety risk that is presented with this information.

Therefore, considering this feedback SSEN has concluded that it would no longer consider the Preferred Route Option A and this option would not be taken forward to alignment stage. Route Options B and C have low UXO risk and would now be considered to determine a Proposed Route option to take forward to the alignment stage (see Section 5).

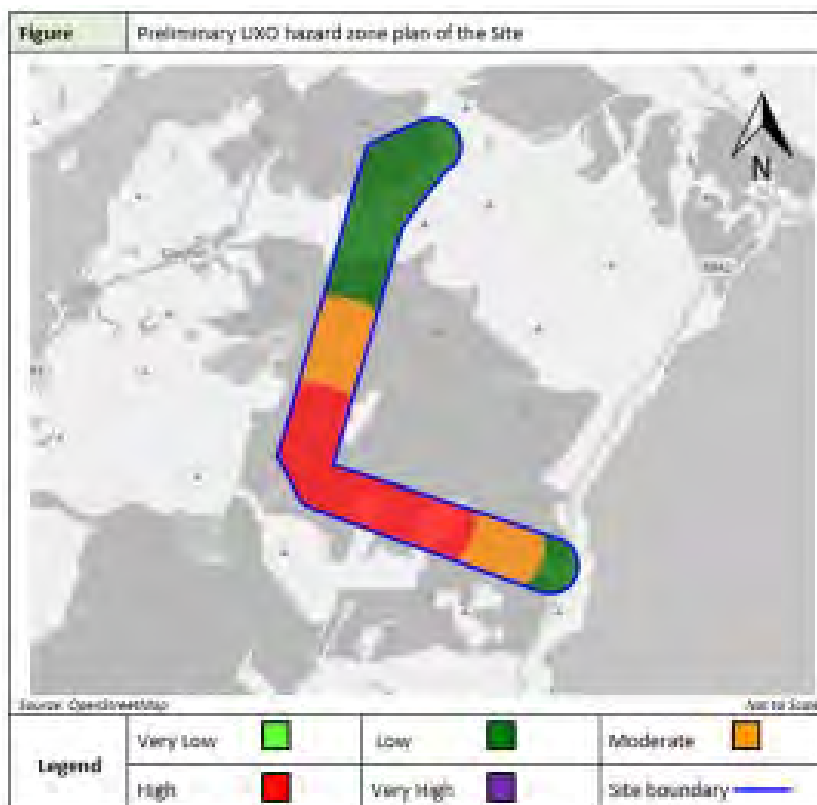


Figure 4.1: Preferred Route Option A showing high risk zone.

5. DESIGN RESPONSE TO FEEDBACK

5.1 Refinement of Preferred Route

An initial comparison of the options (see Appendix 2) identified Route A as the environmentally preferred route. This was because Route B and C predominantly cross blanket bog and peatland habitats, which will include potential groundwater dependent terrestrial ecosystems (pGWDTE) which would result in direct impacts on these irreplaceable habitats. Although these habitats are also present in Route A, this route is predominately conifer plantation woodland meaning these habitats would have experienced disturbance during forestry operations.

Route B has the largest overall area of peatland (4.6 km²) of the three route options and would affect a greater extent of Ancient Woodland than Route C.

From an environmental and engineering perspective Route C is preferred. This is because it has a lower UXO hazard level (see Section 4.4) as well as a lower potential for impacts to sensitive habitat including peat, blanket bog and ancient woodland, when compared to Route B.

5.2 Proposed Route

Route C will now be taken forward as the Proposed Route to alignment stage.

6. NEXT STEPS

6.1 Route Alignment Selection

The next stages of the Proposed Development are as follows:

1. Alignment Selection – Following the identification of the Proposed Route – Route C, SSEN Transmission will carry out assessments and design work to identify a Preferred Alignment for the Wind Farm Connection. These alignment options will be assessed from an environmental, engineering and economic perspective. The next round of consultation will provide an opportunity to present and comment upon the Preferred Alignment, with particular regard to sensitive locations and the need for any mitigation. This consultation is anticipated to take place in early Autumn 2022.
2. Proposed Alignment – Having regard to consultation undertaken on the Preferred Alignment, SSEN Transmission will identify its Proposed Alignment. SSEN Transmission will continue to undertake further surveys, and detailed Environmental Impact Assessments will be carried out as the project progresses. Further consultation with statutory and other stakeholders is anticipated to take place in late 2022 and early 2023, which will be the final phase of pre-application consultation prior to the application being submitted for development consent.
3. Application – Following the formal consultation stage, SSEN Transmission will consider the final details of its proposals before submitting an application for consent under Section 37 of the Electricity Act 1989. There will be a further opportunity for comments to be submitted in relation to the application to the Scottish Government Energy Consents Unit. Full instructions on how to comment and the timescales for doing so will be advertised in the local and national press when the application is submitted.

Further Information will also be posted on the project website, including the summary of the feedback/questions and SSEN Transmission's responses from the Consultation events at: <https://www.ssen-transmission.co.uk/projects/sheirdrim-wind-farm-connection/>

APPENDIX 1: CONSULTATION BROCHURE

Argyll and Kintyre 275kV Strategy Consultation Booklet

November/December 2021

Share your views with us:



We are launching a pre-application consultation exhibition to gain views and feedback on our proposals for:

- The Argyll and Kintyre 275kV Substations Planning Application. The Substations were consulted on as part of the Argyll and Kintyre 275kV Strategy consultations in July 2021.
- The proposed Sheirdrim Windfarm Connection project.

Information on our proposals is available within this consultation booklet and we also invite you to attend our virtual consultation events where you can view our proposals online using our virtual consultation room.

Live IM chats with the project team will be held on the following dates and times:

Wednesday 8th December 2021 -10-12 Noon

Thursday 9th December 2021 - 5-7pm

This brochure, the Argyll and Kintyre 275kV Substations Report on Consultation from the July 2021 consultation, access to the virtual room and any other information can be accessed on the project webpage: www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/



Scottish & Southern
Electricity Networks

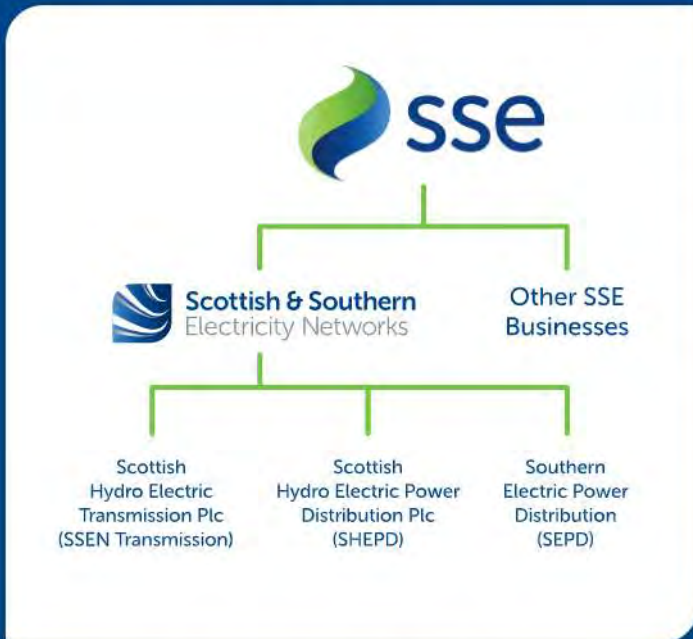
TRANSMISSION

Contents

- 04 Who We Are
- 05 The Argyll and Kintyre 275kV Strategy
- 06 The Argyll and Kintyre 275kV Substations
- 07 Technology Options
- 08 An Suidhe Substation
- 10 Crarae Substation
- 12 Craig Murrail Substation
- 14 Crossaig North Substation Design
- 16 Next Steps
- 17 Sheirdrim Wind Farm
Connection Consultation
- 20 What else is happening in Argyll?
- 22 How do I have my say?
- 23 Your feedback

Who We Are

We are Scottish and Southern Electricity Networks, operating under licence as Scottish Hydro Electric Transmission plc (SSEN Transmission) for the transmission of electricity in the North of Scotland.



What is the difference between Transmission and Distribution?

Electricity Transmission is the transportation of electricity from generating plants to where it is required at centres of demand. The Electricity Transmission network, or grid, transports electricity at very high voltages through overhead lines (OHL), underground cables (UCG) and subsea cables. Our transmission network connects large scale generation, primarily renewables, to central and southern Scotland and the rest of Great Britain. It also helps secure supply by providing reliable connection to the wider network of generation plants.

The Electricity Distribution network is connected into the Transmission network but the voltage is lowered by transformers at electricity substations, and the power is then distributed to homes and businesses through overhead lines or underground cables.

In total we maintain about 5,000km of overhead lines and underground cables – easily enough to stretch across the Atlantic from John O’Groats all the way to Boston in the USA.

Our network crosses some of the UK’s most challenging terrain – including circuits that are buried under the seabed, are located over 750m above sea level and up to 250km long.

The landscape and environment that contribute to the challenges we face also give the area a rich resource for renewable energy generation. There is a high demand to connect from new wind, hydro and marine generators which rely on Scottish and Southern Electricity Networks to provide a physical link between the new sources of power and electricity users. Scottish and Southern Electricity Networks is delivering a major programme of investment to ensure that the network is ready to meet the needs of our customers in the future.

Our responsibilities

We have a licence for the transmission of electricity in the north of Scotland and we are closely regulated by the energy regulator the Office of Gas and Electricity Markets (Ofgem).

Our licence stipulates that we must develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

Overview of Transmission Projects



The Argyll and Kintyre 275kV Strategy

The original transmission network in Argyll and Bute was constructed over 60 years ago and designed to transmit electricity to consumers in rural areas of low-density population.

As the UK strives for Net Zero (achieving a balance between the greenhouse gases put into the atmosphere and those taken out), SSEN Transmission has seen a significant increase in generator connection applications in Argyll and Kintyre in the last 18 months, predominantly in renewable generation.

In terms of this renewable generation (i.e., windfarms), there are infrastructure requirements needed to connect generators to our Transmission network.

This means we need to increase our network capability in Argyll and Kintyre, beyond that already under current construction and public development, to enable the connection of further renewable generation and to export to the wider GB network.

We have called this group of works designed to deliver the required increase in network capacity our 'Argyll and Kintyre 275kV Strategy'.

Our Argyll and Kintyre 275kV Strategy consists of 3 projects which are at various stages of consenting and public consultation process:



Creag Dhubh
Dalmally 275kV Connection

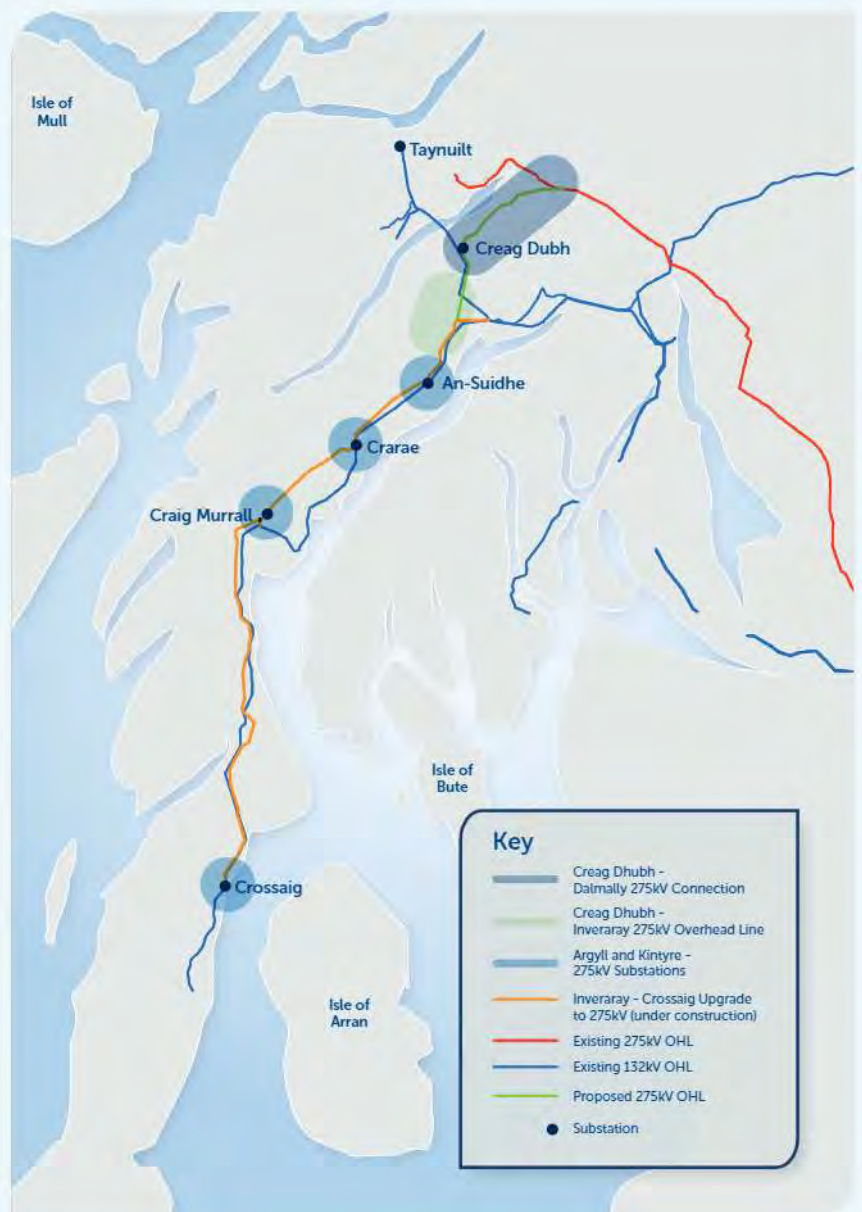


Creag Dhubh
Inveraray 275kV Overhead Line



Argyll and Kintyre
275kV Substations

To find out more about the Strategy as a whole, and sign up for updates, please visit:
www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-strategy/



Argyll and Kintyre 275kV Substations

About the project

Project Need

Due to the projected increase in renewable energy generation in Argyll, a need has been identified for the upgrade and reinforcement of the electricity transmission network on the Argyll peninsula to ensure supply and support the transition to net zero emissions.

As described during the development process for the Inveraray – Crossaig overhead line rebuild, the replacement overhead line is being built at a higher 275kV voltage, initially operating at 132kV between Inveraray and Crossaig. As future renewable generation requirements connect to the electricity network and the operating voltage is required to increase to 275kV, substations along the route will also require to be replaced to accommodate this increase.

Project Overview

We are therefore proposing to construct and operate four (4) new 275kV electricity substations at the following locations:

- in the vicinity of the existing An Suidhe substation;
- in the vicinity of the existing Crarae substation;
- in the vicinity of Craig Murrail, north of Lochgilphead; and
- in the vicinity of the existing Crossaig substation.

Once the 275kV substations are constructed, the existing 132kV substations at An Suidhe and Crarae will be decommissioned, with Port Ann and Crossaig substations being retained.

The selection of the preferred site was undertaken as a combination of the environment, engineering and cost assessment scoring and the Preferred Site Options were selected was taken forward for consultation and detailed design in July 2021. Since the consultation events, the Preferred Site Options have undergone further assessment and design resulting in minor changes taking into consideration key constraints.

We are intending on submitting our Town and Country Planning (Scotland) Act 1997 application for consent to Argyll and Bute Council in Spring 2022. This will follow our review of the feedback we receive during the consultation period.

Three of the substations will also require consent from the Scottish Governments Energy Consent Unit, through Section 37 of the Electricity Act 1989. This will cover all aspects relating to the overhead line works associated with our proposals.

These works comprise of a limited number of diversions and 'tie ins' which relate to ongoing reinforcements associated with the Inveraray to Crossaig transmission network.

The following pages outline the proposals that we are seeking to take forward to Planning and Section 37 application submission, on which your feedback is sought.

- Technology Options (page 7)
- An Suidhe Substation (page 8)
- Crarae Substation (page 10)
- Craig Murrail Substation (page 12)
- Crossaig North Substation (page 14)

Technology Options

Following the consultation process and a technology options review, it was determined that an Air Insulated Switchgear (AIS) substation was the preferred solution to meet decarbonisation goals that we have committed to in our RIIO-T2 business plan: (www.ssen-transmission.co.uk/media/3761/a-network-for-net-zero-final-business-plan.pdf).

The alternative option to AIS is known as Gas Insulated Switchgear (GIS). GIS substations are smaller in size to an AIS substation. However, GIS substations utilise Sulphur Hexafluoride (SF₆) as an insulator in both the switchgear bay and the circuit breaker. SF₆ is a very high global warming potential greenhouse gas.

However, innovation in switchgear technology may provide SSEN Transmission with an opportunity to consider a GIS substation that does not use SF₆ gas. This would allow us to reduce the size of our substation footprint, the height of the control building and the extent of associated works, which are currently proposed under an AIS solution.

An Suidhe Substation

Components of the Proposed Development that will be subject to Town and Country Planning

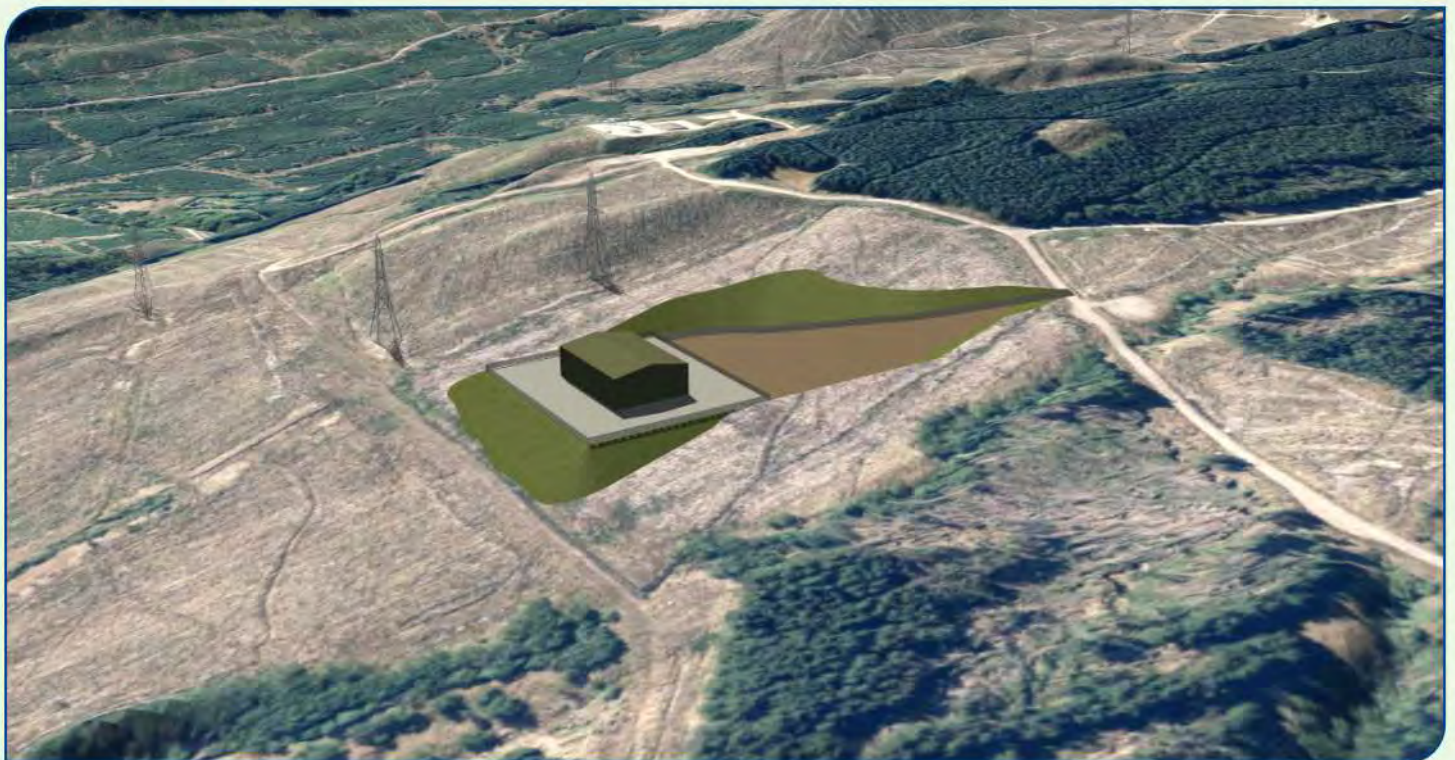
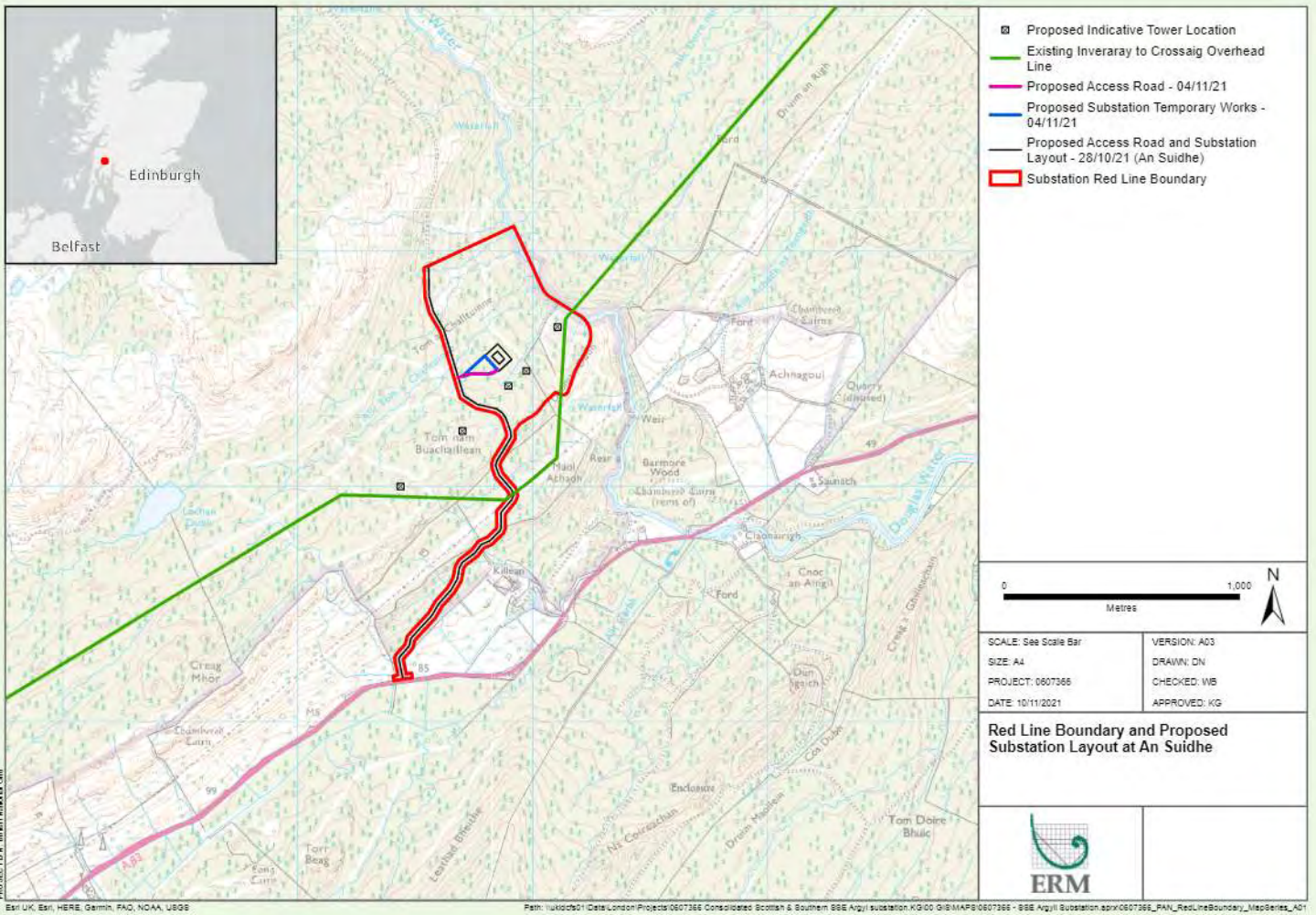
- A level platform of up to 0.6 ha (excluding cut/fill required to tie the platform into existing ground levels);
- Gas-insulated switchgear (GIS) comprising of a control building (likely to be 31m by 45m with an approximate height of 15m), infrastructure, electrical equipment and Internal roads, access paths, and hardstanding areas within the substation compound;
- The site would be surrounded by a 2.4m high security fence of palisade construction with CCTV surveillance;
- Upgrading approximately 2.5km of existing access tracks and new access tracks (length to be confirmed);
- Formation of a temporary works area and construction laydown areas;
- Associated landscaping works and felling of approximately 7.5ha commercial forestry; and
- Drainage, including attenuation basins (SuDS ponds), the number to be confirmed.

Components of the Associated Development subject to Section 37 of the Electricity Act 1989

- Approximately five towers will be required to make the connection into and out of the proposed substation;
- Potential for short term temporary overhead line diversions during construction; Temporary works areas (where possible, the main site compound will be shared with the substation above); and
- Dismantling of seven redundant towers.

Key Environmental Considerations

- Glen Etive and Glen Fyne SPA is over 10km to the north east. There are no sites within 5km designated for habitat.
- The majority of the Proposed Development is within commercial coniferous plantation of low ecological and conservation value. There is an area of semi-natural broadleaved woodland, which is of higher ecological importance than the surrounding conifer habitat. There are no Ground Water Dependent Terrestrial Ecosystems (GWDTEs) or Annex 1 habitats present.
- The Proposed Development is not within a nationally or locally designated landscape. It is 1.8km east of a locally designated landscape, West Loch Fyne (Coast) Area of Panoramic Quality (APQ) and 4.6km north east of the East Loch Fyne (Coast) APQ. The closest residential receptors are approximately 700 m downslope.
- The proximity and character of designated assets within 2km of the Proposed Development has potential to result in indirect impacts resulting from changes to setting. These include Category B listed Claonairigh House approximately 2km to the south and the Inveraray Castle Garden and Designated Landscape.
- The closest watercourse is Douglas Water, 300m east of the Proposed Development. The SEPA flood map indicates that the Proposed Development contains very small pockets of high-medium likelihood surface water flooding.
- The nearest noise sensitive receptor is approximately 700m from the Proposed Development.
- With the implementation of mitigation that will be agreed with Argyll and Bute Council the Proposed Development is not considered likely to have a significant effect upon the environment and local receptors during construction and operation.



Crarae Substation

Components of the Proposed Development that will be subject to Town and Country Planning

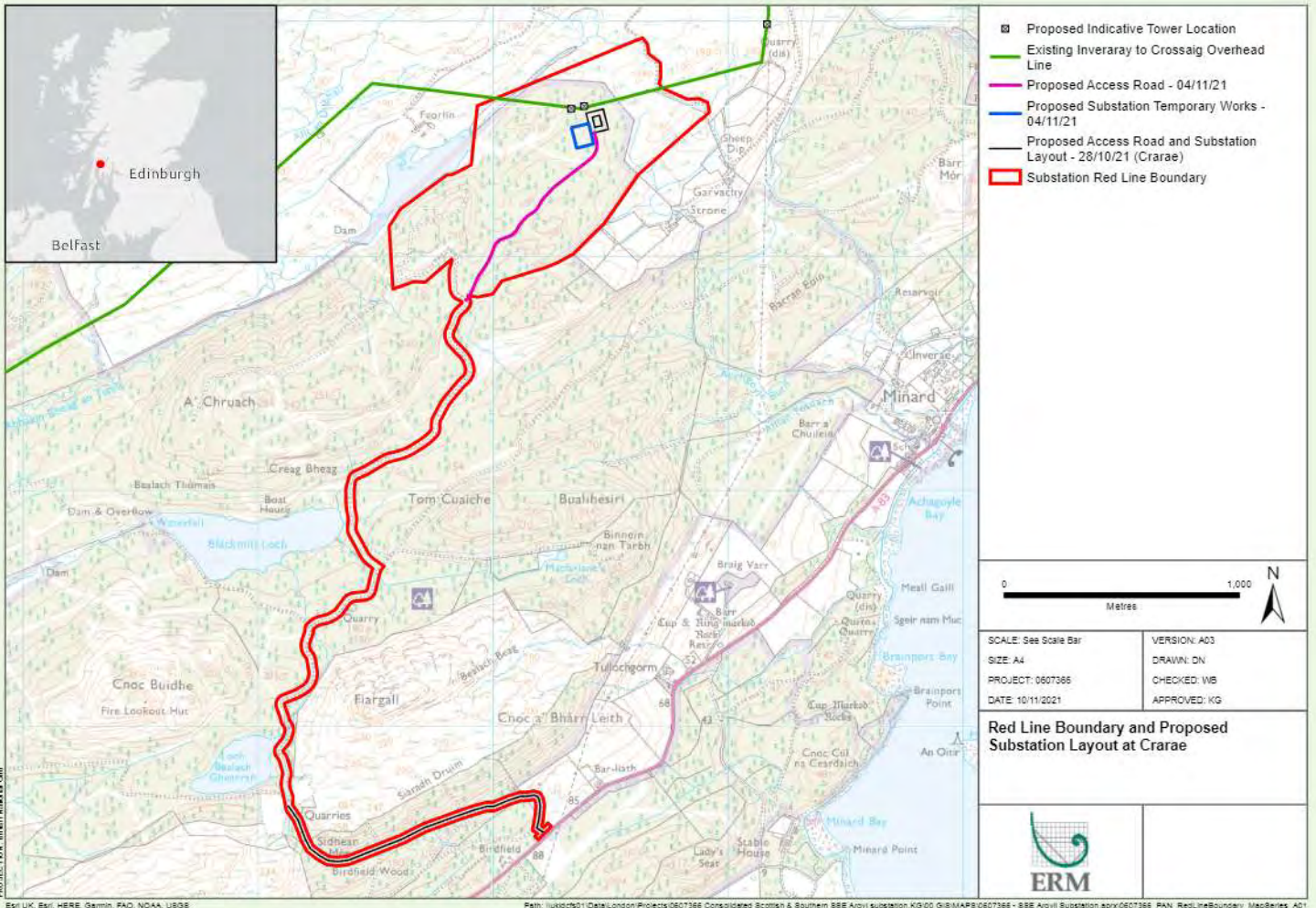
- A level platform of up to 0.6 ha (excluding cut/fill required to tie the platform into existing ground levels);
- Gas-insulated switchgear (GIS) comprising of a control building (likely to be 31m by 45m with an approximate height of 15m), infrastructure, electrical equipment and Internal roads, access paths, and hardstanding areas within the substation compound;
- The site would be surrounded by a 2.4m high security fence of palisade construction with CCTV surveillance;
- Upgrading approximately 4.5km of existing access tracks and new access tracks (length to be confirmed)
- Formation of a temporary works area and construction laydown areas;
- Associated landscaping works and felling approximately 3 ha of commercial forestry; and
- Drainage, including attenuation basins (SuDS ponds), the number to be confirmed.

Components of the Associated Development subject to Section 37 of the Electricity Act 1989

- Approximately three towers will be required to make the connection into and out of the proposed substation;
- Potential for short term temporary overhead line diversions during construction;
- Temporary works areas (where possible, the main site compound will be shared with the substation above); and
- Dismantling of three redundant towers.

Key Environmental Considerations

- The Proposed Development is within commercial coniferous plantation of low ecological and conservation value though there is potential for red squirrel dreys.
- There is an area of marshy grassland within the site which has potential for Ground Water Dependent Terrestrial Ecosystems (GWDTEs) and further assessment will be undertaken to confirm this.
- Knapdale Loch SPA is over 17km to the west. There are no sites within 5km designated for habitat.
- The Proposed Development does not sit within a nationally designated landscape. The Proposed Development is approximately 1.6km west of a locally designated landscape, West Loch Fyne (coast) Area of Panoramic Quality (APQ) and 4km west of East Loch Fyne (coast) APQ. The closest residential receptors are over 500m down slope.
- Crarae Garden and Designed Landscape is approximately 1.8km to the east. Crarae Lodge scheduled monument is approximately 2.4km to the south east. Brainport Bay scheduled monuments are approximately 2.5km to the south. Minard Castle Category B listed building is approximately 3km to the south. the presence of intervening forestry and the separation distance suggests that there will be no significant effects on the setting of designated assets.
- The closest watercourse is Abhainn Bhaeg An Tunns, adjacent to the Proposed Development. The SEPA flood map indicates that the Proposed Development contains very small pockets of high- medium likelihood surface water flooding.
- The nearest noise sensitive receptor is approximately 500m from the Proposed Development.
- With the implementation of mitigation that will be agreed with Argyll and Bute Council the Proposed Development is not considered likely to have a significant effect upon the environment and local receptors during construction and operation.



Craig Murrail Substation

Components of the Proposed Development that will be subject to Town and Country Planning

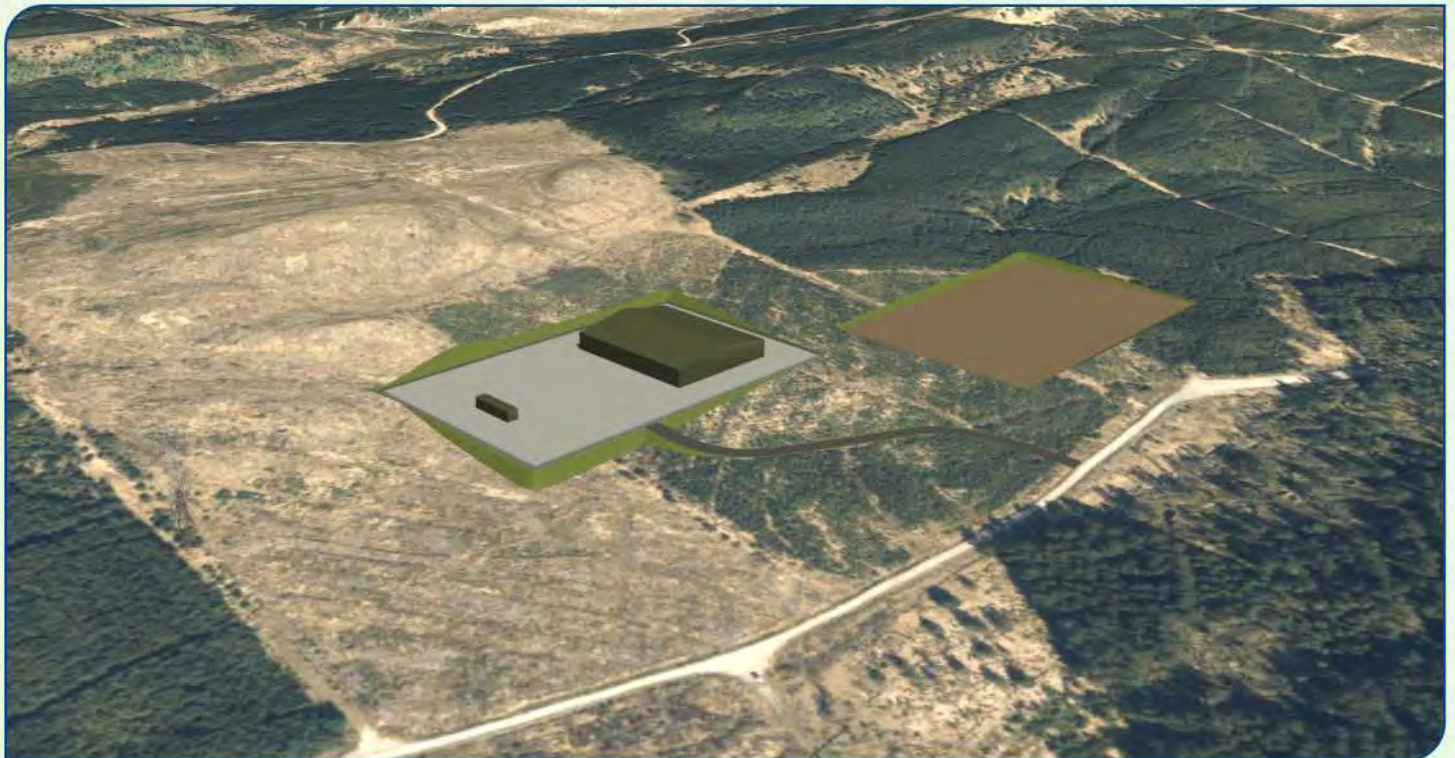
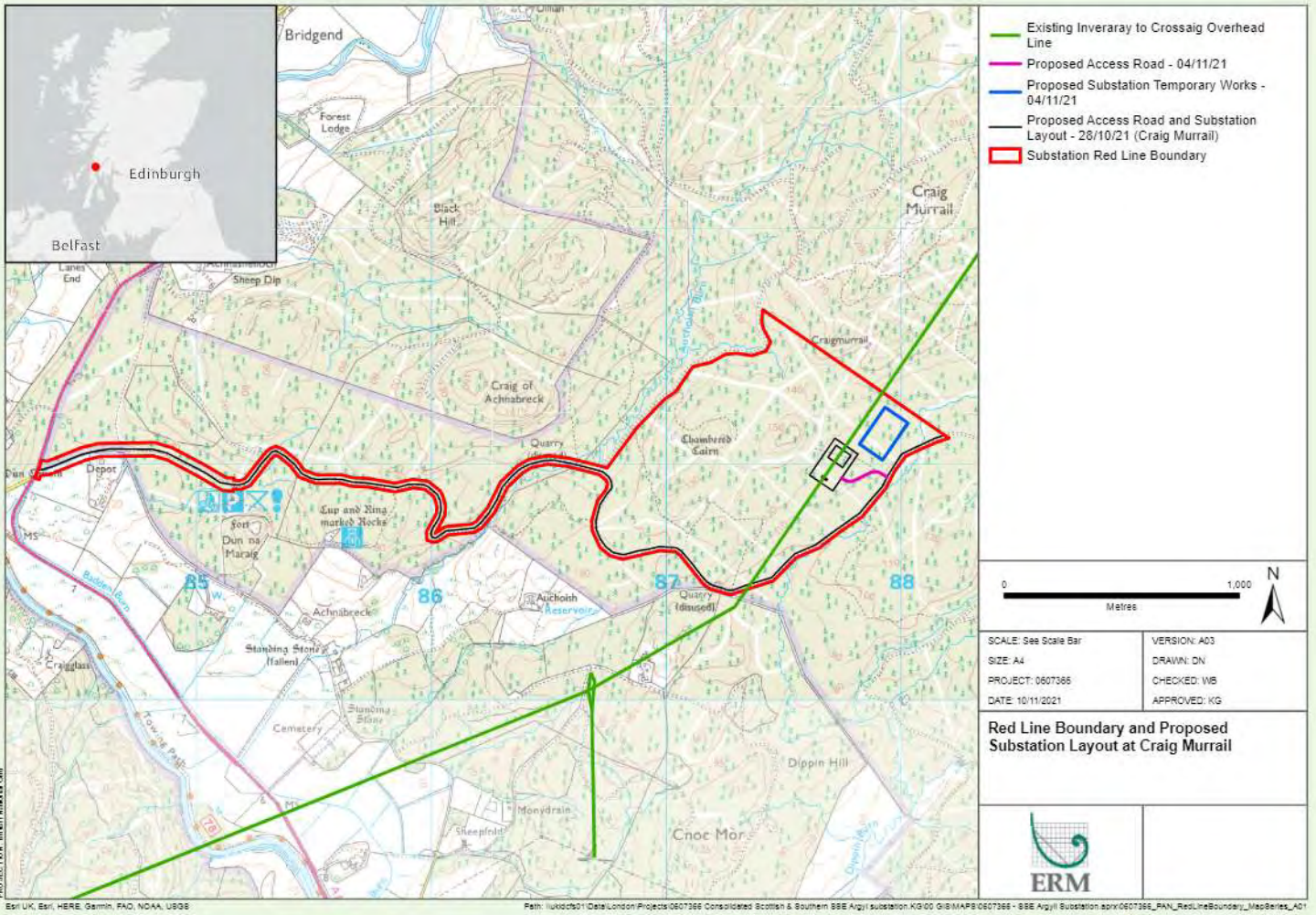
- A level platform of up to 0.8 ha (excluding cut/fill required to tie the platform into existing ground levels);
- Gas-insulated switchgear (GIS) comprising of a control building (likely to be 31m by 66m with an approximate height of 15m), infrastructure, electrical equipment and Internal roads, access paths, and hardstanding areas within the substation compound. with an approximate height of 15m);
- 33kV Switchroom building (likely to be 20m by 6m);
- The site would be surrounded by a 2.4m high security fence of palisade construction with CCTV surveillance;
- Upgrading approximately 5.1km of existing access tracks and new access tracks (length to be confirmed);
- Formation of temporary site compounds and construction laydown areas;
- Associated landscaping works and felling of approximately 0.5 ha of commercial forestry; and
- Drainage, including attenuation basins (SuDS ponds), the number to be confirmed.

Components of the Associated Development subject to Section 37 of the Electricity Act 1989

- Approximately three towers will be required to make the connection into and out of the proposed substation;
- Potential for short term temporary overhead line diversions during construction;
- Temporary works areas (where possible, the main site compound will be shared with the substation above); and
- Dismantling of three redundant towers.

Key Environmental Considerations

- The majority of the Proposed Development is commercial coniferous plantation of low ecological and conservation value. An area of mature conifer woodland is present with potential for red squirrel species.
- Moine Mhor SAC, SSSI and LNCS is 4km to the east. Tainish and Knapdale Woods SAC and SSSI is 7km to the east. Knapdale Loch SPA & SSSI is 7km to the south east. Lochgilphead LNCS is 3.5km to the south. Loch Leathan LNCS is 6.9km north.
- The Proposed Development does not sit within a nationally or locally designated landscape. It is approximately 1.8km south east of the Knapdale National Scenic Area (NSA). The West Loch Fyne (Coast) Area of Panoramic Quality (APQ) is 3.3km east. The closest residential receptors are located approximately 1.3km away.
- The proximity and character of designated assets within 2km of the Proposed Development has potential to result in indirect impacts resulting from changes to setting. The Scheduled Monument Auchoish long cairn lies in a forestry clearing approximately 600m east. Achnabreck prehistoric rock carvings Scheduled Monuments are approximately 1.9km to the south west. Ballimore Garden and Designated Landscape is over 8km to the south west. Through implementation of mitigation no significant effects are likely.
- The SEPA flood map indicates that the Proposed Development has small areas of high-medium surface water flood risk through implementation of mitigation no significant effects are likely. The Proposed Development is in close proximity to the north west tributary of the Dippin Burn, however it is beyond 30m and not at risk of river flooding.
- The nearest noise sensitive receptor is over 1.3km from the Proposed Development.
- With the implementation of mitigation that will be agreed with Argyll and Bute Council the Proposed Development is not considered likely to have a significant effect upon the environment and local receptors during construction and operation.



Crossaig North Substation Design

Components of the Proposed Development that will be subject to Town and Country Planning

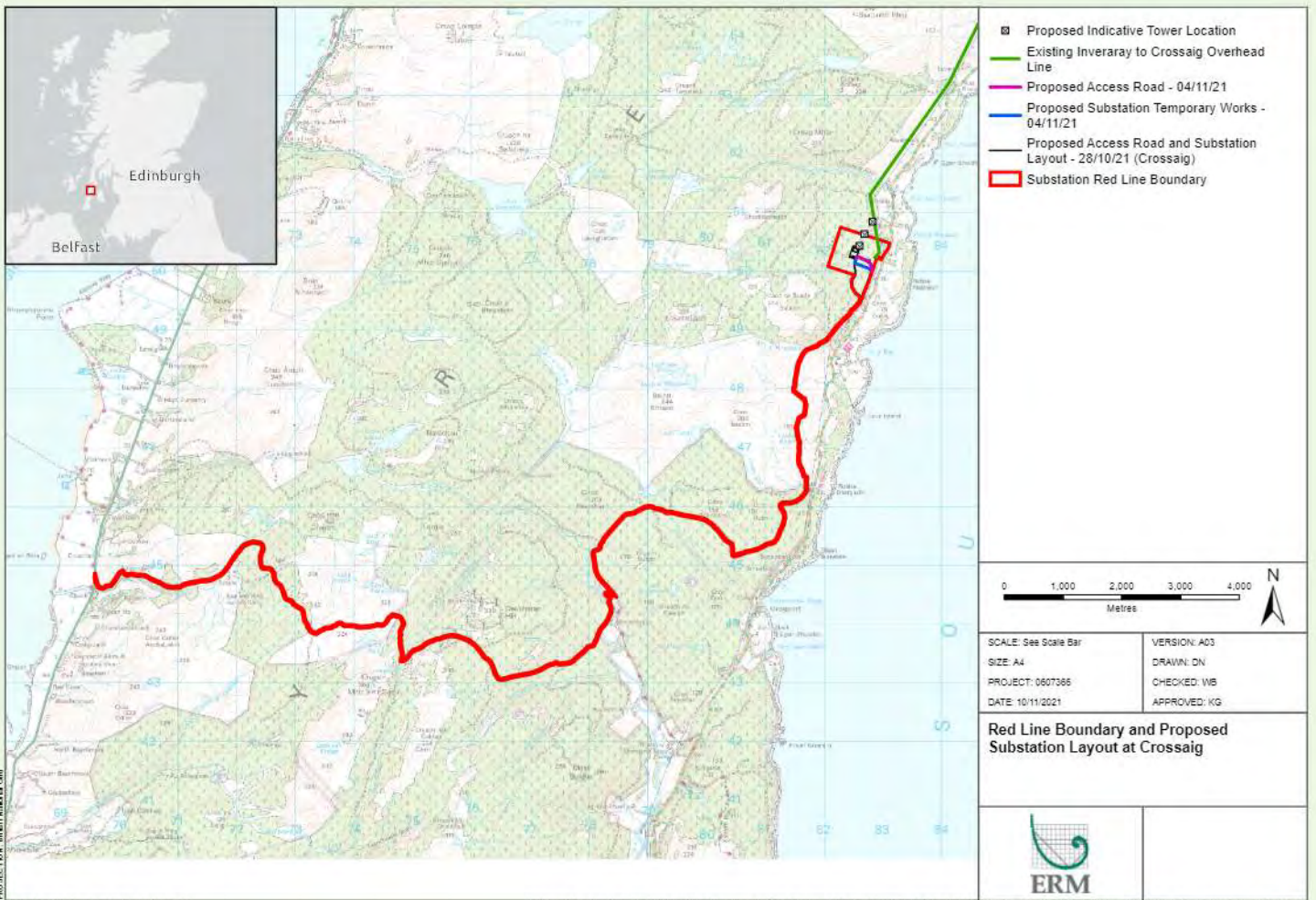
- A level platform of up to 1.93 ha (excluding cut/fill required to tie the platform into existing ground levels.);
- Gas-insulated switchgear (GIS) comprising of two control buildings, infrastructure, electrical equipment and Internal roads, access paths, and hardstanding areas within the substation compound:
 - One 275kV control building likely to be 31m by 65m with an approximate height of 15m;
 - One 132kV control building likely to be 11m by 20m with an approximate height of 15m; and
 - Two new 480MVA 275/132kV supergrid transformers located between the above mentioned buildings;
- The site would be surrounded by a 2.4m high security fence of palisade construction with CCTV surveillance;
- Upgrading approximately 25 km of existing access tracks and new access tracks (length to be confirmed);
- Formation of temporary site compounds and construction laydown areas;
- Associated landscaping works and felling approximately 14 ha of commercial forestry; and
- Drainage, including attenuation basins (SuDS ponds), the number to be confirmed.

Components of the Associated Development subject to Section 37 of the Electricity Act 1989

- Approximately three towers will be required to make the connection into and out of the proposed substation;
- Potential for short term temporary overhead line diversions during construction;
- Temporary works areas (where possible, the main site compound will be shared with the substation above); and
- Dismantling of ten redundant towers.

Key Environmental Considerations

- The Proposed Development does not sit within any internationally, nationally, or locally designated sites.
- A number of international designated sites lie within 10km of the Proposed Development, including Sound of Gigha SPA (9.5km west), Kintyre Goose Lochs SPA (7.8km west), Kintyre Goose Roosts SPA (5.2km west).
- A number of nationally designated sites lie within 10km of the Proposed east Development, including Arran Northern Mountains (7.2km), Claonaig Wood SSSI (5.7km north).
- A number of Local Nature Conservation Sites (LNCS) lie within 5km of the Proposed Development including Crossaig Glen LNCS (1.5km north), Cour LNCS (2km south), Loch an Eilein Group (4km north west).
- The majority of the Proposed Development is commercial coniferous plantation of low ecological conservation value. There is an area of mature conifer woodland, which has the potential to support red squirrel.
- The Proposed Development does not sit within a nationally or locally designated landscape. There would be views of the Proposed Development from the Arran National Scenic Area (NSA) and North Arran Wild Land Area (WLA), which lie 4.5km south east. The closest residential receptors are over 1km to the north east.
- The proximity and character of designated assets within 2km of the Proposed Development does not indicate potential for indirect impacts resulting from changes to setting. There is a Category A Listed Building, Cour House, within 1.8km of the Proposed Development. The closest Scheduled Monument is Talatoll, over 5km north east.
- The SEPA flood map indicates that the Proposed Development contains small pockets of high-medium likelihood surface water flooding. A watercourse is located at the south west corner of the Proposed Development.
- The nearest noise sensitive receptor is over 1km from the Proposed Development.
- With the implementation of mitigation that will be agreed with Argyll and Bute Council the Proposed Development is not considered likely to have a significant effect upon the environment and local receptors during construction and operation.



Next Steps

Environmental

Environmental surveys are currently being undertaken within the proposed planning application boundaries which will enable us to undertake an Environmental Assessment to identify potential impacts and to develop robust mitigation strategies to ensure that there are no significant residual impacts on the environment and local receptors during construction and operation.

Design

Following the collation of feedback and outline results from the surveys the design will be finalised for taking forward to the submission of the planning application.

Sheirdrim Wind Farm Connection Consultation

What is the project?

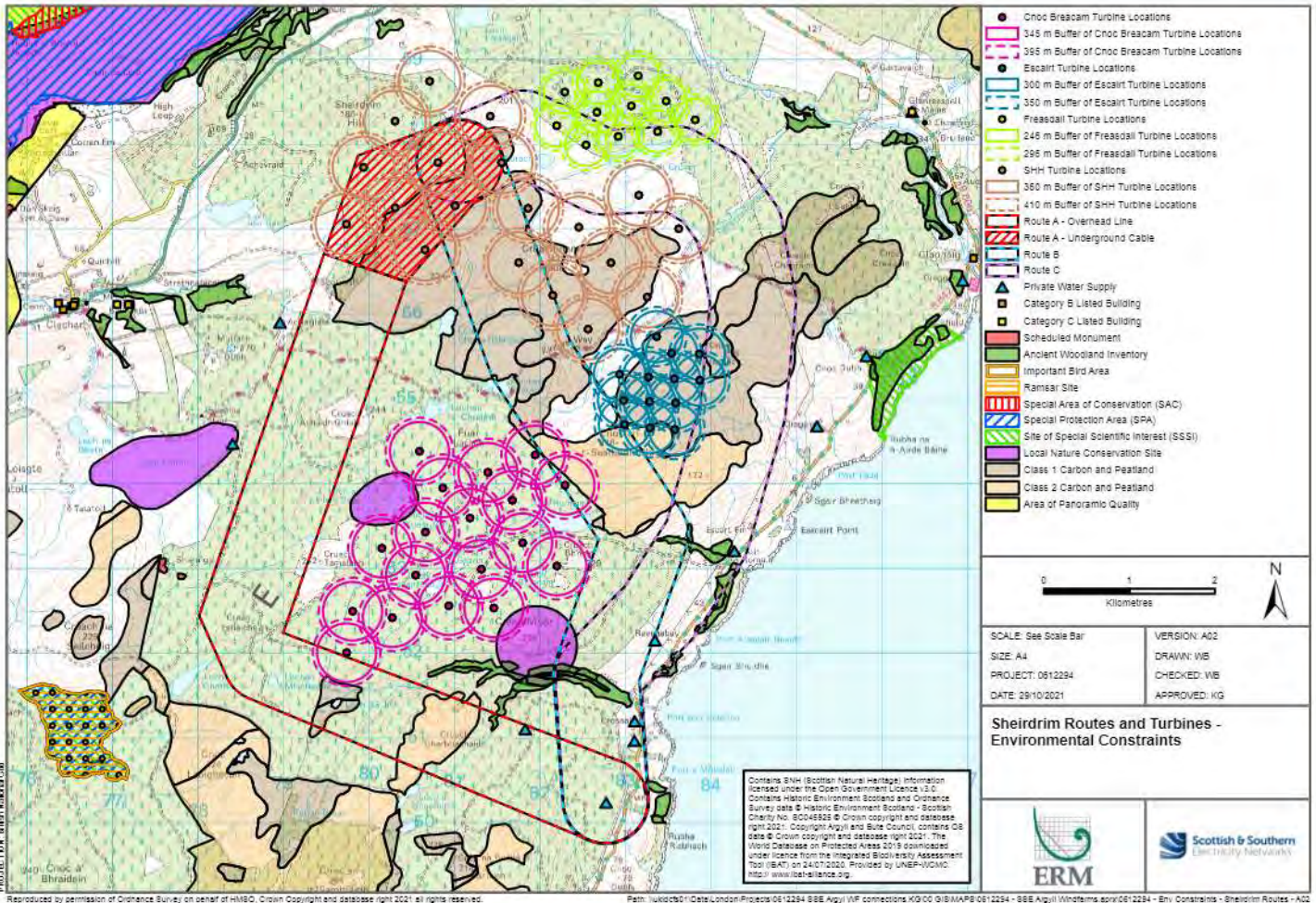
Scottish Power (UK) Ltd is the developer for the proposed Sheirdrim Windfarm located west of Claonaig, in Argyll. The 84MW windfarm requires a single circuit 132kV overhead line (OHL) connection from the windfarm substation compound and terminating at the existing Crossaig 132kV substation, with an approximate length of 11 km.

SSEN seeks to connect Sheirdrim Windfarm to the wider electricity network. It also aims to obtain planning permission for the Sheirdrim Windfarm Substation Compound. The substation platform would be the responsibility of Scottish Power (UK) Ltd as the Windfarm developer. The proposed project would involve:

- A possible underground cable (UGC) from the Sheirdrim Windfarm Substation Compound, extending approximately 2 km to 3 km before converting to OHL. This would require excavation of a trench in which to lay the cable and the construction of joint bays.
- Between 8 km and 11 km of trident wood poles or steel lattice structures to carry a single circuit 132kV OHL. Wood poles would require excavation and backfilling. Where shallow bedrock is present, it may be necessary to break or remove rock to accommodate pole foundations. Steel lattice towers would require excavation of a suitable area for the tower pad and installation of foundation.
- Install a 120MVA 132/33kV transformer; a GIS 33kV transformer Circuit Breaker; and a 33kV Switch Disconnector on suitable level platforms inside a combined control and transformer building; along with their associated cabling/metering/protection equipment.
- Felling commercial forestry to create an operational corridor to enable the safe operation and maintenance of the OHL.
- Associated works will include creation of temporary laydown areas for materials and welfare facilities, installation of permanent and temporary access tracks and drainage infrastructure.
- Remedial works to reinstate the immediate vicinity of the works and any ground disturbed, to pre-existing use.

What are the Route Options?

We have identified three potential Routes for the new overhead line. The Route selection process identifies a wide corridor in which a preferred Alignment for the overhead line can be determined. This aims to progress towards a preferred overhead line Alignment in a systematic manner, which is technically feasible, economically viable, and could be anticipated to cause the least disturbance to the environment and to those who live, work and visit the area or use it for recreation. The options are:



1. Route A

Route A comprises UGC and OHL and heads south from the proposed windfarm, then turning east at Loch Ghatha, to Crossaig substation. The approximate route length is 11km.

2. Route B

Comprises OHL and UGC, travelling south from the proposed wind farm, with the most direct route to Crossaig substation. The southern section of the route runs alongside north of the B842. The approximate route length is 8km.

3. Route C

Comprises OHL and UGC and heads east from the wind farm, then south after passing Loch Cruinn. Route C joins with Route B at Crossaig Glen, and both follow south to Crossaig substation, alongside the B842. The approximate route length is 11km.

What are the potential risks associated with these options?

We have completed a desk-based assessment of the routes and identified that all three options present the following environmental risks:

- commercial forestry would need to be felled.
- direct impact on areas of blanket bog and peat.
- cultural heritage assets may be impacted by route development.
- intersects with the Kintyre Way, with potential for close range visual effects.
- potential for barrier and collision impacts to Schedule 1 birds including qualifying interests of Kintyre Goose Roosts SPA and Sound of Gigha SPA.
- potential impacts to Ancient Woodland and Semi Natural Ancient Woodland habitats and to European and Nationally protected species. Route A contains a very small area of Ancient Woodland, which could be avoided during the Alignment process.

Sheirdrim Windfarm Connection Environment RAG rating of all three route options

RAG Impact Rating - Environmental	Route Option		
	A	B	C
Natural Heritage			
Designations	Orange	Red	Red
Protected Species	Green	Green	Green
Habitats	Orange	Red	Red
Hydrology/geology	Green	Green	Green
Ornithology	Orange	Orange	Orange
Cultural Heritage	A	B	C
Designated	Orange	Green	Green
Non designated	Green	Green	Green
People	A	B	C
Proximity to dwellings	Green	Green	Green
Landscape	A	B	C
Access	Orange	Orange	Orange
Character	Orange	Orange	Orange
Visual	Orange	Orange	Orange
Land Use	A	B	C
Agriculture	Green	Green	Green
Forestry	Orange	Orange	Orange
Recreation	Orange	Orange	Orange
Planning	A	B	C
Planning	Orange	Orange	Orange

The Engineering assessment has identified that all routes will present some challenges mainly due to the presence of peat, with Route B having the greatest potential to affect peatland. Route B is the shortest route as it takes a direct path through two windfarms, and this may cause technical challenges to maintain clearance from the wind turbines, potentially increasing overall construction cost.

There are constraints affecting Route C due to proximity to the 275kV Inveraray to Crossaig OHL, windfarms and potential flood risk. Route A is marginally the longest route. It presents the least technical challenges when compared to Routes B and C.

To illustrate the level of risk associated to each consideration, please see the below Red Amber Green (RAG) table.

A high risk is shown as red, a medium risk is shown as amber, and a low risk is shown as green.

Sheirdrim Windfarm Connection Engineering RAG rating of all three route options

Category	Route Option		
	A	B	C
Infrastructure Crossing			
Major Crossings	Green	Green	Green
Minor Roads	Red	Green	Orange
Environmental Design	A	B	C
Elevation	Green	Orange	Green
Contaminated Land	Orange	Orange	Orange
Flooding	Orange	Green	Red
Ground Condition	A	B	C
Terrain	Green	Green	Green
Peatland	Red	Red	Red
Construction and Maintenance	A	B	C
Access	Green	Red	Green
Proximity	A	B	C
Clearance Distance	Green	Green	Green
Windfarms	Orange	Red	Red
Communication Masts	Green	Green	Green
Additional Considerations	A	B	C
Route Length	Red	Green	Red

What else is happening in Argyll?

SSEN consulted on the three projects which make up the Argyll 275kV Strategy (1. Creag Dhubh to Dalmally 275kV Connection, 2. Creag Dhubh to Inveraray 275kV Overhead Line and 3. Argyll and Kintyre 275kV Substations) in July 2021. The Report on Consultation for each of these projects can be found on the project specific website:

(www.ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection/)

(www.ssen-transmission.co.uk/projects/creag-dhubh-inveraray-275kv-overhead-line/)

(www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/)

We are engaging with the Community in Dalmally regarding the alignment which will be taken forward in our Section 37 Application for the Creag Dhubh to Dalmally 275kV Connection. We expect to make this application in early 2022.

The Creag Dhubh to Inveraray Overhead Line Project is now in the Alignment stage with consultation on the Preferred Alignment provisionally planned for January 2022.

Alongside the Argyll 275kV Strategy, SSEN Transmission are currently developing and constructing additional reinforcement, generation connection and VISTA projects across Argyll. We've provided a list of our SSEN Transmission projects in the region below, alongside a short description and links to where you can access further information.

Sloy Power Station Substation Rebuild

Transmission assets at Sloy Power Station Substation are reaching the end of their working life and need to be replaced. This project includes a new substation near the existing one at the power station, tower and gantry works for connection to the existing overhead line, 11kV cables to be installed to connect back to the power station from the new substation location and removal of existing equipment at the existing substation. The project team are currently identifying potential locations and further information is expected to be shared later this year.

Inveraray – Crossaig Reinforcement

This project involves the rebuild of the existing overhead line between Inveraray and Crossaig and has been in construction since late 2019. Construction on Phase 1 of the project (Inveraray – Port Ann) is drawing to completion whilst enabling works for Phase 2 commenced in May 2021. Find out more:

ssen-transmission.co.uk/projects/inveraray-crossaig

Carradale Substation

The aim of this project is to reinforce Carradale Substation in order to enable renewable generation connection requests. This involves the replacement of four existing transformers with higher capacity units to enable this upgraded connection. Work is ongoing and due to be completed by the end of 2022. Find out more:

ssen-transmission.co.uk/projects/carradale-substation

Dunoon Overhead Line Rebuild

The aim of this project is to replace the existing overhead transmission network line which connects Dunoon to the wider national grid. The existing overhead line is supported by an old design suite of metal lattice towers (often referred to as pylons) which are coming toward the end of their operational life. The project is currently in development and following consultation on the preferred route alignment in August 2021, SSEN plan to submit a Section 37 application for this project in 2022. Find out more: ssen-transmission.co.uk/projects/dunoon/

Glen Falloch and Sloy VISTA

As part of the SSEN Transmission's VISTA (Visual Impact of Scottish Transmission Assets) initiative, we are installing a 132kV twin cable section of the existing 132kV double overhead line circuit at Sloy and Glen Falloch. Construction commenced earlier this year and 26 steel towers are scheduled to be removed by the end of 2021. Find out more:

ssen-transmission.co.uk/projects/vista-glen-falloch-sloy



Windfarm Connection Projects

As mentioned, the Argyll and Kintyre 275kV Strategy is required to facilitate renewable generation in Argyll. We also have a requirement to connect this renewable generation to our upgraded infrastructure.

Windfarm Connection Projects with consultation planned for Spring 2022:

Blarghour Wind Farm Connection: This project aims to connect the proposed Blarghour Wind Farm to the new Creag Dhubh Substation via approximately 10km of overhead line by Autumn/Winter 2025. Consultation on the preferred route for the OHL is targeted for Spring 2022.

Earraghail Wind Farm: The project aims to connect the Earraghail Wind Farm development via c3km of 275kV Double Circuit Overhead Line onto the existing Craig Murrail – Crossaig Overhead Line for October 2025. Consultation on the preferred route for the Overhead Line will be undertaken in Spring 2022.

Tangy 4 Wind Farm: The project aims to connect the Tangy 4 Wind Farm development via c22km of 132kV Single Circuit Overhead Line onto the existing Crossaig – Carradale Overhead Line for October 2026. Consultation on the preferred corridor for the Overhead Line will be undertaken in Spring 2022.

High Constellation Wind Farm Connection: This project aims to connect High Constellation Wind Farm to the existing Crossaig Substation via approximately 400m of underground cable by Spring 2025.



How do I have my say?

We understand and recognise the value of the feedback provided by members of the public during all engagements, consultations and events. Without this valuable feedback, the Project Development team would be unable to progress projects and reach a balanced proposal to submit for planning.

Join our face to face and virtual consultation

Our consultation events have been organised to ensure our project teams will be available to answer questions on following dates and times:

- **Tuesday 30th November 2021: 1pm - 7pm - Loch Fyne Hotel for An Suidhe Substation**
- **Wednesday 1st December 2021: 1pm - 7pm - Carradale Village Hall for Crossaig North Substation and Sheirdrim Windfarm**
- **Thursday 2nd December 2021: 1pm - 7pm - Cairnbaan Hotel Lochgilphead Craae and Craig Murrail Substation**

Our live chat sessions will be held at the following times:

- **Wednesday 8th December 2021: 10pm - 12 Noon**
- **Thursday 9th December 2021: 5pm - 7pm**

During these sessions you will be able to send us your questions using a text chat function and they will be answered by the project team.

The feedback forms in this booklet can be detached and sent back, or you can fill them in online using the form on the project webpage. We do request that any feedback that you wish to be included in the Pre-Application Consultation (PAC) Report is received in written format (feedback received via phone calls will be circulated to the project team but would not be included in the PAC Report).

All feedback received will be collated, reviewed and included in the PAC Report which will accompany the Planning Applications submission to Argyll and Bute Council in Spring 2022. The PAC Report will also be available to view on the project webpage.



If you are unable to join the live chat sessions, there are still plenty of ways to engage with our team:

You can contact us by **email, phone or post**, please see details for the Community Liaison Manager.

We are happy to arrange **(virtual) meetings** for individuals or small groups to discuss any areas of interest and if this is something you would like us to facilitate please contact us as soon as possible

We are happy to **post out copies of this brochure**, please contact the Community Liaison Manager to arrange this.

Keep in touch

If you have any questions or require further information regarding SSEN Transmission's Argyll and Kintyre 275kV Substations, please do not hesitate to contact the project Community Liaison Manager:

Caitlin Quinn

Caitlin.Quinn@sse.com

07901 135 758

Caitlin Quinn, Scottish and Southern
Electricity Networks, Inveralmond House,
200 Dunkeld Road, Perth, PH1 3AQ

Feedback

As part of the consultation exercise, we are seeking comments from members of the public, statutory consultees and other key stakeholders.

We kindly request that all comments are received by **Monday 10th January 2022**. Further information, should you require it, is available on the project webpage or can be made available in printed format by contacting the Community Liaison Manager.

Your Feedback - An Suidhe Substation PAN

If you prefer, the same form is available to complete online and can be found on the project webpage: www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/
Please complete in **BLOCK CAPITALS**. (Please tick one box per question only).

Q1 Do you feel sufficient information has been provided to enable you to understand what is being proposed on site and why?

Yes No If no, please tell us how we could provide further explanation

Q2 Are you satisfied that the proposed layout and design is appropriate for the site location?

Yes No If no, please tell us how we could provide further explanation

Q3 Do you have any particular concerns or queries on the Proposed Development?

Q4 Is there anything specific you would like to raise in relation to the project which will impact on the planning process to deliver this essential network upgrade at An Suidhe substation?



Do you have any other comments / support on the Proposed Development?

Full name

Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous please tick this box.

Thank you for taking the time to complete this feedback form.

Please submit your completed form by one of the methods below:

Post: Scottish Hydro Electric Transmission, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Email: Caitlin.Quinn@sse.com



Your Feedback - Crarae Substation PAN

If you prefer, the same form is available to complete online and can be found on the project webpage: www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/
Please complete in **BLOCK CAPITALS**. (Please tick one box per question only).

Q1 Do you feel sufficient information has been provided to enable you to understand what is being proposed on site and why?

Yes No If no, please tell us how we could provide further explanation

Q2 Are you satisfied that the proposed layout and design is appropriate for the site location?

Yes No If no, please tell us how we could provide further explanation

Q3 Do you have any particular concerns or queries on the Proposed Development?

Q4 Is there anything specific you would like to raise in relation to the project which will impact on the planning process to deliver this essential network upgrade at Crarae substation?



Do you have any other comments / support on the Proposed Development?

Full name

Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous please tick this box.

Thank you for taking the time to complete this feedback form.

Please submit your completed form by one of the methods below:

Post: Scottish Hydro Electric Transmission, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Email: Caitlin.Quinn@sse.com



Your Feedback - Craig Murrail Substation PAN

If you prefer, the same form is available to complete online and can be found on the project webpage: www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/
Please complete in **BLOCK CAPITALS**. (Please tick one box per question only).

Q1 Do you feel sufficient information has been provided to enable you to understand what is being proposed on site and why?

Yes No If no, please tell us how we could provide further explanation

Q2 Are you satisfied that the proposed layout and design is appropriate for the site location?

Yes No If no, please tell us how we could provide further explanation

Q3 Do you have any particular concerns or queries on the Proposed Development?

Q4 Is there anything specific you would like to raise in relation to the project which will impact on the planning process to deliver this essential network upgrade at Craig Murrail substation?



Do you have any other comments / support on the Proposed Development?

Full name

Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous please tick this box.

Thank you for taking the time to complete this feedback form.

Please submit your completed form by one of the methods below:

Post: Scottish Hydro Electric Transmission, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Email: Caitlin.Quinn@sse.com



Your Feedback - Crossaig North Substation PAN

If you prefer, the same form is available to complete online and can be found on the project webpage: www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations/
Please complete in **BLOCK CAPITALS**. (Please tick one box per question only).

Q1 Do you feel sufficient information has been provided to enable you to understand what is being proposed on site and why?

Yes No If no, please tell us how we could provide further explanation

Q2 Are you satisfied that the proposed layout and design is appropriate for the site location?

Yes No If no, please tell us how we could provide further explanation

Q3 Do you have any particular concerns or queries on the Proposed Development?

Q4 Is there anything specific you would like to raise in relation to the project which will impact on the planning process to deliver this essential network upgrade at Crossaig North substation?



Do you have any other comments on the Proposed Development?

Full name

Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous please tick this box.

Thank you for taking the time to complete this feedback form.

Please submit your completed form by one of the methods below:

Post: Scottish Hydro Electric Transmission, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Email: Caitlin.Quinn@sse.com



Your Feedback - Sheirdrim Windfarm Connection - Route Options Feedback Questions

Q1 Do you feel sufficient information has been provided to enable you to understand what is being proposed and why?

Yes No If no, please tell us how we could provide further explanation

Q2 Which of the three Options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.

Q3 Which of the three Options would you consider the least preferable option for SSEN Transmission to develop? Please provide an explanation of your answer.

Q4 Are there any potential risks or benefits associated with Sheirdrim Windfarm Connection, that you believe have not been included in the Consultation Document?



Do you have any other comments / support on the Proposed Development?

Full name

Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous please tick this box.

Thank you for taking the time to complete this feedback form.

Please submit your completed form by one of the methods below:

Post: Scottish Hydro Electric Transmission, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Email: Caitlin.Quinn@sse.com

The feedback forms and all information provided in this booklet can also be downloaded from the dedicated websites:

<https://www.ssen-transmission.co.uk/projects/argyll-and-kintyre-275kv-substations>

<https://www.ssen-transmission.co.uk/projects/sheirdrim-wind-farm-connection>

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks consultation report. By completing this feedback form you consent to Scottish and Southern Electricity Networks using feedback for this purpose.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at Number One Forbury Place, 43 Forbury Road, Reading Berkshire, RG1 3JH which are members of the SSE Group



APPENDIX 2: ENVIRONMENTAL, ENGINEERING AND COST APPRAISAL

Below comprises an extract from the Routeing Consultation Document (ADD WEBLINK IN FOOTNOTE), which is provided here for ease of reference for the reader to compare the Preferred Route A, proposed in the Consultation Document, and the Proposed Route C (see Section 4.4) being taken forward as the Proposed Route to the Alignment Selection Stage.

6.2 Route A

6.2.1 Environmental Baseline and Appraisal

Route A begins within the proposed Sheirdrim Wind Farm, within the Plateau Moorland Landscape Character Type (LCT), which is a medium-large scale landscape. As Route A transitions to OHL, it enters an extensive area of commercial forestry. In the south of the route corridor, near Crossaig substation, there is a transition into the smaller scale Rocky Coastline LCT. There are no landscape designations within Route A. The nearest designated landscape is located 3.1 km at its closest point to Route A (refer to Figure 2) Route A is distant from visual receptors for the majority of the route. The landscape contains few scattered residential and farm properties, concentrated on the lower slopes, and close to the A83 and B842 to the north west and south east of the route, respectively. The closest settlement is Crossaig at the most southern point of the route. Route A would intersect with the Kintyre Way, with potential for close range visual effects for a short section of the route and would be partially viewed in the context of the consented and existing wind turbines.

Route A does not pass through internationally, nationally, or locally designated sites for nature conservation. However, proximity to Kintyre Goose Roosts SPA (1.5 km to the west at the closest point) and Sound of Gigha SPA (2 km to the north at the closest point), mean there is potential for barrier and collision impacts to Schedule 1 species, as they may pass through the route corridor to access these designated sites. Further potential risks to natural heritage that have been identified in a desk-based assessment of the route corridor are:

- Direct impacts on blanket bog and peat ⁵ due to being intersected by the route;
- Impact on an area of semi natural ancient woodland south of Cnoc Breacam Wind Farm; and
- Impact to European and nationally protected species considered likely to be present.

There are no designated cultural heritage assets within proposed route A. There are assets within close proximity that may be sensitive to settings impacts, or impacted by development within the route, such as Talatoll Shielings (SM3817) Scheduled Monument (0.3 km from the route at the closest point).

Route A passes through large areas of commercial forestry that would need to be felled to create an operational corridor and access tracks for the proposed OHL. The extent of tree-felling would depend on the final alignment and commercial returns may be compromised within a limited area surrounding the proposed development.

The environmental appraisal is provided in **Table 3.1**.

Route	RAG Impact Rating - Environmental					
	Natural Heritage	Cultural Heritage	People	Landscape	Land Use	Planning

⁵ Blanket bog and peat are an Annex 1 Habitat. Annex 1 lists the specific habitats which have been designated as a Special Area of Conservation, to which common EU-wide legislation applies.

	Designations	Protected Species	Habitats	Hydrology/geology	Ornithology	Designated	Assets	Proximity to dwellings	Designations	Character	Visual	Agriculture	Forestry	Recreation	Planning
Route A	M	L	M	L	M	M	L	L	M	M	M	L	M	M	M

Table 3.1: Route A Environmental RAG Impact Rating

6.2.2 Engineering Baseline and Appraisal

Route A is the longest of the route options from Sheirdrim Windfarm to Crossaig substation, with approximately 2.5 km of UGC, and 9 km of OHL. There are no major crossings such as railways, major roads, rivers, major pipelines, or other significant infrastructure. There are a number of minor crossings that will need to be considered. Route A has the most minor crossings of the three proposed routes, which includes six road crossings and three watercourse crossings. Route A is not within an area of high elevation, contaminated land, or have large areas significantly prone to flooding.

There is a significant amount of Class 1 and Class 2⁶ peat in Route A (approx. 33% of the route centreline), which will be difficult to avoid during construction and maintenance. Despite this, route A has the smallest overall area of peatland (1.61 km²) of the three route options. Route A also has good access as there are numerous existing tracks and minor roads within 1 km, which may help limit peat disturbance and damage.

Route A has good clearance from any properties and communication masts. The route passes close to the proposed wind turbines (see Figure 2). To maintain SSEN Transmission's recommended distance from OHL to turbines, UGC will be required for the section passing through the wind farm and the OHL will need to be located on the southern extremity of Route A, away from the proposed turbines.

The engineering appraisal is provided in **Table 3.2**.

⁶ Class 1: Nationally important carbon-rich soils, deep peat and priority peatland habitat. These are areas likely to be of high conservation value. Class 2: Nationally important carbon-rich soils, deep peat and priority peatland habitat. These are areas of potentially high conservation value and restoration potential. Available at: <https://soils.environment.gov.scot/>

Route	RAG Impact Rating - Environmental											
	Infrastructure Crossings		Environmental Design			Ground Conditions		Construction and Maintenance	Proximity			Other Considerations
	Major Crossings	Minor Crossings	Elevation	Contaminated Land	Flooding	Terrain	Peatland	Access	Clearance	Windfarms	Communication Masts	Route Length
Route A	L	H	L	L	M	L	H	L	L	M	L	H

Table 3.2: Route A Engineering RAG Impact Rating

6.2.3 Cost Appraisal

The approximate construction cost of the route has been calculated based on a standard per km rate derived from SSEN Transmission's experience of similar projects. Route Option A has the highest capital cost of the three Route Options, however it is still rated as Green as the cost differences between the different route options is low, i.e. it is 16% higher than the lowest cost option. Operations (inspection and maintenance) have been allocated an amber rating due to the difference in length of the Route Options i.e. based on differences between 8.5 km and 11.5 km. Route Option A has the highest tree felling costs of the three Route options, the only Route with a red RAG rating for tree felling.

The cost appraisal is provided in **Table 3.3**.

Route	RAG Impact Rating – Cost								
	Capital	Diversions	Public Road Improvement	Tree Felling	Land Assembly	Consent Mitigations	Inspections	Maintenance	Total Cost
Route A	G	G	G	R	G	G	A	A	G (116%)

Table 3.3: Cost RAG Rating Table for Route A

6.3 Route B

6.3.1 Environmental Baseline and Appraisal

Route B begins within the proposed Sheirdrim Wind Farm, within an area of open Plateau Moorland LCT, which is a medium-large scale landscape. Where Route B meets Loch Romain and re-directs towards Crossaig substation, the landscape becomes dominated by commercial forestry. In the very south of the route corridor, by Crossaig substation, Route B enters the smaller scale Rocky Coastline LCT. There are no landscape designations within Route B, and the nearest designated landscape is located 3.9 km at its closest point (refer to Figure 3). The landscape contains few scattered residential and farm properties, concentrated on the lower slope, and close to the A83 and B842 to the north west and south east of the route, respectively. The closest settlement is Crossaig, which lies within the route corridor. Route B would also intersect with the Kintyre Way, with potential for close range visual effects for a short section of the route and would be viewed in the context of the consented and existing wind turbines.

Route C does not pass through any internationally or nationally designated sites for nature conservation. However, proximity to Kintyre Goose Roosts SPA (5km to the west at the closest point) and Sound of Gigha SPA (2.4km north at the closest point), mean there is potential for barrier and collision impacts to Schedule 1 species, as they may pass through the route corridor to access these designated sites. Further potential risks to natural heritage that have been identified in a desk-based assessment are:

- Direct impacts on large areas of blanket bog and peat due to being intersected by the route;
- Direct impact on areas of semi natural ancient woodland;
- Direct impact on Crossaig Glen Local Nature Conservation Site (LNCS); and
- Impact to European and nationally protected species considered likely to be present.

There are no designated cultural heritage assets within proposed route B. There are assets within close proximity that may be sensitive to settings impacts, or impacted by development within the route corridor, such as Cour House, Category A Listed Building (1.6 km from the route at the closest point).

Route B passes through areas of commercial forestry that would need to be felled to create an operational corridor and access tracks for the proposed OHL. The extent of tree-felling would depend on the final alignment and commercial returns may be compromised within a limited area surrounding the proposed development.

The environmental appraisal is provided in **Table 3.4**.

Route	RAG Impact Rating - Environmental														
	Natural Heritage					Cultural Heritage		People	Landscape			Land Use			Planning
	Designations	Protected Species	Habitats	Hydrology/geology	Ornithology	Designated	Non designated		Designations	Character	Visual	Agriculture	Forestry	Recreation	
Route B	H	L	H	L	M	L	L	L	M	M	M	L	M	M	M

Table 3.4: Route B Environmental RAG Impact Rating

6.3.2 Engineering Baseline and Appraisal

Route B is the shortest of the route options from Sheirdrim Windfarm to Crossaig substation, with approximately 2.5km of UGC and 6km of OHL. There are no major crossings, however a number of minor crossings will need to be considered. Route B has the least minor crossings of the three proposed routes, which includes one road crossing and three watercourse crossings. Route B has 25% of the OHL above an elevation of 200 m, which increases the risk of wind and ice loading on the lines, which can result in the need for stronger structures. Route B does not appear to be within an area of contaminated land or have large areas significantly prone to flooding.

There is a significant amount of Class 1 and Class 2 peat in Route B (approx. 53% of the route centreline), which will be very difficult to avoid disturbing during construction and maintenance. Route B has the largest overall area of peatland (4.6 km²) of the three route options. In addition, Route B has poor access within no access tracks within 1 km of the route, which may worsen peat disturbance if numerous access tracks must be constructed.

Route B has good clearance from any properties and communication masts. The route passes close to the proposed wind turbines (see Figure 3), with over half the route impacted by windfarms. In order to maintain SSEN's recommended distance from OHL to turbines (of 149.9 m height), UGC will be required for the section passing through the wind farm and the OHL will need to be located on the southern extremity of Route A, away from the proposed turbines.

The engineering appraisal is provided in **Table 3.5**.

Route	RAG Impact Rating - Environmental											
	Infrastructure Crossings		Environmental Design			Ground Conditions		Construction and Maintenance	Proximity			Other Considerations
	Major Crossings	Minor Crossings	Elevation	Contaminated Land	Flooding	Terrain	Peatland	Access	Clearance from Buildings	Windfarms	Communication Masts	Route Length
Route B	L	L	M	L	L	L	H	H	L	H	L	L

Table 3.5: Route B Engineering RAG Impact Rating

6.3.3 Cost Appraisal

The approximate construction cost of the route has been calculated based on a standard per km rate derived from SSEN Transmission's experience of similar projects.

Route Option B has the lowest capital cost of the three Route Options, it is the only Route Option with all green RAG ratings apart from Tree Felling. Route Option B has an amber RAG rating for Tree Felling due to having the second highest volume of trees of the three routes.

The cost appraisal is provided in **Table 3.6**.

Route	RAG Impact Rating – Cost								
	Capital	Diversions	Public Road Improvement	Tree Felling	Land Assembly	Consent Mitigations	Inspections	Maintenance	Total Cost
Route B	G	G	G	A	G	G	G	G	G

Table 3.6: Cost RAG Rating Table for Route B

6.4 Route C

6.4.1 Environmental Baseline and Appraisal

Route C is located between the proposed Sheirdrim Wind Farm and Freasdail wind farm, and follows a route east of Escairt Wind Farm, which is within an area of open Plateau Moorland LCT, a medium-large scale landscape. The south of Route C, is adjacent to an existing overhead line route in parallel with the B842, is within the smaller scale Rocky Coastland LCT. Route C has a number of areas covered by commercial forestry, both in the north, to the west of Loch Cruinn, and towards the south, where the route joins with the B842. There are no landscape designations within Route C, and the nearest designated landscape is located 3.9 km at its closest point (refer to Figure 4). The landscape contains few scattered residential and farm properties, concentrated on the lower slopes, and close to the A83 and B842 to the north west and south east of the route, respectively. The closest settlement is Crossaig, which lies within the route corridor. Route C would also intersect with the Kintyre Way, with potential for close range visual effects for a short section of the route and would be viewed in the context of the consented and existing wind turbines.

Route C does not pass through any internationally or nationally designated sites for nature conservation. However, proximity to Kintyre Goose Roosts SPA (5 km to the west at the closest point) and Sound of Gigha SPA (2.4km north at the closest point), mean there is potential for barrier and collision impacts to Schedule 1 species, as they may pass through the route corridor to access these designated sites. Further potential risks to natural heritage that have been identified in a desk-based assessment are:

- Direct impacts on large areas of blanket bog and peat due to being intersected by the route;
- Direct impact on areas of semi natural ancient woodland;
- Direct impact to Crossaig Glen LNCS; and
- Impact to European and nationally protected species considered likely to be present.

There are no designated cultural heritage assets within proposed Route C. There are assets within close proximity that may be sensitive to settings impacts, or impacted by development within the route corridor, such as Cour House, Category A Listed Building (1.6 km from the route at the closest point).

Route C passes through areas of commercial forestry that would need to be felled to create an operational corridor and access tracks for the proposed OHL. The extent of tree-felling would depend on the final alignment and commercial returns may be compromised within a limited area surrounding the proposed development.

The environmental appraisal is provided in **Table 3.7**.

Route	RAG Impact Rating - Environmental														
	Natural Heritage					Cultural Heritage		People	Landscape			Land Use			Planning
	Designations	Protected Species	Habitats	Hydrology/geology	Ornithology	Designated	Non designated		Designations	Character	Visual	Agriculture	Forestry	Other	
Route C	H	L	H	L	M	L	L	L	M	M	M	L	M	M	M

Table 3.7: Route C Environmental RAG Impact Rating

6.4.2 Engineering Baseline and Appraisal

Route C consists of approximately 2.5 km UGC, and 9 km OHL. In Route C, there are no major crossings, however five minor crossings will need to be considered. Route C has the lowest elevation of the three options, not exceeding 200m at any point. Route C does not appear to be within an area of contaminated land, however it does have the highest flood risk, with 9% of the route within a 1 in 200-year flood zone.

There is a significant amount of Class 1 and Class 2 peat in Route C (approx. 29% of the route centreline), which will be difficult to avoid disturbing during construction and maintenance. Within the 1 km corridor, there is an area of approximately 2.95 km² of peat present. Route C has good access with numerous tracks present within 1 km of the route, including the B842, which may mitigate disturbance to peatland.

Route C has good clearance from any properties and communication masts, however it is within close proximity to nearby wind turbines. The route passes close to the proposed wind turbines (see Figure 4), with over half the route impacted by windfarms. In order to maintain SSEN's recommended distance from OHL to turbines (of 149.9 m), UGC will be required for the section passing through the wind farm and the OHL will need to be located on the southern extremity of Route A, away from the proposed turbines.

The engineering appraisal is provided in **Table 3.8**.

Route	RAG Impact Rating - Environmental											
	Infrastructure Crossings		Environmental Design			Ground Conditions		Construction and Maintenance	Proximity			Other Considerations
	Major Crossings	Minor Crossings	Elevation	Contaminated Land	Flooding	Terrain	Peatland	Access	Clearance from Buildings	Windfarms	Communication Masts	Route Length
Route C	L	M	L	L	H	L	H	L	L	H	L	H

Table 3.8: Route C Engineering RAG Impact Rating

6.4.3 Cost Appraisal

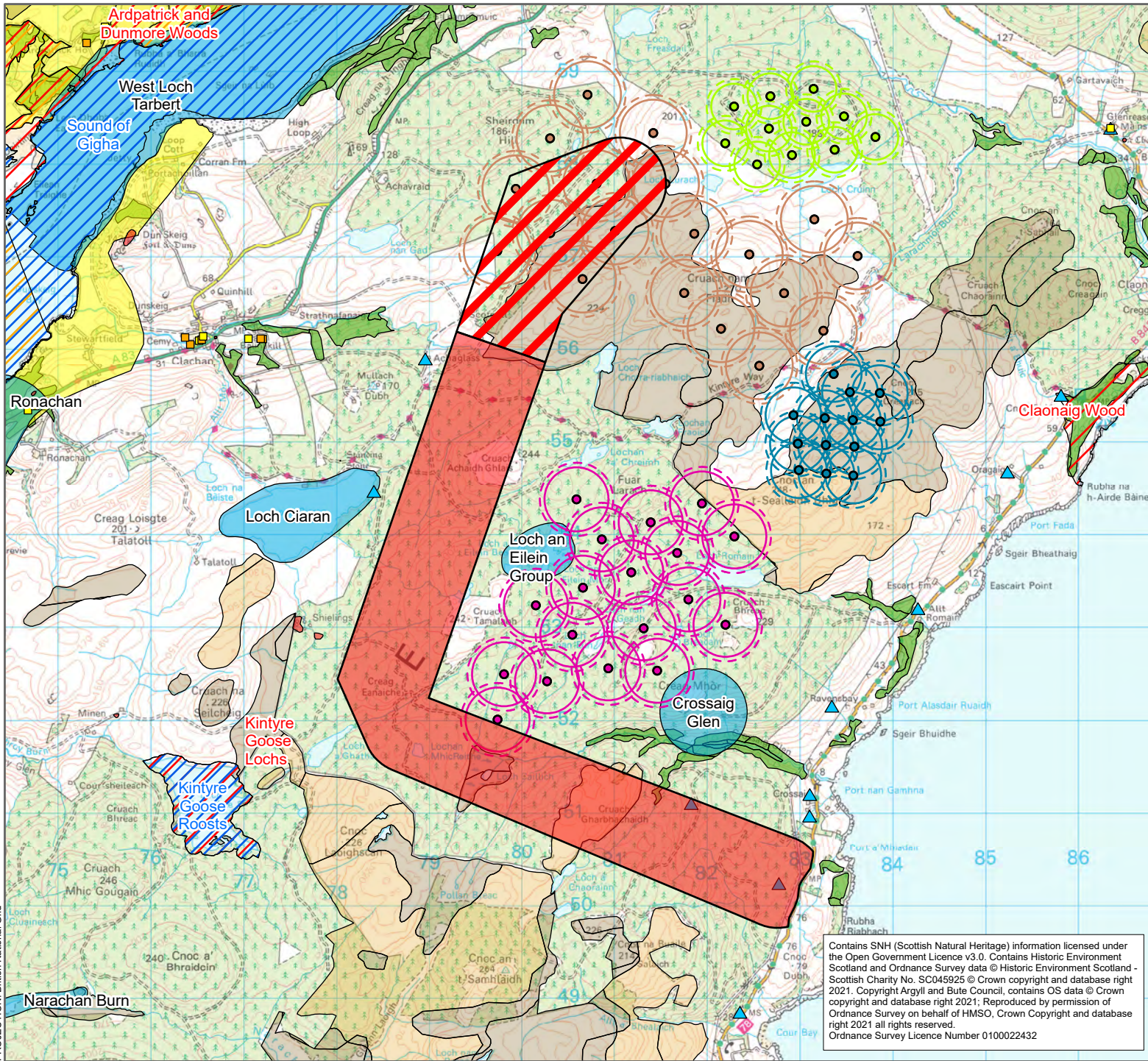
The approximate construction cost of the route has been calculated based on a standard per km rate derived from SSEN Transmission's experience of similar projects.

Route Option C has the second highest capital cost of the three Route Options and has an overall green RAG rating, because it is only 11% higher than the lowest cost option. Operations (inspection and maintenance) have been allocated an amber RAG rating due to the difference in length of the Route Options i.e. based on differences between 8.5 km and 11.5 km. In comparison with the other Route Options, Route Option C has a green RAG rating for tree felling as it has the fewest volume of trees to be felled of the Route Options.

The cost appraisal is provided in **Table 3.9**.

Route	RAG Impact Rating – Cost								
	Capital	Diversions	Public Road Improvement	Tree Felling	Land Assembly	Consent Mitigations	Inspections	Maintenance	Total Cost
Route C	G	G	G	G	G	G	A	A	G (111%)

Table 3.9: Cost RAG Rating Table for Route C



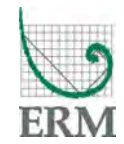
- Route A - Overhead Line
 - Route A - Underground Cable
 - Cnoc Breacam Turbine Locations
 - 345 m Buffer of Cnoc Breacam Turbine Locations
 - 395 m Buffer of Cnoc Breacam Turbine Locations
 - Escairt Turbine Locations
 - 300 m Buffer of Escairt Turbine Locations
 - 350 m Buffer of Escairt Turbine Locations
 - Freasdail Turbine Locations
 - 246 m Buffer of Freasdail Turbine Locations
 - 296 m Buffer of Freasdail Turbine Locations
 - SHH Turbine Locations
 - 360 m Buffer of SHH Turbine Locations
 - 410 m Buffer of SHH Turbine Locations
- Cultural Heritage Constraints:
- Category B Listed Building
 - Category C Listed Building
 - Private Water Supply
 - Scheduled Monument
 - National Scenic Area
- Ecological Constraints:
- Special Area of Conservation (SAC)
 - Special Protection Area (SPA)
 - Site of Special Scientific Interest (SSSI)
 - Ancient Woodland Inventory
 - Local Nature Conservation Site
 - Class 1 Carbon and Peatland
 - Class 2 Carbon and Peatland
 - Area of Panoramic Quality



SCALE: See Scale Bar	VERSION: A02
SIZE: A4	DRAWN: DN
PROJECT: 0612294	CHECKED: OW
DATE: 05/09/2022	APPROVED: KG

Figure 2
Ecological and Heritage Constraints

Contains SNH (Scottish Natural Heritage) information licensed under the Open Government Licence v3.0. Contains Historic Environment Scotland and Ordnance Survey data © Historic Environment Scotland - Scottish Charity No. SC045925 © Crown copyright and database right 2021. Copyright Argyle and Bute Council, Crown Copyright and database right 2021. Copyright Argyle and Bute Council, Crown Copyright and database right 2021 all rights reserved. Ordnance Survey Licence Number 0100022432



PROJECTION: British National Grid

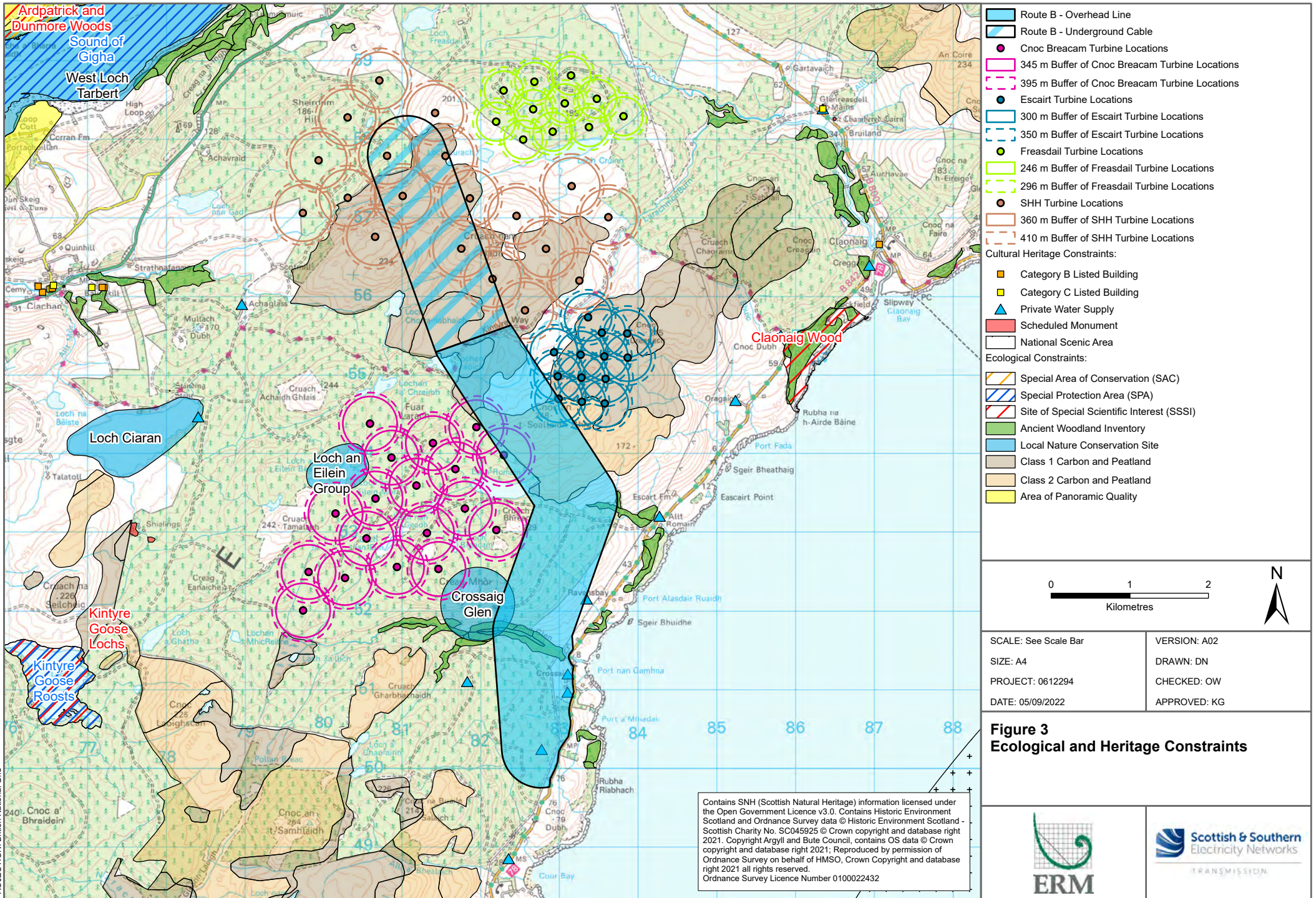
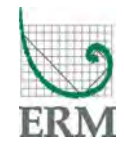


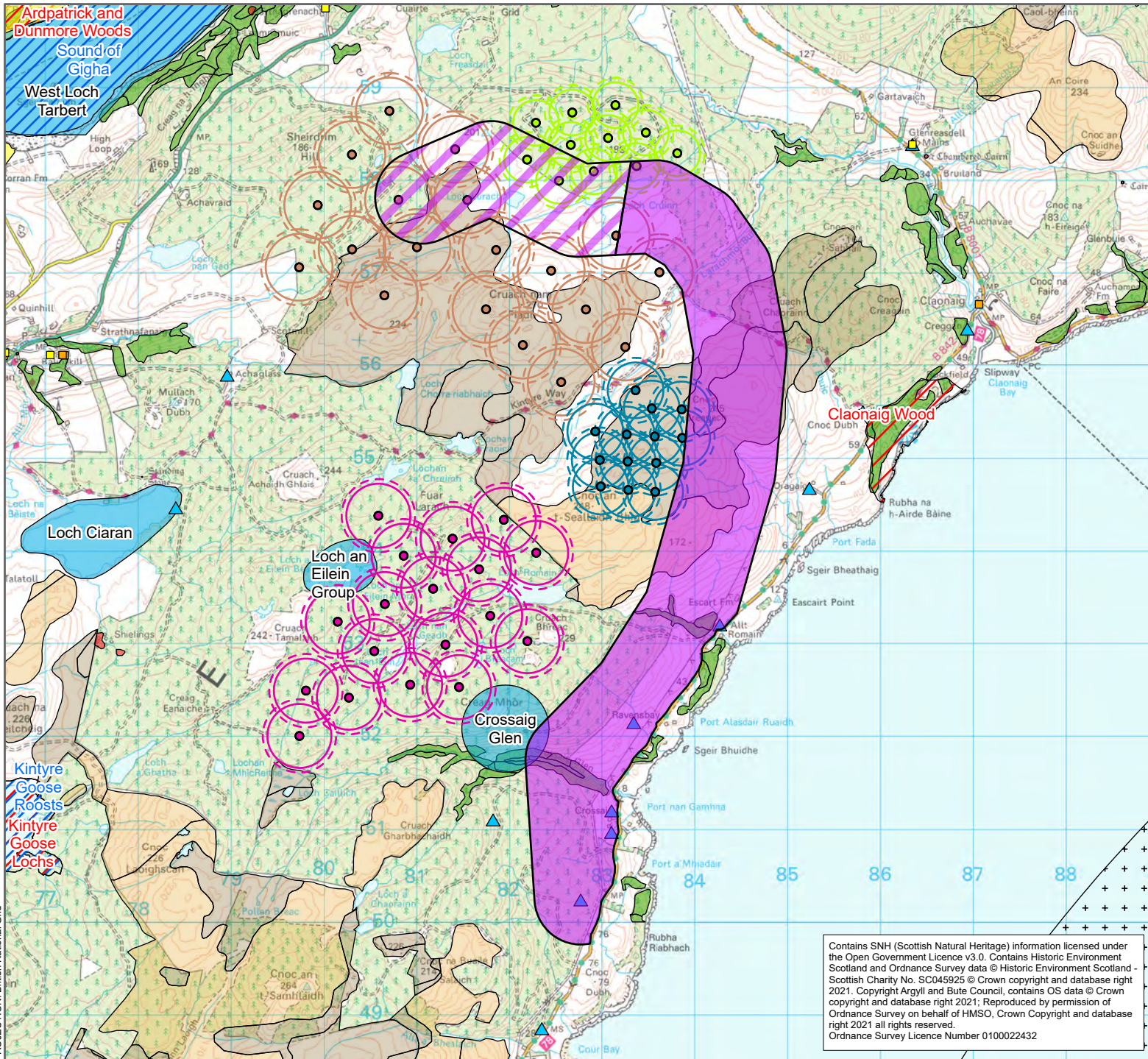
Figure 3
Ecological and Heritage Constraints

SCALE: See Scale Bar	VERSION: A02
SIZE: A4	DRAWN: DN
PROJECT: 0612294	CHECKED: OW
DATE: 05/09/2022	APPROVED: KG

Contains SNH (Scottish Natural Heritage) information licensed under the Open Government Licence v3.0. Contains Historic Environment Scotland and Ordnance Survey data © Historic Environment Scotland - Scottish Charity No. SC045925 © Crown copyright and database right 2021. Copyright Argyll and Bute Council, contains OS data © Crown copyright and database right 2021. Reproduced by permission of Ordnance Survey on behalf of HMSO, Crown Copyright and database right 2021 all rights reserved. Ordnance Survey Licence Number 0100022432



PROJECTION: British National Grid



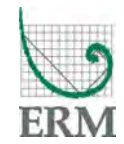
- Route C - Overhead Line
 - Route C - Underground Cable
 - Cnoc Breacam Turbine Locations
 - 345 m Buffer of Cnoc Breacam Turbine Locations
 - 395 m Buffer of Cnoc Breacam Turbine Locations
 - Escairt Turbine Locations
 - 300 m Buffer of Escairt Turbine Locations
 - 350 m Buffer of Escairt Turbine Locations
 - Freasdail Turbine Locations
 - 246 m Buffer of Freasdail Turbine Locations
 - 296 m Buffer of Freasdail Turbine Locations
 - SHH Turbine Locations
 - 360 m Buffer of SHH Turbine Locations
 - 410 m Buffer of SHH Turbine Locations
- Cultural Heritage Constraints:**
- Category B Listed Building
 - Category C Listed Building
 - Private Water Supply
 - Scheduled Monument
 - National Scenic Area
- Ecological Constraints:**
- Special Area of Conservation (SAC)
 - Special Protection Area (SPA)
 - Site of Special Scientific Interest (SSSI)
 - Ancient Woodland Inventory
 - Local Nature Conservation Site
 - Class 1 Carbon and Peatland
 - Class 2 Carbon and Peatland
 - Area of Panoramic Quality



SCALE: See Scale Bar	VERSION: A02
SIZE: A4	DRAWN: DN
PROJECT: 0612294	CHECKED: OW
DATE: 05/09/2022	APPROVED: KG

Figure 4
Ecological and Heritage Constraints

Contains SNH (Scottish Natural Heritage) information licensed under the Open Government Licence v3.0. Contains Historic Environment Scotland and Ordnance Survey data © Historic Environment Scotland - Scottish Charity No. SC045925 © Crown copyright and database right 2021. Copyright Argyll and Bute Council, contains OS data © Crown copyright and database right 2021; Reproduced by permission of Ordnance Survey on behalf of HMSO, Crown Copyright and database right 2021 all rights reserved. Ordnance Survey Licence Number 0100022432



PROJECTION: British National Grid

