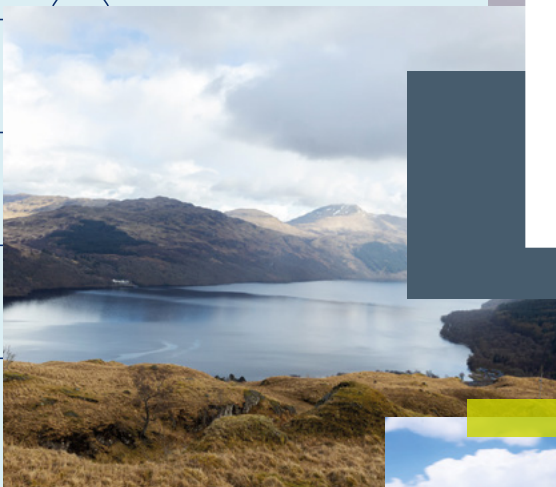


Balallan 132kV Switching Station

Consultation Booklet

June 2024



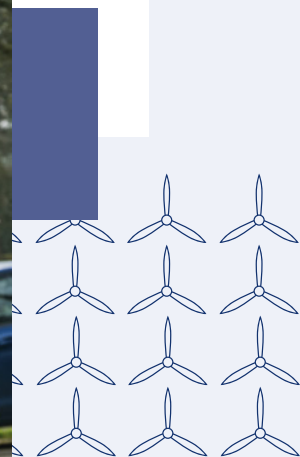
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The consultation events will be taking place on:

Wednesday 26th June 2024, 3pm–7pm

Balallan & District Recreation Hall, Balallan, Isle of Lewis, HS2 9PT

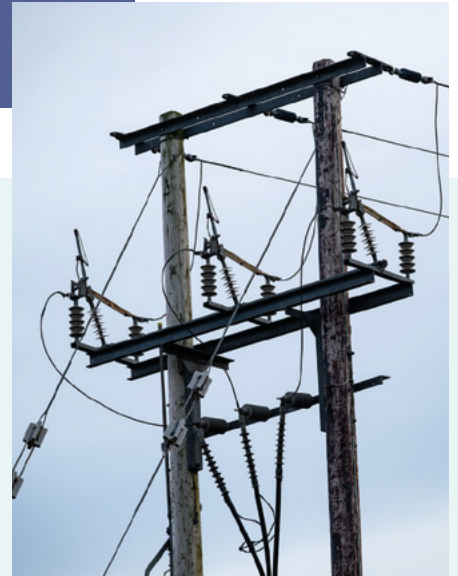


Powering change together

The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.



We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish Governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with National Grid Electricity System Operator to connect vast renewable energy resources – harnessed by solar, wind, hydro and marine generation – to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two-thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing £20 billion into our region's energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 of which will be here in Scotland.



Find out more

Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

What we do

We manage the electricity transmission network across our region which covers a quarter of the UK's landmass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground subsea cables and Overhead Lines (OHL) to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on our host communities. So we're committed to minimising our impacts and maximising all the benefits that our local developments can bring to your area.


We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: ssen-transmission.co.uk/talk-to-us/contact-us

Overview of the site selection process

SSEN Transmission has developed and implements a standard process for the selection of sites for new substations of 132kV and above. The main aim of the process is to provide a consistent approach to the selection of new substation sites, underpinned by our statutory obligations to:

'Develop and maintain an efficient, coordinated and economical electricity transmission system in its licensed area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites building or objects' (Electricity Act 1989, Section 9 (2) a & b).

Our site selection process ensures the design, consenting, construction and operation of a substation is done in a manner that is technically feasible and financially viable whilst, on balance, causes the least disturbance during construction and operation to the environment and the people who live, work and use it for recreation.

Performance	Comparative appraisal
Most preferred  Least preferred	Low potential for the development to be constrained
	Intermediate potential for the development to be constrained
	High potential for the development to be constrained

Key stages

Stage 0: Pre-site selection activities

The starting point in all substation site selection projects is to establish the need for the project and to select the potential engineering option to deliver it. This process will be triggered by the preparation of several internal assessments and documents.

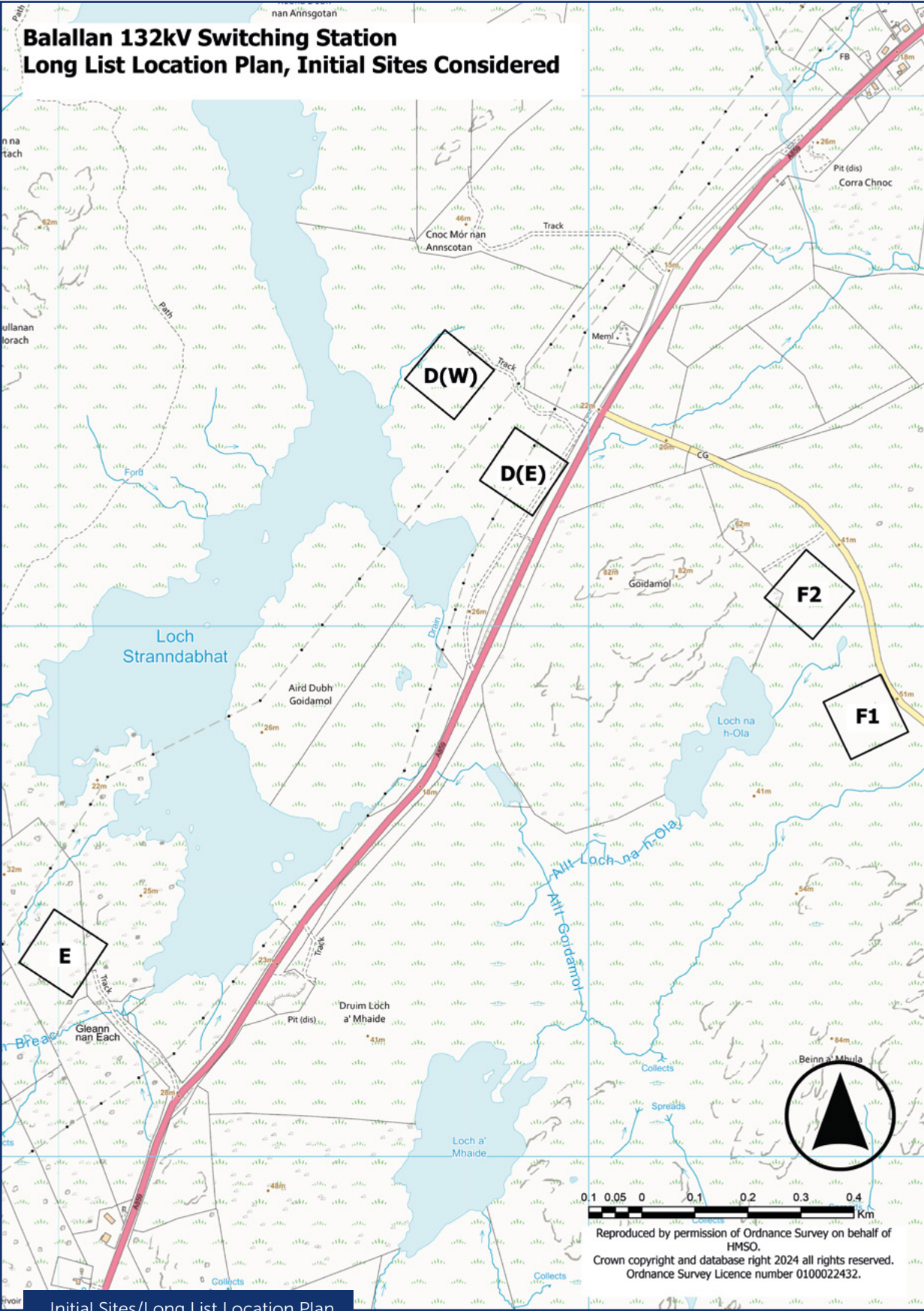
Stage 1: Initial site screening

This stage seeks to identify technically feasible, economically viable and environmentally acceptable site options within a defined area. The search area may vary depending on terrain, other infrastructure, designated areas and features and connection options. The aim to identify several potential sites which can be initially assessed for suitability.

Stage 2: Detailed site selection

This stage seeks to identify a potential substation site, which avoids physical, environmental and social constraints where possible, is likely to be acceptable to stakeholders, and is economically viable whilst taking into account engineering and connection requirements.





Project need and overview potential site: D West

The Balallan 132kV Switching Station will house all the required Gas Insulated Switchgear (GIS) to accommodate the connection of the 132kV overhead line from Muaitheabhal Wind Farm and the 132kV overhead line to Harris and Stornoway. The Switching Station will enable the Muaitheabhal wind farm to connect onto the new 132kV Overhead Line and export electricity to the mainland via the proposed HVDC cable link.

To reduce the size of the footprint required, Gas Insulated Switchgear (GIS) has been utilised which provides a footprint approximately 2/3 smaller than that of traditional Air Insulated Switchgear.

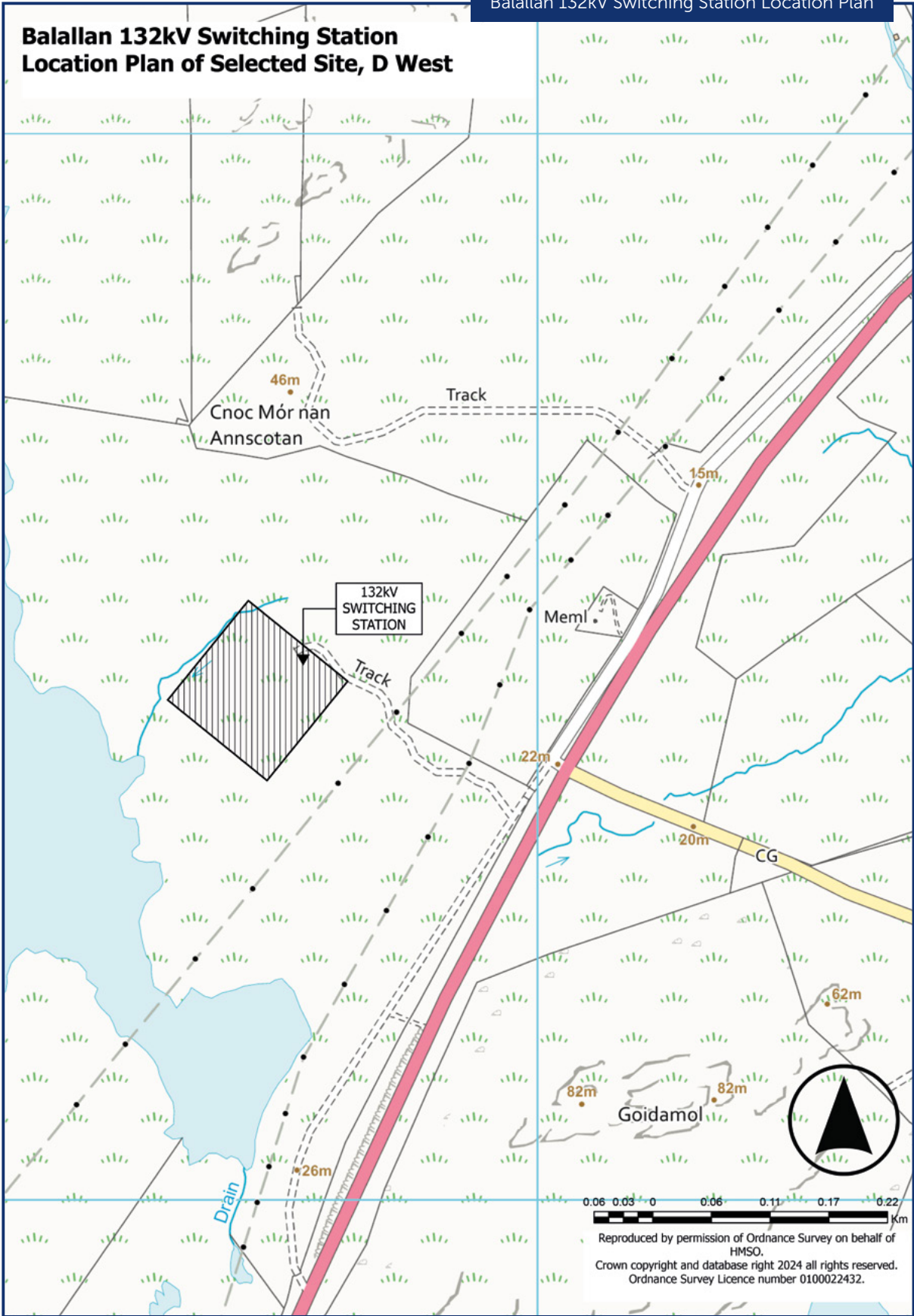
A permanent access road will be built into the site from the A859.

The Switching Station will also include ancillary equipment on the ground floor including control and protection panels, communication equipment, low-voltage switchgear, batteries, and welfare facilities.

Outline building dimensions are expected to be 41m (long) x 16m (wide) x 13m (high) within an overall platform measuring approximately 77m x 87m.



Balallan 132kV Switching Station Location Plan



Site layout

The Balallan 132kV switching station will be primarily housed indoors, this is due to the corrosive and extreme environment that the equipment will face in this location. By constructing indoors, we extend the service life of our equipment, as well as improving reliability.

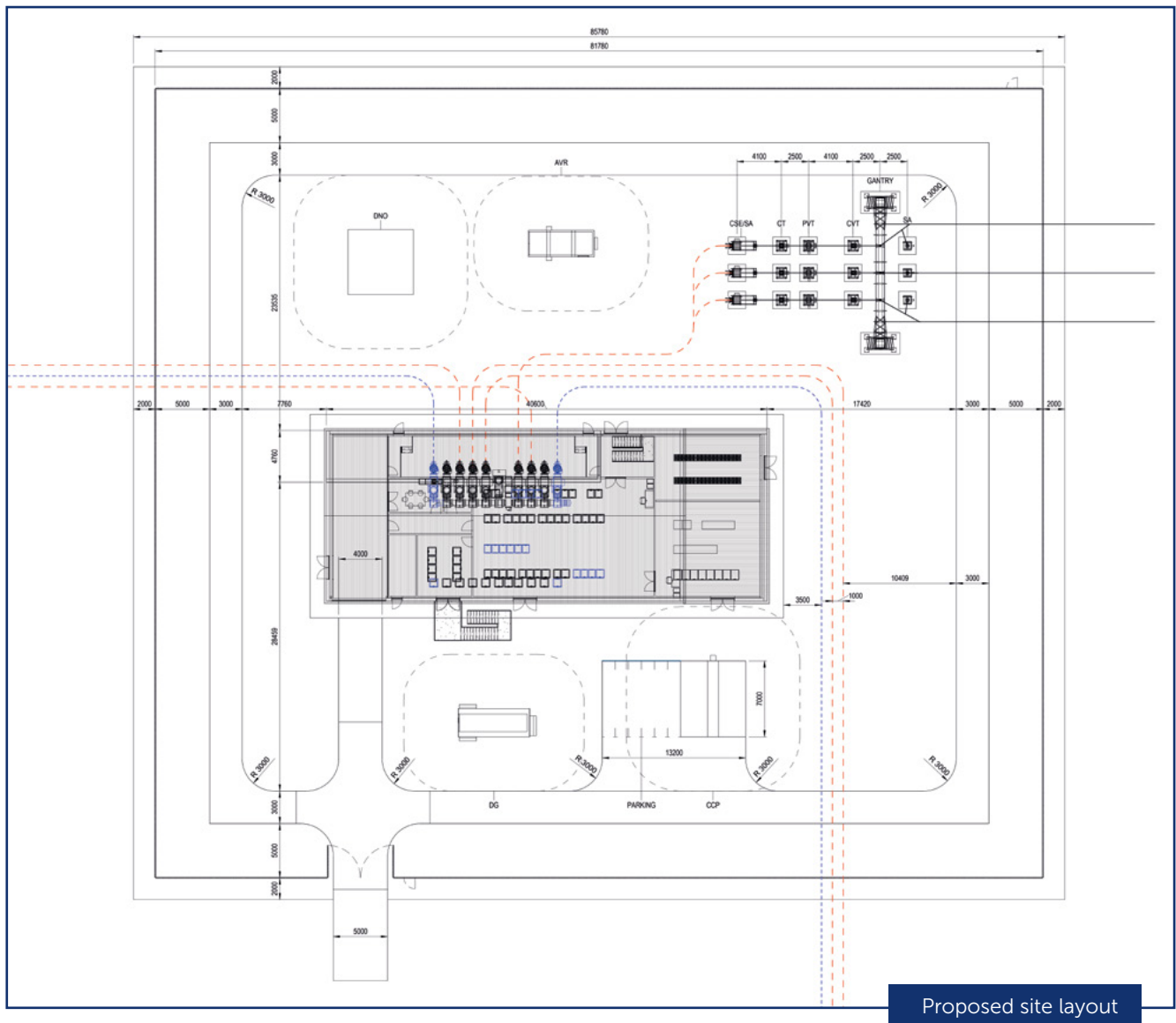
This will result in less intervention through the lifetime of the site.

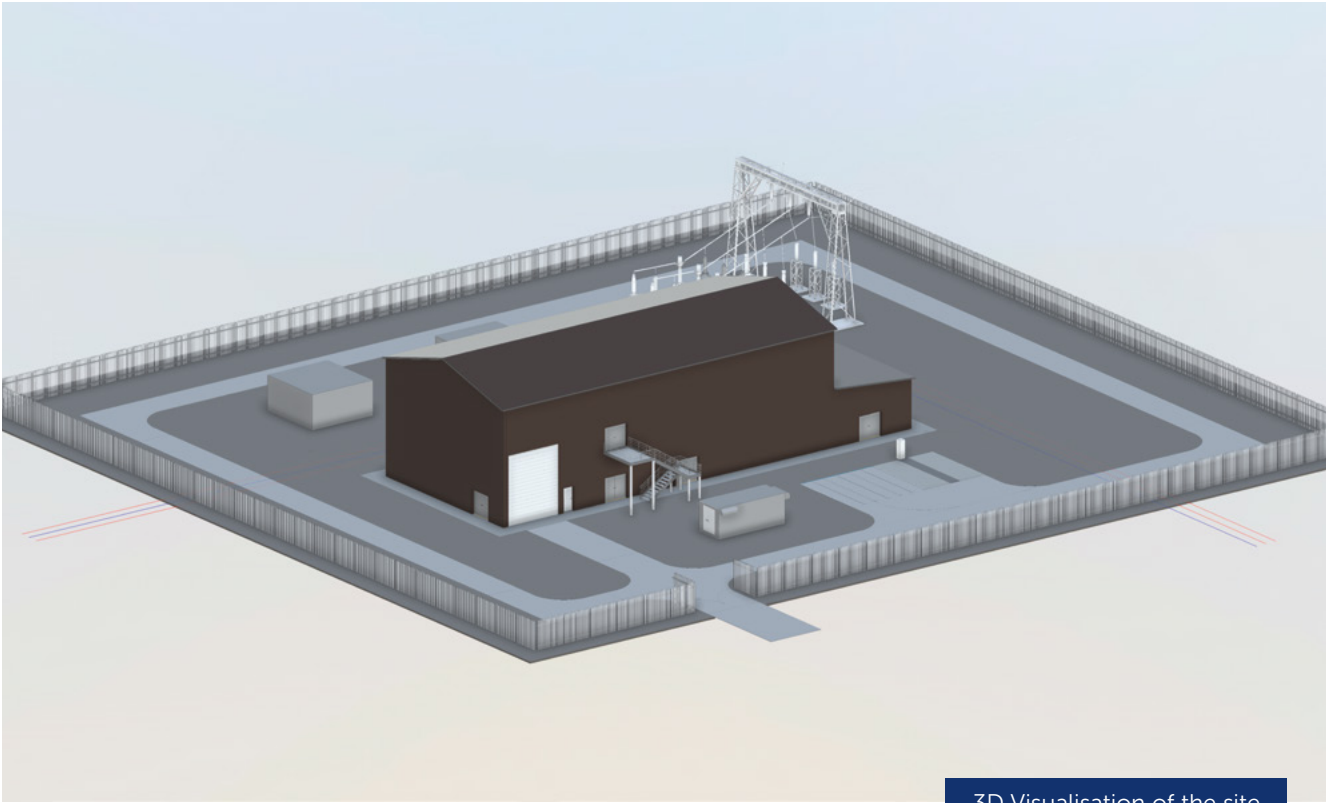
Externally to the main building, there will be several piece of ancillary equipment including, a gantry for one overhead line entry point and its associated high voltage switchgear, a diesel generator to provide emergency back-up power, car parking (including EV chargers) and Low voltage regulation equipment.

The nature of a Gas Insulated Substation means that we need to enter the high voltage switchgear using cables.

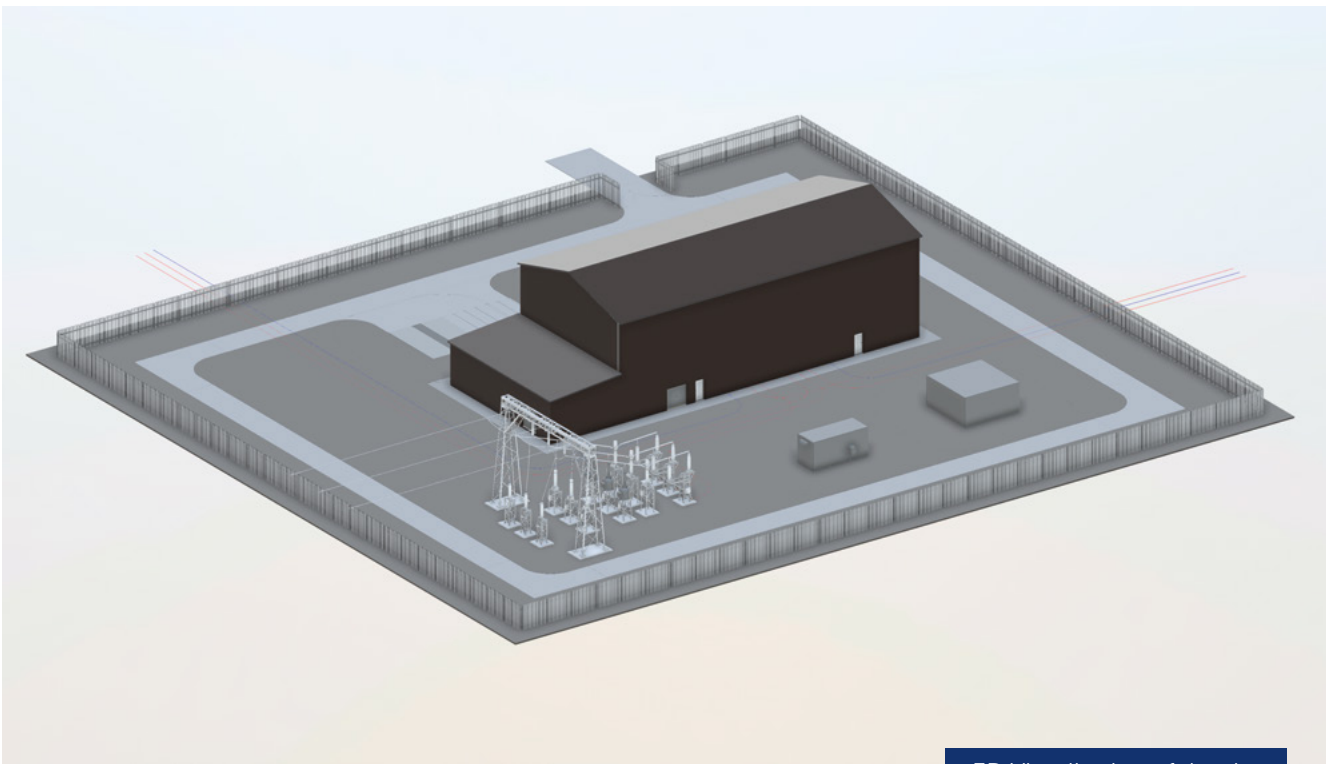
All connections into this site, except for the Overhead Line that comes from Stornoway will connect into this site via cable. Overhead Line to Cable transitions will be located around the boundary of the switching station, these will be constructed using 5 poles in keeping with the current Overhead lines on the island. These 5 pole structures will create a suitably strong structure for the Overhead Line to transition to cable.

Outline building dimensions are expected to be 41m (long) x 16m (wide) x 13m (high) within an overall platform measuring approximately 77m x 87m.





3D Visualisation of the site



3D Visualisation of the site

Environmental considerations

At this stage in the project, site options have been assessed for environmental values. Environmental assessments have considered landscape and visual amenity, ecology, habitats, ornithology, geology/hydrogeology, hydrology, and cultural heritage.

Ecology, habitats and ornithology

The project has assessed at a high level, and will continue to assess in detail, the risk to species and habitats in the area and in consultation with the key stakeholders will give full consideration to any risks highlighted. The development has the potential to encounter protected species and sensitive habitats within the project area, however, is located outside of any of the environmental designations on Lewis.

During the next stage of the project further species and habitat surveys will be undertaken to better understand the potential impacts so the site can be designed to avoid or minimise these impacts where possible. This environmental data will be invaluable for informing the final site design and any mitigation required in consultation with NatureScot.

Landscape and visual amenity

The site selection process aims to identify locations that minimise the effect on landscape and visual amenity. A full Landscape and Visual Impact Assessment (LVIA) will be undertaken and included in the detailed environmental assessment to come.

Cultural heritage

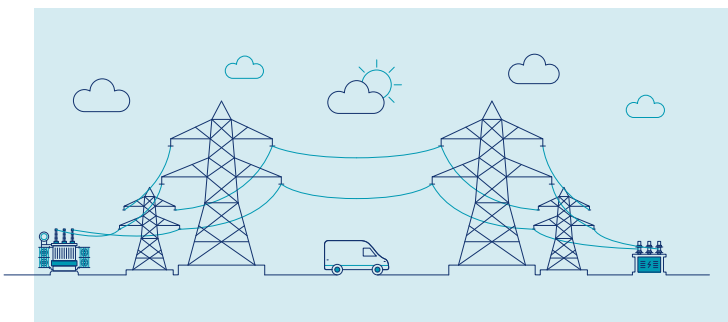
Scheduled and non-scheduled heritage features have been mapped and risk assessed through the stages of the site selection optioneering process.

The project works will be designed and constructed to ensure these features are avoided, where possible. Where this is not possible further site assessments will be conducted in consultation with the planning authority.

Geology, hydrology and hydrogeology

Risks to the aquatic environment have been considered as part of the site selection process. We look at proximity to surface waterbodies (rivers/lochs/coastal), proximity to aquifers and drinking waters and also the potential for Ground Water Dependent Ecosystems (GWDTEs).

Further habitat mapping and ground investigation will be undertaken to further inform the site positioning, access and construction methodologies, to minimise impact on these habitats. A Peat Management Plan will be developed and implemented during construction. Pollution Prevention Plans will also be prepared, to map out the measures to protect the water environment.



Social considerations

The interaction of our project with those who live, work and travel near it is embedded in our assessment of a potential site and our approach to how we construct and operate the switching station.

Landscape and visual

Landscape Designations, the Landscape Character and the Visual Amenity of the location within which the site will sit are key factors in our assessment of where to locate the site, as well as how to construct it.

When assessing the visual aspect of the site we take account of settlements and residential properties, key transportation and recreational routes utilised by tourists and visitors to an area, vantage points and tourist destinations from where views and landscape appreciation is important.

We also consider whether the switching station will compromise any of the special qualities for which the landscape is designated e.g. a National Scenic Area or whether it will compromise the characteristic elements of its landscape character.

Land use and recreation

The land and how it is utilised is included in our assessment for the location of the potential site. Recreational uses including footpaths, cycle routes and sporting activities (fishing, stalking, shooting) are identified and factored into the assessment of options for the site.

A traffic management plan will be developed for managing construction traffic during the site build and, should it be needed, a plan can also be developed to help manage any disruption to recreation during the construction phase.

Next steps

The interaction of the project with the environment in which it sits (i.e. flora, fauna and human/social) will be further assessed in detail as part of ongoing environmental assessments.



Help shape our plans

The work we have planned is significant and has the potential to deliver massive benefits in your community, Scotland, and beyond. Yet we know that achieving our goals will require a lot of work that will impact your lives. That's why we want to work with you every step of the way throughout the planning and delivery stages of these essential and ambitious works.

We're committed to delivering a meaningful consultation process that actively seeks the views of everyone affected by our plans. That means making our plans clear and easily accessible, so that you can give us input throughout each stage of the development process.

Throughout the consultation, we'll present our approach to developing the project, including changes made since we last consulted with you.

We will also provide some visualisations and maps to show you where everything will be located.

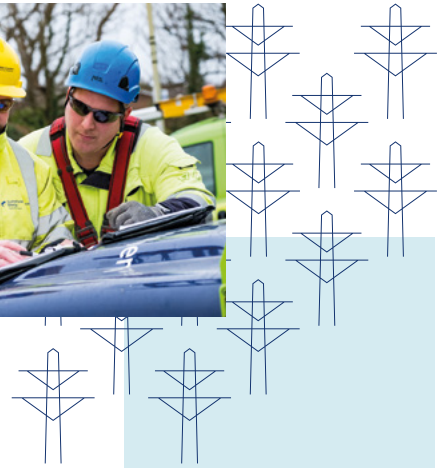
We want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of any changes and refinements we've made.

By telling us what you think, you will help shape our proposals. We want to harness your local knowledge so that we spot any unforeseen challenges early and maximise the potential benefits and opportunities for your communities.

Because, ultimately, we want you to work with us to ensure that the energy infrastructure we build will be the best it can possibly be.

Who we are consulting with

As well as communities, we are keen to hear feedback from a broad range of other stakeholders including but not limited to landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, Scottish Environment Protection Agency (SEPA) and Historic Environment Scotland (HES).



Finding common ground with landowners

SSEN Transmission recognises landowners and occupiers as key stakeholders in the development of our projects and is committed to consultation and engagement with all parties likely to have an interest in our proposals.

As the project design develops, we will work with landowners and occupiers to mitigate the effects of our infrastructure on their properties. Our team of dedicated land managers will be on hand to answer queries and address concerns throughout.

We will be required to carry out various engineering and environmental surveys to inform the design process.

Consent will be sought from affected landowners and occupiers in advance for these surveys.

Once we have finalised the design of the substation and associated works, we will be required to secure the appropriate land rights from landowners and occupiers in order that appropriate consents can be sought from Scottish Ministers.

Our land managers will endeavour to reach a voluntary agreement with landowners and occupiers, however, as a statutory undertaker, we may require to underpin voluntary discussions with an application to Scottish Ministers for a Necessary Wayleave or Compulsory Purchase Order. Ultimately this is to ensure nationally significant infrastructure projects are delivered on time and in line with our license obligations. We also have a duty to protect the interests of the UK bill payer. Statutory powers are not used lightly as we aim to work with landowners and occupiers to secure the necessary land rights voluntarily.

All potentially affected landowners and occupiers have the opportunity to provide feedback at our in person consultation events and by submitting a feedback form. We would encourage all those with an interest to submit their views through this consultation.



Leaving things better than we found them

We recognise that we have significant interaction with the environment through the activities we undertake in Scotland as we seek to develop and improve the transmission network.

With this work comes a legal responsibility to design and build our projects in a manner which protects the natural and built environment.

We are committed to protecting and enhancing the environment by minimising the potential impacts from our construction and operational activities on biodiversity.

To this end, we have committed to no net loss of biodiversity in non irreplaceable habitats for all of our projects gaining consent from 2020 onwards, and net gain of biodiversity on all projects gaining consent from 2025.

This means that during the development, construction and operation of our projects, we will leave the environment no worse than when we found it, and where possible make it even better, leaving a positive environmental legacy at all of our SSEN Transmission sites.

As this project progresses through the development process, we will actively seek ways to avoid and minimise impacts on biodiversity, through careful routeing design to avoid areas of highest biodiversity value, to implementing habitat restoration and improvement measures in areas within and surrounding the proposed development.

If there are biodiversity improvement projects in your local area that SSEN Transmission could get involved with, please get in touch. Contact details for the Community Liaison Manager can be found on page 16.

Example projects

Tomatin Bog Pool Creation

Temporary silt settlement ponds used during the construction of the adjacent substation were highlighted for their potential in creating bog pool habitats, specifically for the enhancement of the local dragonfly and damselfly population. Collaborating with the British Dragonfly Society, the silt ponds were re-purposed by softening banks and shallowing deeper sections to create excellent habitat for dragonfly and damselfly. Rocks and deadwood were placed nearby to further enhance the habitat and support other invertebrates.



Tomatin Bog Pool Creation

Thurso South substation and The Bumblebee Conservation Trust

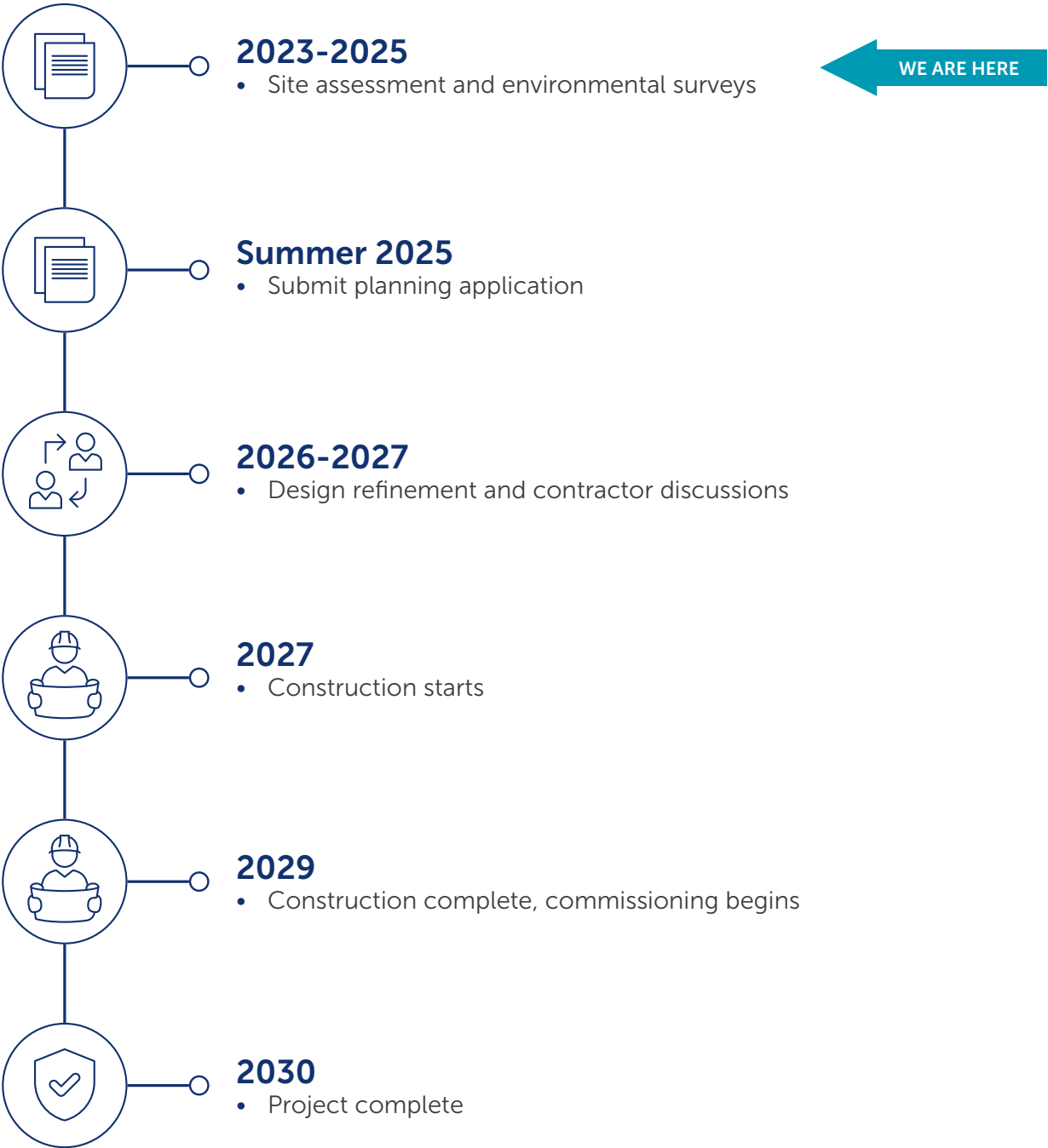
We created approximately 10 hectares of bee-friendly habitat to support the pollination of the rare endemic great yellow bumblebee.

This contributed to wider conservation efforts for this bee species. A collaboration with The Bumblebee Conservation Trust facilitated research on food availability for bumblebees, identifying the need for a diverse seed mix containing key flowering species to enhance early, main and late food supply to support the full lifecycle of bumblebees.



Thurso South substation and The Bumblebee Conservation Trust

Project timeline



Have your say

We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.

The feedback period

We will accept feedback from now until 26 July 2024.

How to provide feedback

Submit your feedback online by scanning the QR code on this page or via the form on our project webpage at: ssen-transmission.co.uk/projects/project-map/balallan-switching-station-and-132kv-ohl/

Email the feedback form to our Community Liaison Manager or write to us enclosing the feedback form at the back of this booklet.

What we're seeking views on

We want you to share your thoughts and opinions on our plans, where you think we can make improvements and concerns about the impact of our work.

We'll be actively looking to mitigate the impacts of the project as much as possible over the coming months, but it would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver a local community benefit you would like us to consider.

We encourage all interested community members to fill in a feedback form when submitting feedback, however if you prefer, you can email us to provide your feedback or ask any questions.



To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar.

Our Community Liaison Team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations and development trusts, and regularly engage with interested individuals.

Community Liaison Manager

Lisa Marchi-Grey
Community Liaison Manager

SSEN Transmission
10 Henderson Road,
Inverness, IV1 1SN

E: lisa.marchi@sse.com
T: 07825 015 507



Additional information

The best way to keep up to date is to sign up to project updates via the project webpage: ssen-transmission.co.uk/projects/project-map/balallan-switching-station-and-132kv-ohl/



You can also follow us on social media

 [SSEN-Transmission](#)

 [SSETransmission](#)

Your feedback

Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Please complete in BLOCK CAPITALS.

Q1. Has the requirement for the project been clearly explained?

Yes No Unsure

Q2. Have we explained the approach taken to select the proposed Switching Station site adequately?

Yes No Unsure

Q3. Are there any additional factors, or environmental features, that you consider important and should be brought to the attention of the project team?

Comments:

Q4. Do you have any other comments about the Switching Station?

Comments:

Q5. Following review of the provided information, how would you describe your understanding of the Balallan Switching Station?

Excellent Quite good Neither good or poor Poor Very poor

Q6. Overall how do you feel about the Balallan Switching Station?

Yes No Unsure

Q7. And finally, from your experience to date, can you rate the quality of the consultation undertaken on the Balallan Switching Station?

Excellent Quite good Neither good or poor Poor Very poor

Full name

Address

Telephone

Email

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

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at stakeholder.admin@sse.com or by clicking on the unsubscribe link that will be at the end of each of our emails.

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at ssen-transmission.co.uk/privacy

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

Thank you for taking the time to complete this feedback form. Please submit your completed form by one of the methods below:

Post: SSEN Transmission, 10 Henderson Road, Inverness, IV1 1SN **Email:** lisa.marchi@sse.com

Online: ssen-transmission.co.uk/projects/project-map/balallan-switching-station-and-132kv-ohl/

Download: Comments forms and all the information from today's event will also be available to download from the project website.

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

ssen-transmission.co.uk/projects/project-map/balallan-switching-station-and-132kv-ohl/

We intend to use Artificial Intelligence (AI) to assist our experienced teams in the analysis of your feedback, so we can categorise key points raised more quickly. You can learn more about how we're utilising AI at ssen-transmission.co.uk/AIFAQ

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

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