Scottish & Southern Electricity Networks

TRANSMISSION

Consultation Document

Taynuilt to Creag Dhubh and Nant 132 kV Overhead Lines Reinforcement

February 2026

Scottish & Southern Electricity Networks

TRANSMISSION

CONTENTS

FIGURES

GLOSSARY

Term	Definition
Alignment	A centre line of an overhead line OHL, 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.
Area of Search	The Area of Search is a broad geographical area within which possible sites might be capable of identification within approximately 5 km of the required connectivity point.
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.
Environmental Impact Assessment (EIA)	A formal process set down in *The Electricity Works (EIA) (Scotland) Regulations 2017* used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development.
Gardens and Designed Landscapes (GDLs)	The Inventory of Gardens and Designed Landscapes lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance.
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Kilovolt (kV)	One thousand volts.
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.
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.
National Scenic Area (NSA)	A national level designation applied to those landscapes considered to be of exceptional scenic value.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
Planning application	An application for planning permission under the Town and Country Planning (Scotland) Act 1997, as amended by the Planning etc. (Scotland) Act 2006. It should be noted that consent under section 37 of the Electricity Act 1989 usually carries with it deemed planning

Term	Definition
	permission from the Scottish Ministers under Section 57 of the Town and Country Planning (Scotland) Act 1997.
Plantation Woodland	Woodland of any age that obviously originated from planting.
Preferred Alignment	An alignment for the overhead line taken forward to stakeholder consultation following a comparative appraisal of Route Options.
Proposed Alignment	An alignment taken forward to consent application. It comprises a defined centre line for the overhead line and includes an indicative support structure (tower or pole) schedule, also specifying access arrangements and any associated construction facilities.
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.
Preferred Route	The Route Option appraised as preferrable within the context of the appraisal of the specified factor.
Potential Route	The Route Option being presented for stakeholder consultation which is considered to represent the optimum balance between the various environmental considerations.
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.
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 (Directive74/409/EEC) to protect important bird habitats. Implemented under the Wildlife and Countryside Act 1981.
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.
The National Grid	The electricity transmission network in the Great Britain.
Volts	The international unit of electric potential and electromotive force.
Wild Land Area (WLA)	Those areas comprising the greatest and most extensive areas of high wildness. It is not a statutory designation, but WLAs are considered nationally important.

PREFACE

This Consultation Document has been prepared by Ramboll UK Ltd on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission) to seek comments from all interested parties on the Potential Routes identified for the proposed 275 kilovolt (kV) overhead line (OHL) between Taynuilt substation and under construction Creag Dhubh substation as well as the 132kV OHL from Nant substation, teeing into the Taynuilt to Creag Dhubh OHL and an extension of the existing 132 kV Fernoch OHL, connecting it to the proposed Taynuilt to Creag Dhubh 275 kV OHL.

The Consultation Document is available online at the project website:

Taynuilt - Creag Dhubh Reinforcement - SSEN Transmission

Two face to face public consultation events will be held between 2pm and 7pm

- at Taynuilt Village Hall, Taynuilt, Argyll and Bute, PA35 1JH on 11th March 2026 and
- at Portsonachan Village Hall, Portsonachan, Argyll and Bute, PA33 1BJ on 12th March 2026.

Comments and feedback on this Consultation Document should be sent to:

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All comments are requested by **23rd April 2026**.

Scottish & Southern Electricity Networks

TRANSMISSION

EXECUTIVE SUMMARY

Scottish and Southern Electricity Network (SSEN) Transmission is proposing to construct a new 275 kV OHL between the existing Taynuilt substation and the currently under construction Creag Dhubh substation in Argyll, replacing the existing 132kV OHL. As part of this project, it is proposed to replace the existing Nant 132kV OHL as the condition of the existing assets is approaching end of life. Finally, the project also proposes to extend the existing single circuit 132kV Fernoch OHL to tee into the proposed Taynuilt to Creag Dhubh OHL. These works are necessary to increase our network capability in Argyll to enable the connection of future renewable energy generation projects.

Route Options were identified, which provided feasible areas for the OHL to be developed, and from a which Potential Routes have been selected that provides an optimum balance of environmental, engineering and economic factors. This Consultation Document invites comments from all interested parties on the Potential Routes.

Moving forward, confirmation of the Potential Routes will be informed by this consultation exercise and through detailed surveys, which may identify any presently unknown engineering, environmental or land use constraints. Subject to the outcome of the consultation, we will develop potential alignments within the Potential Routes, which will then be subject to further appraisal and consultation. On identification of the Proposed Alignment, Section 37 Consent under the Electricity Act 1989 will be sought from the Energy Consent Unit of the Scottish Government for proposed new overhead line infrastructure.

Further public consultation on the Proposed Alignment will take place by Winter 2026. It is anticipated that an application for consent for a Proposed Alignment will be submitted in Summer 2027.

When providing comments and feedback on this Consultation Document, SSEN would be grateful for your consideration of the questions below:

- Has the need for the Project been adequately explained?;
- Has the approach taken to select the Potential Routes been adequately explained?;
- Are there any factors, or environmental features, that you consider may have been overlooked during the Potential Route selection process?;
- Do you feel, on balance, that the Potential Routes selected are the most appropriate for further consideration at the alignment selection stage? Please provide an explanation of your answer; and
- If you don't agree to our Potential Routes, which of the options would you consider the best option for SSEN Transmission to develop? Please provide an explanation to your answer.

1. INTRODUCTION

1.1 Purpose of Document

This Consultation Document invites comments from all interested parties on the Potential Routes identified for a proposed new 275 kV OHL between Taynuilt substation and the under construction Creag Dhubh substation, the existing Nant OHL replacement and extension of existing 132kV Fernoch OHL (see **Figure 1: Route Options and Study Area, Appendix 1**) (hereafter referred to as the 'Proposed Development').

This Consultation Document explains the project need and provides a summary of the process followed to arrive at the Potential Route. The Consultation Document is intended to provide a summary of the Route Options identification and appraisal process, including the evaluation of environmental, engineering and economic criteria. The Potential Route is considered to provide the optimal opportunity to achieve an economically viable, technically feasible and environmentally sound alignment within it.

Comments are now sought from statutory authorities, key stakeholders, elected representatives and the public on the route selection process and the Potential Routes identified. All comments received will inform further consideration of the Potential Route, and subsequent alignment options therein.

1.2 Document Structure

This report is comprised of eight sections as follows:

1. Introduction – Sets out the purpose of the Consultation document;
2. The Proposals - Describes the need for the proposals, the proposed technology solution and the typical construction methods;
3. Route Selection Process - Sets out the route selection process and methodology that has been applied to date to derive the Potential Route;
4. Description of the Route Options - Describes the Route Options that have been identified;
5. Baseline Conditions - Describes the local context and baseline environmental and engineering conditions
6. Comparative Appraisal - compares each Route Option against a series of environmental, technical and economic considerations to arrive at a recommendation for the Potential Routes; and
7. Consultation on the Proposals - Invites comments on the route assessment process and identification of Potential Routes.

The main body of this document is supported by a series of figures (See **Appendix 1**) and RAG appraisal summary tables (**Appendix 2**).

1.3 Next Steps

As part of the consultation exercise, comments are sought from members of the public, statutory consultees and other key stakeholders on the Potential Routes.

Following receipt of comments, a Report on Consultation will be produced which will document the consultation responses received, and the decisions made in light of these responses.

Following the identification of the Proposed Routes, further technical and environmental surveys will be undertaken to identify a potential alignment within the routes. Consultation on a Potential Alignment will be undertaken during Autumn 2026.

2. THE PROPOSALS

2.1 The Need for the Project

SSEN Transmission is a wholly owned subsidiary of the SSE plc Group of companies. SSEN Transmission holds a license under the Electricity Act 1989 for the transmission of electricity in the north of Scotland and has a statutory duty under Schedule 9 of the Electricity Act 1989 to '*develop and maintain an efficient, co-ordinated and economical electricity transmission system in its licensed areas*'.

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, SSEN Transmission has seen a significant increase in generator connection applications in Argyll, predominantly in renewable generation.

This means SSEN needs to increase the network capability in Argyll, beyond what's already under current construction and public development, to enable the connection of further renewable generation and to export to the wider GB network.

The project is essential to support the growing demand for renewable energy integration and to ensure secure, sustainable power delivery for communities and businesses.

The existing Taynuilt to Inveraray 132kV overhead line and Nant 132kV overhead line, commissioned in 1961, were built to historic design standards and incorporates lightweight towers, reduced electrical clearances, and limited lightning protection. These inherent design constraints restrict future reinforcement, increase fault susceptibility and limit the network's ability to support future generation connections.

The Fernoch 132kV overhead line needs to be extended as a result of the main OHL between Taynuilt and Creag Dhubh is being rebuilt and upgraded. When this new OHL is constructed, the existing connection point that currently supplies Fernoch substation cannot remain in place, as it would no longer meet modern engineering, safety and capacity standards. Extending the OHL allows Fernoch substation to remain securely connected to the upgraded network while ensuring continued reliability of supply in the area.

It is proposed to construct and operate replacement OHLs that meets current specifications and modern strength and clearance requirements.

2.2 Alternative Options and Preferred Technology Solution

A routeing strategy was defined at the outset of the project which considered alternative connection methods including overhead line, underground cable and utilisation of the existing OHL connection.

The re-use of the existing OHL was evaluated but disregarded on the basis that:

- The Proposed Development is required to deliver a step change in transmission capacity to accommodate future generation connections and to remove existing network constraints. Achieving this would require, as a minimum, replacement of conductors and associated fittings, and potentially additional circuits;
- The existing towers and foundations were not designed to accommodate higher-capacity conductors or increased electrical and mechanical loads. Detailed asset condition assessments identified that the towers do not meet current design standards and would require widespread strengthening, extension or replacement, making reuse inefficient and technically constrained;
- The existing OHL provides the sole means of supply to parts of the local network, including Taynuilt and associated connections, with no viable alternative supply routes available.

Extended outages required to reconductor or upgrade the existing line would therefore introduce unacceptable risks to security of supply and existing generation connections; and

- Incremental refurbishment or partial upgrades of the existing infrastructure would not deliver a future-proofed solution, would require repeated outages over time, and would not represent an efficient or economical long-term investment when compared with a coordinated replacement strategy.

For a connection of this length and scale an underground cable is not a feasible option due to significantly higher costs involved during construction, environmental constraints associated with interactions with the water environment and peatland habitats, the presence of watercourses and associated flood zones, potential undesignated assets as well as increase risk and cost associated with ongoing maintenance associated with underground cables in remote areas.

A hybrid solution would also not remove the need for a new overhead line along the majority of the route, as the Proposed Development is intended to fully replace and decommission the existing overhead line infrastructure.

As such, all route options explored were OHL routes. A new OHL connection was selected as the preferred option based on the ability to deliver the shortest, most cost-effective solution for the Proposed Development.

2.3 Proposal Overview

The Proposed Development would comprise of two distinctive elements:

- Construction of approximately 14.2 km of new double circuit 275 kV OHL connection between the existing Taynuilt substation and new (under construction) Creag Dhubh substation supported by Steel Lattice Towers (L8). As part of this project, the existing 132 kV OHL between Taynuilt and Creag Dhubh will be dismantled. A separate, consented project will be responsible for dismantling the existing 132 kV OHL between Creag Dhubh substation and Inveraray. The OHL would initially operate at 132 kV but should be designed to allow it to be run at 275kV in the future with minimal work required. To maintain supply, the existing line would remain in place and operational whilst the replacement line is being constructed;
- Construction of approximately 5.1 km, new single circuit 132 kV connection between the existing Nant substation and a hard tee into the proposed Taynuilt to Creag Dhubh OHL supported by Steel Lattice Towers (L7); and
- Construction of approximately 1.2km of single circuit 132kV OHL to extend the existing Fernoch 132kV OHL to tee in into proposed Taynuilt to Creag Dhubh 275kV OHL, supported by wood poles.

The final design of support type is generally dependent on three main factors: altitude, weather and the topography of the route. The size of supports and span lengths will also vary depending on these factors, with supports being closer together at high altitudes to withstand the effects of greater exposure to high winds, ice and other weather events. The support configuration, height and the distance between supports will therefore only be fully determined after a detailed alignment survey. Typical Steel Lattice tower can be seen in **Plate 2-1**.

Plate 2-1: Typical Steel lattice tower design (L7)

2.3.1 *Construction Activities*

Construction activities are anticipated to consist of six phases, as follows:

- Alterations to the existing transmission and distribution networks;
- Enabling work (forestry clearance and establishment of temporary construction compound(s);
- Erection of support structures;
- Conductor stringing (including construction of temporary scaffolding);
- Inspections and OHL commissioning;
- Dismantle of existing OHL; and
- Removal of temporary works and site reinstatement.

All construction activities will be undertaken in accordance with a Construction Environmental Management Plan (CEMP) which will define specific methods for environmental survey, monitoring and management throughout construction. A CEMP will be produced by the Principal Contractor and agreed with statutory stakeholders prior to the commencement of construction.

2.3.2 *Woodland Removal*

Any woodland removal which may be required prior to the construction work will be identified and described after a Proposed Alignment has been identified. Any removal of sections of commercial forest would be undertaken in consultation with Scottish Forestry and affected landowners. After

felling, any timber removed that is commercially viable would be sold and the remaining forest material would be dealt with in a way that delivers the best practicable environmental outcome and is compliant with waste regulations. The methods of woodland removal and management of timber would be described in a Woodland Management Document in-line with The UK Forestry Standard[1] guidance, to be prepared as part of the application for consent.

2.3.3 Access during Construction

Vehicle access is required to each support structure location during construction to allow excavation and creation of foundations and erection of the support structure. Construction would involve excavations and pouring of reinforced concrete foundations, or use of piling and rock anchors where ground conditions necessitate it. Towers section would then be erected using telehandlers and mobile cranes. Existing tracks would be used where possible though provision of new access tracks may be required in areas. A more detailed plan for access during construction will be prepared once a Proposed Alignment has been identified and the preferred support structure type selected.

Access requirements for the Proposed Development will be dependent upon the type of OHL supports chosen. Consideration of impacts will be undertaken at the alignment stage once the support type has been confirmed. However, permanent access to angle / tension tower positions would be desirable for operational and management purposes and for storm control. A more detailed plan for access during construction will be prepared once a Proposed Alignment has been identified and the type of support structure has been selected. For steel lattice towers, a need for permanent access to all section (tension) towers and angle towers is assumed to be required while temporary access would be typically needed for suspension towers.

2.3.4 Indicative Programme

It is anticipated that construction of the Proposed Development would take place over a 29-month period, following the granting of consents, although a detailed programming of works would be the responsibility of the Principal Contractor in agreement with SSEN Transmission. Construction is estimated to start in November 2028 with completion in March 2031.

[1] The UK Forestry Standard 5th edition (2023). The Government's approach to sustainable forestry (online). Available at: The UK Forestry Standard (Accessed 10th Dec 2025).

3. ROUTE SELECTION PROCESS

3.1 Methodology

The approach to route selection, in identifying and assessing alternative OHL routes, is informed by SSEN Transmission's Routeing Guidance.[2] The guidance sets out a process which aims to balance environmental, engineering and economic considerations throughout the Route Options assessment process.

The objective of the process is to identify a Potential Route, which is considered to provide the optimal opportunity to achieve an economically viable, technically feasible and environmentally sound alignment within it.

This report summarises the process of Stage 2: Route Selection from the guidance[2], which seeks to find a Proposed Route which, where possible, avoids physical, environmental and amenity constraints, is likely to be acceptable to stakeholders, and is economically viable, taking into account factors such as altitude, slope, ground conditions and access.

The procedures note that, depending on the scale of the project or character of the area, it may be possible to combine Stages 1 and 2. In practice, this has been achieved by moving from Stage 0 to Stage 2, with no evaluation of alternative corridors completed.

In the case of the Proposed Development, there is a clear lack of reasonable alternative corridors. This is due to the following:

- The required connection leaves little flexibility to propose alternative corridors due to its relatively short distance (approximately 14 km);
- Major physical constraints to the east and west of the corridor (Loch Awe and the mountainous region of the Glen Etive and Glen Fyne Special Protection Area (SPA) to the east; and Loch Nant and existent/consented wind farms to the northwest); and
- Alternative corridor(s) that avoided these above constraints would result in an unfeasibly long route(s).

In consideration of these principles, the method of identifying a Potential Route in this study has involved the following four key tasks:

- Identification of the baseline situation;
- Identification of alternative Route Options;
- Environmental analysis of Route Options; and
- Identification of Potential Routes.

On finalisation of the Route Selection (Stage 2) process, Stage 2 will be followed by Alignment Selection (Stage 3) and onto the Consenting Process (Stage 4).

3.2 Study Area

A Study Area was identified within which the identification and assessment of Route Options could be completed (see **Figure 2: Study Area and Context, Appendix 1**). This Study Area was derived to provide an area sufficiently large enough to encompass a range of feasible Route Options between the key connection points at Taynuilt and Creag Dhubh substations, and Nant substation, while remaining proportionate to the scale of the Proposed Development.

[2] Scottish & Southern Electricity Networks, 2020. PR-NET-ENV-501: Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above.

The Study Area definition had regard to the technical constraints posed by very steep topography to the north of the A85 road, the presence of the Glen Etive and Glen Fyne Special Protection Area north of the A85 and the need to provide a wide number of options for crossing Loch Awe. The northern and southern boundaries of the study area are defined with reference to the location of Taynuilt substation and Creag Dhubh substation. The boundaries of the operational Carraig Gheal Wind Farm, and application stage Musdale Wind Farm were taken into consideration in setting the boundary to the west, noting that to go around these sites would involve creating a very long route, which would not be efficient or economic. In addition, the need to incorporate connections to the Nant substation and extension of the existing Fernoch OHL were also considered.

Baseline studies have been focussed within this Study Area, although consideration of potential receptors outside of this area (e.g. environmental designations, visual receptors or cultural heritage sites) has been undertaken and these are referenced where relevant in this report where relevant.

3.3 Baseline Conditions

3.3.1 Desk Study

A series of desk-based studies have been undertaken to identify a broad range of potential constraints and opportunities within the Study Area, and its adjacent context, which may be constraints to routeing.

- Digital datasets, referenced in text when relevant;
- Mapping and previous survey information to identify areas where construction would be constrained or disproportionately complex, including steep slopes, deep peat, areas of elevated flood risk and locations requiring bespoke engineering solutions (such as long-span crossings);
- Identification of sites designated for nature conservation and other constraints from GIS datasets available from the NatureScot Site Link[3];
- Identification of archaeological assets based on statutory designation and other recorded sites, using GIS datasets available from Historic Environment Scotland[4] [5];
- Review of the Argyll and Bute Local Development Plan 2 (2024)[6] to identify further environmental constraints and opportunities, such as regional level designations or other locations important to the public;
- Review of Landscape Character Assessments of relevance to the Study Area[7];
- Review of Ordnance Survey (OS) mapping (1:50,000 and 1:25,000 online mapping and terrain data from OS OpenData) and aerial photography (where available) to identify other potential constraints such as settlements, properties, walking routes, cycling routes etc.;
- Extrapolation of OS OpenData to identify further environmental constraints including locations of watercourses and waterbodies and to undertake a preliminary slope analysis;
- Identification of watercourse and waterbody quality and areas prone to flooding, utilising online GIS data sources from Scottish Environment Protection Agency (SEPA)[8];

[3] NatureScot (N/A). Site Link. [online]. Available at: https://sitelink.nature.scot/home (Accessed 10th Dec 2025).
[4] Historic Environment Scotland, (N/A). Portal. [online]. Available at: http://portal.historicenvironment.scot/ (Accessed 10th December 2025).
[5] Canmore (N/A). Royal Commission on Ancient and Historical Monuments of Scotland. [online]. Available at: https://canmore.org.uk/ (Accessed 10th December 2025).
[6] Argyll and Bute Council (2024.). Local Development Plan 2. [online]. Available at: https://www.argyll-bute.gov.uk/ldp2 (Accessed 10th December 2025).
[7] NatureScot (N/A). Scottish Landscape Character Type Map and Descriptions. [online]. Available at: https://www.nature.scot/professionaladvice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions (Accessed 10th December 2025).
[8] Scottish Environment Protection Agency (N/A). SEPA Data publication. [online]. Available at: https://www.sepa.org.uk/environment/environmental-data/ (Accessed 10th December 2025)

- Review of other local information through online and published media such as tourism sites and walking routes; and
- Review of ornithological data available from other SSEN transmission projects in the vicinity of the Proposed Development.

3.3.2 Site Visits

The prevailing environmental baseline conditions of the Study Area through which the Route Options run have been identified using publicly available digital datasets, and a review of survey work previously undertaken in the area.

Ornithological surveys have been underway since April 2025, with further species surveys proposed to be completed as part of the alignment stage. Additional site visits to survey identified constraints, such as peat depth, are proposed to be undertaken as part of the alignment and consenting phases.

3.4 Route Identification and Selection Methods

3.4.1 Route Identification

Route Options (see **Figure 1: Route Options and Study Area, Appendix 1**) were identified as part of the desk-based studies considering constraints identified by high level suitability Multi Criteria Analysis (MCA) using Geographic Information Systems (GIS). Consideration has included a review of the steps outlined in the Holford Rules and SSEN Transmission Routeing Guidance[2].

In summary, the following has been taken into account as far as is practicable at this routeing stage and will be considered in more detail during Stage 3 (Alignment Selection):

- Avoid if possible major areas of highest amenity value (including those covered by national and international designations and other sensitive landscapes) (Holford Rule 1);
- Avoid by deviation, smaller areas of high amenity value such as regional scenic areas;
- Other things being equal, try to avoid sharp changes of direction and reduce the number of larger angle towers required (Holford Rule 3);
- Avoid skylining the route in key views and where necessary, cross ridges obliquely where a dip in the ridge provides an opportunity (Holford Rule 4);
- Avoid the highest terrain, where climatic conditions can impose extra loading (wind and ice) on OHL conductors (technical constraint that aligns with the second part of Holford Rule 4, land over 500 m avoided where possible, over 600 m avoided absolutely);
- Target the route towards moderately open valleys with woods where the apparent height of towers will be reduced, and views of the line will be broken by trees (avoid slicing through landscape types and try to keep to edges and landscape transitions) (Holford Rule 5);
- Consider construction access and the availability of existing roads and tracks;
- Consider the appearance of other OHLs in the landscape to avoid a dominating or confusing wirescape effect; and
- Consider technical issues related to crossing the existing OHL alignment, clearances, connectivity, outages, maintenance and faults.

3.4.2 Route Options

The Route Options were initially identified, at 1 km width for Taynuilt to Creag Dhubh with a 300 m width for the Nant Route Options and Fernoch Extension Route, along areas where it was considered feasible to accommodate the Proposed Development e.g. in parallel with roads or existing accesses for ease of access and through existing gaps in forestry to minimise felling

requirements. A reduced 300 m width was used for the Nant Route Options (and Fernoch Extension) due to the heavily constrained nature and relatively small size of the Study Area not allowing for a meaningful difference in Route Options if a 1 km width was retained. Route Options were then refined, aligned in places to avoid hard constraints (those constraints that if directly intersected/significantly impacted would constitute making the Proposed Development non-feasible/consentable).

All Route Options had to account for the existing OHLs, avoiding where practicable any crossing of these existing OHLs. This is so that the existing OHLs could be retained and energised during the construction of the Proposed Development:

- In the case of the Taynuilt to Creag Dhubh Route Options, this resulted in the Route Options being situated either directly east or directly west of the existing OHL, with significant deviations prior to and at the crossing points of Loch Awe; and

In the case of the Nant Route Options, this resulted in the siting of Route Options north or south of the existing OHL, limiting the crossing of existing OHLs to east of Kilchrenan.

For the identification of Potential Route Options for the Proposed Development, a Multi Criteria Analysis (MCA) process was followed, which used Geographical Information Systems (GIS) to analyse available digital datasets. Digital data was collected to inform the baseline for the Route Options Appraisal.

The Route Options are described in detail in **Section 4**, below.

3.5 Appraisal Method

Appraisal of the Route Options has followed the process defined by SSEN's Transmission Routeing Guidance[2], including the environmental topics considered within. As stated above, for ease of assessment and interpretation.

Below is a list of the topic areas considered as part of the Route Options appraisal.

3.5.1 Environmental Criteria

Appraisal of Route Options has involved systematic consideration against the following environmental topic areas:

- Natural Heritage - Designations; Protected Species; Habitats; Ornithology; and Hydrology / Hydrogeology / Geology;
- Cultural Heritage - Designated Heritage Assets; and Non-designated Heritage Assets;
- Proximity to Dwellings - Residential Properties;
- Landscape and Visual - Designations; Landscape Character; and Visual Amenity;
- Land Use - Agriculture; Forestry; Recreation; and Proposed infrastructure; and
- Planning - Policy; and Proposals.

3.5.2 Engineering Criteria

Appraisal of Route Options has involved systematic consideration against the following engineering topic areas:

- Infrastructure Crossings - major crossings (132 kV, 275 kV, Rail, 200+m wide river, navigable canal, gas or hydro pipeline); road crossings;
- Environmental Design - elevation; atmospheric pollution; contaminated land; flooding;
- Ground Conditions - terrain; peat;

- Construction / Maintenance- access; angle towers; and
- Proximity - clearance distance; wind farms, communication masts, urban environments; metallic pipelines.

3.5.3 Economic Criteria

Appraisal of Route Options has involved systematic consideration against the following economic topic areas:

- Capital construction; diversions; public road improvements; tree felling; land assembly; consent mitigations; and
- Operational inspections; maintenance.

3.5.4 Comparative Appraisal

Each Route Option has been considered in terms of its potential interaction with the environmental, engineering and economic characteristics, features and sensitivities. The Route Options have then been compared to determine which has the greatest and least capacity or potential to accommodate the Proposed Development.

In line with the RAG assessment criteria defined within the SSEN Transmission Guidance, a RAG rating has been applied to each topic area within each Route Option. This rating is based on a three-point scale as indicated in Table 3.1 below[2].

Table 3.1 – RAG Criteria

Performance	Comparative Appraisal
Most Preferred	Low potential for the development to be constrained. Where features are identified, interaction with the proposed development is unlikely to be material.
	Moderate potential for the development to be constrained. Interaction of features with the proposed development is potentially material but mitigatable.
Least Preferred	High potential for the development to be constrained. Interaction of features with the proposed development is unlikely to be mitigatable.

3.5.5 Identification of a Potential Route

The overall objective throughout the appraisal of Route Options has been to take full consideration of all environmental, engineering and economic factors to minimise any potential adverse impacts. Following a review and consideration of the Potential Route Options, the preferred Route Options were arrived at and Potential Routes proposed.

The Potential Routes are presented in **Figure 3: Potential Route Options, Appendix 1**.

4. DESCRIPTION OF THE ROUTE OPTIONS

4.1 Identification of Sections and Route Options

All Route Options are described below and illustrated in **Figure 1: Route Options and Study Area, Appendix 1**. The Route Options are divided into three areas for appraisal, the Nant Route Options, Taynuilt to Creag Dhubh Route Options and the Fernoch Extension Route. There are nine Route Options in total:

- Taynuilt to Creag Dhubh Route - Six Route Options;
- Nant Route – Two Route Options; and
- The Fernoch Extension Route.

4.1.1 Taynuilt to Creag Dhubh Route Options

The Route Options were developed between the existing Creag Dhubh substation (northern extent), and the consented Creag Dhubh substation (southern extent). Additionally, routes were required to be oriented entirely to the east or entirely to the west of the existing OHL due to the need to retain operation of this OHL alongside construction of the Proposed Development:

- Route Option 1 was identified as it maintains the greatest distance from the Glen Etive and Glen Fyne SPA, whilst allowing a crossing of Loch Awe with minimal intersection of Ancient Woodland;
- Route Option 2 was identified similarly to Route Option 1, with the difference of selecting a crossing of Loch Awe with the shortest potential span;
- Route Option 3 was identified as it follows closely the existing OHL, whilst mostly avoiding Ancient Woodland when crossing Loch Awe;
- Route Option 4 was identified similarly to Route Option 2, with the difference of selecting a crossing of Loch Awe avoiding Drinking Water Protection Areas (DWPAs);
- Route Option 5 was identified to avoid the large concentration of Ancient Woodland and designations associated with Loch Etive Woods and the crossing of Loch Awe, as well as avoiding areas of Class 1 peatland north of Loch Awe; and
- Route Option 6 was identified similarly to Route Option 5, with a difference of selecting a crossing of Loch Awe with the shortest potential span.

Route Option 1

Route Option 1 is approximately 15.4 km in length. Starting at Taynuilt substation, the Route Option heads south southeast through pastureland before entering woodland, crossing the B845 road, and paralleling the west side of the existing OHL. The Route Option then veers slightly eastward, crossing the Nant OHL, before continuing south, passing east of Kilchrenan. After a 630 m crossing of Loch Awe, near Taychreggan on the north shore and Portsonachan on the south shore, the Route Option then turns eastward through woodland to reach the site of the consented Creag Dhubh substation. At Taynuilt, the Route Option starts at an elevation of 50 m above sea level (ASL), ascending to approximately 230 m before dropping down to 30 m to cross Loch Awe. The Route then ascends again to approximately 260 m upon reaching Creag Dhubh.

Route Option 2

Route Option 2 is approximately 14.7 km in length. Starting at Taynuilt substation, the Route Option heads south southeast through pastureland before entering woodland, crossing the B845 road, and paralleling the west side of the existing OHL. The Route Option then veers east, before branching away from the existing OHL south ward, passing southwest of Lochan na Gealaich.

Following a 750 m crossing of Loch Awe, east of Taychreggan and west of Achnacarron on the north side and in the vicinity of Upper Sonachan on the south side. The Route Option then starts to head east to reach the site of the consented Creag Dhubh substation. At Taynuilt, the Route Option starts at an elevation of 50 m ASL, ascending to approximately 230 m before dropping down to 30 m to cross Loch Awe. The Route Option then ascends again to approximately 260 m upon reaching Creag Dhubh.

Route Option 3

Route Option 3 is approximately 14.2 km in length. Route Option 3 closely follows the path of the existing OHL, but stays slightly to the east along its entire route. Remaining slightly east throughout its course. Starting at Taynuilt substation, the Route Option initially travels southeast before veering south southeast, crossing the B845 road and passing to the west of Barachander. It then veers eastward passing to the northeast of Lochan na Gealaich. Following a 661 m crossing of Loch Awe, northeast of Achnacarron on the northside and near Ardbrecknish on the south side. From there, the Route Option travels south to reach the consented Creag Dhubh substation. At Taynuilt, the Route Option starts at an elevation of 50 m ASL, ascending to approximately 190 m before dropping down to 30 m to cross Loch Awe. The Route Option then ascends again to approximately 260 m upon reaching Creag Dhubh.

Route Option 4

Route Option 4 is approximately 14.7 km in length. Starting at Taynuilt substation, the Route Option initially travels southeast before veering south southeast through woodland, crossing the B845 road and passing to the west of Barachander, staying immediately to the east of the existing OHL. It then veers eastward, branching away from the existing OHL to the north. Following a 975 m crossing of Loch Awe, southwest of Hayfield on the north shore and northeast of Rockhill Farm on the south shore. The Route Option then travels south to reach the consented Creag Dhubh substation. At Taynuilt, the Route Option starts at an elevation of 50 m ASL, ascending to approximately 190 m before dropping down to 30 m to cross Loch Awe. The Route Option then ascends again to approximately 260 m upon reaching Creag Dhubh.

Route Option 5

Route Option 5 is approximately 15.2 km in length. Starting at Taynuilt substation, the Route Option initially travels southeast before veering south southeast through pastureland before entering woodland, staying immediately east of the existing OHL. It then veers eastward, away from the existing OHL before switching back in a southwest direction, passing southeast of Loch Tromlee. The Route Option rejoins the path of the existing OHL and travels, passing to the northeast of Lochan na Gealaich. Following a 661 m crossing of Loch Awe, northeast of Achnacarron on the northside and near Ardbrecknish on the south side. From there, the Route Option travels south to reach the consented Creag Dhubh substation. At Taynuilt, the Route Option starts at an elevation of 50 m ASL, ascending to approximately 250 m before dropping down to 30 m to cross Loch Awe. The Route Option then ascends again to approximately 230 m upon reaching Creag Dhubh.

Route Option 6

Route Option 6 is approximately 15.6 km in length. Starting at Taynuilt substation, the Route Option initially travels southeast before veering south southeast through pastureland before entering woodland, staying immediately east of the existing OHL. It then veers eastward, away from the existing OHL before switching back in a southwest direction, passing southeast of Loch Tromlee. It then veers eastward. Following a 975 m crossing of Loch Awe, southwest of Hayfield on the north shore and northeast of Rockhill Farm on the south shore. The Route Option then travels south to reach the consented Creag Dhubh substation. At Taynuilt, the Route Option starts at an

elevation of 50 m ASL, ascending to approximately 250 m before dropping down to 30 m to cross Loch Awe. The Route Option then ascends again to approximately 230 m upon reaching Creag Dhubh.

For the purpose of comparative appraisal, the area within the proposed Route Options has been considered for all environmental topics as part of the relevant Route Options to ensure that all constraints information is captured.

4.1.2 Nant Route Options

The Nant Route Options were developed between the existing Nant substation (western extent), and the Taynuilt to Creag Dhubh Route Options (eastern extent). Additionally, routes were required to be oriented entirely to either the north or south of the existing Nant OHL due to the need to retain operation of this OHL alongside construction of the Proposed Development and therefore minimise any required crossing of this OHL:

- Nant Route Option 1 was identified as it maintains an orientation south of the existing Nant OHL without requiring crossing of that OHL; and
- Route Option 2 was identified primarily to avoid the designated areas of ancient woodland in proximity to the existing Nant substation.

Nant Route Option 1

Nant Route Option 1 is approximately 4.8 km in length. Starting at Nant substation, the Route Option heads east and northeast along the woodland on the lower slopes of Creag Loigste before running alongside the existing Nant OHL, staying to it's south and east. The Route Option crosses the B845 road north of Kilchrenan and Kilchrenan Burn, heading east where it reaches the connection point of the existing Taynuilt to Inveraray OHL and proposed Taynuilt to Creag Dhubh Route Options, immediately north of Lochan na Gealaich. The Route Option starts at its lowest elevation of 51 m ASL, ascending to its maximum elevation of 153 m ASL before descending again to 100 m at the tee point.

Nant Route Option 2

Nant Route Option 2 is approximately 5.1 km in length. Starting at Nant substation, the Route Option heads north and northeast uphill avoiding the nearby woodland, staying north and west of the existing Nant OHL. The Route Option then turns east, crossing the existing Nant OHL in the immediate vicinity of the existing Fernoch OHL. The Route Option then crosses the B845 north of Kilchrenan, heading east where it reaches the connection point of the existing Taynuilt to Inveraray OHL and proposed Route Options, immediately north of Lochan na Gealaich. The Route Option starts at its lowest elevation of 69 m ASL, ascending to its maximum elevation of 155 m ASL before descending again to 100 m at the tee point.

4.1.3 Fernoch Extension

The Fernoch Extension Route was identified, following a feasibility assessment, as the most proportionate solution as it is shorter, requiring fewer structures and minimising environmental and visual effects. No alternative Routes are proposed as due to the short distance, no other Routes are deemed feasible.

Fernoch Extension Route

The Fernoch Extension Route is approximately 2.2 km in length. Starting at the connection point of the existing Fernoch OHL and existing Taynuilt to Creag Dhubh OHL. The Route Options heads southeast, south of Loch Tromlee, where it crosses the existing Taynuilt to Inverary OHL. This Route Option crosses the B845 road as well as a forestry access track. The Route Option passes close by to some existing houses which are on the B845 road. The terrain in this area is generally flat

moorland with some patches of forestry. The Route Option intersects all of the proposed Taynuilt to Creag Dhubh Route Options.

5. BASELINE CONDITIONS

5.1 Introduction

This section summarises the baseline information for the key environmental and engineering constraint types and their associated topics relevant to the Proposed Development, as outlined in **Section 3**. The relationship of Route Options to specific constraints are highlighted throughout this section, where relevant.

5.2 Environmental Constraints

This section summarises the baseline information and key constraints for each of the environmental topics relevant to the Proposed Development. Key constraints are shown on **Figure 4: Key Constraints, Appendix 1**.

5.2.1 Natural Heritage

The Natural Heritage Study Area consists of a 2 km buffer from all Route Options. An overview of constraints is shown on **Figure 5: Ecology and Ornithology Constraints, Appendix 1**; **Figure 6: Hydrology Constraints, Appendix 1**; and **Figure 7: Geology and Soils Constraints, Appendix 1**.

Designations

The statutory and non-statutory designations available in the Study Area of the Taynuilt to Creag Dhubh OHL are presented in **Table 5.1**.

No national or internationally designated sites are located in the Study Area for the Nant Route Options.

Table 5.1 Statutory Designated Sites within 2 km and Non-Statutory Designated Sites within 1 km

Designation / Type	Statutory / Non-Statutory	Name of Designation	Notes
National Nature Reserve (NNR)	Non-Statutory	Glen Nant NNR	Designated for the protection of native forest. Including oak, ash, alder and birch species.
Site of Specific Scientific Interest (SSSI)	Statutory	Glen Nant SSSI	Designated for the protection of various plant, woodland and invertebrate species.
Site of Specific Scientific Interest (SSSI)	Statutory	Collie Leitire SSSI	Designated for the protection of various woodland and invertebrate species.
Special Area of Conservation (SAC)	Statutory	Loch Etive Woods SAC	Designated for the protection of Otters (*Lutra lutra*) and various woodland species.

Taynuilt to Creag Dhubh

Areas of Ancient Woodland of semi-natural origin (part of the Ancient Woodland Inventory (AWI)) are abundant in two main regions within the vicinity of the Route Options, along the banks of Loch Awe and within and surrounding the Glen Nant National Forest.

- Route Option 1 - Crosses several extents of the Ancient Woodland surrounding Loch Etive Woods and a small section on the northern bank of Loch Awe, spanning a total of 41.9 hectares (ha) of Ancient Woodland (of semi-natural origin);
- Route Option 2 - Crosses several extents of Ancient Woodland surrounding Loch Etive Woods and one section on both the northern and southern banks of Loch Awe, as well as a section of long-established woodland close to the Creag Dhubh substation. In total, Route Option 2 crosses 44.8 ha of Ancient Woodland (of semi-natural origin) as well as a small intersection of long-established woodland south of Loch Awe;
- Route Option 3 - Crosses Ancient Woodland to the west of the River Awe, and extents of Loch Etive Woods. Crosses another small section of Ancient Woodland on the north side of Loch Awe, a section of long-established woodland on the south side of Loch Awe, and another section of Ancient Woodland near Creag Dhubh. In total, Route Option 3 crosses 54.7 ha of Ancient Woodland (of semi-natural origin) and a small concentration of long-established woodland south of Loch Awe;
- Route Option 4 - Crosses Ancient Woodland to the west of the River Awe, and extents of Loch Etive Woods. Crosses further Ancient Woodland on the north and south side of Loch Awe. In total, Route Option 4 crosses 74.4 ha of Ancient Woodland (of semi-natural origin);
- Route Option 5 - Crosses Ancient Woodland to the west of the River Awe. Crosses another small section of Ancient Woodland on the north side of Loch Awe, a section of long-established woodland on the south side of Loch Awe, and another section of Ancient Woodland near Creag Dhubh. In total, Route Option 5 crosses 32.0 ha of Ancient Woodland (of semi-natural origin) and a small concentration of long-established woodland south of Loch Awe; and
- Route Option 6 - Crosses Ancient Woodland to the west of the River Awe. Crosses further Ancient Woodland on the north and south side of Loch Awe. In total, Route Option 6 crosses 51.7 ha of Ancient Woodland (of semi-natural origin).

Nant

Nant Route Option 1 intersects 9.5 ha of Ancient Woodland of semi-natural origin (part of the AWI) in the southwestern extent of the Route Option in the vicinity of Nant substation.

Nant Route Option 2 avoids any intersection with Ancient Woodland.

Fernoch

The Fernoch Extension avoids any intersection with Ancient Woodland.

Habitats

The Study Area contains woodland, peatland, and wetland areas that form part of the ecological character.

Taynuilt to Creag Dhubh

Loch Etive Woods SAC is designated for its Annex 1 habitats, including Tilio-Acerion Forest in Glen Nant's rocky gorges. These forests feature ash and hazel understorey with rich herbs and grasses. The site is also significant for old sessile oak woods in the southwest Highland zone, known for bryophyte diversity. Diverse soils create transitions between oakwood, wet alder, and ash-elm-hazel stands. The woods support the rare chequered skipper butterfly *(Carterocephalus palaemon*), highlighting the importance of preserving these habitats and their biodiversity. The rest of the Study Area is characterised with craggy upland areas typical of the southwest highland area, rocky coastland, a freshwater loch, and peatland areas.

From a biodiversity perspective, the irreplaceable habitats (annex I habitats defined as in good condition) of Blanket Bog and Ancient Woodland are present throughout the Study Area. These areas of Ancient Woodland are concentrated in the north of the Study Area in the immediate

vicinity of Taynuilt substation and further south associated with Glen Nant National Forest as well as on the northern and southern banks of Loch Awe. The areas of Blanket Bog are concentrated in the centre of the Study Area, in the vicinity and to the south of Loch Tromlee. All Route Options intersect areas of these habitats to varying extends, as summarised in **Table 5.2** below.

Table 5.2 Taynuilt to Creag Dhubh – Area of Irreplaceable Habitats

Route Option	Area (ha) of Irreplaceable Habitats	Area of Irreplaceable Ancient Woodland (ha)	Area of Irreplaceable Blanket Bog (ha)
Route Option 1	78.78	35.41	43.37
Route Option 2	76.78	36.46	40.32
Route Option 3	68.59	46.58	22.01
Route Option 4	92.80	64.55	28.25
Route Option 5	71.35	31.56	39.79
Route Option 6	95.60	49.53	46.07

Nant

The study area itself is characterised with craggy upland areas typical of the southwest highland area, with heathland, upland grasslands, broadleaved and coniferous woodland all present.

Some of these habitats, particularly wet / dry heath and blanket bog will likely constitute Annex 1 habitats designated under the Habitats Directive. Habitats within the Study Area have the potential to comprise Ground Water Dependent Terrestrial Ecosystems (GWDTE) with SEPA guidance identifying acid grassland and wet heath as having moderate potential to support GWTDE[9].

From a biodiversity perspective, the irreplaceable habitats of Blanket Bog and Ancient Woodland are present throughout the Study Area. The Ancient Woodland is concentrated in the eastern woodland (between 350 m and 1.2 km east) from Nant substation. Blanket Bog is present throughout the northern half of both Route Options. Both intersect Nant Route Option 1, while Nant Route Option 2 is intersected by Blanket Bog only (see **Table 5.3** below).

Table 5.3 Nant – Area of Irreplaceable Habitats

Route Option	Area (ha) of Irreplaceable Habitats	Area of Irreplaceable Ancient Woodland (ha)	Area of Irreplaceable Blanket Bog (ha)
Nant Option 1	22.64	9.28	13.36
Nant Option 2	34.25	0.00	34.25

Fernoch

Similar to the above Route Options, from a biodiversity perspective. Irreplicable habitats are present in the area of Fernoch Extension Route. However, these areas are minimal, consisting of fewer than 1 hectare of Irreplicable Blanket bog and no areas of Ancient Woodland.

Protected Species

Due to the habitats present, the Study Area has the potential to support protected species such as otters, pine martens, red squirrels, Daubenton's bats, red deer, badgers, and foxes. These species are legally safeguarded under national and international conservation legislation, and their

[9] SEPA (2017). SEPA Guidance Note 31 - Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems. [online]. Available at: https://www.sepa.org.uk/media/143868/lupsgu31_planning_guidance_on_groundwater_abstractions.pdf (Accessed 30 December 2025).

presence highlights the importance of maintaining and protecting woodland habitats during project planning.

An ecological desk study identified records of several European Protected Species (EPS), protected under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended)[10], those identified as priority species on the Scottish Biodiversity List[11] (SBL) and / or protected under national legislation such as the Wildlife and Countryside Act 1981[12] as amended (WCA) or Protection of Badger Act 1992[13] (PBA). The identified species / species groups include:

- Bats (EPS and SBL);
- Badger (PBA);
- Red squirrel (WCA and SBL);
- Pine marten (WCA and SBL);
- Red Fox (WCA and SBL);
- Red Deer (WCA and SBL);
- Otter (EPS and SBL); and
- Fish (SBL).

Ornithology

A review of planning application documents for wind farm developments within 2 km of the Study Area was undertaken to inform the ornithology baseline. A number of Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) or red listed Birds of Conservation Concern (BoCC) were recorded.

Taynuilt to Creag Dhubh

The Glen Etive and Glen Fyne SPA is the primary site of ornithological importance in the area. Located in the Scottish Highlands, it is designated to protect key bird species, most notably the golden eagle, providing essential nesting and hunting habitats. The SPA also supports breeding populations of red-throated divers and merlins. All Route Options pass within 2 km of the SPA along the northeast of the Study Area, with Options 3 to 6 coming closest at around 850 m. At their southern extent near the Creag Dhubh substation, all Route Options pass within 1 km of the SPA.

Nant and Fernoch

No statutory designated sites are within 2 km of the Route Options, but the Glen Etive and Glen Fyne Special Protection Area (SPA), located over 2 km to the east and northeast, is important for bird conservation. The SPA is primarily designated to protect golden eagles, providing critical nesting and hunting habitats. It also supports breeding populations of red-throated divers and merlins. All Route Options lie beyond 2 km of the SPA but do not directly intersect it, so they would not directly impact these important bird populations.

[10] The Conservation (Natural Habitats, &c.) Regulations 1994. [online] Available at: *https://www.legislation.gov.uk/uksi/1994/2716/contents/made* (Accessed 30th December 2025).
[11] The Scottish Biodiversity List is a list of animals, plants and habitats that Scottish Ministers consider to be of principal importance for biodiversity conservation in Scotland, as required by the Nature Conservation (Scotland) Act 2004.
[12] Wildlife and Countryside Act 1981. [online]. Available at: https://www.legislation.gov.uk/ukpga/1981/69 (Accessed 30th December 2025)
[13] Protection of Badger Act 1992. [online]. Available at: https://www.legislation.gov.uk/ukpga/1992/51/contents (Accessed 30th December 2025)

Hydrology, Geology and Hydrogeology

Taynuilt to Creag Dhubh

Six small lochs are located within the study area: Loch Nant, Loch an Leoid, Loch Tromlee, Loch an Droighinn, Lochan na Gealaich and Dubh Loch. All the Route Options traverse Loch Awe (one of the largest freshwater lochs in Scotland) and small watercourses draining into either Loch Awe or the River Nant/Loch Etive catchment. Route Options cross multiple tributaries, including the Kilchrenan Burn and Allt Poll an Dubhaich, with sections of high fluvial flood risk identified, particularly near the Kilchrenan Burn. Some routes intersect Scottish Water Drinking Water Protected Areas (DWPAs) and private water supplies (PWS), indicating potential sensitivities for water resources.

Areas of medium and high likelihood flood risk are present throughout the Study Area, with areas of medium risk concentrated around unnamed watercourses associated with lochs north of Loch Awe such as Loch Tromlee. Areas of high flood risk are primarily associated with watercourses on the northern and southern banks of Loch Awe.

Class 1 and Class 2 peatlands are critical environmental features due to their role in carbon storage, biodiversity, and hydrology. Class 1 peatland is nationally important, comprising deep peat and priority peatland habitats that are likely to have high conservation value. These areas act as significant carbon sinks, helping to mitigate climate change, and support rare species and unique ecosystems. Class 2 peatland, while slightly less sensitive, still contains carbon-rich soils and valuable habitats that require careful consideration to avoid degradation. Disturbance to these peatlands can lead to substantial carbon emissions and loss of biodiversity, making their protection a key factor in route selection and project planning. Soils are mainly peaty gleys, with areas of brown earth and mineral podzols. Significant areas of carbon-rich peatland exist, with Class 1 peatland (nationally important) concentrated between Loch Nant and Loch Tromlee.

- Route Option 1 intersects 60.8 ha of Class 1 peatland and 189.8 ha of Class 2 peatland;
- Route Option 2 intersects 60.8 ha of Class 1 peatland and 160.8 ha of Class 2 peatland;
- Route Option 3 intersects 30.9 ha of Class 1 peatland and 175.9 ha of Class 2 peatland;
- Route Option 4 intersects 30.9 ha of Class 1 peatland and 184.4 ha of Class 2 peatland;
- Route Option 5 intersects 6.2 ha of Class 1 peatland and 297.3 ha of Class 2 peatland; and
- Route Option 6 intersects 6.2 ha of Class 1 peatland and 305.8 ha of Class 2 peatland.

Geologically, the Route Options traverse peat and glacial deposits overlying diverse bedrock: northern areas include Lorn Plateau Volcanic Formation and North British Siluro-Devonian Dyke Suite, while southern sections are underlain by Crinan Grit quartzite.

Hydrogeologically, the Route Options lie within the Oban and Kintyre groundwater body, classified in good overall condition. Bedrock is a low-productivity aquifer, yielding limited groundwater primarily via fractures and discontinuities.

Nant

The Study Area covers catchments draining into Loch Awe, Loch Nant, Loch an Leoid, and Loch an Droighinn. Numerous watercourses cross the Route Options, with some, including the Kilchrenan Burn and Berchan River, associated with areas of high fluvial flood risk. One PWS source is located immediately to the south of the Nant substation.

Areas of medium flood risk are present and associated with unnamed watercourses throughout the Study Area. Areas of high flood risk are primarily associated with watercourses on the northern banks of Loch Awe, in the vicinity of Nant substation as well as south of Annat.

Soils are primarily peaty gleys with areas of brown earth and mineral podzols, and several routes intersect nationally important peatlands (Class 1 and Class 2), which are key carbon-rich habitats.

- Nant Route Option 1 intersects no areas of Class 1 Peatland and 104.3 ha of Class 2 Peatland; and
- Nant Route Option 2 intersects no areas of Class 1 Peatland and 96.6 ha of Class 2 Peatland.

Geologically, the Route Options traverse glacial deposits overlying diverse bedrock formations, including Tayvallich Slate and Limestone, Kilchrenan Conglomerate, Crinan Grit, and Tayvallich Volcanic Formation. One geological conservation site, Kilchrenan Burn and Shore, lies near Nant Route Option 1.

Hydrogeologically, the Route Options sit within the Oban and Kintyre groundwater body, classified in good overall condition. Bedrock formations are low-productivity aquifers with limited groundwater yield, where flow occurs mainly through fractures and discontinuities.

Fernoch

Small lochs are located within the Study Area, the most significant being Loch Tromlee and Loch Nant. The Fernoch Extension Route crosses six watercourses, including Allt Bochain, the Kilchrenan Burn, and four other unnamed watercourses. One PWS source is intersected and one DWPA is intersected. It also crosses 2.5 ha of High Flood Risk areas.

The Fernoch Extension Route intersects 6.3 ha of Class 1 Peatland and 101.2 ha of Class 2 Peatland.

Geologically, the Fernoch Extension Route is underlain by Crinan Frit, Tayvallich Slate and Limestone, Tayballich Limestone and North Britain Siluro-devonian Calc alkaline Dyke Suite bedrock formations.

Hydrogeologically, the Route Options lie within the Oban and Kintyre groundwater body, classified in good overall condition.

5.2.2 Cultural Heritage

A high-level desk-based assessment has been carried out which covers two Study Areas. Baseline information and these Study Areas are shown on **Figure 8: Cultural Heritage Constraints, Appendix 1**:

- Inner Study Area: this covers the Route Options, the study area for the identification of heritage assets that could receive direct impacts from the Proposed Development; and
- Outer Study Area: an area extending 2 km either side of the Route Options to identify heritage assets whose settings may be affected by the Proposed Development. This study area has been selected as the distance to which the Proposed Development is likely to have potential for significant settings impacts.

Designated Heritage Assets

Taynuilt to Creag Dhubh

There are six Scheduled Monuments that lie within the Inner Study Area, including cairns, crannogs, and a cup-marked rock. The Outer Study Area contains a further 33 designated assets, including 14 Scheduled Monuments, 17 Listed Buildings (three Category A, nine Category B, and five Category C), one Inventory Garden and Designed Landscape of national importance, and one Conservation Area of regional importance. The number of Scheduled Monuments intercepted varies by Route Option, from none to four.

Nant

There are no designated heritage assets such as Scheduled Monuments, Listed Buildings, or other designated heritage sites within the Inner Study Area.

Within the Outer Study Area, there are 12 designated assets, comprising nine Scheduled Monuments of national importance, one Category B Listed Building of regional importance, and two Category C Listed Buildings of local importance. There are no Inventory Gardens and Designed Landscapes, Historic Battlefields, or Conservation Areas in the Outer Study Area.

Fernoch

There are no designated heritage assets such as Scheduled Monuments, Listed Buildings, or other designated heritage sites within the Inner Study Area. Two scheduled monuments are located within the Outer Study Area.

Non-Designated Heritage Assets

Taynuilt to Creag Dhubh

There are 95 non-designated heritage assets across the Inner and Outer Study Areas. Six of these are Non-Statutory Registered (NSR) Sites of potential national importance, with one in the Inner Study Area (Lochan na Gealaich crannog) and five in the Outer Study Area, including dun structures, cairns, platforms, and kerb-cairns. The remaining 89 non-designated assets span a wide range of monument types, from prehistoric stone circles and burial cairns to Bronze Age and Iron Age settlements, medieval and post-medieval farmsteads, field systems, and modern buildings and quarries.

Nant

Within the Inner Study Area, there are 23 non-designated heritage assets, including one Non-Statutory Registered (NSR) Site of potential national importance. The Outer Study Area includes an additional four NSR Sites of potential schedulable quality, comprising prehistoric kerb cairns, crannogs, and a dun.

Fernoch

There are no non-designated heritage assets within the Fernoch Extension Route.

5.2.3 People

The People Study Area covers the area of the Route Options themselves. An overview of constraints is shown on **Figure 9: Landscape Constraints, Appendix 1**.

Proximity to Dwellings

Baseline conditions in relation to visual effects on residents are described in the Visual Amenity section below. This includes details of settlements and residential clusters.

Taynuilt to Creag Dhubh

Residential properties are present to varying degrees within the Route Options:

- Route Option 1 – Six properties;
- Route Option 2 – Four properties;
- Route Option 3 - 23 properties;
- Route Option 4 – 15 properties;
- Route Option 5 – 11 properties; and
- Route Option 6 – Three properties.

Nant

Residential properties within the Route Options are limited. Nant Route Option 1 contains two properties, while Nant Route Option 2 contains none.

Fernoch

Four residential properties are intersected by the Fernoch Extension Route.

5.2.4 *Landscape and Visual Amenity*

A 10 km Study Area from the Route Options has been adopted to assess potential landscape and visual constraints, some of which are illustrated on **Figure 9: Landscape Constraints, Appendix 1**. The assessment considers key receptors, including landscape designations and classifications, seascape and landscape character types, and visual receptors.

Designations

National Designations

Taynuilt to Creag Dhubh

Ardanaiseig House GDL, an 18th-century garden with notable trees and woodland parkland, lies approximately 1.9 km northeast of Route Options 5 and 6. Both Ben Lui and Loch Etive mountains Wild Land Areas (WLA) are nearby (4.6 km and 1.4 km east of some routes), but all Route Options are outside these areas, so NPF4 policy does not give them significant consideration.

Nant

No GDLs are present within the Study Area. The nearest nationally important WLA, Ben Lui and Loch Etive mountains, lie 8.3 km and 6.6 km east of the Route Options, respectively, meaning the routes are outside these areas and not subject to their primary considerations under NPF4.

Fernoch

No GDLs are present within the Study Area. The nearest WLA, the Loch Etive mountains, is located 8.9 km east of the Fernoch Extension Route.

Other Nationally Important Landscapes

Taynuilt to Creag Dhubh

All Route Options fall within the North Argyll Area of Panoramic Quality (APQ), which encompasses parts of Loch Awe, Loch Etive, and surrounding uplands, recognized for its scenic value.

Nant

The Nant Route Options intersect the Argyll and Bute APQ, which covers parts of Loch Awe, Loch Etive, and surrounding uplands.

Fernoch

The Fernoch Extension Route intersects the Argyll and Bute APQ.

Regional Designations

No additional regional landscape designations are present beyond the APQ and the proximity of Ardanaiseig House GDL or the APQ.

Landscape Character

Landscape Features - The Study Area comprises a predominantly upland landscape within the Craggy Upland LCT, featuring rounded knolls, rocky outcrops, small upland lochs, and glens with historic settlement patterns, while portions of the Rugged Mountains LCT to the east include steep slopes, gullies, waterfalls, and exposed rock faces, and the Upland Glens LCT to the north is characterised by linear valleys, ribbon lochs, meandering rivers, and scattered small settlements. The Plateau Moor and Forest LCT lie to the south, with rounded ridges, open moorland, and narrow glens, and small sections of the Rocky Coastland LCT intersect the northern Route Options,

featuring hummocky terrain, rocky outcrops, and mixed woodland along loch shores. The area contains scattered residential properties and small villages within the glens, with historic and archaeological features concentrated on knolls and lower slopes, while local roads and recreational routes provide access through the upland and glen landscapes, creating a varied and scenic environment with a strong sense of remoteness and visual interest.

Landscape Context - The Craggy Upland and adjacent LCTs are defined by a range of natural and historic features that contribute to both their aesthetic and ecological significance. The upland terrain is characterized by rounded knolls, rock outcrops, and low-lying hollows containing small lochs, often interspersed with burns and streams. In the higher areas, expansive moorlands and conifer plantations dominate, while sheltered glens provide locations for small-scale settlements and isolated farmsteads. The historic landscape pattern is irregular, shaped by long-term agricultural and settlement activity, with archaeological features frequently located on knolls or lower slopes, preserving traces of earlier societies. Linear and dispersed settlement patterns, combined with the dramatic topography, create a sense of seclusion and visual prominence within the wider landscape.

Additional landscape features include elements from the surrounding LCTs, such as steep gullies, scarp slopes, waterfalls, and fast-flowing upland burns in the Rugged Mountains LCT, and ribbon lochs, meandering rivers, and small woodland pockets in the Upland Glens LCT. The Plateau Moor and Forest LCT contribute broad, undulating ridges and open moorland that enhance the perception of scale and remoteness. Rocky Coastland areas feature hummocky landforms, rocky outcrops, narrow glens, and a mixture of grassland and woodland, providing diversity in texture and visual interest along the northern Route Options. Overall, the combination of topographic variety, water features, moorland, woodland, and historic elements creates a rich, layered landscape with strong scenic and wilderness qualities, influencing both the visual amenity and environmental sensitivity of the Route Options.

The Study Area is composed of five Landscape Character Types as defined by NatureScot's "The Landscape of Scotland'. The LCTs within the Study Area are:

- LCT 35 - Rugged Mountains;
- LCT 37 - Upland Glens – Argyll;
- LCT 39 - Plateau Moor and Forest – Argyll;
- LCT 40 - Craggy Upland – Argyll; and
- LCT 53 - Rocky Coastland.

Visual

The potential visual receptors within the Study Area have been identified as shown in **Table 5.2** below. The nature of views within the Study Area is largely shaped by the combined influence of topography and forestry cover. Visual amenity is principally concerned with scenic quality, the composition of views, and the interaction of landscape characteristics as experienced from a range of locations, including summits and vantage points, recreational routes, cultural sites, lochs and glens, settlements and residential properties, and transport routes.

Table 5.2 Potential Visual Receptors within the Study Area

Type of Receptor	Identified Receptor
Settlement and Residential Receptors	Settlements: Kilchrenan, Annat, Coillaig, Cladich, Ardbrecknish and Portsonachan.

Type of Receptor	Identified Receptor
	Villages: Inverinan, Taynuilt, Lochawe.
Transport receptors	Key roads through the Study area including A85, A819, B840 and B845.
Tourist and Recreational Receptors	No National trails in the Study Area. National cycle Network 78 follows the B845 and the winding minor road along the western side of Loch Awe between Kilchrenan and Ford.
	Additional Cultural receptors other than those mentioned in Section 5.2.2 (Taynuilt to Creag Dhubh only): • Kilchurn Castle (Scheduled Monument - SM90179); • St Conan's Kirk (Category A Listed Building); and • Bridge of Awe
	Key summits: • Beinn a' Bhuiridh; • Stob Diamh; • Ben Cruachan; • Beinn a' Chocuill (Taynuilt to Creag Dhubh only); • Beinn Eunaich (Taynuilt to Creag Dhubh only); • Creag Thulach (Nant Only); • Meall an Fhithich (Nant Only); and • Beinn Ghlas (Nant Only).
	Notable Lochs: • Loch Tromlee; • Loch Awe; • Loch an Leoid; • Loch Etive; • Loch Nant; • Cruachan Reservoir; • Dubh Loch (Taynuilt to Creag Dhubh only); • Loch nan Losgan (Nant Only); • Loch a Chrion-doire (Nant Only); and • Lochan na Gealaich (Nant Only).

5.2.5 Land Use

The Study Area used for the land use appraisal has been defined by the boundaries of the Route Options, extending to 2 km from the Route Options for access and recreation. An overview of constraints is shown on **Figure 10: Land Use Constraints, Appendix 1**.

Agriculture

The Study Area consists of Agricultural land with classifications ranging between 5.1 and 7, classified by the Scottish Government Soil Maps[14].

Taynuilt to Creag Dhubh

The Route Options pass over classification 5.3 at the northern extent in the vicinity of Taynuilt substation. Upon the approach to the B845 in Glen Nant National Forest, Route Option 1-4 transition to crossing over classifications 6.1 and 5.2. Route Options 5 & 6 instead transition to classifications 6.3. All Route Options then cross classifications 5.2, 5.3, 6.3 and 7 on the northern and southern banks of Loch Awe.

Nant

The Route Options pass over predominantly agricultural land classification 6.3. There are small areas of classification 5.2 intersecting Nant Route Option 1 in the vicinity of the Nant substation, and Nant Route Option 2 in the vicinity of B845.

Fernoch

The Fernoch Extension Route passes predominantly over agricultural land classification 6.3, with smaller areas of classifications 5.2 and 6.1 intersected at its western extent.

Infrastructure

Taynuilt to Creag Dhubh

The Taynuilt to Creag Dhubh Route Options generally remain in close proximity to the existing Inverary to Taynuilt OHL in the northern extent of the Study Area, with some deviation at the crossing of Loch Awe. It also intersects 132kV OHL connections to Fernoch and Nant substations, requiring coordination to manage crossings and ensure safety. Operational wind farms at Carraig Gheal and Beinn Ghlas are located on the western boundary of the study area but remain unaffected by the proposed development.

Nant

The Nant Study Area intersects several existing overhead lines within the study area, including the Nant OHL and the Inverary to Taynuilt OHL. These intersections will require careful planning to manage crossings and maintain network integrity. The Route Options also pass near the existing Fernoch OHL, although this does not require a crossing. The presence of multiple existing lines influences design considerations and construction methodology.

Fernoch

The Fernoch Extension Option, by its nature, intersects both the Fernoch OHL and the Inverary to Taynuilt OHL.

Forestry

This landscape is characterised by a mosaic of commercial conifer plantations, native woodland, open ground, and areas of wet, peaty soils. Forestry within the study area is managed under multiple ownerships and includes windfirm plantation blocks, which are susceptible to windthrow due to coastal exposure, upland topography, and shallow rooting in peat soils. The area also contains sections of Ancient Woodland and priority habitats, requiring careful consideration during route selection and construction planning.

Taynuilt to Creag Dhubh

[14] Scotland's Environment (2021) Scotland Environment Map. https://map.environment.gov.scot/Soil_maps/?layer=5

The Taynuilt to Creag Dhubh Route Options also predominantly traverse forestry land classified as Grade F5 south of Loch Awe and in the vicinity of the Creag Dhubh substation, with limited flexibility for tree crop growth and management. However, areas of Grade F2 land, offering very good flexibility for tree crops, occur immediately surrounding the Taynuilt substation, while Grade F4 land with moderate flexibility is present on either side of Loch Awe and south of the substation. Forestry operations in this area typically include clear felling, thinning, windblow clearance, timber extraction, replanting, and forest road construction, alongside selective felling and habitat restoration in native woodlands. These activities are undertaken in compliance with forestry regulations and environmental standards to balance timber production with biodiversity and landscape conservation. Recent works around Creag Dhubh substation have included clearance of commercial conifer plantations and vegetation along access routes, with ongoing management felling along the Creag Dhubh to Dalmally[15] and Creag Dhubh to Inverary[16] OHLs to align with the wider construction programme and regulatory requirements.

Nant and Fernoch

According to Scottish Government Soil Maps, the Nant Route Options and Fernoch Extension Route predominantly traverse forestry land classified as Grade F5, indicating limited flexibility for the growth and management of tree crops. Certain sections of Nant Route Options 1 and 2 also include areas of Grade F4 land, which offers moderate flexibility for tree crop management, particularly around Loch Awe between Loch an Droighinn and Dubh Loch, and south of the Taynuilt substation. The route passes through a mix of open ground, Ancient Woodland, and commercial conifer plantations under multiple ownerships. Both routes intersect windfirm plantation blocks assessed as moderately susceptible to windthrow due to coastal exposure, upland terrain, and shallow rooting in wet, peaty soils and bog habitats. Additional management felling may be required to maintain woodland stability and mitigate windthrow risk.

Recreation

Taynuilt to Creag Dhubh

Scotland Environment Maps show that the Glen Nant path, which follows the B845 between Achlonan and Kilchrenan and forms part of a National Cycle Route, runs parallel to sections of Route Options 3 and 4 and is crossed by Route Options 1 and 2. No core paths or National Cycle Routes intersect Route Options 5 and 6.

Nant

Several core paths are present within the Study Area and are intersected by a number of route options. Core Path C173(e), which follows the minor road between Annat and Collaig, and Core Path C300(c), which runs alongside the B845, are intersected by the Nant route options. Overall, the majority of route options cross or run adjacent to established core paths within the area.

Fernoch

The Fernoch Extension Route intersects a single core path, Core Path C300(c) as it follows the route of the B845 in a north-south orientation.

5.2.6 Planning

Policy

The relevant Local Development Plans (LDPs) to the appraisal are the Argyll and Bute LDP2[17]. There are numerous policies within the current and proposed LDPs on the protection of the natural and

[15] https://www.ssen-transmission.co.uk/projects/project-map/creag-dhubh---dalmally-275kv-connection/
[16] https://www.ssen-transmission.co.uk/projects/project-map/creag-dhubh---inveraray-275kv-overhead-line/
[17] https://www.argyll-bute.gov.uk/planning-and-building/planning-policy/local-development-plan-2

built environments that are relevant in the consideration of the development of electricity infrastructure, of which Policy 30 is particularly relevant to the Proposed Development. The Proposed Development would form part of the low carbon strategy envisaged in NPF4[18]. NPF4 recognises that the transmission network has a crucial role to play in facilitating the delivery of low carbon energy system.

Proposals

Within the vicinity of the Route Options are multiple proposed OHL or underground cables (UGC) developments:

- Taynuilt – Tullich 33 kV (OHL/UGC) to the north (connecting to the Taynuilt substation); and
- Creag Dhubh – Dalmally 275 kV OHL to the south (connecting to the proposed Creag Dhubh substation), currently under construction.

Additionally, proposed wind farm projects are also located in the vicinity of the Route Options:

- Beinn Ghlas II and Musdale Windfarms to the northwest.

Taynuilt to Creag Dhubh

Housing Allocation area M4005, in the site of the Barrachander Quarry, intersects Route Options 1 and 2 (along with the existing OHL).

Nant and Fernoch

No housing allocations or other allocations from the LDP intersect either the Nant Route Options or Fernoch Extension Route.

5.3 Engineering Constraints

5.3.1 Infrastructure Crossings

Major Crossings

Major crossings include other OHLs of 132kV and above, Railways, rivers orloch of more than 200m in width, navigable waterways, motorways and other major roads, major pipelines and other significant infrastructure. These crossing require specific OHL design solutions and can greatly constrain route selection and detailed alignment.

All Taynuilt to Creag Dhubh Route Options cross Loch Awe. Route Options 1 and 2 intersect the existing Nant and Fernoch OHLs.

The Nant Route Options each intersect at least one existing overhead line, namely the existing Nant OHL or the existing Taynuilt to Inveraray OHL.

The Fernoch Extension Route intersects both the existing Fernoch OHL and the Taynuilt to Inverary OHL.

Road Crossings

Road crossings include all road crossing excluding those considered under major crossings. Private tracks and driveways may also be included where the need for access to be maintained is present or where relatively high traffic volumes are anticipated. Whilst there is a lesser impact on the OHL from these crossings, measures are still required and collectively they can greatly constrain an option.

[18] Scottish Government (2023) National Planning Framework 4. https://www.gov.scot/publications/national-planning-framework-4/

Key roads through the area includes the A85, A819, B840 and B845.

5.3.2 *Environmental Design*

Elevation

Elevations within the Study Area range from a minimum of 34 m to approximately 276 m AOD in the Taynuilt to Creag Dhubh Route Options and from a minimum of 51 m to 267 m AOD in the Nant Route Options.

The Nant Route Options and Fernoch Extension Route are predominantly below 200 m AOD.

Atmospheric Pollution

The atmospheric pollution has been checked based from the data gather from National Atmospheric Emission Inventory (NAEI) 23. The NAEI provides information on the following pollutants that are deemed to affect the performance of OHLs:

- Carbon Dioxide;
- Nitrogen Dioxide;
- Nitrogen Oxide;
- Sulphur Dioxide; and
- Particulate matters (10 µm, 2.5 µm, 1 µm and 0.1 µm).

No areas of high pollution have been identified within the Study Area.

Contaminated Land

There are no known areas of contaminated land or evidence of a risk of contaminated land identified within the Route Options. An Unexploded Ordnance (UXO) detailed desk study and constraints assessment has been undertaken and identified a number of potential sources of UXO hazards within the Study Area. These included World War II bombing ranges, military training areas, post-war UXO finds and aircraft crash sites. For the majority of the Study Area, evidence indicates that the risk of a UXO hazard being present owing to military activity is low. However, in some discrete locations, a moderate to high UXO hazard level may exist, particularly within the boundaries of former or current military establishments such as airfields and defensive installations.

Flooding

Flood risk has been reviewed with reference to the SEPA Flood Map, including fluvial, pluvial and coastal flood extents and the 0.5% annual probability (1 in 200 year) flood event.

The majority of the Taynuilt to Creag Dhubh Route Options and the Fernoch Extension Route are not located within extensive areas of medium or high flood risk as defined by SEPA. However, SEPA mapping identifies localised areas of fluvial and surface water flood risk associated with watercourses and drainage pathways within the Study Area. In particular:

- Localised areas adjacent to Kilchrenan Burn are identified as being at high likelihood of fluvial flooding.
- Limited areas of fluvial flood risk are mapped along sections of the River Nant near Taynuilt.
- Surface water flood risk is mapped along minor watercourses and steep slope drainage paths that discharge towards Loch Awe.

Where Route Options intersect mapped flood risk zones, these interactions are limited in spatial extent and typically associated with discrete watercourse crossings.

Open water bodies within the Study Area, including Loch Awe and Lochan na Gealaich (Lussa Loch), are identified on the SEPA Flood Map as permanent water features rather than floodplains. While overhead line crossings of these water bodies are required, these do not represent flood risk to the route itself and will be addressed through appropriate span design and clearance in accordance with relevant standards.

Review of the SEPA Flood Maps indicates that both Nant Route Options intersect localised areas of fluvial and pluvial flood risk, primarily associated with minor watercourses and surface water flow paths. These areas are limited in extent and do not represent extensive floodplains. SEPA mapping identifies small areas of high likelihood flooding associated with certain watercourses; however, these are limited to discrete channel and drainage features. No Route Option passes through large, continuous areas of high flood risk.

5.3.3 Ground Conditions

Terrain

The terrain has been assessed by reviewing the average gradient and maximum gradients along with the maximum and average slopes of the terrain along the Route Options using Google Earth elevation profile. Steep slopes along the Route Options can cause significant issues with regards to routeing, maintenance, access and construction. This would cause Route Options with larger slopes to be more difficult to utilise and would increase costs for building and maintenance. The terrain within the Study Area is fairly steep with gradients below 30% throughout Study Area.

Peat

Peat distribution within the Study Area has been informed by data from the British Geological Survey peat mapping.

Peat deposits are present along all Route Options. In most Route Options, more than 20% of the route length passes through areas where peat coverage exceeds approximately 50% of the routes width. The presence of peat represents a constraint that will require careful consideration during detailed alignment selection and foundation design. However, at Routing stage, the extent and distribution of peat are broadly comparable across the Route Options.

5.3.4 Construction and Maintenance

Access

The study area contains a network of designated Core Paths and sections of a National Cycle Route. These paths provide important recreational and active travel opportunities, and their intersection with Route Options is a key consideration for maintaining public access and amenity.

Taynuilt to Creag Dhubh

This section contains the Glen Nant path, which follows the B845 between Achlonan and Kilchrenan. The path runs parallel to some route options and is crossed by others. The B845 also forms part of a National Cycle Route, which is an important feature for active travel and tourism in the area.

Nant

The Nant area includes several Core Paths that intersect or run close to the proposed route options. These include paths near Annat to Collaig, along the B845, and through woodland areas around Fernoch Hill and Loch nan Losgann. These paths are valued for recreation and access to

natural landscapes, and their presence requires careful consideration to minimise disruption and maintain public amenity.

Fernoch

The Fernoch Extension Route intersects one core path, running alongside the B845.

Angle Towers

The approximate number of angle towers has been assessed for each Route Option by observing the number of angles of deviation along the centre line of the route. OHLs with a high number of angle supports tend to be more difficult to construct, due to the number of angle pull throughs, and often require more extensive access. As such, an Option with a large number of angle supports is at a greater risk of being constrained.

5.3.5 Proximity

Clearance Distance

Although the Study Area is not a highly populated and urban dense location, due to the limited amount of land area and the number of environmental factors along each route (peatland, Special Protection Areas, bodies of water etc), it isn't possible to achieve a clearance of more than 250 m in certain sections of each route. However, it is not achievable to have a clearance of 100 m in all sections. Some areas have clearance of over 250 m, however some are limited to 100 m.

Wind Farms

No existing or planned wind farms have been found in close proximity to any of the Route Options.

Communication Masts

The OS map and cell mapper website[19] have been assessed to check if any communication masts are present within the Study Area. There were no communications masts found within 1 km of the Nant Route Options. However, three communication masts were found to be located within close proximity to each of the Taynuilt to Creag Dhubh Route Options.

Urban Environments

No Route Option passes through any particular urban development and have limited number of isolated/dispersed dwellings. Therefore, will not be addressed further in this report.

5.4 Economic Constraints

5.4.1 Regulated Company

SSEN Transmission 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 electricity transmission system in its licenced area' SSEN transmission are regulated by Ofgem, who determine how much revenue SSEN Transmission can earn from customers to cover the cost of maintaining and reinforcing the electricity network.

Ultimately the costs associated with development, operation and maintenance of the Transmission systems form part of the energy user's bill. Further information on how SSEN Transmission are regulated be found here: https://www.ssen-transmission.co.uk/information-centre/industry-andregulation/

[19] Cell Mapper (N/A). Cellular Tower and Signal Map. [online]. Available at: https://www.cellmapper.net/

5.4.2 *Maintenance of Supply*

SSEN Transmission are required to maintain a reliable network. It is highlighted that Route Options which require crossing of an existing line will incur increased costs and risk elements associated with the required temporary OHL diversions which would be needed to maintain a Transmission connection during the construction phase.

5.4.3 *Assumptions and Limitations*

Due to the early stage of the project limited information was available to make a cost comparison appraisal, resulting in the requirement to make very high-level assumptions for each of the cost comparison elements considered. More detailed cost estimates of the investment required to build the replacement OHL will be derived as the project progresses.

6. COMPARATIVE APPRAISAL

This section provides a summary of the environmental, engineering and economic characteristics relevant to each Route Option and an appraisal of the performance of each Route Option with reference to each characteristic. Only those factors which inform the comparative appraisal are assessed.

The OHL's Route Options are appraised independently from one another, as a Potential Route for both the Taynuilt to Creag Dhubh and Nant OHLs is required. In addition, despite not being a comparative appraisal, the appraisal of the Fernoch Extension Route is also presented here in accordance with SSE guidance. The Potential Route Options are shown on **Figure 3: Potential Route Options, Appendix 1**.

6.1 Taynuilt to Creag Dhubh Route Options

6.1.1 Environmental Appraisal

Natural Heritage

Designations

Route Option 1 is rated **RED** due to its potential to directly impact Loch Etive Woods SAC and Glen Nant SSSI in the northern area of the Route Option as the Route Option directly intersects the SAC and SSSI. It should be noted that these intersections are minor, limited to the southeastern edge of the designated sites (as shown in **Figure 5: Ecology and Ornithology Constraints, Appendix 1**). Additionally, it intersects multiple parcels of Ancient Woodland throughout the length of the Route Option (totalling 41.9 ha) the majority of which is associated with Glen Nant Forest, potentially causing extensive habitat loss.

Route Option 2 also receives a **RED** rating due to similar identified constraints. As it shares the same route as Route Option 1 in the northern section, it intersects the same designated sites as described above. Similarly, it intersects multiple parcels of Ancient Woodland across the length of the Route Option (totalling 44.8 ha), posing significant risks to its conservation status.

Route Option 3 is considered less impactful on Loch Etive Woods SAC, Glen Nant SSSI, and Glen Nant NNR as it is over 500 meters away from these areas in comparison to Route Options 1 and 2, separated by the existing OHL. However, it intersects multiple parcels of Ancient Woodland (totalling 54.7 ha), resulting in a **RED** rating due to potential extensive habitat loss.

Route Option 4 is similar to Option 3 in terms of proximity to the designated sites, being over 500 meters away and separated by the existing OHL. Nonetheless, it intersects the largest total area of Ancient Woodland at 74.4 ha (again consisting of multiple parcels throughout the length of the Route Option, the majority of which being in the northern section), leading to a **RED** rating due to significant habitat loss.

Route Option 5 is also over 500 meters away from Loch Etive Woods SAC, Glen Nant SSSI, Glen Nant NNR, and Coille Leitire SSSI, separated by the existing OHL to the west and the River Awe to the east. It intersects 32.0 ha of Ancient Woodland, across multiple parcels, warranting a **RED** rating for potential habitat loss.

Route Option 6, like Option 5, is over 500 meters from the aforementioned designated sites and separated from these by the existing OHL to the west and River Awe to the east. It intersects 51.7 ha of Ancient Woodland, across multiple parcels, leading to a **RED** rating due to potential extensive habitat loss.

Protected Species

The Route Options are all rated **GREEN** with respect to their impact on European and UK Protected Species. These species are known to reside in woodlands associated with Glen Nant Forest and Loch Awe, which could be potentially affected by each Route Option. However, the likelihood of significant constraints due to these species is considered low across all options. This assessment is due to the relatively limited area of woodlands directly impacted and the potential for avoidance through careful micrositing efforts.

Habitats

Route Option 1 is rated **RED** due to its intersection with key habitats, specifically 35.4 ha of irreplaceable Ancient Woodland and 43.4 ha of Blanket Bog, an Annex I habitat. The areas of Ancient Woodland are distributed in parcels throughout the length of the Route Option, primarily in the northern section, with smaller parcels on the northern bank of Loch Awe. The areas of Blanket Bog are concentrated in the middle of the Route Option, southwest of Loch Tromlee. Although it does not intersect or border any Annex I habitats associated with a SAC, the significant impact on these key habitats results in a **RED** rating.

Similarly, Route Option 2 is rated **RED**, intersecting 36.5 ha of irreplaceable Ancient Woodland and 40.3 ha of Blanket Bog. The areas of Ancient Woodland are distributed in parcels throughout the length of the Route Option, primarily in the northern section, with smaller parcels on the banks of Loch Awe. The areas of Blanket Bog are concentrated in the middle of the Route Option, southwest of Loch Tromlee. Despite not intersecting or bordering any SAC-associated Annex I habitats, the impact on these critical habitats leads to its **RED** rating.

Route Option 3 is rated **RED**, with intersections involving 46.6 ha of irreplaceable Ancient Woodland and 22.0 ha of Blanket Bog, the lowest Blanket Bog impact among all options. The areas of Ancient Woodland are distributed in parcels throughout the length of the Route Option, primarily in the northern section, with smaller parcels in the vicinity of Creag Dhubh substation. The areas of Blanket Bog are concentrated in the middle of the Route Option, south of Loch Tromlee. It does not intersect or border SAC-associated Annex I habitats, yet the considerable impact on these key habitats justifies the **RED** rating.

Route Option 4 is significantly impactful, intersecting 64.6 ha of Ancient Woodland—the highest among all options, and 28.3 ha of Blanket Bog. The areas of Ancient Woodland are distributed in parcels throughout the length of the Route Option, concentrated in the northern section, the north bank of Loch Awe and in the vicinity of Creag Dhubh substation. The areas of Blanket Bog are concentrated in the middle of the Route Option, south of Loch Tromlee. Although it does not intersect or border SAC-associated Annex I habitats, the extensive intersection with critical habitats results in a **RED** rating.

Route Option 5 also receives a **RED** rating, intersecting 31.6 ha of irreplaceable Ancient Woodland, the lowest among all options, and 39.8 ha of Blanket Bog. The areas of Ancient Woodland are distributed in parcels throughout the length of the Route Option, primarily in the northern section, with smaller parcels in the vicinity of Creag Dhubh substation. The areas of Blanket Bog are concentrated in the middle of the Route Option, east of Loch Tromlee. It does not intersect or border any SAC-associated Annex I habitats, but the impact on these key habitats leads to its RED rating.

Finally, Route Option 6 is rated RED due to intersecting 49.5 ha of irreplaceable Ancient Woodland and 46.1 ha of Blanket Bog, the highest Blanket Bog impact among all Route Options. The areas of Ancient Woodland are distributed in parcels throughout the length of the Route Option, concentrated in the northern section, the north bank of Loch Awe and in the vicinity of Creag Dhubh substation. The areas of Blanket Bog are concentrated in the middle of the Route Option, east of Loch Tromlee. It does not intersect or border any SAC-associated Annex I habitats, but the significant impact on key habitats results in the RED rating.

Ornithology

The Route Options are all rated **AMBER** due to their moderate potential to impact Schedule 1 birds and BoCC species thought to reside in the area. Although each Route Option lies outside the 1 km disturbance distance of the Glen Etive and Glen Fyne SPA. This designation poses a moderate constraint given the potential presence of associated species such as the golden eagle in the vicinity. Until ornithology surveys provide definitive data regarding the presence or absence of these species, a similar potential disturbance is assumed for BoCC species.

Hydrology and Hydrogeology

Route Option 1 is rated **RED** due to its intersections with three Scottish Water DWPAs (as shown on **Figure 6: Hydrology Constraints, Appendix 1**). Additionally, it faces various AMBER level constraints related to run-off and pollution pathways, including a 650 m crossing of Loch Awe, seven watercourses, 46.2 ha of High Risk Flood area, impacts on five PWS locations, and potential hydrological changes from required felling during construction.

Route Option 2 also receives a **RED** rating, intersecting with two Scottish Water DWPAs and facing similar AMBER constraints. It involves a 750 m crossing of Loch Awe, seven watercourses, 52.2 ha of High Risk Flood area, impacts on four PWS locations, and potential hydrological changes from felling during construction.

Route Option 3 is rated **RED**, intersecting two Scottish Water DWPAs and encountering AMBER constraints. This route includes a 600 m crossing of Loch Awe, five watercourses, 51.4 ha of High Risk Flood area, impacts on one PWS location, and potential hydrological changes from felling during construction.

Route Option 4 is rated **RED** due to its intersection with one Scottish Water DWPA, along with AMBER level constraints. It features a 920 m crossing of Loch Awe, five watercourses, 64.0 ha of High Risk Flood area, impacts on three PWS locations, and potential hydrological changes from felling during construction.

Route Option 5 is rated **RED**, intersecting one Scottish Water DWPA and facing similar AMBER constraints. This route includes a 600 m crossing of Loch Awe, three watercourses, 46.4 ha of High Risk Flood area, impacts on two PWS locations, and potential hydrological changes from felling during construction.

Route Option 6 is rated **AMBER** with constraints related to the potential for run-off and pollution pathways, including a 920 m crossing of Loch Awe, three watercourses, 59.1 ha of High Risk Flood area, impacts on four PWS locations, and potential hydrological changes from felling during construction. Notably, it avoids a RED rating as it does not intersect any Scottish Water DWPAs.

Geology

Route Option 1 is rated **RED** due to its intersection with large sections of Class 1 and Class 2 peatland. Specifically, it crosses 60.8 ha of Class 1 peatland and 189.8 ha of Class 2 peatland (as shown on **Figure 7: Geology and Soils Constraints, Appendix 1**), marking the largest intersection of Class 1 peatland among all the options. These peatlands are considered nationally important carbon-rich soil resources by NatureScot.

Similarly, Route Option 2 is rated **RED** for intersecting 60.8 ha of Class 1 peatland and 160.0 ha of Class 2 peatland. Like Route Option 1, it hits the largest intersection of Class 1 peatland, highlighting significant impact on nationally important carbon-rich soil resources.

Route Option 3 is also rated **RED** as it crosses 30.9 ha of Class 1 peatland and 175.9 ha of Class 2 peatland, both recognized as nationally important carbon-rich soil resources by NatureScot.

Route Option 4 is rated **RED**, intersecting 30.9 ha of Class 1 peatland and 184.4 ha of Class 2 peatland. Despite being lower in Class 1 peatland intersection than Options 1 and 2, it still poses considerable impact on these vital soil resources.

Route Option 5 is rated **AMBER**, crossing the smallest area of Class 1 peatland at 6.2 ha and 297.3 ha of Class 2 peatland. The minimal intersection of Class 1 peatland suggests potential avoidance through careful micrositing during alignment.

Route Option 6 is also rated **AMBER**, intersecting 6.2 ha of Class 1 peatland and the highest area of Class 2 peatland at 305.8 ha. While the Class 1 peatland impact is low and potentially avoidable, the extensive Class 2 peatland intersection requires careful consideration.

Conclusion

Based on the comprehensive analysis of natural heritage environment, Route Options 5 is overall the preferred Route Option. While all Route Options face significant intersections with environmentally sensitive areas such as Ancient Woodland, peatlands, and public water supply areas, Route Option 5 intersects the lowest amount of Ancient Woodland (32.0 ha) and Irreplaceable Habitats (71.4 ha). Additionally, Route Option 5 is rated AMBER for Hydrology and Hydrogeology, indicating manageable constraints related to runoff and pollution pathways, and minimizing ecological disruption. Finally, Route Option 5 (alongside Route Option 6) is preferred from the perspective of peat, intersecting the smallest area of Class 1 Peatland (6.2 ha) and being one of only two Route Options with the potential to completely avoid Class 1 Peatland (though at the expense of having the second highest intersection of Class 2 Peatland (297.3 ha)).

Cultural Heritage

Designated Heritage Assets

Route Option 1 is rated **AMBER** due to the potential impact on 34 designated heritage assets within 2 km of the Route Option, including 17 Scheduled Monuments, 16 Listed Buildings, and one Conservation Area (as shown on **Figure 8: Cultural Heritage Constraints, Appendix 1**). The most significant potential impacts are on the settings of Caisteal Suidhe Cheannaidh Dun (SM 4120) and Barbreck Cairn (SM 4033), both located 0.1 km from the route.

Route Option 2 is rated **AMBER** as it intersects one designated heritage asset, Carn Ban, Cairn (SM 4048), a Scheduled Monument of national importance. Within 2 km of this route, there are 38 designated heritage assets, including 21 Scheduled Monuments, 16 Listed Buildings, and one Conservation Area. The route also runs 0.1 km west of Caisteal Suidhe Cheannaidh Dun (SM 4120), potentially impacting its setting.

Route Option 3 is rated **AMBER**, intersecting four designated heritage assets, all Scheduled Monuments of high sensitivity, including Rockhill Farm Cairn (SM 4201), Rockhill Farm Crannogs (SM 4202), Holy Stone, Cup and Ring Marked stone, Kilchrenan (SM 4049), and Carn an Roin Crannog, Loch Awe (SM 4193). The proximity of these monuments could create a pinch point within the Route Option, making them difficult to avoid, especially Rockhill Farm Crannogs and Carn an Roin Crannog. The setting of Holy Stone is less likely to be significantly impacted due to its disturbed surroundings.

Route Option 4 is rated **AMBER**, intersecting three Scheduled Monuments of high sensitivity—Holy Stone (SM 4049), Rockhill Farm Crannogs (SM 4202), and Ceann Mara Crannog (SM 4229). The proximity of these monuments could create a pinch point, making them difficult to avoid, particularly the Rockhill Farm Crannogs and Ceann Mara Crannog. The setting of Holy Stone is less likely to be significantly impacted due to its disturbed surroundings.

Route Option 5 is rated **AMBER**, intersecting four Scheduled Monuments of high sensitivity—Holy Stone (SM 4049), Carn an Roin Crannog (SM 4193), Rockhill Farm Cairn (SM 4201), and Rockhill

Farm Crannogs (SM 4202). The proximity of these monuments, especially Rockhill Farm Crannogs and Carn an Roin Crannog, could create a pinch point making them difficult to avoid. The setting of Holy Stone is less likely to be significantly impacted due to its disturbed surroundings. The route also runs 0.3 km east of Eilean Tighe Bhain, Fortified Dwelling (SM 4037), potentially impacting its setting.

Route Option 6 is rated **AMBER**, intersecting three Scheduled Monuments of high sensitivity—Holy Stone (SM 4049), Rockhill Farm Crannogs (SM 4202), and Ceann Mara Crannog (SM 4229). The proximity of these monuments could create a pinch point, making them difficult to avoid, particularly the Rockhill Farm Crannogs and Ceann Mara Crannog. The setting of Holy Stone is less likely to be significantly impacted due to its disturbed surroundings. The route also runs 400 m east of Eilean Tighe Bhain, Fortified Dwelling (SM 4037), potentially impacting its setting.

Non-Designated Heritage Assets

Route Option 1 is rated **GREEN** due to the presence of 31 non-designated heritage assets within the route. These assets, ranging from prehistoric cairns and house platforms to medieval and post-medieval settlement remains, are predominantly of negligible, low, and medium sensitivity. Although two large townships, Poll an Dubhaich and Achnacraobh (WOSAS 14000 and 13852), may require careful routing to avoid significant impacts, most assets can be readily avoided during the alignment stage.

Route Option 2 is also rated **GREEN**, with 20 non-designated heritage assets identified. These include prehistoric cairns and medieval/post-medieval settlement remains, ranging from minor intrinsic value to medium sensitivity. The large township Poll an Dubhaich (WOSAS 14000) requires careful routing to minimise effects. Otherwise, heritage assets are well distributed and can be avoided during alignment.

Route Option 3 is rated **GREEN** based on the identification of 20 non-designated heritage assets. This includes prehistoric house platforms and cairns, and post-medieval settlement remains. The large township Barachander (WOSAS 14763) necessitates careful routing to prevent significant effects. Generally, assets can be avoided during alignment.

Route Option 4 is rated **GREEN**, with 20 recorded non-designated heritage assets within the route corridor. Prehistoric house platforms and cairns and medieval and post-medieval settlement remains account for the majority of these assets. The large townships (WOSAS 14763 and 45913) require strategic routing to avoid impacts. Most assets can be easily avoided during the alignment stage.

Route Option 5 is rated **GREEN** due to 46 identified non-designated heritage assets, including prehistoric house platforms, hut circles, and cairns, alongside settlement remains from medieval and post-medieval periods. Larger townships (WOSAS 14763 and 45913) need careful routing. Overall, assets are distributed evenly and are avoidable during alignment.

Route Option 6 is also rated **GREEN**, sharing the presence of 46 non-designated heritage assets similar to Option 5. These include prehistoric house platforms, hut circles, cairns, and medieval/post-medieval settlement remains. Large townships (WOSAS 14763 and 45913) require routing strategies to avoid impacts. Heritage assets are generally well distributed and avoidable during alignment.

Conclusion

Considering both designated and non-designated heritage assets, the preferred route options are Route Options 1 and 2. These options are rated **GREEN** because they avoid or intersect the least number of Scheduled Monuments within the Inner Study Area, significantly reducing potential impacts on nationally important heritage assets. Route Option 1 avoids all Scheduled Monuments entirely, while Route Option 2 intersects only one, making them the most effective in minimizing

direct impacts on designated heritage sites. Although other options (3 to 6) offer flexibility for alignment adjustments, they intersect multiple high-sensitivity Scheduled Monuments, increasing the complexity of mitigation and statutory compliance. Therefore, Route Options 1 and 2 are considered the most suitable choices for the proposed development, offering the greatest potential for heritage preservation and reducing project risk.

People

Proximity to Dwellings

Route Option 1 is rated **AMBER**. Within the boundary of the Route Option, there are five groups of residential properties, including the town of Taynuilt, and six residential properties lie within the Route Option (as shown on **Figure 9: Landscape Constraints, Appendix 1**). Careful consideration at the alignment stage will be necessary to avoid overbearing impacts on residential amenity by maintaining an appropriate distance (over twice the nominal height of towers) from residential properties.

Route Option 2 is also rated **AMBER**, intersecting four residential properties and lying within 250 meters of multiple residential clusters. As with Route Option 1, careful alignment planning will be required to mitigate impacts and maintain an appropriate distance from residential properties.

Route Option 3, rated **AMBER**, intersects 23 residential properties, the highest among the route options. These properties are concentrated around two settlements: Barachander and Ardbrecknish. Avoiding overbearing impacts on residential amenity will necessitate thoughtful alignment to maintain appropriate distances, particularly as the route would be located to the west of the existing OHL.

Route Option 4 intersects 15 residential properties concentrated around Barachander and is rated **AMBER**. Similar to the other options, careful alignment planning will ensure the route maintains an appropriate distance from residential properties.

Route Option 5 intersects 11 residential properties concentrated around Ardbrecknish and is rated **AMBER**. Proper alignment will be essential to mitigate impacts on residential amenity by maintaining appropriate distances from the properties, particularly to the west of the existing OHL.

Route Option 6 is rated **GREEN** as it intersects three residential properties, which are not concentrated at any specific point along the route. This lower level of intersection allows for easier avoidance of overbearing impacts on residential amenity by maintaining an appropriate distance from residential properties.

Conclusion

Based on the assessment of proximity to residential areas, Route Option 6 is the preferred route. It is rated **GREEN** as it intersects only three residential properties, which are not concentrated at any specific point along the route. This minimal level of intersection allows for easier mitigation of significant effects and avoids overbearing impacts on residential amenity by maintaining a distance in excess of 2 to 4 tower heights. In contrast, Route Options 1 to 5 are rated **AMBER** due to their higher intersections with residential properties, necessitating more complex alignment and mitigation strategies to minimize impacts. Therefore, Route Option 6 is the most suitable choice based on minimising residential impacts.

Landscape and Visual

Designations

Route Option 1 is rated **AMBER** as it is located within the North Argyll APQ, potentially affecting its special qualities. It is unlikely to have significant effects on Loch Etive Mountains WLA due to its distance (approximately 1.5 km east) and localized construction impact. The Ben Lui WLA would

experience minimal visibility impact due to intervening topography, though some views might be possible from elevated summits. Ardanaiseig House GDL would have limited visibility of the route, primarily during the Loch Awe crossing.

Route Options 2 to 6 are all rated **RED** due to similar reasons. Each is situated within the North Argyll APQ, potentially adversely affecting its special qualities. The nearest significant designation within the 10 km study area is Loch Etive Mountains WLA, located around 1.5 km east of each route option. Given the distance, significant effects on Loch Etive Mountains WLA are unlikely, and construction impacts would be localized and short-term. The Ben Lui WLA would be screened by intervening topography northeast of the A819 road corridor, with elevated viewpoints offering some visibility, partially mitigated by commercial woodland. Ardanaiseig House GDL would have limited visibility of the routes due to substantial screening by mature woodland, except during the Loch Awe crossing, where long-distance visibility would be affected.

Landscape Character

Route Options 1 & 3-6 are rated **RED** due to its potential to adversely affect the setting and experience of the Craggy Upland (LCT 40) and Rocky Coastland (LCT 53) areas of Argyll through major construction activities and permanent presence of major engineered infrastructure (in this case, new OHLs). Both these LCTs are characterised by moorland, forests and hills/outcrops. The imposition of an OHL across a significant length of these LCTs would directly compromise local features where they are present. While temporary, construction impacts would introduce additional visual impositions on the LCT characteristics across a wider area than the permanent OHL due to the presence of construction traffic and infrastructure.

Route Option 2 is rated **AMBER**, as it lies within the same LCTs as identified in the case of Route Option 1. Temporary construction impacts would be localized and short-term, while permanent impacts would be confined to the immediate area. Introducing a new visual element requires careful consideration to reduce cumulative visual impacts from existing developments. Given its limited visibility and the expansive nature of the landscapes, significant effects are likely, but potentially less severe than Route Option 1.

Visual

Route Option 1 is rated **RED** due to its potential visual effects on settlements, transport roads, summits, recreational paths, and cultural sites. The presence of the construction of the OHL and permanent imposition of said OHL would compromise the experience of viewpoints from and along these assets. Kilchrenan and Portsonachan would have clear views of Route Option 1, whereas Taynuilt would experience partially mitigated visual effects due to screening by buildings, topography, and vegetation. Properties along the B845 would likely have clear views. Partial views of Route Option 1 would be available from the A85 and A819, while visibility would exist along the B840 and B845. Elevated sections of Core Path C300 would also experience view of the Route Option. At distant summits like Beinn a' Bhuiridh and Ben Cruachan, the route would be noticeable but not dominant. Kilchurn Castle and Kilconan's Kirk would be mostly shielded, though some long-range views across Loch Awe could be affected.

Route Option 2 is also rated **RED**, with potential visual effects on the aforementioned receptor groups. Kilchrenan and Portsonachan would have prominent views of the OHL, with considerable visibility around Loch Awe. Taynuilt would experience visual effects, especially skylining to the southeast. The B845 to Kilchrenan would have broken views. Visibility varies across key transport routes, with high visibility from B840 and B845 compromising the view from these roads. Elevated sections of Core Path C300 would face potential visual effects. At distant summits, visibility would be moderated by terrain. Kilchurn Castle would be fully screened, while Loch Awe crossing would potentially impact long-range views. Kilconan's Kirk would see minimal impact except for distant views down Loch Awe.

Route Option 3, rated **AMBER**, would have considerable visual effects, particularly prominent in relation to the views from the residential properties at Fanans and Ardbrecknish. Taynuilt, the Bridge of Awe, and properties along the B845 views would be screened by terrain and vegetation. Potential visual effects of this Route Option on transport receptors would be limited to users of the B840 and B845 and local residents along these roads. The Route Option would be visible from elevated sections of Core Path C300. At summits like Beinn a' Bhuiridh and Ben Cruachan, Route Option 3 would be noticeable but not dominant. Kilchurn Castle and Kilconan's Kirk would be partially shielded, though long-range views at Loch Awe would be impacted.

Route Option 4 is also rated **AMBER** with similar impacts to Option 3, affecting settlements like Fanans, Ardbrecknish, and Kilchrenan, with varying degrees of visibility due to screening. Transport roads would experience partial views along A819 and B845, but high visibility from A85 and clear sightlines from B840 and B845 would potentially impact views. Users of core Path C300 would experience visual effects, and visual amenity from summits would be affected by presence of the Route Option, though the OHL infrastructure would not dominate viewer experiences. Kilchurn Castle would be fully screened, while Loch Awe crossing views would be impacted. Kilconan's Kirk would see minimal impact aside from long-distance views down Loch Awe.

Route Option 5 is rated **RED** due to potential visual impacts on settlements, transport roads, recreational paths, summits, and cultural sites. Fanans and Ardbrecknish residents would have substantial views on Route Option 5. Taynuilt residents and properties along B845 would experience varied views of the Route Option 5 impacted by terrain and vegetation. Transport roads would have partial screening but high visibility from A85 and open aspects from B840 and B845. Users of Core Path C300 would face potential visual effects, with OHL infrastructure being prominently visible at various points along the Core Path. At summits like Beinn a' Bhuiridh and Ben Cruachan the Route Option would also be visible, though these would not dominate the user experience. Kilchurn Castle and Kilconan's Kirk would be fully screened, though Loch Awe crossing would impact long-range views down Loch Awe.

Route Option 6 is rated **RED** for similar reasons. It would be prominent for residents of Fanans and Ardbrecknish. Taynuilt, Bridge of Awe, and properties along B845 would have varied views affected by terrain and vegetation. Visibility across transport roads would vary, with high visibility from A85 and B840 and potential impacts from B845. The Route Option would be notably visible from Core Path C300, affecting user experience. Summits such as Beinn a' Bhuiridh and Ben Cruachan would have moderate visibility due to distance and terrain features. Kilchurn Castle would be fully screened, while Loch Awe crossing would significantly impact long-range views. Kilconan's Kirk would see minimal impact except for views down Loch Awe.

Conclusion

Although all Route Options have potential to significantly affect a large number of visual receptors, notably users of B845 and B840 roads, and residents in the numbers of settlements, Route Option 3 is the preferred route based on landscape and visual considerations. It consistently demonstrates moderate visual impacts that can be effectively managed with careful planning and mitigation strategies. Unlike Route Options 1, 2, 5, and 6, which are considered to have potential to significantly affect a large number of visual receptors. It also strikes a balance by minimizing disruptions to settlements, transport roads, recreational paths, summits, and cultural sites. It should be noted that Route Option 4 is similarly preferred, having a similar appraisal to Route Option 3, the main difference being the reduced span of Loch Awe.

Land Use

Agriculture

All six Route Options are rated **GREEN** based on agricultural land quality. The Scottish Government Soil Maps indicate that the land within each corridor has an agricultural land classification ranging between 5.1 and 6.3, deeming it to be of poor quality.

Forestry

Route Option 1 is rated **AMBER** as it intersects approximately 344 ha of commercial plantation woodland near the Creag Dhubh substation. The installation of the overhead line (OHL) requires cutting edge trees, potentially affecting the stability of the retained crop and increasing the risk of windthrow. Management felling is proposed to mitigate these risks and maintain overall woodland stability, but the creation of operational corridors is unlikely to compromise forestry operations or commercial returns, given the periodic restructuring of woodland.

Route Option 2 is also rated **AMBER**, intersecting roughly 305 ha of commercial woodland. Similar to Route Option 1, cutting edge trees for OHL installation necessitates management felling to prevent windthrow and ensure stability. Forestry operations and commercial returns are expected to remain unaffected due to regular woodland management practices.

Route Option 3, rated **AMBER**, intersects around 276 ha of commercial woodland, presenting fewer impacts compared to Options 1 and 2. However, management felling is still required to maintain woodland stability and prevent isolation of coupes, ensuring that forestry operations and commercial returns are not compromised.

Route Option 4 intersects approximately 303 ha of commercial woodland and is rated **AMBER**. The same management felling measures are required to maintain stability and avoid windthrow, similar to the other options. Forestry operations and commercial returns remain unaffected by the development.

Route Option 5 is rated **AMBER**, intersecting roughly 334 ha of commercial woodland. The required management felling will prevent windthrow and maintain the stability of the woodland, without compromising forestry operations or commercial returns.

Route Option 6 is rated **AMBER** due to its intersection with approximately 360 ha of commercial woodland, the largest area among the options. Despite the substantial intersection, management felling will ensure woodland stability, and forestry operations and commercial returns should remain unaffected.

Recreation

Route Option 1 is rated **AMBER** as it crosses the Glen Nant path (C300(b)) at multiple locations. This path is part of a core path network and a National Cycle Route (NCN 78). Despite these intersections, the proposed development will not sever or compromise the recreational use of the pathway.

Route Option 2 also receives an **AMBER** rating for similar reasons. It intersects the Glen Nant path multiple times, but the nature of the proposed development ensures that the recreational use remains intact.

Route Options 3 and 4 are rated **GREEN**. Although they run parallel with the Glen Nant path for 2.5 km, there is no potential to sever or compromise this path or its recreational use with these Route Options.

Route Options 5 and 6 are rated **GREEN** as they do not intersect or converge upon any recreational route, thereby avoiding any impact on recreational pathways entirely.

Conclusion

Route Options 5 to 6 are preferred based on their minimal impact on agriculture, forestry, and recreation. All six route options are rated **GREEN** for agriculture, indicating poor-quality land. Route

Options 3 to 6 are rated **GREEN** for recreation, as they do not intersect any core paths or recreational routes, preserving their use. Additionally, Route Options 5 and 6 do not run alongside any core paths either. Although all options are rated **AMBER** for forestry due to the need for management felling, Route Options 3 and 4 intersect less commercial woodland compared to other Route Options. Overall, Route Options 5 and 6 strike the best balance in minimizing environmental impacts while supporting the project's development.

Planning

All six Route Options are rated **GREEN** as they align with the low carbon strategy envisaged in NPF4 and supported by Policies 4 and 30 from the Argyll and Bute Local Development Plan (LDP). These policies promote renewable energy developments that adhere to sustainable principles and include the necessary infrastructure for electricity transmission and distribution networks.

Policy

Route Options 1 and 2 are rated **AMBER** as they intersect the Argyll and Bute LDP Housing Allocation M4005, which includes the site of the Barrachander Quarry. This allocation also intersects the existing overhead line (OHL), presenting potential conflicts with the proposed development.

Route Options 3 to 6 are rated **GREEN** because there are no proposed or consented projects within the routes that would conflict with the proposed development.

Conclusion

The preferred routes are Route Options 3 to 6. These options are rated **GREEN** and do not intersect any proposed or consented projects, thus avoiding potential conflicts. Additionally, they align with the low carbon strategy envisaged in NPF4 and are supported by Policies 4 and 30 from the Argyll and Bute Local Development Plan 2, promoting renewable energy developments with sustainable principles and necessary transmission infrastructure.

6.1.2 Engineering Appraisal

Infrastructure Crossings

Major Crossings

All Routes Options have two or more major crossings including 132kV OHLs, Railway Crossings, A type Road Crossings and the Loch Awe Crossing.

All proposed Route Options involve crossing Loch Awe with varying span lengths:

- Route Option 1 spans 630 m;
- Route 2 spans 750 m;
- Route 3 spans 661 m;
- Route 4 spans 975m;
- Route 5 spans 661m; and
- Route 6 spans 975m.

Additionally, Route Options 5 and 6 also cross the 220m wide Lochan na Gealaich. The length of the Loch Awe crossing is a key engineering constraint. As span length increases, conductor sag increases requiring substantially taller towers to maintain statutory electrical clearances. For the preferred crossing (Route Option 3) of approximately 661m, crossing towers of around 90m in height are anticipated (taller than standard 132kV towers). Longer crossings would require disproportionately taller structures. By comparison, a span of approximately 975m could require

towers in excess of 130m, resulting in larger foundations, increased land take, greater construction complexity, higher cost and increased landscape and visual effects. In engineering terms, crossings in the range of 600–700m are considered feasible without introducing exceptional tower structures. Crossings approaching 900m or greater are materially less favourable due to the scale of infrastructure required.

Route Options 1, 3 and 5 are appraised as similar, with their Loch Awe crossings width varying from 630 m (Route Option 1) to 661 m (Route Option 3 and Route Option 5) with only difference that Route 1 has three 132kV OHL crossings while Route 5 has two 132kV OHL crossings. Similarly, Route Options 4 and 6 are appraised as similar, with Loch Awe crossing widths of 975 m, while 132kV OHL crossing are 3 and 2 respectively of 132KV OHL crossings. Route Option 2 is appraised between these, with a 750 m Loch Awe crossing, alongside three 132kV OHL crossings.

Route Options 1 and 3 stand out as the most favourable choices because of their narrower crossing width of Loch Awe compared to the other route options although both options have three 132kV OHL crossings. In contrast, Route Options 4 and 6 are the least preferred Route Options because of having 132kV OHL crossings as well as 275kV OHL crossing and having highest Loch Awe crossing width of 972 m and 975 m respectively.

Road Crossings

Route Options 3-6 cross the A85 Road. In addition, all six Route Options cross the B845 Road near Barachander and B840 Road near Portsonachan, Upper Sonachan or Ardbreacknish.

All routes are required to cross a major A class road (A85) upon leaving the vicinity of Taynuilt substation. Government road traffic data statistics indicates a daily average of 2,786 vehicles in the year 2023 and 2,845 vehicles in the year 2024.[20]. The B845 and B840 are single track roads, and as such, construction-related traffic management and temporary disruption would require careful planning.

For all Route Options, there are a multitude of small tracks which would allow access for construction and maintenance of the OHL towers.

Environmental Design

Elevation

Google Earth profiles of all Route Options show that in Route Option 3 and 4 less than 10% of the route length lies above 200 m Above Ordnance Datum (AOD). For all other Route Options, between 10% and 25% of the route length exceeds 200 m AOD.

Route options 3 and 4 have been assigned a GREEN Rating since less than 10% of their routes are above 200m AOD. In addition, Route Options 1, 2, 5 and 6 have been assigned an **AMBER** Rating, as 10-25% of their routes exceed 200m AOD.

Atmospheric Pollution

Based upon the pollution maps, all Route Options shown have similar levels of pollution across all of the pollution types. Of each of the pollution types, CO_2 and NO_2 pollution types show intermediate concentration along the route paths. Therefore, the RAG ratings are **AMBER** for all Route Options.

Contaminated Land

Based on Zetica's UXO desk study and risk assessment, no significant sources of UXO hazard have been identified on the site. Therefore, all Route Options are rated **GREEN**.

[20] https://roadtraffic.dft.gov.uk/count-points/30775

Flooding

Route Options 2, 4, 5 and 6 are assigned a **RED** Rating due to more than 5% of the route length with over 80% of the width located within a 1 in 200-year flood zone. Route Options 1 and 3 are assigned an **AMBER** Rating, as 2%-5% of their length is similarly affected.

Ground Conditions

Terrain

The Route Options have been assessed using Google Earth to determine the average gradient, maximum gradients, and maximum and average slopes. All Route Options received an **AMBER** rating based on these terrain assessments. The slopes vary slightly across the Route Options, with Route Options 3 and 5 having the most extreme slope variations, reaching maximum values of 27.4% and 27.5%, respectively. Route Option 4 has gradual slope averages, while Route Options 2 and 5 exhibit the highest average slopes.

Peat

The British Geological Survey website has been used to determine peat areas along each Route Options. Peat is present in all Route Options. Almost all routes have greater than 20% of option length with greater than 50% of width through peat. Therefore, all Route Options have been rated **RED**. The tower positioning should be selected in such a way that maximum peat depth should be avoided during the alignment stage.

Construction and Maintenance

Access

Almost all Route Options share similar constraints regarding access tracks. Starting from Taynuilt up to Kilchrenan and Annat, all Route Options are consistently within 1.5 km of the existing B845 permanent road. For the first 5 km from Taynuilt, there is an additional access track that occasionally crosses or remains within 1 km of the proposed Route Options, ultimately connecting to the B845 Road near Shellachan. Moreover, the proposed Route Options intersect several scattered existing access tracks that connect various villages, populations, forests, and farms, offering additional access points along the Route Options. After crossing Loch Awe, all routes intersect the B840 Road at various locations. The last 3 km from Creag Dhubh substation feature scattered access tracks crossing the proposed routes at different points. However, certain sections of the proposed Route Options are over 1 km from the nearest permanent path, complicating access in these areas. Consequently, all Route Options scored **AMBER** due to the lack of a complete access track from start to end and limited tracks along the route, with many sections over 1 km from the existing road network.

A comparative analysis of access availability reveals that Route Options 1 and 2 are the most favorable, given that approximately 8.9 km of both routes from Taynuilt to Kilchrenan lie within 1 km of the B845 Road. Additionally, an existing access track extends from Taynuilt approximately 3 km towards Kilchrenan. Route Options 3 and 4 are the second-best options, featuring roughly 3 km of existing access track from Ardbrecknish up to Creag Dhubh substation and approximately 8.9 km of route within 1.5 km of the B845 Road. Route Options 1-4 are similar in terms of accessibility, with about 8 to 10 km of route from Taynuilt to Kilchrenan situated within 1.1 km of the B845 Road and intersecting 5 to 8 existing access tracks. In contrast, Route Options 5 and 6 are less favorable due to the lack of access along the route, particularly from Taynuilt to Creag na Gobhair.

Angle Supports

The approximate number of angle towers has been assessed for each Route Option by observing the number of angles of deviation along the centre line of the route, with Route Option 3 having the least number of angle supports (11) and is therefore rated **GREEN**. From an Engineering

viewpoint, this would be a preferrable option due to the fact that angle towers result in much higher costs and higher amounts of land take. Route Option 4 is rated **AMBER**, having 12 angle supports. All the other options have in excess of 12 angle towers and are therefore rated **RED**.

Proximity

Clearance

All Route Options are rated **AMBER** as they are capable of providing clearance of 100-250m.

Windfarms

No existing or proposed wind farms are located within any of the proposed Route Options. Therefore, all Route Options are rated **GREEN**.

Communication Masts

One communications mast is located 700 m from the centerline of Route Options 1 and 2, while another mast is found 13 m from the centerline of Route Options 3 and 4 near Taynuilt. An additional mast is situated within Route Option 6, just after the Loch Awe crossing near Ardbrecknish, at a distance of 178 m from the centerline. Although these masts may not pose a direct issue, careful planning will be required during the alignment stage to ensure that towers and conductors do not obstruct the line of sight for the masts. All routes are therefore rated **RED**.

Urban Environment

Proposed Route Options do not pass through any Urban Developments and have limited number of isolated/dispersed dwellings so rated as **GREEN**.

Other Considerations

Route Lengths

Route Option 3 has shortest route as it takes a more direct approach from Kilchrenan to the Creag Dhubh substation. Route Options 2 and 4 are less than 5% longer than the shortest route, while Route Options 1, 5 and 6 are the longest routes and are equal or less than 10% longer than the shortest routes therefore all have score a **GREEN** rating. Due to the increase in length, the longer route would result in increased cost and construction time.

DNO Crossings

Route Options 5 and 6 are rated **AMBER** due to having three DNO crossings each. Conversely, all other Route Options are rated **RED** as they have four or five DNO crossings each.

6.1.3 Cost Appraisal

Capital

Construction

Route Options 1 and 3 are rated **GREEN** for construction costs, due to the shortest overall crossing lengths. In addition, Route Option 3 requires the lowest number of angle towers. Route Options 2 and 5 are by comparison rated as **AMBER**, with Route Options 4 and 6 rated as **RED**.

Diversions

Route Options 1-3 are rated **GREEN** due to requiring the fewest diversions. By comparison, Route Option 4, requiring the most, is rated **RED**. Route Options 5 and 6 are rated **AMBER**.

Public Road Improvements

Route Options 1 and 2 are rated **AMBER** as they have the greatest existing access provision available. However, some new access tracks will still be required. By comparison, Route Options 3-6 are rated RED due to the need for extensive new access provision.

Tree Felling, Land Assembly and Consents Mitigation

All Route Options are rated **AMBER** for these factors, with little discernible differential between them. Associated costs will be required for all three factors, resulting in the AMBER appraisal.

Operational

Inspections and Maintenance

Route Options 1-3 are rated GREEN for both factors due to the assumed lower comparable costs as a result of shorter lengths and access requirements. By comparison, Route Options 4 and 6 are rated RED, with Route Option 5 rated AMBER.

Conclusion

Route Option 1 is the second longest route but has the shortest Loch Awe crossing. . The route also encroaches on to the largest area of Class 1 Peatland and would incur additional costs of a peat management plan and suitable land to manage the peat. Notably there would also be possible incursion onto Ancient Woodland, with the potential to incur additional management costs.

Route Option 2 has the longest loch Awe crossing and therefore would have to use larger towers to facilitate the clearances required. This route also would encroach onto Class 1 Peatland and would therefore require a peat management plan; it would also impact on a local housing allocation. Lastly this Route Option is likely to be least favourate, due to it crossing a local well known walking route and being located close to the housing allocation.

Route Option 3 is preferred due to it having a relatively short loch crossing. It also comes in as one of the shortest main routes and has fewer angle towers. It also has good access in comparison to others. This Route Option appears to be preferable in cost as it affects much lower volumes of Class 1 Peatland and other Environmental factors. However, it still encroaches onto a large portion of Ancient Woodland that will incur additional mitigation costs.

Route Option 4 has one of the longest Loch crossings and therefore would require larger (and therefore more costly) towers. Whilst a comparatively shorter overall route it will also cross the distribution network four times which would result in extra costs. The Route Option impacts areas of Class 1 & 2 Peatland that would require a peat management plan.

Route Option 5 is the third longest route and is located 2.5 km away from the existing tee in point for the Fernoch OHL, resulting in the need for 2.5 km of pole work to extend the Fernoch OHL to a new tee in point. There is also limited access to the line meaning extensive new access works. Both of these factors would incur significant costs. Additionally, although having a reduced intersection with environmental factors, it still impacts a smaller area of Ancient Woodland and Class 1 Peatland which would incur additional management costs.

Route Option 6 has the longest loch crossing out of the selected routes and has the least access due to the route being across mostly remote landscape and therefore require the most extensive access works. Both of these factors would result in significant associated costs. Additionally, although having a reduced intersection with environmental factors, it still impacts a smaller area of Ancient Woodland and Class 1 Peatland which would incur additional management costs.

6.1.4 *Potential Route Option*

Environmental Appraisal

Route Option 6 initially appears favourable from its RAG appraisal. However, it has significant constraints, including the highest intersections of irreplaceable Ancient Woodland (49.5 ha) and Blanket Bog (46.1 ha), in addition to substantial visual amenity impacts. Both of these being key constraints from a consenting perspective. The route also intersects a large area of Class 2 peatland, another key constraint. While it performs well in hydrology, proximity to dwellings, and recreation, these advantages are outweighed by the aforementioned severe environmental constraints, making Route Option 6 less favourable overall.

Route Options 3 therefore emerges Preferred Route Options. When considering the overall RAG ratings and the weighting of key constraints and topics within, this Route Option is preferred due to:

- Preferred from the perspective of both internationally and nationally designated natural heritage sites, avoiding direct intersection with notable sites such as Glen Nant SSSI unlike other Route Options. Additional it is the preferred Route Option in relation to habitats, , one of the key constraints to the Proposed Development, intersecting the smallest overall area of irreplaceable Ancient Woodland and Annex I Blanket Bog (68.6 ha);
- A middle ground from the perspective of total Ancient Woodland (semi-natural origin) (second worst with 54.7 ha within the Route Option) and Peat perspectives (second best Class 1 and 2 peatland). Avoiding intersecting the largest areas of ancient woodland as well as Class 1 and Class 2 peatland;
- Preferred from an ornithology perspective as it maintains the greatest distance from the constraints to the east and southwest;
- Preferred from the perspective of visual, particularly associated with the crossing of Loch Awe of which it would have the shortest crossing and therefore most limited affect on the views of the Loch, which is likely to be one of the key constraints to the Proposed Development; and
- Is least preferred from the perspective of people (proximity to dwellings, which is the total number of dwellings in the route option), but this is considered one of the most practicable to mitigate by micro-siting the alignment within the extent of the route option at the next development stage.

Engineering Appraisal

Based on engineering considerations, each route has been evaluated based on technical constraints including such as the Loch Awe crossing length and access availability. Route Option 3 is preferred due to having the highest number of GREEN RAG ratings and the lowest number of RED RAG ratings. The Route Option requires a manageable crossing length of 661 m (the joint second shortest), fewer angle points, simpler construction requirements, and better access, thereby lowering overall risk.

Route Option 1, the second most preferred, has a marginally shorter crossing but involves greater constraints near properties and the adjacent B840 road, increasing its effective span to approximately 703 m.

Economic Appraisal

Based on the comparative cost analysis and consideration of engineering and environmental impacts, Route Option 3 emerges as the preferred choice among the six Route Options. This Route Option stands out due to its relatively short Loch Awe crossing, reduced overall route length, and

the lowest number of angles supports required. It benefits from better access compared to other options, resulting in potentially lower construction and operational costs. Additionally, Route Option 3 affects smaller volumes of peat and other environmental factors, which should minimise both mitigation requirements and associated expenses. Although it does encroach upon ancient woodland, the overall environmental impact is less significant than in other routes, making it the most cost-effective and practical solution.

Overall, the Loch Awe crossing remains the critical factor for feasibility. Route Option 3, with its favourable crossing length, fewer angle points, and superior access, represents the most balanced solution. Route Option 1, while feasible and a secondary preference, is disadvantaged by its longer effective span. The other Route Options are less favourable due to extensive spans and/or significant construction difficulties, such as extensive access requirements.

Summary

RAG Table summaries are provided in **Appendix 2**. Taking into account environmental, engineering and cost perspectives, Route Option 3 (see **Figure 3: Potential Route Options, Appendix 1**) is identified as the Potential Route due to its balanced performance across all key considerations.

6.2 Nant Route Options

6.2.1 Environmental Appraisal

Natural Heritage

Designations

Nant Route Option 1 is rated **RED**, primarily due to its direct traverse through 9.5 ha of Ancient Woodland in the vicinity of Nant substation (as shown on **Figure 5: Ecology and Ornithology Constraints, Appendix 1**), leading to significant habitat loss and posing a threat to the conservation status of these ecologically valuable areas. Both options lack national or internationally designated sites within the Study Area.

Nant Route Option 2 is rated **GREEN** as it completely avoids any intersection with Ancient Woodland, thus preventing habitat destruction and enabling better conservation outcomes. With this clear distinction, Route Option 2 is the more environmentally favourable choice, minimising ecological disruption and better supporting conservation objectives.

Protected Species

Nant Route Option 1 intersects seven watercourses potentially used by otters and areas of Ancient Woodland that could support pine marten, badger, red squirrel, and roosting bats, leading to an **AMBER** rating due to these ecological considerations. Although both options cross the same number of watercourses, Nant Route Option 1's interaction with Ancient Woodland increases its potential impact on various species.

Nant Route Option 2, with a **GREEN** rating, crosses more upland habitats, offering limited potential for the presence of badgers, pine marten, and red squirrels compared to Nant Route Option 1. This lower risk to critical wildlife habitats and species makes Nant Route Option 2 the more environmentally favourable choice.

Habitats

Nant Route Option 1 is rated **RED** due to intersecting 9.3 ha of irreplaceable Ancient Woodland and 13.3 ha of Blanket Bog, an Annex I habitat. The area of Ancient Woodland is concentrated in the aforementioned area to the immediate east of Nant substation. The areas of blanket bog are located in the open areas to the west and north of Kilchrenan. This Route Option crosses areas of

semi-natural broadleaved woodland, including sessile oak woodland, which are of high biodiversity importance and difficult to replace if removed.

Similarly, Nant Route Option 2 is rated **RED**, intersecting a larger area of 34.3 ha of irreplaceable Blanket Bog, an Annex I habitat. The areas of blanket bog are concentrated to the west and northwest of Kilchrenan, with smaller parcels to the north of Kilchrenan. This Route Option primarily crosses areas of upland grazing and marshy grassland, which are deemed to have lower biodiversity significance.

Ornithology

Nant Route Option 1 has an **AMBER** RAG rating, as it crosses upland habitats capable of supporting territories for white-tailed eagles, hen harriers, and black grouse lekking habitat. Specifically, a hen harrier territory and a black grouse lek are present at the eastern end of the Route Option, highlighting potential impacts on these important bird species.

Similarly, Nant Route Option 2 also has an **AMBER** RAG rating for crossing identical upland habitats that support white-tailed eagle and hen harrier territories and black grouse lekking habitat. Like Option 1, a hen harrier territory and a black grouse lek are found at the eastern end of this Route Option, indicating similar potential impacts on these bird species.

Hydrology and Hydrogeology

Nant Route Option 1 is rated **AMBER** due to the potential for run-off and pollution pathways in relation to various environmental receptors. This route crosses seven watercourses, including Allt Ath nan Each, Allt na h-airigh, Kilcrhenan Burn, and four unnamed watercourses. Nant Route Option 1 connects to the Proposed Taynuilt to Creag Dhubh OHL immediately north of Lochan na Gealaich, intersects 3.9 ha of High Risk Flood Area, and does not intersect any PWS sources or DWPAs.

Similarly, Nant Route Option 2 is rated **AMBER**. It crosses the same seven watercourses, connecting to the Proposed Taynuilt to Creag Dhubh OHL north of Lochan na Gealaich. The Route Option also intersects the same 3.9 ha of High Risk Flood Area, and does not intersect any PWS sources or DWPA.

Geology

Nant Route Option 1 is rated **AMBER** due to crossing 104.3 ha of Class 2 peatland, indicating significant potential environmental impacts (as shown on **Figure 7: Geology and Soils Constraints, Appendix 1**). Given the large area of peatland intersection, it is unlikely that such impacts could be avoided through micro-siting, presenting considerable challenges for conservation efforts.

Similarly, Nant Route Option 2 also carries an **AMBER** rating, as it crosses 96.6 ha of Class 2 peatland. Like Option 1, the extensive area of intersection makes it improbable to avoid environmental impacts through micro-siting.

Conclusion

Nant Route Option 1 is rated **RED** for significant habitat loss by crossing Ancient Woodland, **AMBER** for potential impacts on protected species and direct impacts on non-designated heritage assets, and it poses the potential for significant visual impacts including on residential amenity. Nant Route Option 2 avoids Ancient Woodland, poses fewer impacts on protected species, and has minimal visual and residential impacts. Both options intersect critical habitats and have similar hydrology and geology constraints. Overall, Nant Route Option 2 is preferred for its lower environmental and residential impacts and better conservation outcomes.

Cultural Heritage

Designated Heritage Assets

Nant Route Option 1 has been rated **AMBER** for designated heritage assets due to its proximity to Auchachenna, chambered cairn (SM4047), which lies approximately 12 meters south of the Route Option (see **Figure 8: Cultural Heritage Constraints, Appendix 1**). This proximity has the potential to significantly compromise the setting of the Scheduled Monument. There are no statutory designated heritage assets directly within the Inner Study Area, and given the separation distance, it is unlikely that Nant Route Option 1 would result in significant adverse impacts on the settings of other designated heritage assets located in the Outer Study Area (nine Scheduled Monuments, one Category B Listed Building, and two Category C Listed Buildings).

Nant Route Option 2 has been rated **GREEN** for designated heritage assets as none are located within the Inner Study Area. Within the Outer Study Area, the closest heritage asset, Larach Bhan, cup marked rock (SM4049), is located approximately 350 meters east of the route's eastern end, and the potential impact on its setting is considered insignificant due to existing forestry and a modern road. Another Scheduled Monument, Caisteal Suidhe Cheannaidh, dun (SM4120), lies within 500 meters of the route and occupies a commanding position overlooking the valley with extensive views. Despite this proximity, significant adverse impacts on the dun's setting are unlikely due to the separation distance. There are no statutory designated heritage assets directly within this route, and it is unlikely that Option 2 would impact the settings of other heritage assets, including nine Scheduled Monuments, one Category B Listed Building, and one Category C Listed Building within the Outer Study Area.

Non-Designated Heritage Assets

Overall, Nant Route Option 1 is rated **AMBER** due to the potential for direct impacts on non-designated heritage assets There are 12 previously recorded non-designated heritage assets within Route Option 1, mostly clustered towards the western end. The remains of two townships (WoSAS 13102 and 14741) spread over large areas with multiple buildings and associated features may present difficulties in avoiding these assets. The route crosses the remains of Coillage township (WoSAS 13102; NSR Site), necessitating careful consideration to minimize setting impacts. Four additional NSR Sites, of potential schedulable quality and high sensitivity, are recorded within 2 km of the route. The closest is Lochan na Gealaich crannog (WoSAS 1627), located approximately 60 m from the eastern end, posing potential adverse impacts on its setting. Other NSR Sites over 800 m from the route are unlikely to be significantly affected.

Similarly, Nant Route Option 2 is rated **AMBER** for potential direct impacts on non-designated heritage assets and settings of assets of possible schedulable quality. Ten previously recorded non-designated heritage assets lie within this route, mainly medieval or post-medieval settlement remains, modern hydroelectric structures, and a prehistoric cairn (WoSAS 46317) at Collaig. Like Option 1, it crosses the remains of Coillage township (WoSAS 13102; NSR Site), requiring careful consideration to minimize impacts. Four further NSR Sites, of potential schedulable quality and high sensitivity, are within 2 km, with the closest being Lochan na Gealaich crannog (WoSAS 1627), approximately 60 m from the eastern end, posing similar adverse impact risks. Other NSR Sites over 1 km away are unlikely to be adversely affected.

Conclusion

Nant Route Option 1 is rated **AMBER** for designated heritage assets due to its proximity to Auchachenna chambered cairn, potentially compromising its setting. Conversely, Nant Route Option 2 is rated **GREEN** as it is unlikely to impact the setting of any designated heritage assets. Therefore, Option 2 is preferred for its minimal impact on designated heritage assets.

People

Proximity to Dwellings

Nant Route Option 1 is rated **AMBER** because it lies within 250 meters of five groups of residential properties, including the town of Taynuilt, and the route intersects directly with six residential properties (as shown on **Figure 9: Landscape Constraints, Appendix 1**). To mitigate significant effects and avoid overbearing impacts on residential amenity, careful planning at the alignment stage is necessary, particularly ensuring a distance of more than twice the nominal height of towers.

Nant Route Option 2 is rated **GREEN** as it does not intersect any residential properties. This means there is minimal impact on residential areas, reducing the need for major mitigation measures.

Conclusion

Nant Route Option 1 is rated **AMBER** due to its proximity to residential properties, requiring careful planning to mitigate impacts. Nant Route Option 2 is rated **GREEN**, avoiding any intersections with residential properties and minimizing the need for mitigation. Therefore, Option 2 is preferred for avoiding residential impacts and associated effects.

Landscape and Visual

Designations

Nant Route Option 1 is rated **AMBER** due to several potential impacts. It lies within the Argyll and Bute Area of Panoramic Quality, which may adversely affect its special qualities. It is positioned approximately 6.6 km east of Loch Etive Mountains WLA, making effects unlikely due to this distance. Temporary construction impacts would be highly localized and short-term, with permanent impacts confined to the immediate route area. Additionally, Nant Route Option 1 would be visible from a distance but largely screened from most of Ben Lui WLA due to intervening topography, with minimal visibility from associated elevated summits.

Nant Route Option 2 is also rated **AMBER** for similar reasons. It is within the Argyll and Bute Area of Panoramic Quality, potentially affecting its special qualities. Positioned 6.6 km east of Loch Etive Mountains WLA, potential visual effects are similarly unlikely due to distance. Like Nant Route Option 1, construction impacts would be localized and short-term, with permanent impacts confined to the immediate area of the Route Option. Nant Route Option 2 would also be visible from a distance but largely screened from much of Ben Lui WLA due to intervening topography, with minimal visibility from associated elevated summits.

Landscape Character

Both Nant Route Options are rated **AMBER** due to their potential to adversely affect the setting and experience of the Craggy Upland (LCT 40) and Rocky Coastland (LCT 53) areas of Argyll through construction activities and permanent presence of engineered infrastructure (in this case, new OHL). Both these LCTs are characterised by moorland, forests and hill/outcrops. The imposition of an OHL across a lengthy route within these LCTs would directly compromise local associated features where they are present, such as its rounded knolls, rock outcrops, and lochs in low-lying hollows and glens, and LCT 53, characterized by rocky outcrops, narrow glens, raised beaches, cliffs, and rounded knolls along the rocky coastline.

Visual

Nant Route Option 1 is rated **RED** due to its potential visual effects on settlements, transport routes, summits, recreational paths and cultural sites. The presence of, and construction of, an OHL would compromise the experience of view from and along these assets. The settlements of Kilchrenan and Portsonachan fall within its study area, with both having unobstructed views of the proposed Route Option, prominently affecting short, medium, and long-range views. Kilchrenan would experience significant skylining effects to the west and north, while Portsonachan would have clear views across Loch Awe, also facing skylining to the north. Several key transport routes,

including the A85, A819, B840, and B845, vary in visibility of the proposed route, with the B845 offering clear and prominent views due to proximity and open landscape, though softened by topography. Elevated sections of Core Path C300 would experience on recreational amenity from close proximity and visibility. From summits and vantage points like Beinn a' Bhuiridh and Ben Cruachan, the route would introduce a visual element, but its impact is mitigated by distance, terrain, and vegetation. Additionally, Kilchurn Castle would be completely screened by surrounding topography and vegetation, preventing long-range visibility.

Nant Route Option 2 is rated **AMBER** with similar but less extensive constraints to Nant Route Option 1 due to the increased presence of natural screening of visibility. Views of the Route Option would be partially visible from the settlements of Kilchrenan and Portsonachan, affecting short, medium, and long-range views. Kilchrenan would see partial skylining effects to the west and north, and Portsonachan would have partial views across Loch Awe with possible skylining impacts. Transport routes would experience varying visibility, with the B845 offering clear views but softened by topography and surrounding landscape, though skylining remains a potential issue. Elevated sections of Core Path C300 would similarly face on recreational amenity. From summits like Beinn a' Bhuiridh and Ben Cruachan, the visual impact of the route would be noticeable but mitigated by natural landforms and commercial forestry providing further visual buffers. Kilchurn Castle would be completely screened by topography and mature vegetation, preventing long-range visibility.

Conclusion

Both Nant Route Options 1 and 2 are rated **AMBER** for designations and landscape character due to potential impacts on the North Argyll Area of Panoramic Quality and landscape characteristics, requiring careful management of visual impacts. For visual, Route Option 1 is rated **RED** due to potential visual impacts on settlements, transport routes, and recreational paths, while Route Option 2 is rated **AMBER** with partial visual impacts mitigated by natural terrain and forestry. Therefore, Nant Route Option 2 is preferred for its lower visual impact and better integration with the surrounding landscape and designations.

Land Use

Agriculture

Nant Route Option 1 is rated **GREEN** since the Scottish Government Soil Maps indicate that the land within this corridor has an agricultural land classification ranging between 5.1 and 6.3, deeming it to be of poor quality.

Similarly, Nant Route Option 2 is rated **GREEN**, as the Scottish Government Soil Maps show that the land within this corridor also has an agricultural land classification between 5.1 and 6.3, indicating poor quality.

Forestry

Nant Route Option 1 is rated **RED** as the route intersects areas of Ancient Woodland and Native Broadleaves. This route would likely require further management felling to facilitate construction and operation.

Nant Route Option 2 is rated **AMBER** as it intersects areas of Native Mixed Broadleaves and Commercial Woodland; however, it does not cross any areas of Ancient Woodland.

Recreation

Nant Route Option 1 is rated **AMBER** as it crosses Core Path C173(e) and Core Path C300(c). However, due to the nature of the proposed development, this intersection would not sever or compromise the recreational use of these pathways post-construction.

Nant Route Option 2 is rated **AMBER** as it crosses Core Path C300(c). Similar to Option 1, the intersection would not sever or compromise the recreational use of the pathway post-construction.

Conclusion

Both Nant Route Options 1 and 2 are rated **GREEN** for agriculture, indicating minimal impact due to poor land quality. For forestry, Option 1 is rated **RED** due to significant impacts on Ancient Woodland and Native Broadleaves, while Option 2 is rated **AMBER** as it avoids Ancient Woodland but affects other types of woodland. In terms of recreation, both options are rated **AMBER**, as they cross Core Paths without compromising their use post-construction. Overall, Nant Route Option 2 is preferred due to its lower impact on forestry.

Planning

Policy

Both Nant Route Options are rated **GREEN** as the proposed development aligns with the low carbon strategy envisaged in NPF4, which emphasizes the critical role of the transmission network in facilitating low carbon energy systems.

Both Nant Route Options 1 and 2 are rated **GREEN** as they support the low carbon strategy in NPF4 and align with Argyll and Bute LDP 2 (policies 2 and 30) promoting sustainable renewable energy developments and the necessary transmission infrastructure.

Proposals

Both Nant Route Options are rated **GREEN** as there are no proposed or consented projects within the route that have the potential to conflict with the proposed development.

Conclusion

Both Nant Route Options 1 and 2 are rated **GREEN** for aligning with the low carbon strategy in NPF4 and the Argyll and Bute LDP 2, supporting sustainable renewable energy developments and necessary transmission infrastructure. Additionally, both options have no potential conflicts with proposed or consented projects, making them equally favourable in terms of policy and planning.

6.2.2 Engineering Appraisal

Infrastructure Crossings

Major Crossings

Both of the Nant Route Options require the crossing of the existing 132kV Taynuilt to Inveraray OHL and the B845 road and are therefore rated **RED**.

Road Crossings

None of the proposed Nant Route Options cross any major roads, although both do cross the B845, a key local road in the Study Area. However, both Nant Route Options pass over some form of existing forestry/farm access tracks. As a result, both the Nant Route Options are rated **GREEN**.

Environmental Design

Elevation

Both the Nant Route Options do not cross above 200 m across the route and therefore rated **GREEN**.

Atmospheric Pollution

Both Route Options have similar levels of pollution across all of the pollution types. Of each of the pollution types, CO_2 and NO_2 pollution types show intermediate concentration along the route paths. As a result, both Route Options are rated **AMBER**.

Contaminated Land

As per the results from an UXO desk study and risk assessment carried out by Zetica, no significant sources of UXO hazard have been identified. Therefore, both Route Options are rated **GREEN**.

Flooding

Review of the SEPA Flood Maps and the Route Selection Report indicates that both Nant Route Options intersect localised areas of fluvial and pluvial flood risk, primarily associated with minor watercourses and surface water flow paths.

These flood risk areas are limited in extent and do not represent extensive floodplains. No sections of the Nant Route Options are located within areas identified as being at high risk of flooding across a significant proportion of the route length (0.5% annual probability, 1 in 200 year event).

Potential flood risk can be managed through detailed alignment selection, tower micro-siting, and appropriate foundation design at the detailed design stage. On this basis, flooding is not considered to represent a significant constraint to route selection, and both Nant Route Options are assigned a **GREEN** rating.

Ground Conditions

Terrain

Both Route Options have slopes below 20% and therefore rated **AMBER**.

Peat

Peat distribution along the Nant Route Options has been informed by the Scotland's Soils peat mapping, supported by desk-based interpretation undertaken as part of the Route Selection Report.

Both Nant Route Options pass through areas with a high presence of peat, with sections of the route where peat coverage is extensive across the route corridor.

From an engineering standpoint, the presence of extensive peat represents a significant constraint, due to the potential requirement for specialised foundation solutions, increased construction complexity, and environmental management measures. On this basis, and considering the absolute extent of peat encountered along both Nant Route Options, both routes are assigned a **RED** rating for peat.

Construction and Maintenance

Access

Both Nant Route Options traverse across largely open moorland, and do not benefit from a continuous established or suitable access track along the full length of the Route Options. However, both Nant Route Options are within 1 km of existing forestry or farm access tracks, which could be utilised or upgraded to support construction and maintenance activities. As a result, both Nant Route Options are rated **AMBER**.

Angle Support

Nant Route Option 1 has the higher number of angle supports (7) while Nant Route Option 2 has the least (5). From an Engineering viewpoint, a reduced number of angle supports would be a preferrable option due to the fact that angle towers result in much higher costs and larger area of land take. Therefore, Nant Route Option 1 is rated **RED**, while Nant Route Option 2 is rated **GREEN**.

Proximity

Clearance

Due to environmental factors, it isn't possible to achieve a clearance of more than 250m in certain sections of each Route Option, in particular Nant Route option 1 where due to existing properties it is not achievable to have a clearance of 100m. Both Route Options are therefore rated **AMBER**.

Windfarms

No existing or proposed wind farms are located within the proposed Route Options. Therefore, both Route Options are rated **GREEN**.

Communication Masts

From the desk top survey, there were no communications maps found within 1 km of the Nant Route Options. Furthermore, as the proposals largely follow existing infrastructure the risk of there being issues with interference is low. Therefore, both Route Options are rated **GREEN**.

Urban Environment

The Nant Route Options do not pass through any Urban Developments and have limited number of isolated/dispersed dwellings so rated as **GREEN**.

Other Considerations

Route Lengths

Both Nant option's total lengths are within 10% of each other. As the Route Options have maintained as short as practicable lengths, they are therefore rated **GREEN**.

DNO Crossings

Both the Nant Route options have 2 DNO Crossings and therefore rated **AMBER**.

6.2.3 Cost Appraisal

Capital

Construction

Nant Route Option 1 is rated **RED**, namely due to its requirement for a larger number of angle towers, a significant cost component. By comparison, Nant Route Option 2 is rated **AMBER** as although it also requires angle tower, the total number is fewer.

Diversions

Nant Route Option 1 is rated **AMBER**, requiring multiple diversions due to its proximity to roads such as the B845. By comparison, Nant Route Option 2 is rated **GREEN** as it avoids the need for some of these diversions and the associated costs.

Public Road Improvements

Both Route Options are rated as **AMBER**, both requiring the provision of new access tracks to facilitate construction. A notable expense.

Tree Felling

Neither Route Option is anticipated to incur notable costs associated with tree felling so are therefore rated **GREEN**.

Land Assembly and Consents Mitigation

Nant Route Option 1 is rated **RED** for both factors due to the nature of the land the Route Option passes through, areas of peatland and blanket bog, requiring more costly management plans. By comparison, Nant Route Option 2 is rated **GREEN**.

Operation

Inspections

Nant Route Option 1 is rated **RED** due to the anticipated significant comparable inspection costs. By comparison, Nant Route Option 2 is anticipated to require significantly less costly inspections and is therefore rated **GREEN**.

Maintenance

Nant Route Option 1 is rated **RED** due to, similarly to inspection, the more costly anticipated maintenance requirements of the Route Option. By comparison, Nant Route Option 2 is rated **GREEN**.

Conclusion

Nant Route Option 1 is notably constrained. The route encounters significant challenges (indicated by only achieving one GREEN rating) such as crossing extensive Class 2 Peatland areas and requiring a higher number of angle towers, which increase both construction complexity and associated costs. The intersection of difficult ground conditions and the need for additional access makes this option less favourable in terms of cost.

Nant Route Option 2 is the least constrained and most favourable choice. It secures a higher number of GREEN ratings, indicating fewer challenges and reduced expenses compared to Nant Route Option 1. This route avoids direct impacts on designated sites, protected species, and infrastructure, which helps to minimise costly mitigation measures. Additionally, it requires fewer angle towers (five compared to a greater number for Nant Route Option 1), which significantly lowers both construction and land acquisition costs. Although Nant Route Option 2 still intersects some Class 2 Peatland and a, in comparison to Nant Route Option 1, larger area of irreplaceable blanket bog, the extent and associated costs are generally lower than those encountered by Nant Route Option 1, making it a more cost-effective solution overall.

6.2.4 Potential Route Option

Environmental Appraisal

From an environmental perspective, Route Option 2 emerges as a clear preferred Route Option. When considering the overall RAG ratings, key constraints and topics within these, Route Option 2 is the preferred due to the following:

- Is the least constrained in accordance with its RAG rating, with seven GREEN ratings and only one RED rating (see **Appendix 2**);
- Preferred from the perspective of both internationally and nationally designated natural heritage sites, in particular intersecting no areas of Ancient Woodland;
- Preferred from the Protected Species perspective as it has limited potential for protected species to be present along the Route Option;
- Preferred from the perspective of cultural heritage designations, people (proximity to dwellings), agriculture, policy and planning which are some of the key constraints to the Proposed Development;
- A middle ground from Peat perspectives (Class 2 peatland), landscape and visual, ornithology, geology, hydrology, non-designated heritage assets, forestry and recreation; and

- Is least preferred from the perspective of irreplaceable habitats (intersecting 34.3 ha of irreplaceable Annex I Blanket Bog compared to Nant Route Option 1's 13.3 ha). However, it is notable that this does not intersect any areas of irreplaceable Ancient Woodland (compared to Nant Route Option 1's 9.3 ha).

Engineering Appraisal

From an engineering perspective, Nant Route Option 2 offers several clear benefits. From a construction perspective, the reduced requirement for angle towers in comparison to Nant Route Option 1 is a clear benefit. It has manageable ground conditions, better access, and fewer angle points, simplifying construction and reducing environmental and engineering risks. This route intersects a smaller proportion of Class 2 Peatland (2.38 km or 46%) compared to Nant Route Option 1, resulting in fewer construction difficulties, environmental risks, and costs. Additionally, the route does not cross the existing 132kV main line and involves only one road crossing (the B845), minimizing overall construction and maintenance challenges.

Cost Appraisal

Based on the cost considerations and constraints detailed in the provided text, Nant Route Option 2 is the favoured choice. It is described as the least constrained and most cost-effective option, securing more GREEN ratings than Option 1, and avoiding direct impacts on designated sites, protected species, and infrastructure. Additionally, Nant Route Option 2 requires fewer angle towers and encounters less challenging ground conditions, resulting in lower construction and land acquisition costs overall.

Summary

The RAG Table summaries are provided in **Appendix 2**. Taking into account environmental, engineering and cost perspectives, Nant Route Option 2 (see **Figure 3: Potential Route Options, Appendix 1**) is identified as the Potential Route due to its balanced performance across all key considerations.

6.3 Fernoch Extension Route

6.3.1 Environmental Appraisal

Natural Heritage

Designations

The Fernoch Extension Route is rated **GREEN**, as no national or internationally designated sites are located in the Study Area and it avoids any intersection with Ancient Woodland.

Protected Species

The Route Option crosses six watercourses, which have potential to be used by otters. The Route Option also crosses upland habitats with limited potential for badger, pine marten and red squirrel to be present. The RAG rating is therefore **GREEN**.

Habitats

The Route Option crosses more upland habitats including wet and dry heath, bracken and coniferous woodland, habitats of lower importance. The Route Option intersects less than 1 ha of irreplaceable Blanket Bog (an Annex I habitat). The RAG rating is therefore **GREEN**.

Ornithology

The habitats crossed by the Route Option include upland habitats capable of supporting white-tailed eagle and hen harrier territories and black grouse lekking habitat. A hen harrier territory is

known to be present at the east end of the Route Option, as is a black grouse lek. The RAG rating is therefore **AMBER**.

Hydrology and Hydrogeology

The Fernoch Extension Route is rated **AMBER** as a result of the potential for run-off and pollution pathways in relation to the following receptors:

- Crosses six watercourses (Allt Bochain, the Kilchrenan Burn, and four other unnamed watercourses);
- connects to the Proposed Taynuilt – Creag Dhuhb OHL immediately south of Loch Tromlee;
- crosses 2.5 ha of High Risk Flood Area; and
- Intersects one PWS and DWPA.

Geology

The Fernoch Extension Route is rated **RED** as it is underlain by sections of Class 1 and Class 2 peatland. The Route Option crosses 6.3 ha of Class 1 peatland and 101.2 ha of Class 2 peatland.

Cultural Heritage

Designated Heritage Assets

The Fernoch Extension Route has been rated **AMBER** for designated heritage assets as it passes in close proximity too and may compromise the setting of Loch Tromlee, fortified dwelling (SM4037), located c.380 m to the north-northeast of the Route Option on an island within Loch Tromlee. One additional Scheduled Monument, Caisteal Suidhe Cheannaidh, dun (SM4120) lies within 500 m of the Route Option. The dun occupies a commanding position at the east end of a rock ridge and overlooks the valley that runs between Taynuilt and Kilchrenan, with extensive views out to the north, south and east.

There are no statutory designated heritage assets within the Route Option. Given the separation distance it is considered that the Route Option would unlikely result in significant adverse impacts on the settings of any other designated heritage assets (four Scheduled Monuments, one Category B Listed Building and one Category C Listed Building).

Non-Designated Heritage Assets

There are no non-designated heritage assets within the Fernoch Extension Route and no NSR Sites (of schedulable quality) within 2 km of the Route Option. Therefore, the Fernoch Extension Route is rated **GREEN**.

People

Proximity to Dwellings

The Fernoch Extension Route intersects four residential properties. However, these are concentrated together at the southern central extent of the Route Option (southwest of Loch Tromlee). As a result, it should be possible through micrositing to ensure that the resultant OHL maintains an appropriate distance from these properties, Therefore, the Route Option is rated **AMBER**.

Landscape and Visual

Designations

Ther Fernoch Extension Route is rated **AMBER** for the following reasons:

- North Argyll APQ – The Route Option lies entirely within the Argyll and Bute Area of Panoramic Quality and has the potential to adversely affect a numerous special qualities described in Section 5.8.5 of the baseline description;
- Loch Etive mountains WLA - The nearest designated area within the 10 km study area is Loch Etive mountains WLA, located approximately 8.9 km east of the Route Option. Due to it's distance, it is therefore unlikely that the Route Option would result in significant effects on this WLA. Temporary construction impacts would be highly localised and would be for a relatively short duration. Permanent impacts would be confined to the immediate of the Route Option, with any long-term effects similarly limited to the surrounding area of the Route Option; and
- Ben Lui WLA – The Route Option would not be visible from a distance and largely screened from the majority of the Ben Lui WLA, due to intervening topography. However, localised visibility would occur from elevated summits. Given the minimal visibility and considerable distance from the WLA, the Route Option is unlikely to result in significant effects on this WLA.

Landscape Character

The Fernoch Extension Route is rated **AMBER** due to its potential to adversely affect the setting and experience of the Craggy Upland (LCT 40) through construction activities and permanent presence of engineered infrastructure (in this case, new OHL). The AMBER appraisal is primarily due to the relatively short length of the Route Option. The imposition of an OHL across the length of the route within the LCT would directly compromise local associated features where they are present and intersected as these characteristics may be changed or removed.

Visual

The Fernoch Extension Route is rated **AMBER**. It is noted that widespread commercial forestry plantations in the region would serve as further visual buffers. Depending on their height and density, these wooded areas could significantly diminish or soften the perceived impact. Seasonal changes and future forestry operations may influence the effectiveness of this screening over time. Overall, while the Route Option may be visible from these elevated vantage points, it is unlikely to substantially alter the overall visual experience due to the combined effects of distance, terrain, and vegetation. The settlements of Kilchrenan and Portsonachan fall within the Study Area. Both settlements would have unobstructed views of the Route Option which would be visibly prominent and effect short, medium and long-range views from these settlements. Several key transport routes, including the A85, A819, B840 and B845 would have varying levels of visibility of the Route Option. The B845 would offer clear and prominent views of the Route Option, given its proximity and open landscape. However, in many views from the B845, the development would be visually softened by the surrounding topography, which provides a natural backdrop. In elevated sections of Core Path C300, the Route Option would be prominently visible and in close proximity. The Route Option would introduce a slight visual element to the panoramic views from the summits of Beinn a' Bhuiridh and Ben Cruachan. It's distance from these summits means it would be noticeable but not dominant views. Kilchurn Castle would be completely screened from the Route Option, due to the surrounding topography and mature vegetation within the castle grounds, which prevent long-range visibility.

Land Use

Agriculture

Ther Fernoch Extension Route is rated **GREEN** as the Scottish Government Soil Maps indicate the land located within the corridor has an agricultural land classification between 5.1 and 6.3, and it is therefore considered of poor-quality.

Forestry

The Fernoch Extension Route has been assessed as **AMBER**. This option avoids areas of Ancient Woodland and would limited forest removal.

Recreation

The Fernoch Extension Route is rated **AMBER** as it crosses Core Path C300(c). However, due to the nature of the Proposed Development, this intersection would not sever or compromise the recreational use of the pathway post construction.

Planning

Policy

The Fernoch Extension Route is rated **GREEN** as the Proposed Development would form part of the low carbon strategy envisaged in NPF4, which recognises that the transmission network has a crucial role to play in facilitating the delivery of low carbon energy systems. Policies 4 and 30 from the Argyll and Bute LDP promote renewable energy developments that are consistent with sustainable principles and the necessary infrastructure to support them, which implicitly includes electricity transmission and distribution networks.

Proposals

The Fernoch Extension Route is rated **GREEN** as no proposed or consented projects with the potential to conflict with the Proposed Development are located within the corridor.

6.3.2 Engineering Appraisal

Infrastructure Crossings

Major Crossings

The Fernoch Extension Route would require the crossing of the existing 132kV Taynuilt to Inveraray OHL and the B845 road and are therefore rated **RED**.

Road Crossings

The Fernoch Extension Route does not cross any major roads, although it does cross the B845, a key local road in the Study Area. However, the Route Option does cross four existing forestry/farm access tracks. As a result, the Route Option is rated **GREEN**.

Environmental Design

Elevation

Ther Fernoch Extension Route does not cross above 200 m across the route and is therefore rated **GREEN**.

Atmospheric Pollution

Of each of the pollution types, CO_2 and NO_2 pollution types show intermediate concentration along the Route Option. As a result, the Route Option is rated **AMBER**.

Contaminated Land

As per the results from an UXO desk study and risk assessment, no significant sources of UXO hazard have been identified. Therefore, the Route Option is rated **GREEN**.

Flooding

No sections of the Fernoch Extension Route are located within areas identified as being at high risk of flooding across a significant proportion of the route length (0.5% annual probability, 1 in 200 year event).

Potential flood risk can be managed through detailed alignment selection, tower micro-siting, and appropriate foundation design at the detailed design stage. On this basis, flooding is not considered to represent a significant constraint to route selection, and the Route Option is assigned a **GREEN** rating.

Ground Conditions

Terrain

The Route Option has slopes below 20% and therefore is rated **AMBER**.

Peat

Peat is present in the entirety of the length of the Route Options. Therefore, all Route Options have been rated **RED**. It is considered that areas of deep peat could be avoided during the alignment stage.

Construction and Maintenance

Access

The Fernoch Extension Route traverses a largely open moorland, the entirety of the route length is within 1.0 km of the B845, as well as crossing multiple existing access tracks, which would be utilised or upgraded to support construction and maintenance activities. As a result, the Route Option is rated **GREEN**.

Angle Support

The Fernoch Extension Route, from an Engineering viewpoint, has a minimal number of angle towers (5) and is therefore rated **GREEN**.

Proximity

Clearance

Due to environmental factors, it isn't possible to achieve a clearance of more than 250m in certain sections of the Route Option, however a clearance of a minimum of 100 m is achievable. The Route Options is therefore rated **AMBER**.

Windfarms

No existing or proposed wind farms are located within the proposed Route Option. Therefore, Route Option is rated **GREEN**.

Communication Masts

From the desk top survey, there were no communications maps found within 1 km of the Fernoch Extension Route. Furthermore, as the proposals largely follow existing infrastructure the risk of there being issues with interference is low. Therefore, Route Option is rated **GREEN**.

Urban Environment

The Fernoch Extension Route does not pass through any Urban Developments and have limited number of isolated/dispersed dwellings so is therefore rated as **GREEN**.

Other Considerations

Route Lengths

The Fernoch Extension Route is determined to have the shortest feasible length and is therefore rated **GREEN**.

DNO Crossings

The Fernoch Extension Route has 2 DNO Crossings and therefore is rated **AMBER**.

6.3.3 Cost Appraisal

Capital

Construction

The Fernoch Extension Route is rated **AMBER** due to, although relatively low, a requirement for complex construction activities such as angle towers and OHL intersections.

Diversions

The Route Option is rated **RED**, requiring multiple diversions due to its proximity to roads such as the B845 and existing access tracks.

Public Road Improvements

The Route Option is rated **GREEN** due to the limited requirements for additional access provision due to extensive existing tracks.

Tree Felling

The Route Option is anticipated to incur some notable costs associated with tree felling so is therefore rated **AMBER**.

Land Assembly and Consents Mitigation

The Fernoch Extension Route is rated **RED** for both factors.

Operation

Inspections

The Fernoch Extension Route is rated **AMBER** due to the anticipated moderate inspection costs.

Maintenance

The Route Option is rated **AMBER** due to, similarly to inspection, moderate cost anticipated in relation to maintenance requirements.

6.3.4 Potential Route Option

As only one Route Option is presented for appraisal, the Fernoch Extension Route is by default the Potential Route.

7. CONSULTATION ON THE PROPOSALS

SSEN Transmission places great importance on, and is committed to, consultation and engagement with all parties, or stakeholders, likely to have an interest in proposals for new projects such as this. Stakeholder consultation and engagement is an essential part of an effective development process.

7.1 Questions for Consideration by Consultees

When providing your comments and feedback, SSEN Transmission would be grateful for your consideration of the questions below:

- Has the need for the Project been adequately explained?
- Has the approach taken to select the Potential Routes been adequately explained?
- Are there any factors, or environmental features, that you consider may have been overlooked during the Potential Routes selection process?
- Do you feel, on balance, that the Potential Routes selected is the most appropriate for further consideration at the alignment selection stage? Please provide an explanation of your answer.
- If you don't agree to our Potential Route which of the Route Options would you consider the best option for SSEN Transmission to develop? Please provide an explanation of your answer.

7.2 Next Steps

Two face to face public consultation events will be held, one on the 11th March 2026 and one on 12th March 2026. The responses received from these consultation events, and those sought from statutory consultees and other key stakeholders, will inform further consideration of the route options put forward, and the confirmation of the Potential Routes to take forward to the next stage in the routeing process (alignment selection).

All comments are requested by 23rd April 2026. A Report on Consultation will be produced which will document the consultations received, and the decisions made in light of these responses.

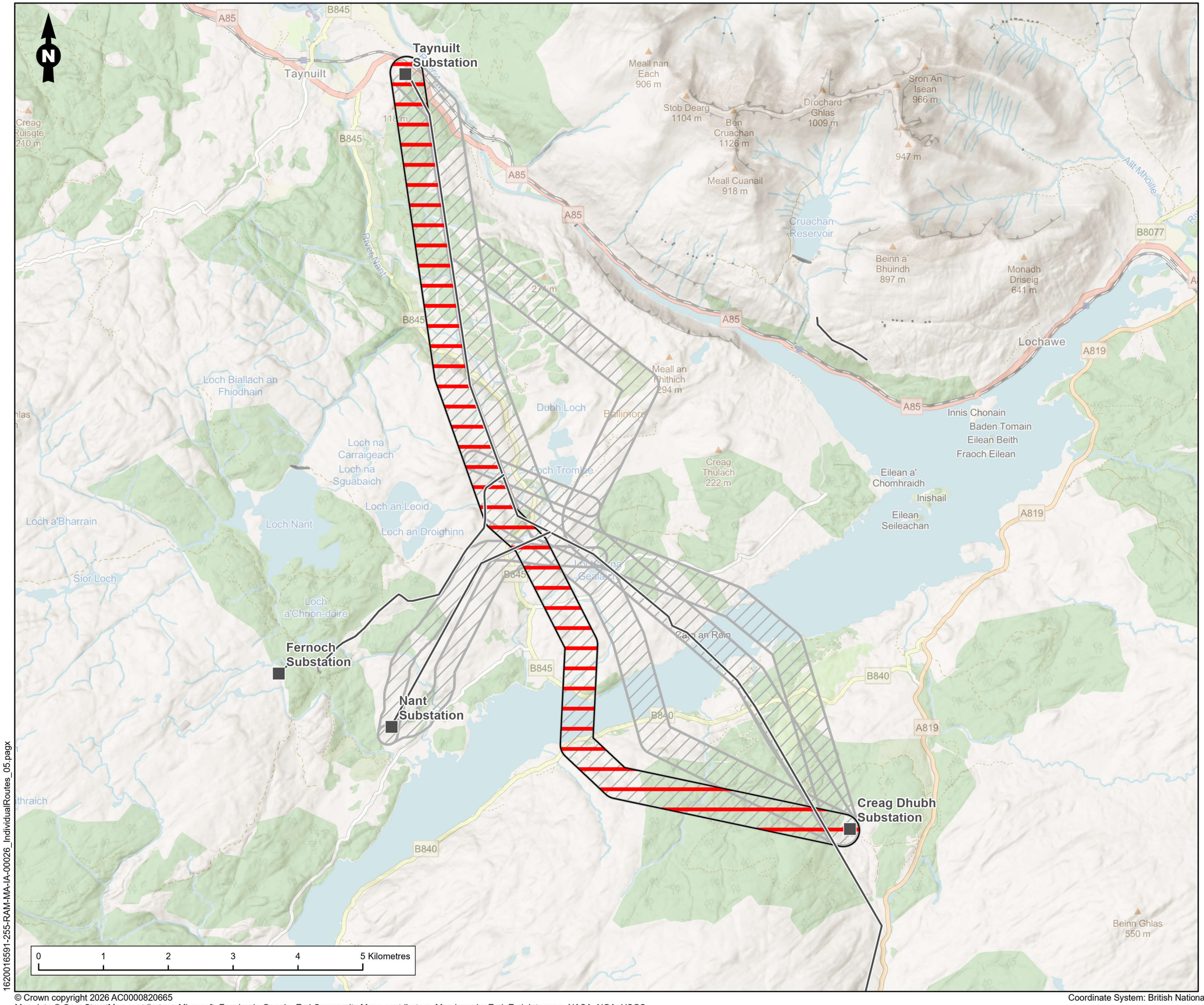
Following the identification and confirmation of a proposed route, further technical and environmental surveys (e.g. Phase 1 Habitat / National Vegetation Classification surveys, Protected Species Surveys and further input by landscape, ecology, cultural heritage) would be undertaken to identify a preferred alignment.

Consultation on a Potential Alignment will be undertaken in a similar manner to the identification of Potential Routes in Autumn 2026.

Scottish & Southern Electricity Networks

TRANSMISSION

APPENDIX 1: FIGURES



Legend

- Taynuilt to Creag Dhubh Route Option 1
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1a	4.0

Prepared By	Scale
MFT/FN	1:55,000 @A3

Client
SSEN Transmission

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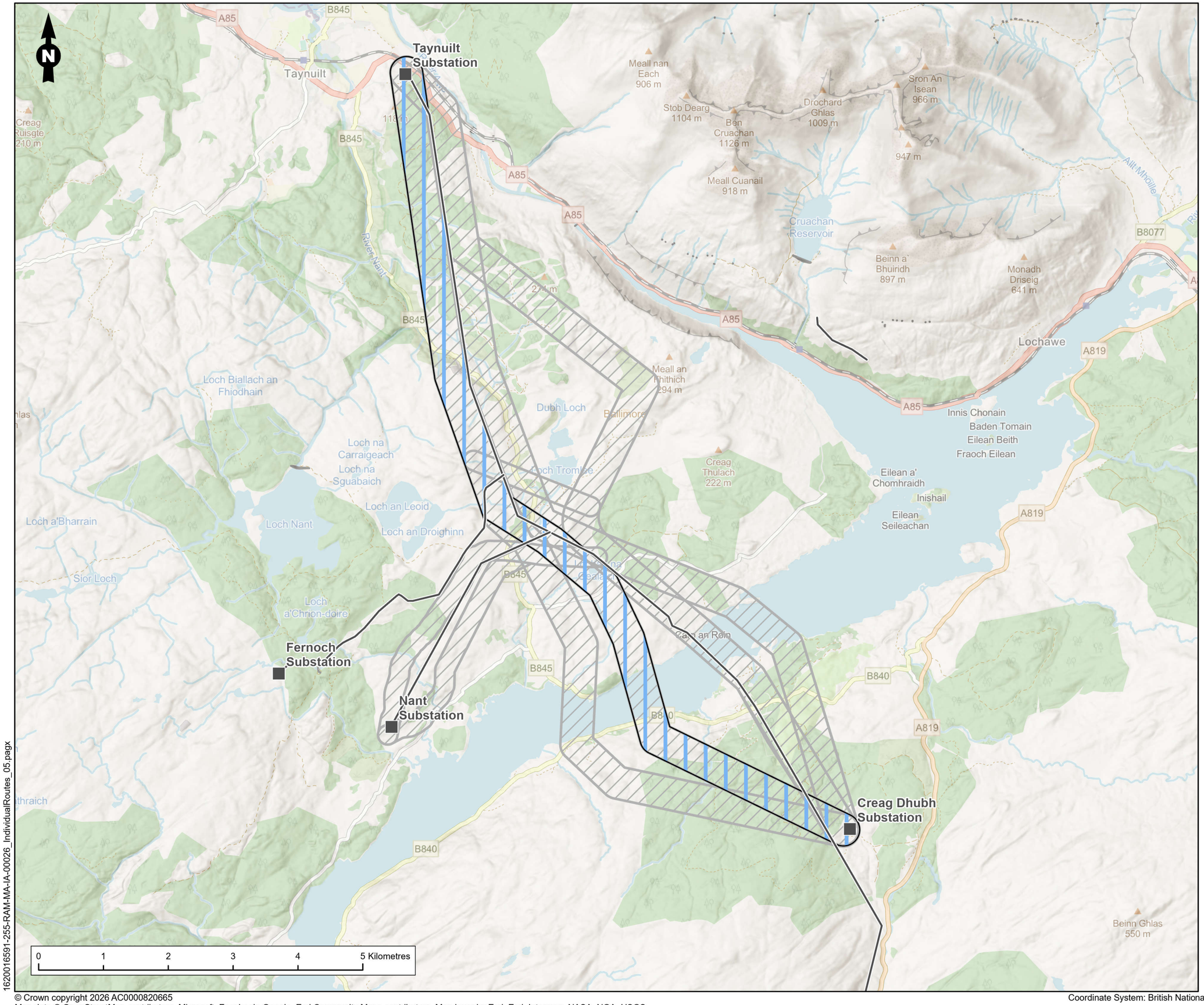

Legend

- Taynuilt to Creag Dhubh Route Option 2
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1b	4.0

Prepared By	Scale
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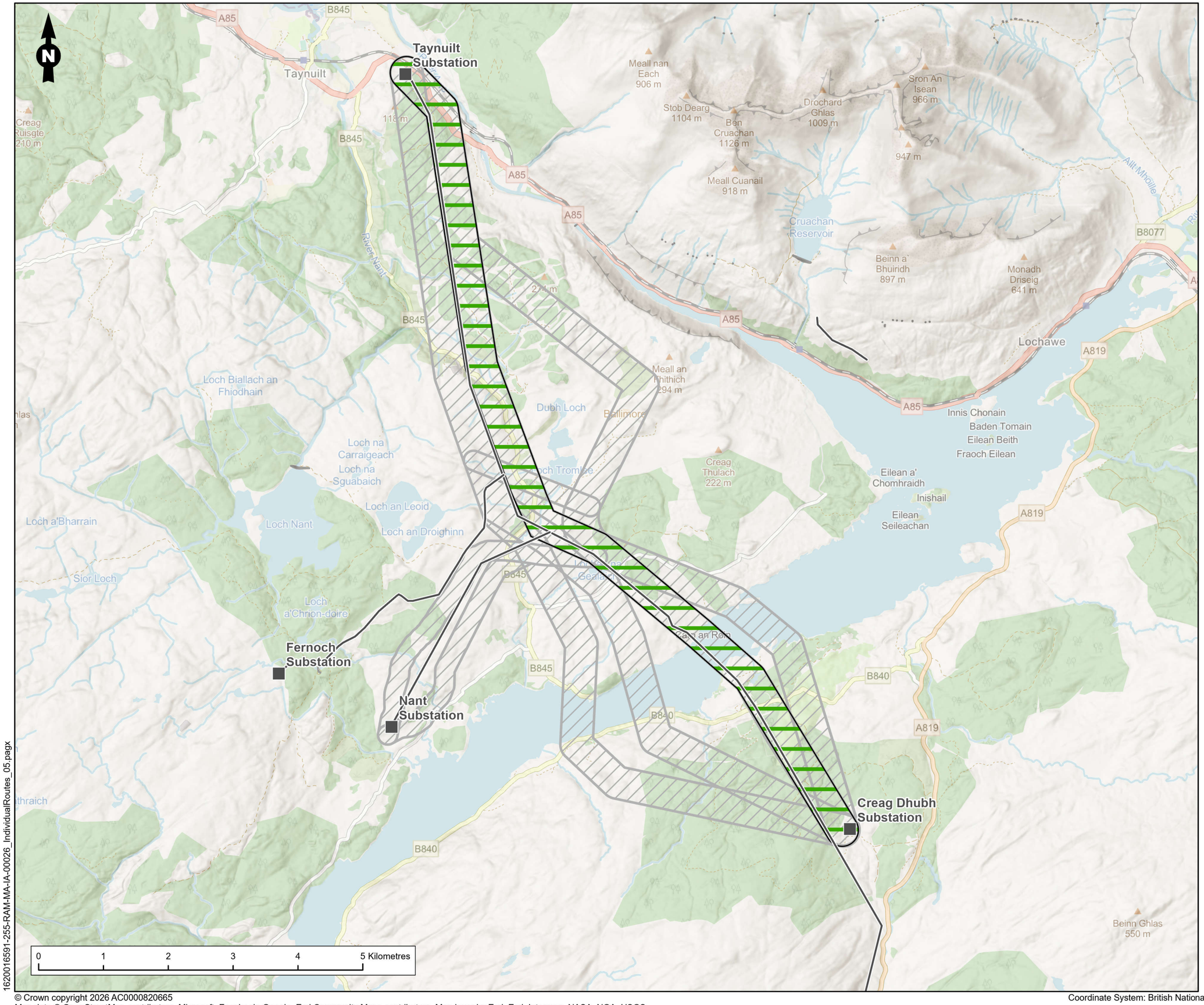

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- Taynuilt to Creag Dhubh Route Option 3
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1c	4.0

Prepared By	Scale
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SSEN Transmission

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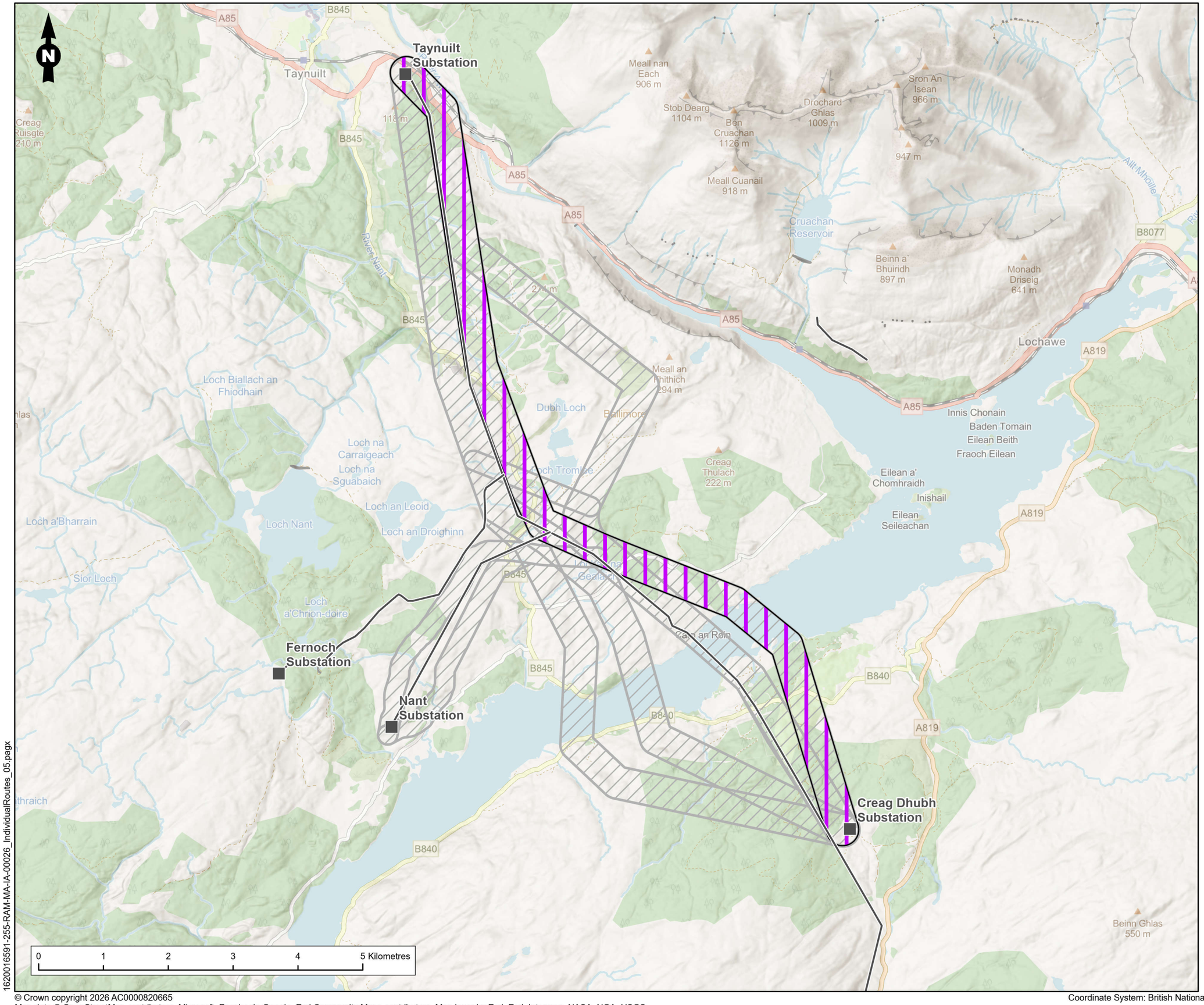

Legend

- Taynuilt to Creag Dhubh Route Option 4
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1d	4.0

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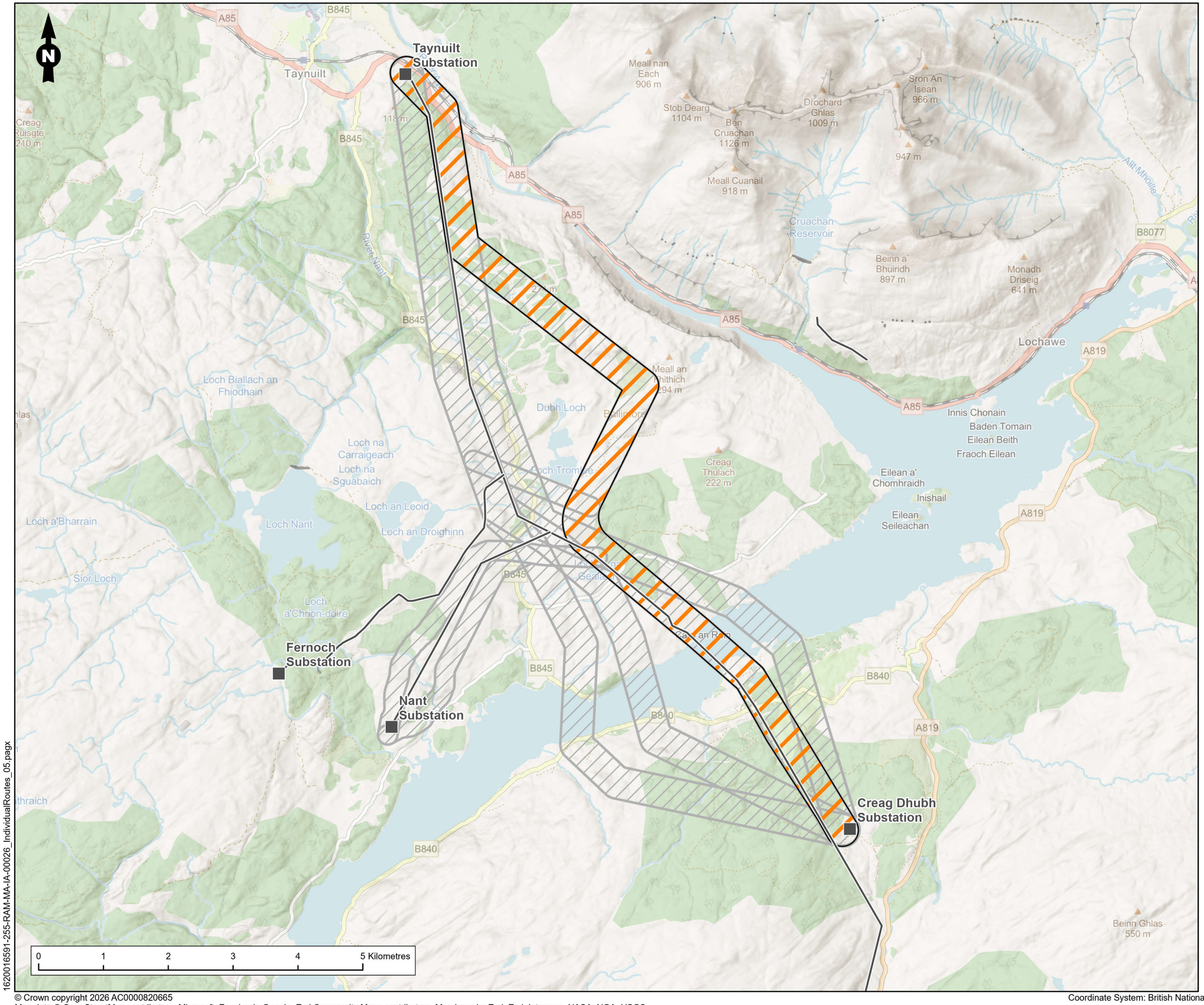

Legend

- Taynuilt to Creag Dhubh Route Option 5
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

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February 2026	1e	4.0

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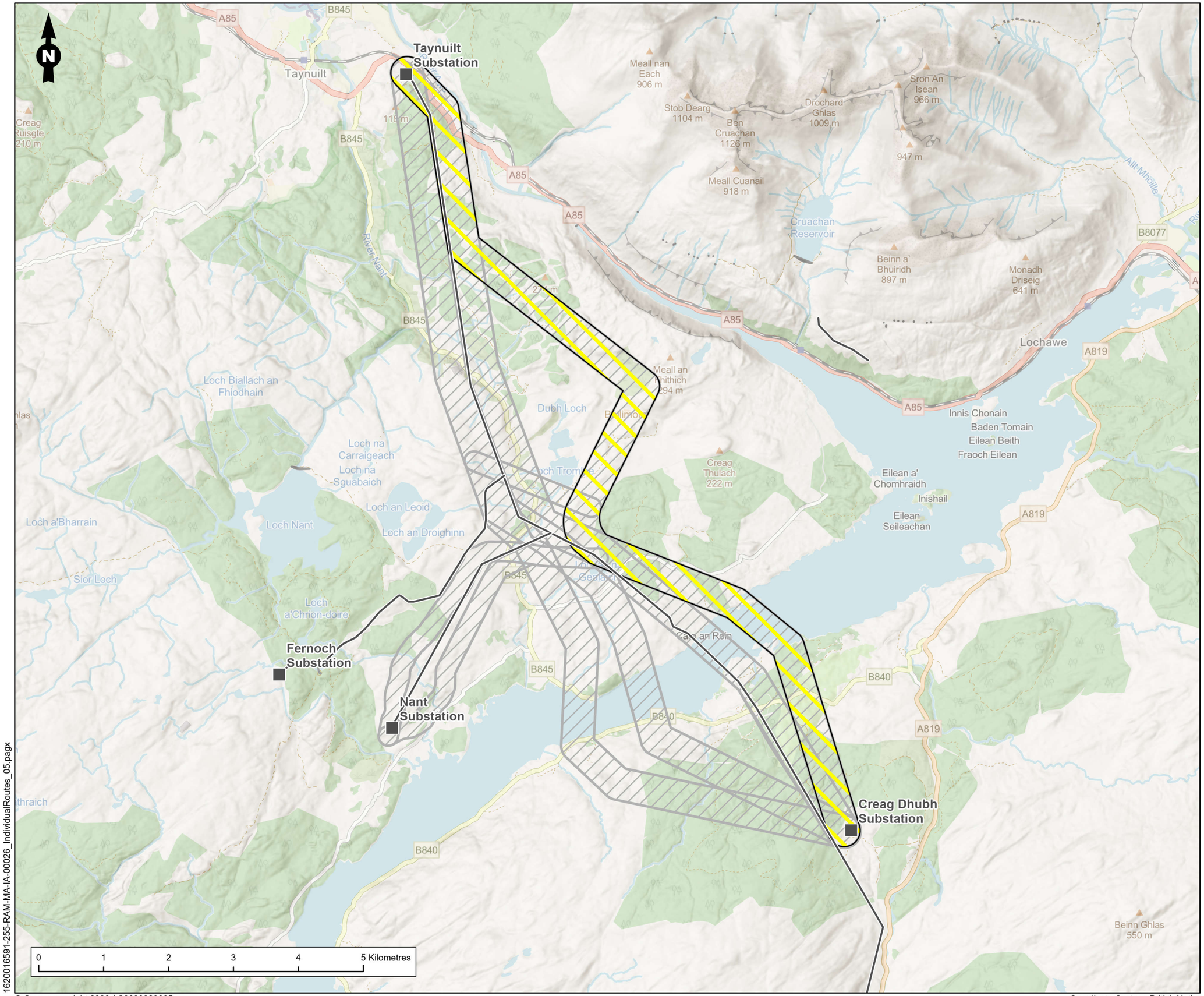

Legend

- Taynuilt to Creag Dhubh Route Option 6
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1f	4.0

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SSEN Transmission

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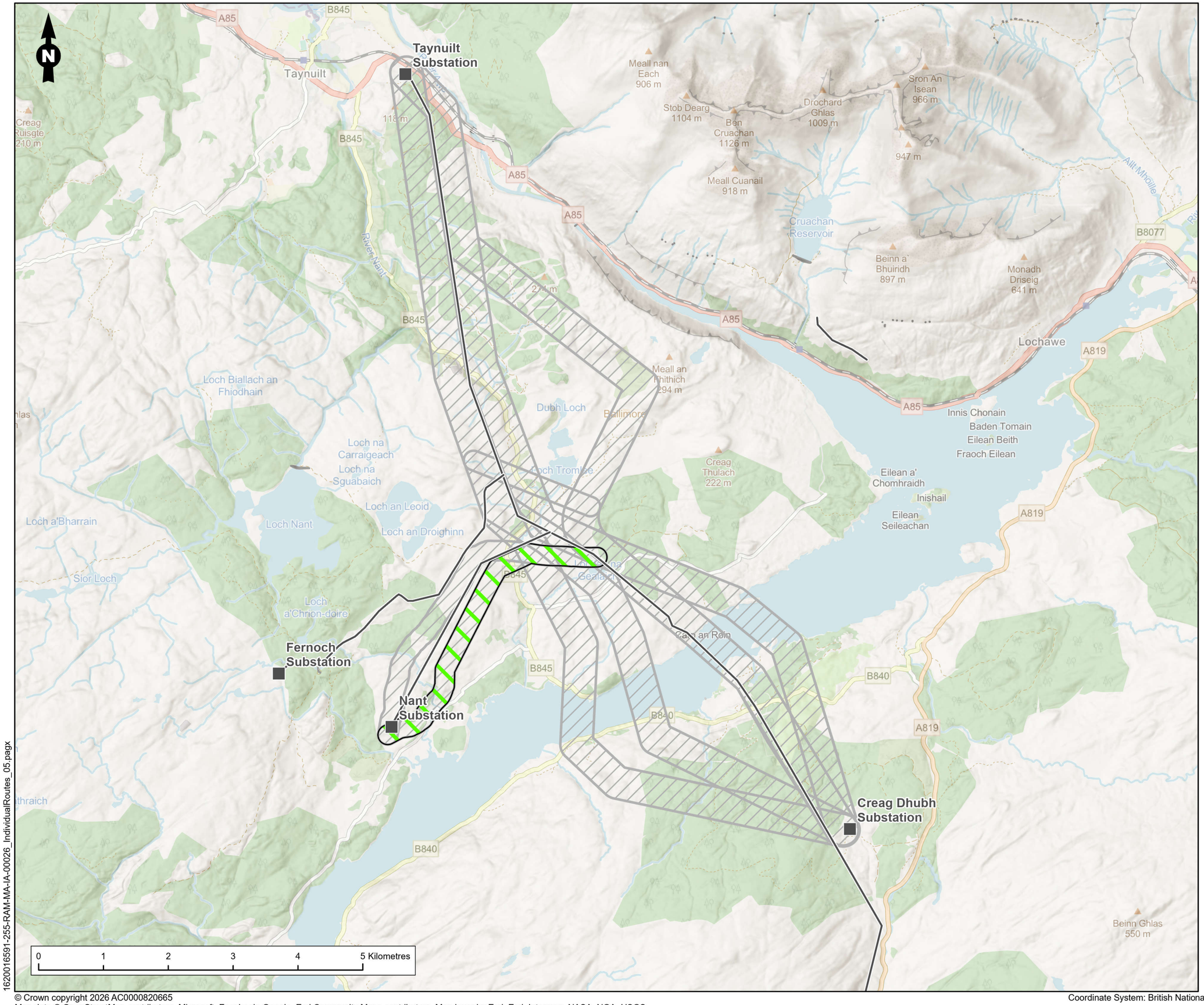

Legend

- Nant Route Option 1
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1g	4.0

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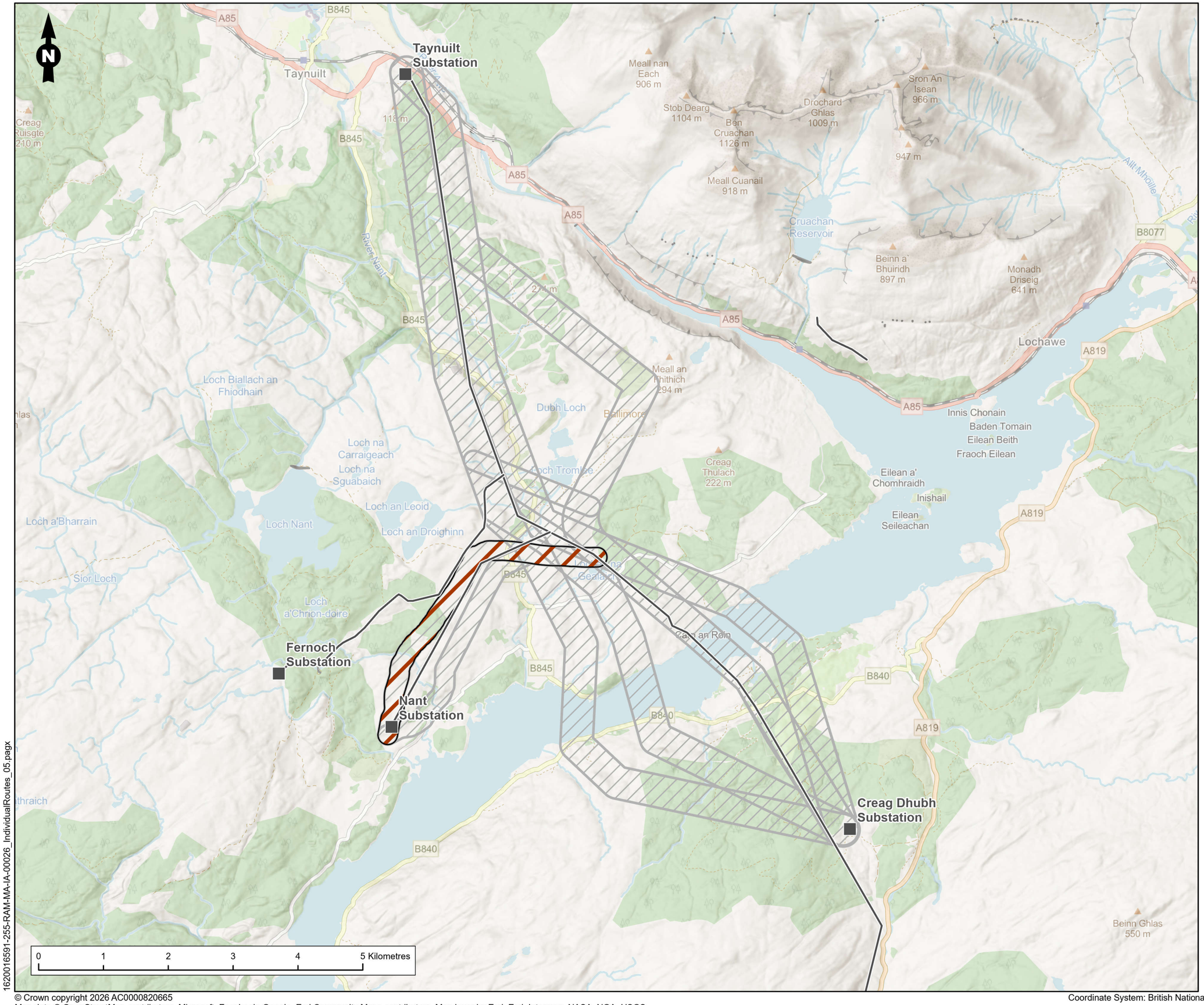

Legend

- Nant Route Option 2
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1h	4.0

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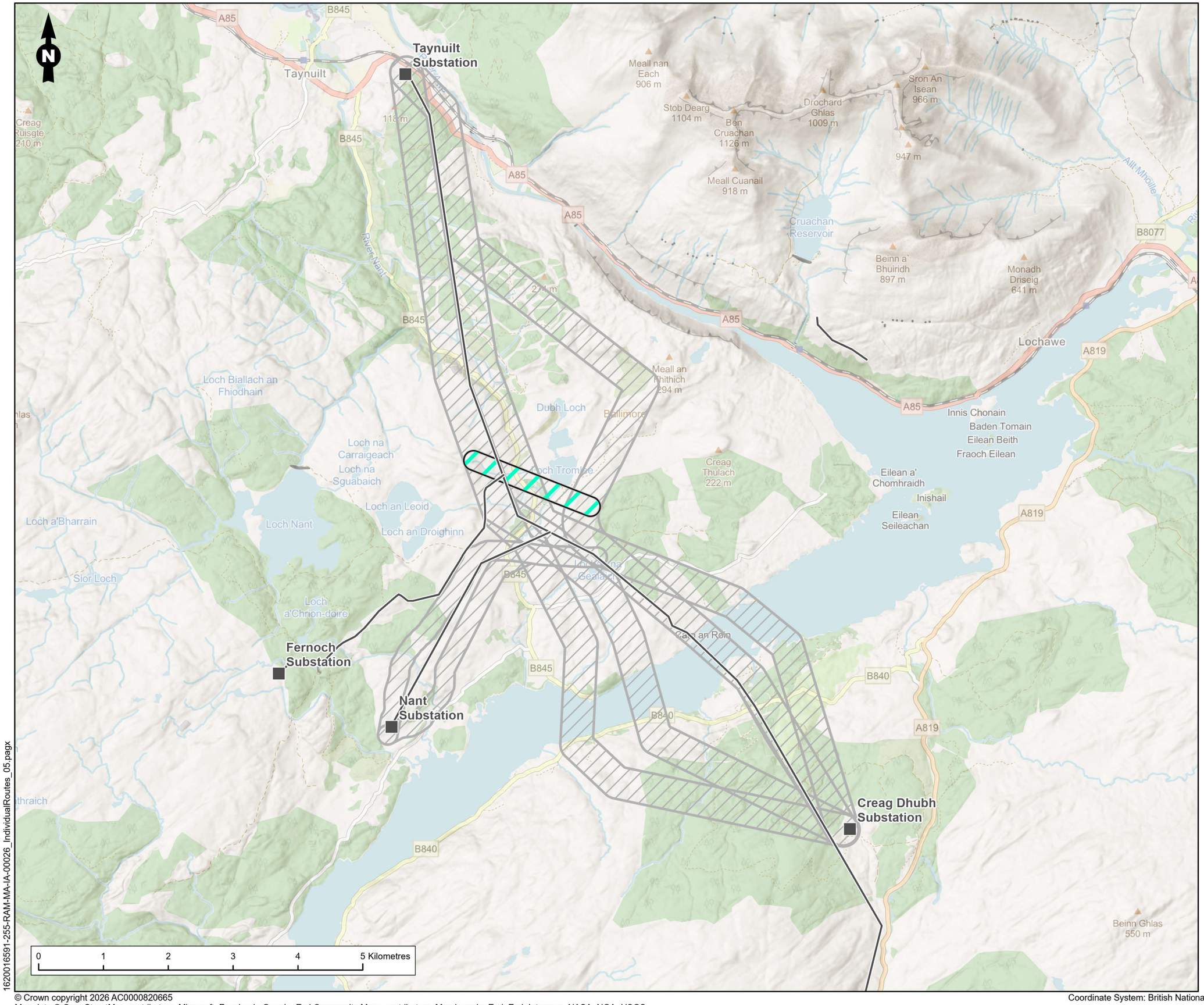

Legend

- Fernoch Extension Route
- Other Route Options

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Route Options and Study Area

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	1i	4.0

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Legend

- Study Area

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Study Area and Context

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	2	2.0

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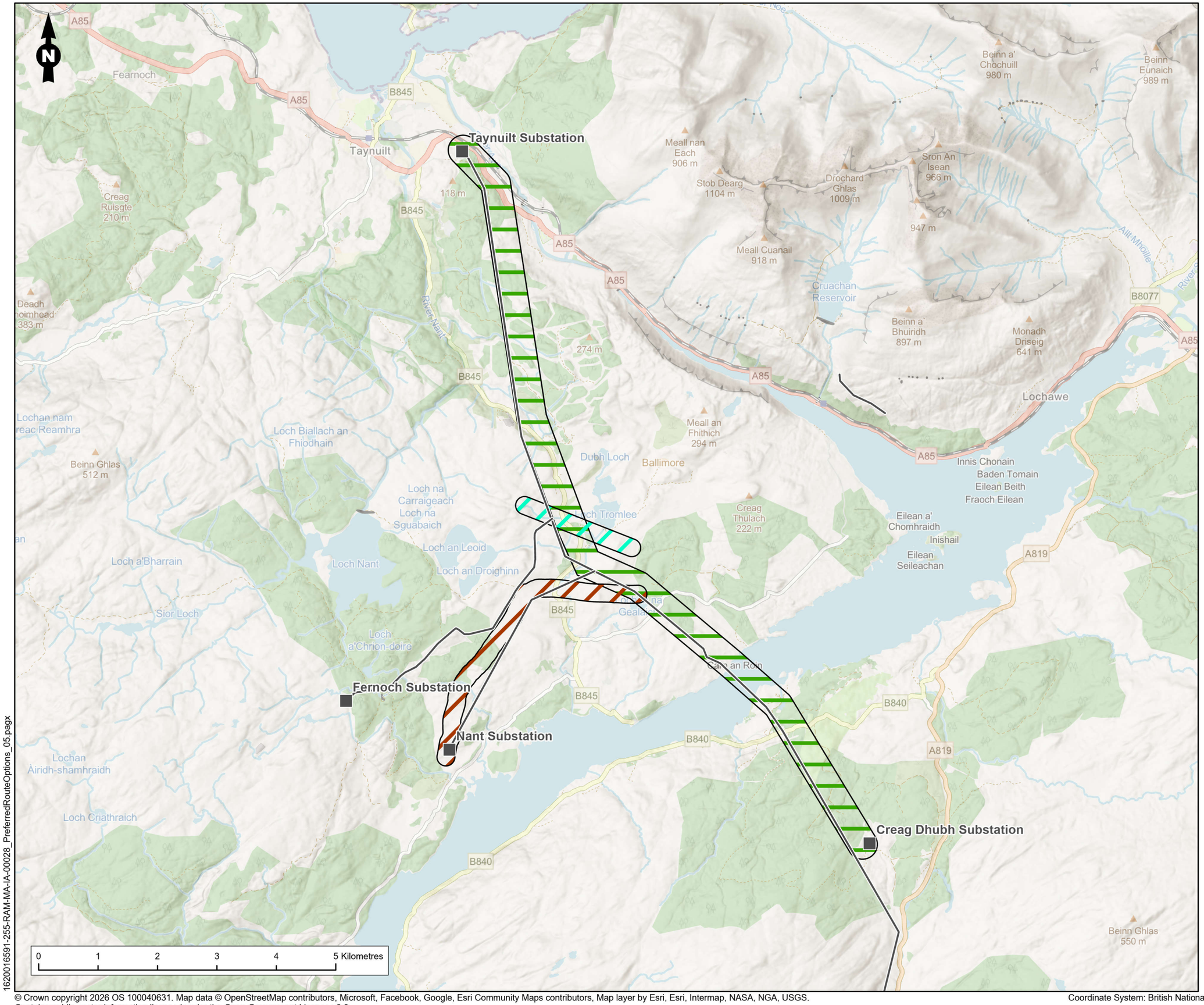

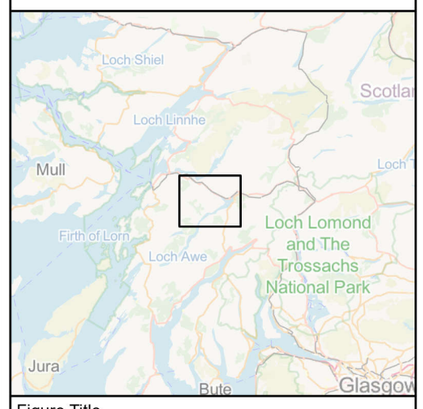

Legend

Route Options

- Fernoch Extension Route
- Nant Route Option 2
- Taynuilt to Creag Dhubh Route Option 3

Infrastructure

- Existing Substation
- Existing Overhead Line

Figure Title
Potential Route Options

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	3	4.0

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SSEN Transmission

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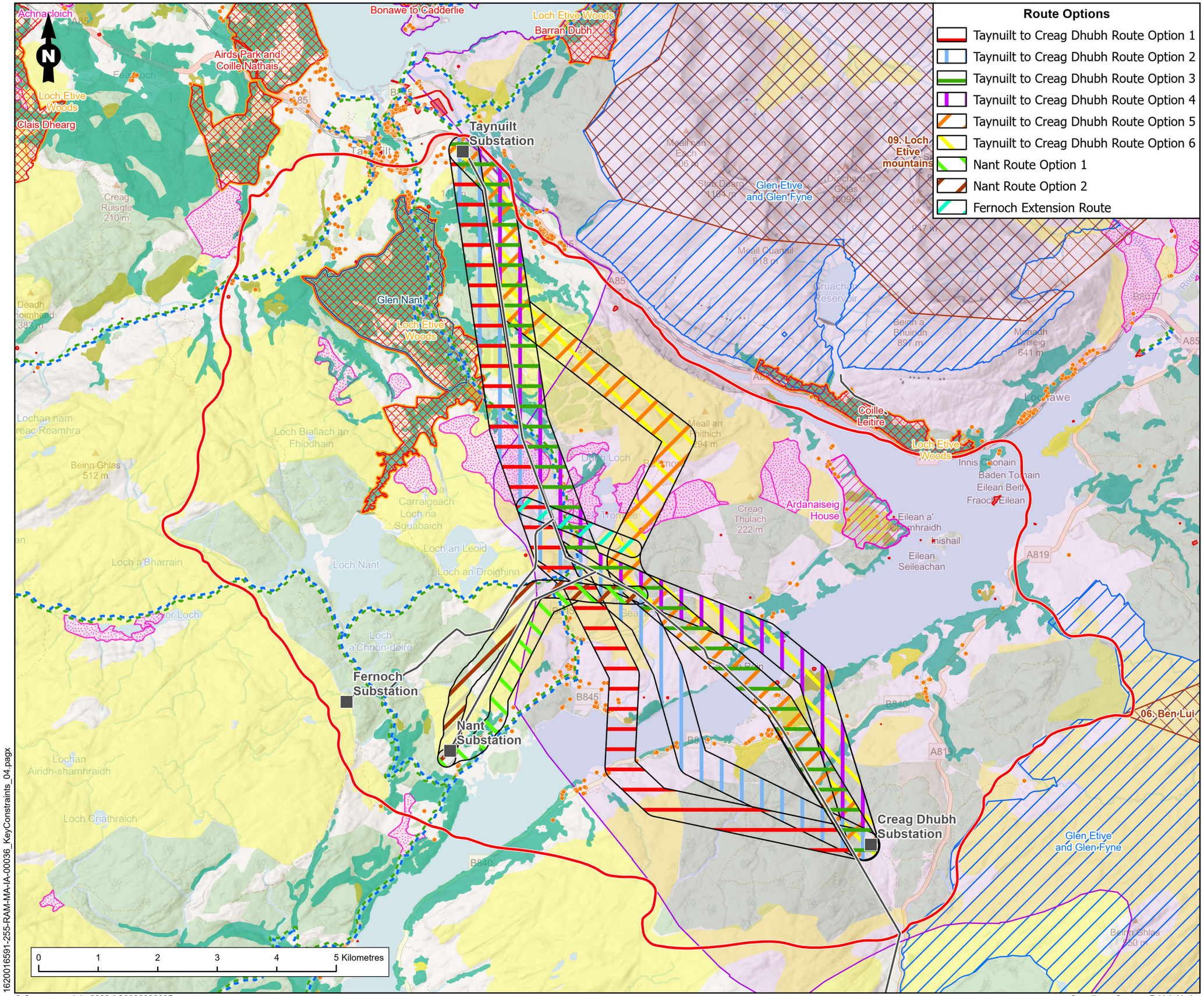

Legend

- Study Area

Infrastructure

- Existing Substation
- Existing Overhead Line

Key Constraints

- Residential properties
- Highland Core Path
- Argyll and Bute Core Path
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- National Nature Reserve
- Wild Land Areas 2014
- Local Landscape Designations - Argyll and Bute / Areas of Panomaric Quality
- Garden and Designed Landscape
- Scheduled Monument

Woodland Inventory

- Ancient (of semi-natural origin)
- Long-Established (of plantation origin)
- Other (on Roy map)*

Carbon and Peatland Importance

- Class 1
- Class 2

* Roy Military Survey of Scotland 1747-55: Shown as unwooded on the 1st edition maps but as woodland on the Roy maps. Such sites have, at most, had only a short break in continuity of woodland cover and may still retain features of Ancient Woodland. https://maps.nls.uk/roy/

Figure Title
Key Constraints

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	4	3.0

Prepared By	Scale
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Client
SSEN Transmission

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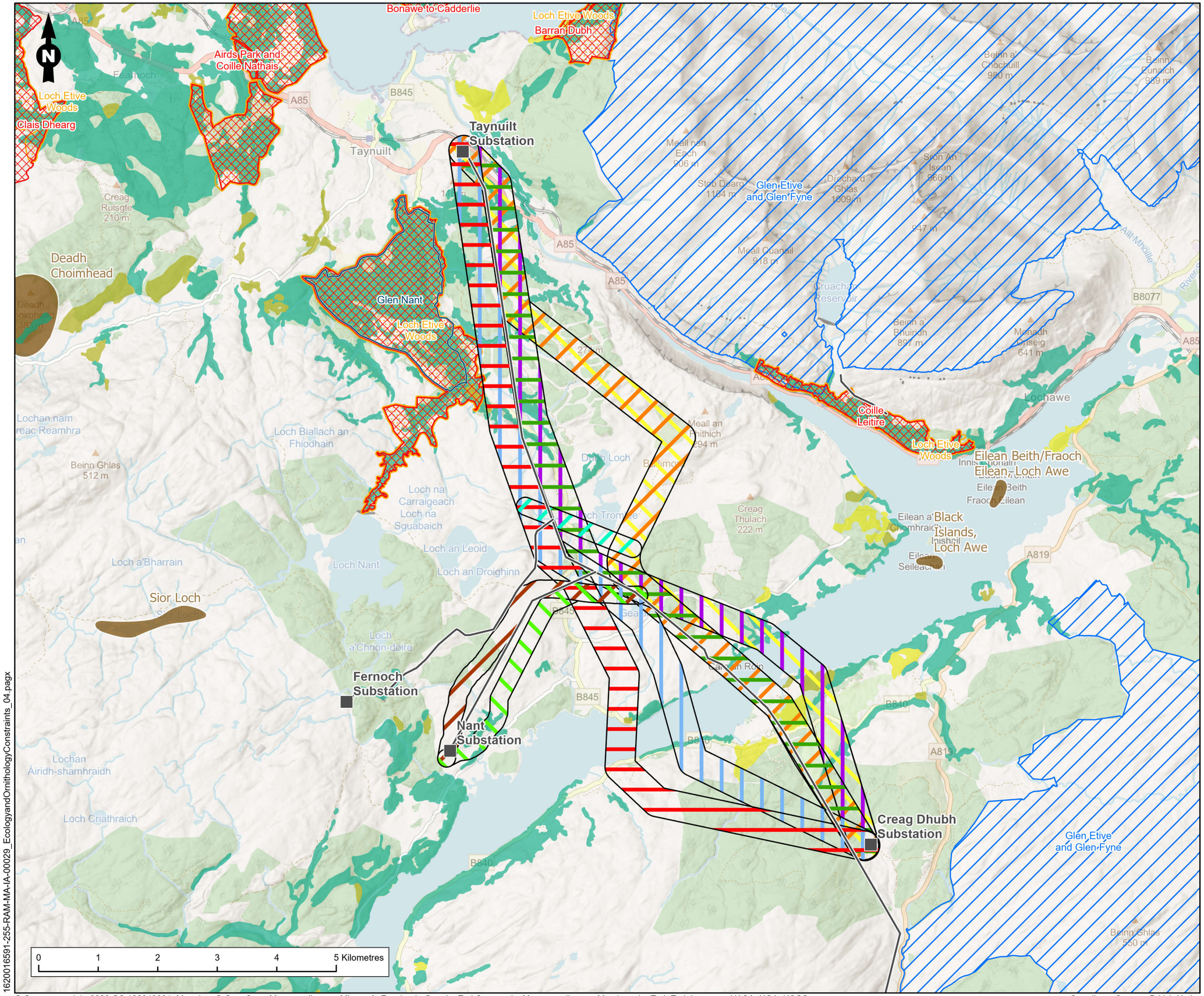

Legend

Route Options

- Taynuilt to Creag Dhubh Route Option 1
- Taynuilt to Creag Dhubh Route Option 2
- Taynuilt to Creag Dhubh Route Option 3
- Taynuilt to Creag Dhubh Route Option 4
- Taynuilt to Creag Dhubh Route Option 5
- Taynuilt to Creag Dhubh Route Option 6
- Nant Route Option 1
- Nant Route Option 2
- Fernoch Extension Route

Infrastructure

- Existing Substation
- Existing Overhead Line

Ecology and Ornithology

- Site of Special Scientific Interest
- National Nature Reserve
- Special Area of Conservation
- Special Protection Area
- Local Nature Conservation Sites

Woodland Inventory

- Ancient (of semi-natural origin)
- Long-Established (of plantation origin)
- Other (on Roy map)*

* Roy Military Survey of Scotland 1747-55: Shown as unwooded on the 1st edition maps but as woodland on the Roy maps. Such sites have, at most, had only a short break in continuity of woodland cover and may still retain features of Ancient Woodland. https://maps.nls.uk/roy/

Figure Title
Ecology and Ornithology Constraints

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	5	4.0

Prepared By	Scale
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Client
SSEN Transmission

RAMBOLL

1620016591-255-RAM-MA-IA-00029_EcologyandOrnithologyConstraints_04.pagx

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

Taynuilt Substation

Fernoch Substation

Nant Substation

Creag Dhubh Substation

0 1 2 3 4 5 Kilometres

Legend

Route Options

- Taynuilt to Creag Dhubh Route Option 1
- Taynuilt to Creag Dhubh Route Option 2
- Taynuilt to Creag Dhubh Route Option 3
- Taynuilt to Creag Dhubh Route Option 4
- Taynuilt to Creag Dhubh Route Option 5
- Taynuilt to Creag Dhubh Route Option 6
- Nant Route Option 1
- Nant Route Option 2
- Fernoch Extension Route

Infrastructure

- Existing Substation
- Existing Overhead Line

Water Environment

- Private Water Supplies
- Watercourse
- Watercourse
- Scottish Environment Protection Area (SEPA) Drinking Water Protected Area - River
- Scottish Environment Protection Area (SEPA) Drinking Water Protected Area - Catchment

Flood Risk (Surface Water, River and Coastal Extent combined)

- High Likelihood - Each year this area has a 10% chance of flooding
- Medium Likelihood - Each year this area has a 0.5% chance of flooding

Figure Title
Hydrology Constraints

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	6	3.0

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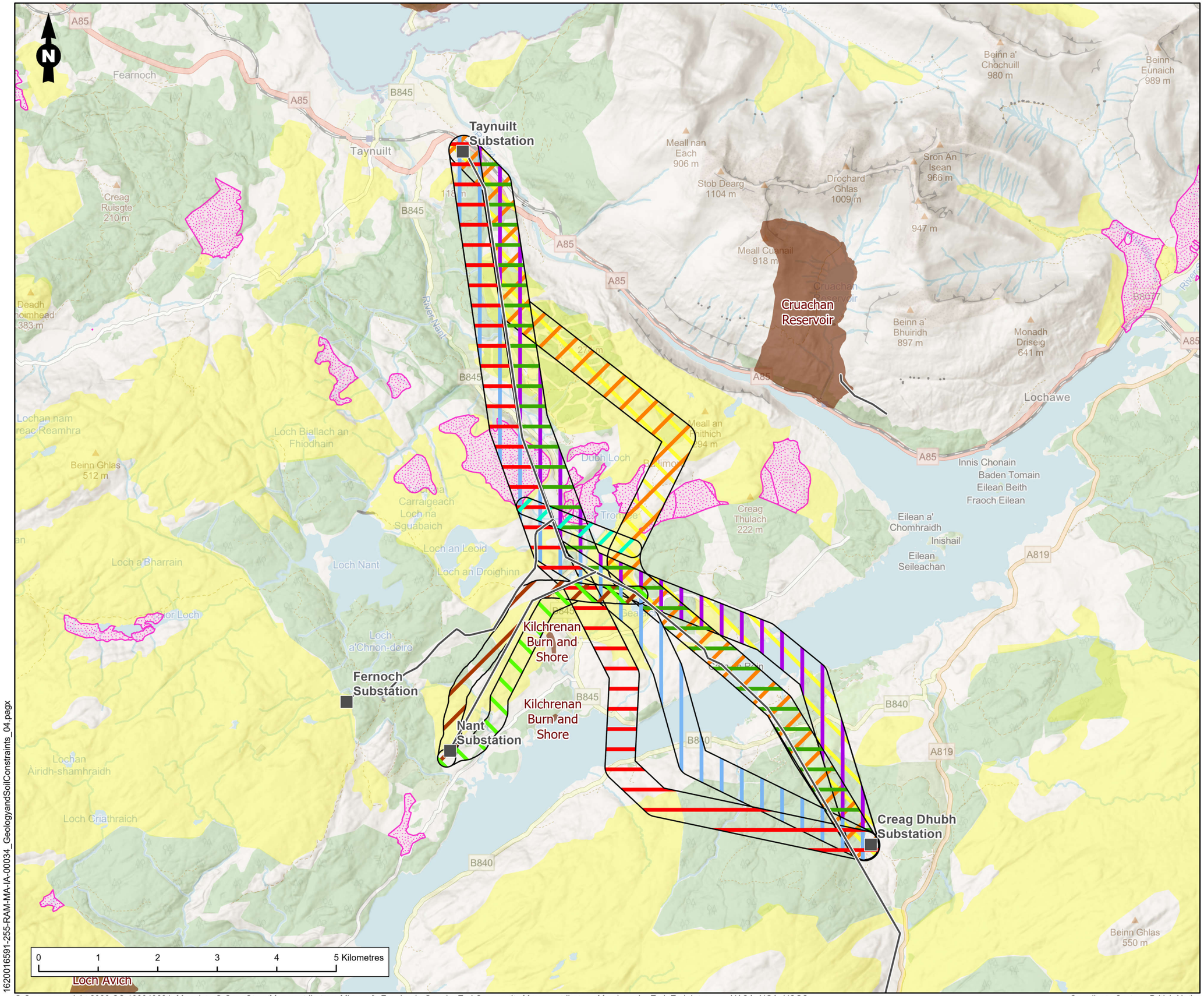

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Route Options

- Taynuilt to Creag Dhubh Route Option 1
- Taynuilt to Creag Dhubh Route Option 2
- Taynuilt to Creag Dhubh Route Option 3
- Taynuilt to Creag Dhubh Route Option 4
- Taynuilt to Creag Dhubh Route Option 5
- Taynuilt to Creag Dhubh Route Option 6
- Nant Route Option 1
- Nant Route Option 2
- Fernoch Extension Route

Infrastructure

- Existing Substation
- Existing Overhead Line

Geology and Soil Constraints

- Geological Conservation Review Site

Carbon and Peatland Importance

- Class 1
- Class 2

Figure Title
Geology and Soils Constraints

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	7	3.0

Prepared By	Scale
LAM	1:60,000 @A3

Client
SSEN Transmission

RAMBOLL

1620016591-255-RAM-MA-IA-00034_GeologyandSoilConstraints_04.pagx

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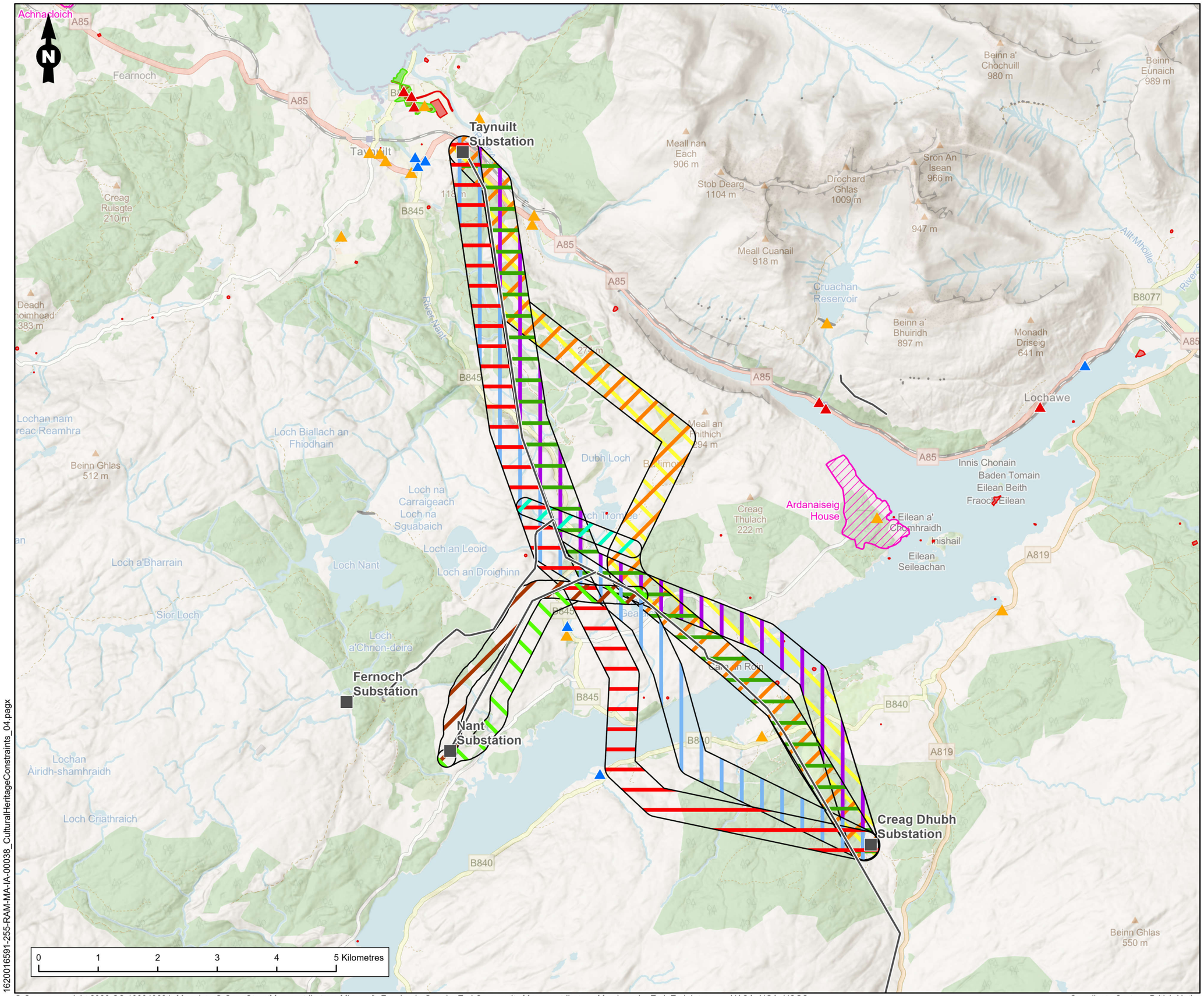

Legend

Route Options

- Taynuilt to Creag Dhubh Route Option 1
- Taynuilt to Creag Dhubh Route Option 2
- Taynuilt to Creag Dhubh Route Option 3
- Taynuilt to Creag Dhubh Route Option 4
- Taynuilt to Creag Dhubh Route Option 5
- Taynuilt to Creag Dhubh Route Option 6
- Nant Route Option 1
- Nant Route Option 2
- Fernoch Extension Route

Infrastructure

- Existing Substation
- Existing Overhead Line

Cultural Heritage Constraints

- Listed Building Category A
- Listed Building Category B
- Listed Building Category C
- Garden and Designed Landscape
- Conservation Area
- Scheduled Monument

Figure Title
Cultural Heritage Constraints

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	8	3.0

Prepared By	Scale
LAM	1:60,000 @A3

Client
SSEN Transmission

RAMBOLL

1620016591-255-RAM-MA-IA-00038_CulturalHeritageConstraints_04.pagx

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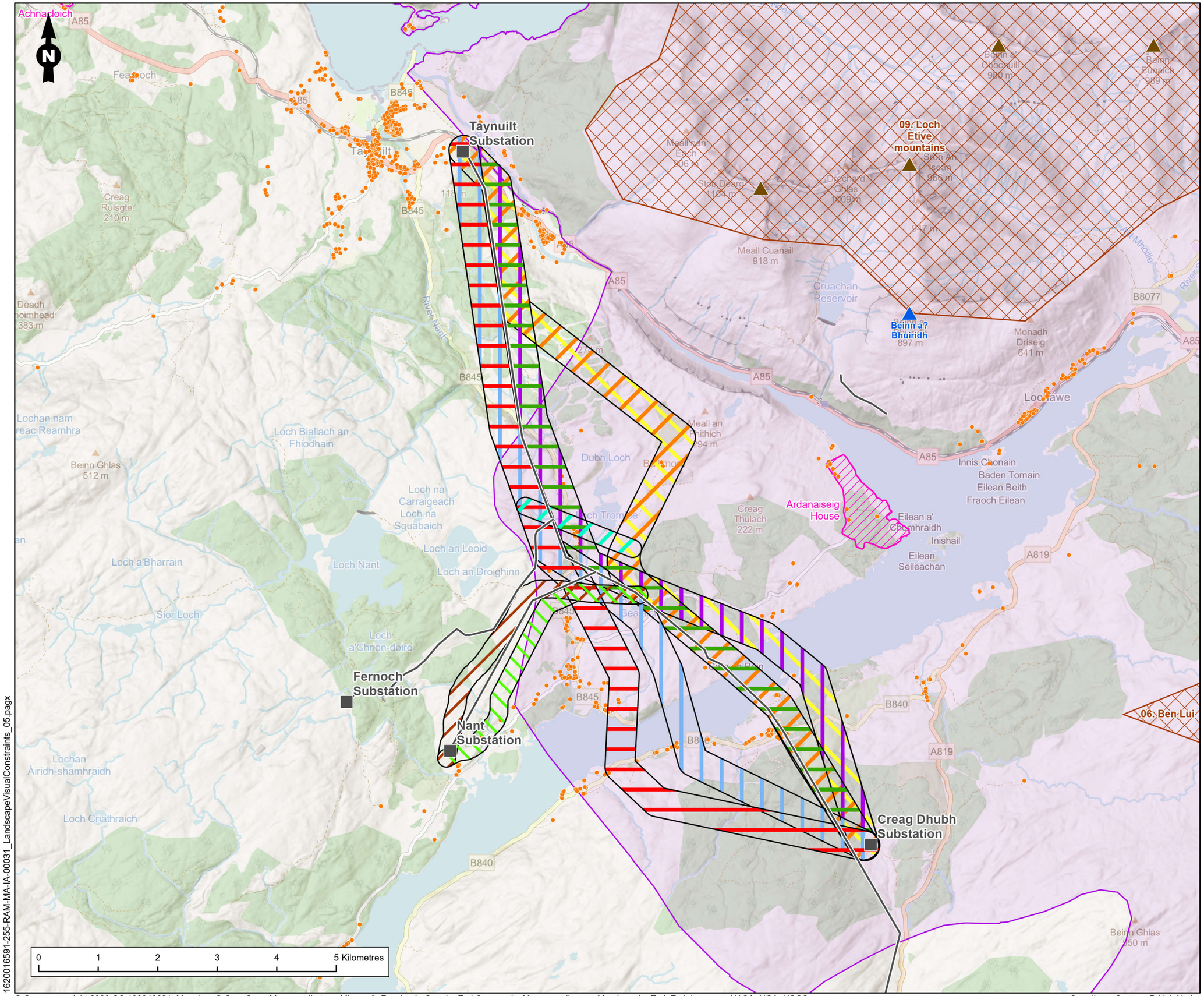


Legend

Route Options

- Taynuilt to Creag Dhubh Route Option 1
- Taynuilt to Creag Dhubh Route Option 2
- Taynuilt to Creag Dhubh Route Option 3
- Taynuilt to Creag Dhubh Route Option 4
- Taynuilt to Creag Dhubh Route Option 5
- Taynuilt to Creag Dhubh Route Option 6
- Nant Route Option 1
- Nant Route Option 2
- Fernoch Extension Route

Infrastructure

- Existing Substation
- Existing Overhead Line

Landscape and Visual Constraints

- Residential properties
- Munro Mountain
- Corbett Mountain
- Garden and Designed Landscape
- Wild Land Areas 2014
- Local Landscape Designations - Argyll and Bute / Areas of Panomaric Quality

Figure Title
Landscape Constraints

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	9	4.0

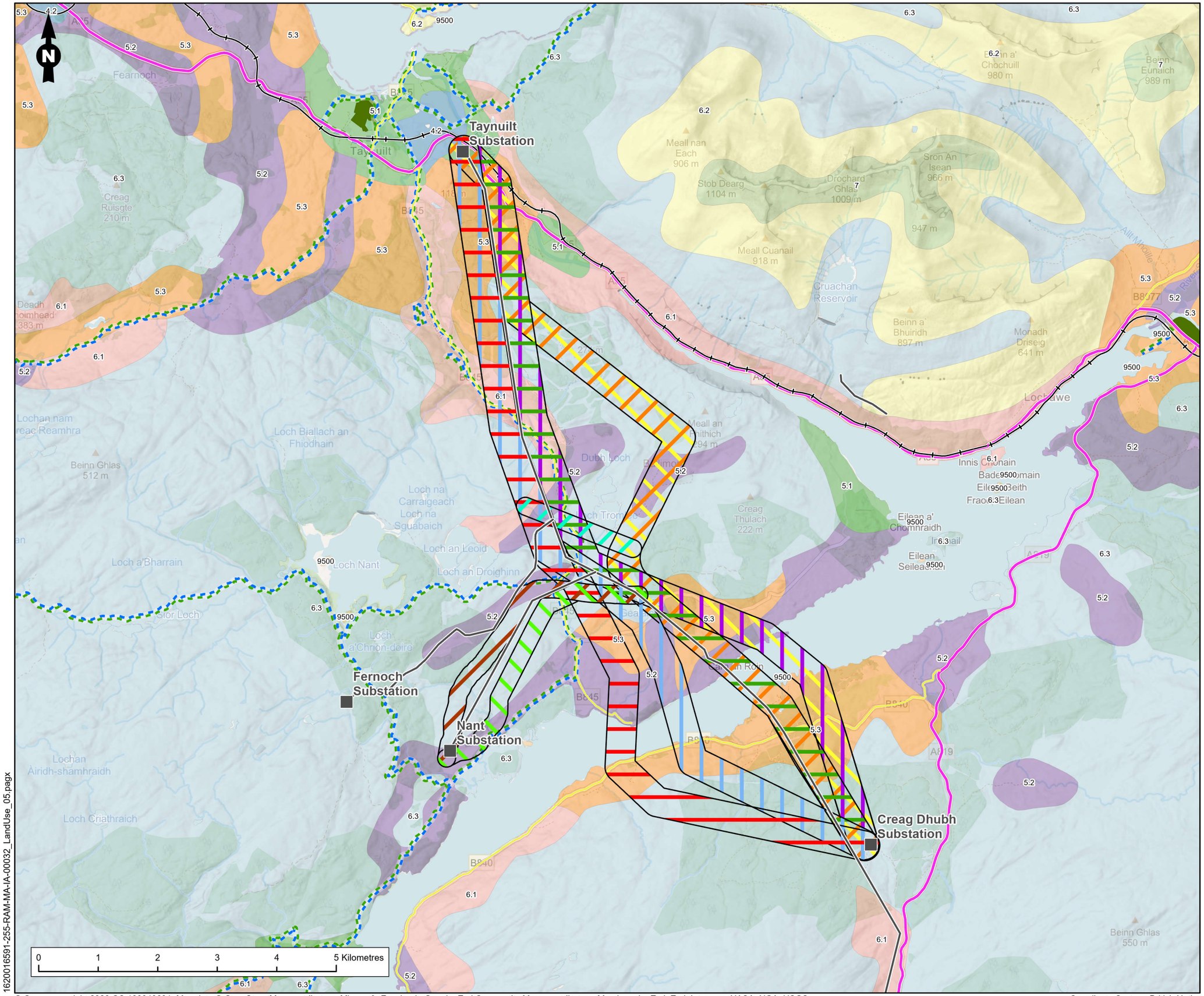
Prepared By	Scale
MFT/FN	1:60,000 @A3

Client
SSEN Transmission

RAMBOLL

1620016591-255-RAM-MA-IA-00031_LandscapeVisualConstraints_05.pagx

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.



Legend

Route Options

- Taynuilt to Creag Dhubh Route Option 1
- Taynuilt to Creag Dhubh Route Option 2
- Taynuilt to Creag Dhubh Route Option 3
- Taynuilt to Creag Dhubh Route Option 4
- Taynuilt to Creag Dhubh Route Option 5
- Taynuilt to Creag Dhubh Route Option 6
- Nant Route Option 1
- Nant Route Option 2
- Fernoch Extension Route

Infrastructure

- Existing Substation
- Existing Overhead Line

Land Use Constraints

- A Road
- B Road
- Highland Core Path
- Argyll and Bute Core Path
- Main Rail
- Golf Course

Land Capability Classification for Agriculture 250k (Class)

- 4.2
- 5.1
- 5.2
- 5.3
- 6.1
- 6.2
- 6.3
- 7
- 9500

Figure Title
Land Use Constraints

Project Name
LT39 Taynuilt to Creag Dhubh 132kV Overhead Line Reinforcement

Project No./Filery ID
1620016591-255

Date	Figure No.	Revision
February 2026	10	3.0

Prepared By	Scale
MFT/FN	1:60,000 @A3

Client
SSEN Transmission

RAMBOLL

1620016591-255-RAM-MA-IA-00032_LandUse_05.pagx

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

APPENDIX 2: SUMMARY OF RAG RATINGS

Environmental Considerations

Table 1: Summary Environmental Comparison Table – Taynuilt to Creag Dhubh Route Options

Environmental Topic	Factor	RAG Impact Rating					
		1	2	3	4	5	6
Natural Heritage	Designations						
	Protected Species						
	Habitats						
	Ornithology						
	Hydrology						
	Geology						
Cultural Heritage	Designations						
	Non-designated Assets						
People	Proximity to Dwellings						
Landscape and Visual	Designations						
	Character						
	Visual						
Land Use	Agriculture						
	Forestry						
	Recreation						
Planning	Policy						
	Proposals						

Table 2: Summary Environmental Comparison Table – Nant Route Options

Environmental Topic	Factor	RAG Impact Rating	
		Nant Route Option 1	Nant Route Option 2
Natural Heritage	Designations		
	Protected Species		
	Habitats		
	Ornithology		
	Hydrology		
	Geology		
Cultural Heritage	Designated Heritage Assets		
	Non-Designated Heritage Assets		

Environmental Topic	Factor	RAG Impact Rating	
		Nant Route Option 1	Nant Route Option 2
People	Proximity to Dwellings		
Landscape and Visual	Designations		
	Character		
	Visual		
Land Use	Agriculture		
	Forestry		
	Recreation		
Planning	Policy		
	Proposals		

Table 3: Summary Environmental Comparison Table – Fernoch Extension

Environmental Topic	Factor	RAG Impact Rating
		Fernoch Extension Route
Natural Heritage	Designations	
	Protected Species	
	Habitats	
	Ornithology	
	Hydrology	
	Geology	
Cultural Heritage	Designated Heritage Assets	
	Non-Designated Heritage Assets	
People	Proximity to Dwellings	
Landscape and Visual	Designations	
	Character	
	Visual	
Land Use	Agriculture	
	Forestry	
	Recreation	
Planning	Policy	
	Proposals	

Engineering Considerations

Table 4: Summary Engineering Comparison Table – Taynuilt to Creag Dhubh Route Options

Engineering Consideration	Factor	RAG Impact Rating					
		1	2	3	4	5	6
Infrastructure crossings	Major crossings						
	Minor Roads						
Environmental Design	Elevation						
	Atmospheric Pollution						
	Contaminated Land						
	Flooding						
Ground Conditions	Terrain						
	Peat						
Construction / Maintenance	Access						
	Angle Towers						
Proximity	Clearance distance						
	Windfarms						
	Communication masts						
	Urban developments						
Other Considerations	Route Length						
	DNO Crossings						

Table 5: Summary Engineering Comparison Table – Nant Route Options

Engineering Consideration	Factor	RAG Impact Rating	
		Nant Route 1	Nant Route 2
Infrastructure crossings	Major crossings		
	Minor Roads		
Environmental Design	Elevation		
	Atmospheric Pollution		
	Contaminated Land		
	Flooding		
Ground Conditions	Terrain		
	Peat		
Construction / Maintenance	Access		
	Angle Towers		

Engineering Consideration	Factor	RAG Impact Rating	
		Nant Route 1	Nant Route 2
Proximity	Clearance distance		
	Windfarms		
	Communication masts		
	Urban developments		
Other Considerations	Route Lengths		
	DNO Crossings		

Table 6: Summary Engineering Comparison Table – Fernoch Extension

Engineering Consideration	Factor	RAG Impact Rating
		Fernoch Extension Route
Infrastructure crossings	Major crossings	
	Minor Roads	
Environmental Design	Elevation	
	Atmospheric Pollution	
	Contaminated Land	
	Flooding	
Ground Conditions	Terrain	
	Peat	
Construction / Maintenance	Access	
	Angle Towers	
Proximity	Clearance distance	
	Windfarms	
	Communication masts	
	Urban developments	
Other Considerations	Route Lengths	
	DNO Crossings	

Cost Considerations

Table 7: Summary Cost Comparison Table – Taynuilt to Creag Chubh Route Options

Cost Consideration	Factor	RAG Impact Rating					
		1	2	3	4	5	6
Capital	Construction						
	Diversions						

	Public Road Improvements						
	Tree Felling						
	Land Assembly						
	Consent Mitigations						
Operational	Inspections						
	Maintenance						

Table 8: Summary Cost Comparison Table – Nant Route Options

Cost Consideration	**Factor**	**RAG Impact Rating**	
		Nant Route 1	**Nant Route 2**
Capital	Construction		
	Diversions		
	Public Road Improvements		
	Tree Felling		
	Land Assembly		
	Consent Mitigations		
Operational	Inspections		
	Maintenance		

Table 9: Summary Cost Comparison Table – Fernoch Extension

Cost Consideration	**Factor**	**RAG Impact Rating**
		Fernoch Extension Route
Capital	Construction	
	Diversions	
	Public Road Improvements	
	Tree Felling	
	Land Assembly	
	Consent Mitigations	
Operational	Inspections	
	Maintenance	