10. MITIGATION PROPOSALS

Embedded mitigation measures have been integral to the design evolution of the Project as described in **Chapter 2: Project Description**.

The key mitigation measures proposed to reduce the potential effects of the Project are described in **Table 10.1.** Mitigation measures are split into two elements: those specific to the Proposed Development (substation and ancillary infrastructure) and those specific to the Associated Development (overhead line diversion).

Table 10.1 Mitigation Summary

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
General	General	A Construction Environmental Management Plan (CEMP) will be the overarching document which combines the principles of all other management plans and environmental plans outlined within this EA Report and would support Construction Method Statements (CMSs). SSEN Transmission's General Environmental Management Plans (GEMPs) (see **Annex A**) will be implemented through the CEMP and include: • Bad Weather • Biosecurity (On Land) • Contaminated Land • Dust Management • Forestry • Oil Storage and Refuelling • Private Water Supplies • Restoration • Soil Management • Waste Management • Watercourse Crossings • Working in or Near Water • Working in Sensitive Habitats • Working with Concrete	
Landscape and Visual	Embedded Mitigation	A number of design principles have been considered in order to minimise landscape and visual impacts as described in Chapter 3: Landscape and Visual: • Land clearance and occupation will be limited to necessary areas only to minimise the geographic spread of the infrastructure and limit the potential impact on the local landscape fabric. • The Proposed Development and Associated Development access tracks will utilise existing forestry tracks to minimise effects associated with peripheral parts of the Project; • The number of new towers comprising the Associated Development has been limited as far as possible to minimise the effects resulting from this component of the Project; • Temporary tracks and temporary overhead line diversions (for construction purposes) would be reinstated at the end of	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		the construction phase, thereby further limiting the geographic extent of potential residual effects; • In terms of colour and materials, buildings would be painted with a recessive colour (dark-brown, such as RAL 8014: Sepia Brown or similar approved) to assist blending in with the surrounding landscape context comprising plantation forestry;	
Ecology & Ornithology	Habitats and Flora	Reinstatement of bog/mire will replace lost habitat.	
	Tree Pruning of AWI	A pre-construction Ancient Woodland survey shall be undertaken (optimum survey period April – June). An ECoW shall be present when any tree works are to be undertaken within an Ancient Woodland.	
	Protected Species	A pre-construction site walkover survey will be completed by a suitably qualified Ecological Clerk of Works (ECoW). Should a species be identified, the appropriate Species Protection Plans (SPPs) (see **Annex H** of this EA Report) will be followed during construction. SPPs include bats, otter, red squirrel and badger, wild cat, reptiles and pine marten.	
	Nesting birds	Habitat removal will be undertaken outside the breeding season if practicable (March to August inclusive)[1]. If this is not possible, a pre-construction site walkover survey focussing on the habitat to be lost within the Project will be undertaken to determine if any nesting birds are present. If nesting birds are identified, the SSEN Transmission SPPs (**Annex H**) will be implemented by a suitably experienced ECoW. If there is a delay to commencing construction following habitat removal, further mitigation may be necessary to deter birds using the site (e.g., regular human presence, tapes across the site, other scaring devices).	
Forestry	General	Best practice as specified by Scottish Forestry and Forest Industry Safety Accord (FISA) will be implemented at all times, including: • BS 5837 (2012) – Trees in Relation to Design, Demolition and Construction; and • The Forestry Commission publication 'Managing Forest Operations to Protect the Water Environment'.	
	Replanting	• A landscape mitigation plan will be created and off-site compensatory planting will be confirmed.	

[1] UK Government Wild birds: surveys and mitigation for development projects. Available at https://www.gov.uk/guidance/wild-birds-surveys-and-mitigation-for-development-projects

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		• The management felling area (either side of the 85m overhead line route) will be replanted by the landowner in-line with Scottish Forestry felling licence regulations.	
Hydrology, Hydrogeology and Geology	Embedded Mitigation	The following mitigation measures relating to the hydrological environment are embedded into the design and construction of the Project: • 50 m watercourse buffers for construction works with the exception of watercourse crossings along access tracks; • Water crossing of watercourses will be avoided in the design where possible; and • Access will utilise existing forestry tracks to minimise effects.	
	WCEMP	Construction good practice methods and works for protection of hydrological receptors are also outlined in the **Annex J: Water Construction Environmental Management Plan (WCEMP)**. The WCEMP includes mitigation measures to protect public water supplies, this includes (but not limited to): • Chemical pollution prevention including measures for appropriate chemical storage; • Mitigation measures and best practice in the event of a spill; • Mitigation measures relating to management of silt and sediment on site; • Appropriate use of concrete onsite including use in watercourse crossing design and concrete washout areas; Recommendation for a surface water quality monitoring programme to be conducted prior to construction, during construction and post-construction due to the presence of private water supplies that may be impacted. This would also include daily visual inspections during proposed construction activities. Water quality and sediment pollution prevention will be managed using best practice guidance cited in the following GEMPS: • Working in or near Water; • Soil Management; • Contaminated Land; • Oil Storage and Refuelling; • Bad Weather; • Working with concrete; and • Working in Sensitive Habitats	
	Site Drainage	Drainage from the site will include elements of SuDS design.	n/a
	Peat Management	A Peat Management Plan has been produced (See **Annex O**) which details the necessary measures that should be followed with regards to handling and storing peat including:	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		• The surface layer of peat (acrotelm) and vegetation will be stripped separately from the catotelmic peat. This will typically be an excavation depth of up to 0.5 m; • Careful handling is required to retain any existing structure and integrity of the excavated materials and thereby maximise the potential for excavated material to be re-used; • Acrotelmic material will be replaced as intact as possible once construction progresses/as it is complete; • To minimise handling and transportation of peat, acrotelmic will be replaced, as far as is reasonably practicable, in the locality from which it was removed. Acrotelmic material is to be placed on the surface of reinstatement areas; • Temporary storage of peat will be minimised, with reinstatement occurring as early as possible during the construction works; • Suitable areas should be sited in locations with lower ecological value, low stability risk and at a suitable distance from water courses; • Reinstatement will, in all instances, be undertaken at the earliest opportunity to minimise storage of turves and other materials; • Managing the construction work as much as possible to avoid periods when peat materials are likely to be wetter (i.e., high rainfall events); and • Transport of peat on-site from excavation to temporary storage and re-use Site should be minimised.	
	Peat Slide Hazard Risk Assessment	The following mitigation measures should be adopted post-consent stage and pre-construction to validate the PSRA and influence the detailed design of the Project: • Ground investigations prior to detailed design; • Update the PSRA as necessary following detailed ground investigations; • Identification of areas sensitive to changes in drainage regime prior to detailed design; • Development of a drainage strategy that will not create areas of concentrated flow and will not affect the current peatland hydrology; • Design of a Development drainage system for tracks and hardstanding that will require minimal ongoing maintenance during the operation of the substation; • Inspection and maintenance of the drainage systems during construction and operation; • Identification of suitable areas for stockpiling material during construction prior to commencement of works; and	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		• Consideration of specific construction methods appropriate for infrastructure in peat land (i.e., geogrids) as part of design Development. During the construction stage, toolbox talks should be delivered to site personnel, which should contain but not be limited to the following information: • Peat slide risks and associated indicators; • Best practise techniques when working in the peatland environment; and • Discussion on being careful not to disrupt or disturb the natural drainage on slopes.	
Archaeology and Cultural Heritage	Consultation	The mitigation strategy developed will involve consultation with the West of Scotland Archaeological Service (WoSAS).	
	Survey	It is recommended that a second survey of the site is carried out prior to works commencing in order to assess changes in design and the areas inaccessible during the initial survey, as a result of dense juvenile tree cover.	
	Watching brief	An archaeological watching brief is required for all ground-breaking works. Archaeological exclusion zones will be established 15 m each side of watercourses, where the ground has been less disturbed by forestry planting and felling.	A watching brief will be maintained during ground-breaking activity related with the Associated Development. Archaeological exclusion zones will be established 15 m each side of watercourses, where the ground has been less disturbed by forestry planting and felling.
	Heritage assets	Cup marked stone - CM_013 A buffer zone of 20 m is demarcated around the asset if works are to be carried out in near proximity, and a watching brief will be maintained during ground-breaking activity if works are to be carried out in near proximity.	None identified, but the potential for unidentified buried archaeological assets remains.
Noise	Embedded Mitigation	Construction works are not to take place during the night-time period, and rock breaking must not be undertaken without prior written agreement from ABC.	
Traffic and Transport	Construction Traffic Management Plan (CTMP)	The Contractor will share a CTMP with ABC and Transport Scotland (where appropriate) identifying appropriate and safe routes for construction traffic which will include the following mitigation measures:	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		• The Contractor will liaise with ABC to determine appropriate traffic management arrangements for construction vehicle movements; • The Contractor will agree appropriate and safe routes to and from the Project with ABC. All construction vehicles will be required to use approved access routes; • Movement of abnormal loads will be restricted to take place outside peak flow hours to minimise disruption to general traffic flows; • Measures will be implemented to minimise dust and dirt being deposited on the carriageway due to construction operations; • Appropriate signage warning other motorists and pedestrians of the presence of construction vehicles will be implemented; • Appropriate signage restricting vehicle speeds will be considered in discussion with ABC; • Police escort or other escort approved by Police Scotland will accompany abnormal load vehicle movements for the delivery of transformer components or any other loads deemed necessary by the road's authorities; and • Use of the CEMP to monitor and ensure that agreed mitigation measures are being implemented.	
	Abnormal Invisible Load (AIL)	Further consultation and notification will be undertaken with relevant local authorities including ABC and Police Scotland. A SSEN Transmission Community Liaison Manager will be appointed to the Project to ensure that the local community and the general public have enough information to plan their journey and avoid abnormal load movements. n/a	

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TRANSMISSION