

16 SCHEDULE OF ENVIRONMENTAL MITIGATION

16.1 Introduction

- 16.1.1 The purpose of this Chapter is to provide a summary of mitigation measures and good practice environmental management commitments proposed throughout this EIA Report (Chapters 6-14) to avoid, reduce, or offset the potential effects of the Proposed Development on the receiving environment.
- 16.1.2 Embedded mitigation has been incorporated into and assessed as part of the Proposed Development and therefore is not listed here. Further information on embedded mitigation is provided in **Chapter 2: Proposed Development Description (EIAR, Volume 2)**.
- 16.1.3 The majority of the pre-construction and construction phase mitigation would be delivered through the site-specific Construction Environmental Management Plan (CEMP). The outline content of the proposed CEMP is provided in **Technical Appendix 3.1: Outline CEMP (EIAR Volume 4)**. Further detail on specific mitigation measures to be included in the CEMP is contained in each of the technical chapters, where relevant.
- 16.1.4 **Table 16-1** provides a summary of those additional mitigation measures and good practice commitments identified throughout the EIA Report.

Table 16-1 Schedule of Environmental Mitigation Measures

Ref.	Issue	Mitigation/ Monitoring Response	EIA Report Reference	Responsibility	Timing
SLVIA (Chapter 6)					
L1	Mitigation During Construction	Standard mitigation measures during the construction phase.	Technical Appendix 2.2: Outline Construction Environmental Management Plan, EIA Volume 3.	Appointed Contractor	During Construction
L2	Mitigation During Operation	Mitigation of operational effects is primarily a matter of the siting/ alignment and design of different aspects of the Proposed Development, and as such constitutes embedded mitigation. This involved a staged process including a Red Amber Green (RAG) Assessment to determine a suitable alignment and design that takes into consideration cost considerations, technical, and environmental constraints and opportunities. Details of the key design drivers and decisions made during the design of the Proposed Development are discussed in Chapter 2: Description of the Proposed Development and Chapter 3: Consideration of Alternatives (EIA Volume 2) . Landscape and visual considerations, such as the existing landscape and visual baseline context as well as published guidance, were key to the design development. Those pertaining to the siting and design of the Proposed Development are summarised below.	Section 6.5, EIA Volume 2	The Applicant / Appointed Contractor	During Operation
L3	Siting	The alignment evolved to ensure that the Proposed Development would be located to: <ul style="list-style-type: none"> • Avoid smaller areas of high amenity value or scientific interest, by deviation; • provided that this can be done without using too many angle towers (i.e. the more massive structures which are used when lines change direction). • Other things being equal, choose the most direct line, with no sharp changes of direction and thus fewer angle towers. • Choose tree and hill backgrounds in preference to sky background wherever possible and when the line has to cross a ridge, secure this opaque background as long as possible and cross obliquely when a dip in the ridge provides an opportunity. Where it does not, cross directly, preferably between belts of trees. • Prefer moderately open valleys with woods, where the apparent height of the towers would be reduced, and views of the line will be broken by trees. • In a countryside which is flat and sparsely planted, keep the higher voltage lines, as far as possible, independent of smaller lines, converging routes, distribution lines and other masts, wires and cables so as to avoid a concatenation or 'wirescape'. 	Section 6.5, EIA Volume 2	The Applicant / Appointed Contractor	During Operation
Cultural Heritage (Chapter 7)					
C1	Major adverse effect on the remains of a former chapel and burial site (HA24)	Mark off and avoid during construction works. Chapel / burial site to be excluded from working areas. Working area for Tower T29 and proposed access track route between Towers T28 and T30 to be kept to the north side of the Proposed Development and away from the chapel/burial site. The chapel and burial ground would be avoided by any proposed forestry felling works in the immediate area. Felling would be directed to steer timber away from the marked remains, and any trees required to be felled in close proximity to the chapel and burial ground would be removed by hand felling. Watching brief to be carried out on any ground breaking for Tower T29 and proposed access track route between Towers T28 and T30 where they lie in close proximity to the chapel/burial site.	Section 7.5, EIA Volume 2	Archaeological Clerk of Works (ACoW) and Appointed Contractor	During Construction
C2	Major adverse effect on two possible burial cairns (HA25 and HA26).	Mark off and avoid during construction works. Watching brief to be carried out on any ground breaking for proposed access track route between Towers T29 and T30. where they pass the cairns.	Section 7.5, EIA Volume 2	ACoW and Appointed Contractor	During Construction
C3	Major adverse effect on a possible court-hill (HA40a), associated bank (HA40b) and an area of ground historically recorded as a burial ground	Mark-off and avoid the court-hill (mound) (HA40a) and associated bank (HA40b). Watching brief to be carried out on any ground breaking for the proposed access track to Tower T11 where it passes the potential burial ground.	Section 7.5, EIA Volume 2	ACoW and Appointed Contractor	During Construction

Ref.	Issue	Mitigation/ Monitoring Response	EIA Report Reference	Responsibility	Timing
	associated with the court-hill (40c).				
C4	Moderate adverse effect on shieling huts (HA2).	Mark off and avoid during felling and construction works. Felling would be steered away from the marked off heritage assets. Post felling survey to record the baseline of any additional upstanding remains associated with the shieling huts. If any additional remains are identified during the post felling survey these should be marked off and avoided for the duration of the construction works.	Section 7.5, EIA Volume 2	ACoW and Appointed Contractor	During Construction
C5	Moderate adverse effect on three buildings (HA9, HA18 and HA31), one enclosures (HA12), and a shieling hut (HA20).	Mark off and avoid during construction works.	Section 7.5, EIA Volume 2	ACoW and Appointed Contractor	During Construction
C6	Moderate adverse effect on three sheepfolds (HA13, HA21 and HA42).	Upstanding / visual remains would be avoided.	Section 7.5, EIA Volume 2	ACoW and Appointed Contractor	During Construction
C7	Moderate adverse significant effect on the remains of a former township (HA27).	Mark off elements of township (building (HA27d), enclosure (HA27e) and clearance cairns (HA27f-h)) and avoid during construction works.	Section 7.5, EIA Volume 2	ACoW and Appointed Contractor	During Construction
C8	Minor cumulative adverse effect on the route of a former drove road (HA3) and military road (HA4).	Watching brief to be carried out during any ground breaking works along the existing access track where it follows the route of the former drove / military road.	Section 7.5, EIA Volume 2	ACoW and Appointed Contractor	Durnig Construction
Ecology (Chapter 8)					
E1	Loss of Ancient Woodland	The permanent loss of Ancient Woodland a would be minimised, where possible through a phased felling approach. Micro siting of access tracks and towers within the 100 m LOD would also be undertaken, where possible, to avoid felling. Compensatory planting following tree felling. Restoration work would be undertaken in line with SSEN Transmission Species Protection Plans (SPPs) and General Environmental Management Plans (GEMPs)	Section 8.5, EIA Volume 2, Technical Appendix 8.2: Outline Habitat Management Plan, Technical Appendix 2.3: SHE Transmission General Environmental Management Plans (GEMP) and Appendix 2.4: SHE Transmission Species Protection Plans (SPP), EIA Volume 4	ECoW and Appointed Contractor	During Construction
E2	Loss of peatland habtiat (wet heath)	Active restoration of peatland habtiats effected by construction.	Section 8.5, EIA Volume 2	ECoW and Appointed Contractor	During Construction
E3	Pollution effect on otter	Pollution control measures would be in place to protect watercourses and control the flow of any run-off from construction or operational activities. Preconstruction protected species surveys will be undertaken and works overseen by an EcoW.	Section 8.5, EIA Volume 2	ECoW and Appointed Contractor	During Construction
Ornithology (Chapter 9)					
O1	Disturbance to bird nests (including potential Schedule 1 birds)	Timing of works; Pre-construction surveys; and Exclusion zones. Mitigation measure to be in line with SSEN Transmission Brid SPP.	Section 9.5, EIA Volume 2 and Appendix 2.4: SHE Transmission Species Protection Plans (SPP), EIA Volume 4.	The Applicant	During Construction Post-construction/ Operational

Ref.	Issue	Mitigation/ Monitoring Response	EIA Report Reference	Responsibility	Timing
Geology and Soils (Chapter 10)					
G1	Construction Activities	<p>Key measures to minimise and prevent impacts to peat and carbon rich soils are included within the Outline PMP (Technical Appendix 10.2: Outline Peat Management Plan) and PLHRA (TA10.3: Peat Landslide Hazard Risk Assessment, EIA Volume 4). These set out good practice measures and specific mitigation measures to minimise the potential effects on peat and carbon rich soils. Specific mitigation to be included to minimise and reduce potential impacts on peat and carbon rich soils include:</p> <ul style="list-style-type: none"> Proposed access tracks located over deep peat (>1 m in depth) would be 'floated' to minimise the volume of excavated peat. If required, bog mats would be used to cross waterlogged areas or minor watercourses without causing damage to bank integrity or compaction of soils; Towers located over deep peat would be constructed using a piled foundation solution where practicable to minimise the peat excavation and disturbance required. Working areas will be constructed using a layer of geotextile and stone over the peat, which can be reinstated on completion; Avoid cutting trenches or aligning excavations across slopes (which may act as incipient back scars for peat failures) unless appropriate mitigation has been put in place; Awareness of peat instability and pre-failure indicators would be incorporated in site induction, tool box talks, and training to enable all site personnel to recognise ground disturbances and features indicative of incipient instability; Peat and carbon rich soils would be stored temporarily on site during the works in accordance with the outline PMP to avoid desiccation and creation of run-off; and Peat and carbon rich soils excavated during the works would be used for the reinstatement of infrastructure such as track verges/shoulders and tower locations. Surplus excavated peat would be used to backfill drainage ditches and depressions in three habitat restoration areas located along the Proposed Development. 	Section 10.5, EIA Volume 2	Appointed Contractor	During Construction
Water Environment (Chapter 11)					
W1	Construction Activities	<p>Chemical Pollution</p> <p>Measures to prevent Chemical pollution will be implemented through application of the CEMP, SSEN Transmission's GEMPs TG-NET-ENV-510 (Oil Storage and Refuelling); TG-NET-ENV-512 (Working Near Water); and TG-NET-ENV-513 (Working in Sensitive Habitats). Specific measures to be adopted would include, but not be limited to, the following:</p> <ul style="list-style-type: none"> All refuelling would be carried out in designated locations, 30 m away from water courses. Irrespective of the buffer distance and location of refuelling, drip trays and spill kits will be available in accordance with standard best practice; Fuel, oils and chemicals will be stored on an impervious base within a suitably drained bund able to contain at least 110 % of the volume stored (and in compliance with compliance with General Binding Rule 28 of the Controlled Activity Regulations); Plant parking areas would be situated at least 30 m from watercourses and plant nappies placed under plant onsite when parked up for extended durations; A personnel Site Induction will make specific reference to required pollution prevention measures; and In the event of a pollutant spillage on site, the material will be contained (using an absorbent material such as sand or soil or commercially available booms) and were an event to occur affecting a watercourse, SEPA would be notified immediately. <p>Sedimentation and Erosion</p> <p>Measures to prevent sedimentation and erosion will be set out in the CEMP (as outlined in Technical Appendix 2.2: OCEMP, EIA Volume 4). The CEMP would include measures to minimise potential adverse effects related to surface water and groundwater discharge, including impacts associated with dewatering which may arise from the excavation of tower foundations. Therefore, the contractor shall be required to meet regulatory requirements and implement best practice measures as set out in SEPA planning guidance and CAR regulations. Specific measures to be adopted would include, but not be limited to, the following:</p> <ul style="list-style-type: none"> The area of soils disturbed or excavated shall be minimised and where disturbance is necessary management of materials shall be carried out in accordance with SSEN Transmission GEMP TG-NET-ENV-511: Soil Management; Clean runoff (i.e. non-silty surface water flow, including that which has not passed over any disturbed construction areas) would be kept separate from construction areas as far as possible, and subsequently distributed to suitable downslope vegetated area; Sediment laden runoff shall be directed to settlement ponds suitable for the containment of volumes of water and sediment as appropriate to the area of disturbed or excavated ground (taking in to account the potential for rainfall events). Water discharged from settlement ponds shall be directed to vegetated areas and measures such as silt fences shall ensure sediment loads are fully entrained; Where drains are installed, either temporarily during the construction phase or in association with the installation of site infrastructure, check dams would be installed at suitable intervals (as defined by the gradient of the drain) to reduce flow velocity and allow the settlement of sediment loads prior to discharge to watercourses; and 	Section 11.5, EIA Volume 2	Appointed Contractor	During Construction

Ref.	Issue	Mitigation/ Monitoring Response	EIA Report Reference	Responsibility	Timing
		<ul style="list-style-type: none"> Following construction activity any disturbed land and vegetation shall be restored to pre-construction conditions (including temporary access tracks) in line with SSEN Transmission GEMP TG-NET-ENV-522: Restoration. <p>Alteration to Surface Water Flows and Runoff</p> <p>Details of any necessary drainage measures would be included in the final CEMP and the design and installation of such measures would mitigate potential adverse impacts on the hydrology of the Site and surrounding areas during the construction phase of the Proposed Development. Measures would ensure that pre-development runoff rates are maintained and that rates of runoff to watercourses are not increased.</p> <p>At the limited number of locations where a track is required to cross a watercourse, or where other infrastructure is necessary within 50 m of a surface watercourse, either as described in this Chapter or as identified by the ECoW, the installation of drainage measures shall be supervised by the ECoW during the construction phase of works. The requirement for monitoring of water quality (prior to and during construction) within watercourses downstream of the Proposed Development would be agreed with SEPA and Marine Scotland. Procedures for this would be detailed in the CEMP.</p> <p>Water Resources</p> <p>Where works are to take place within the identified Cladich DWPA, Scottish Water shall be contacted prior to the commencement of works and works shall be carried out in line with their requirements. Works within the DWPA shall be supervised by the ECoW and visual inspection of the watercourse and intake point shall be carried out on a daily basis to ensure sediment loads are not increased. Water quality sampling shall be carried out prior to construction work to determine physico-chemical baseline conditions and subsequent monitoring will be conducted during the construction phase of the Proposed Development to identify deviation from baseline conditions, under the supervision of the ECoW.</p> <p>Construction works situated within the Cladich DWPA would be subject to additional measures to ensure that the release of sediment laden water or pollutants to the watercourse resulting from the Proposed Development would be mitigated:</p> <ul style="list-style-type: none"> A detailed pre-construction risk assessment will be completed by the contractor in consultation with Scottish Water; A silt barrier (silt fencing or a fibre roll) would be installed downslope of the proposed construction tower locations, following best practice guidance¹ prior to the commencement of construction and would remain in situ until the construction phase is completed and permanent drainage measures that shall serve the track are operational; If dewatering is carried out at the foundation of proposed tower locations, sediment laden water would be pumped to suitably sized settlement ponds (or purpose built sediment tanks), discharge from which would be to a vegetated area at least 10 m from a watercourse or subject to mechanical filtration through the use of de-watering bags, pipe-end filters or passing water through a suitable filter medium; The use of semi-permeable silt curtains situated at a downstream location within the watercourse (at which flow velocities would allow suitable installation) could be considered; No storage of fuels or potentially contaminative materials (including cements), refuelling of plant or extended laydown of plant shall take place within the DWPA; One watercourse crossing is proposed within the DWPA. At this location a silt barrier shall be installed to a 30 m buffer from the watercourse and splash guards installed at the approach to and on the crossing; and Measures to mitigate the potential for the release of sediment laden water from this area during construction would be overseen by the ECoW, who would carry out and record daily inspection of the watercourse and sediment control measures during construction work to ensure no visible increase in sediment load occurs. <p>Detailed risk assessment shall be carried out by the appointed contractor, prior to the commencement of construction work, at four locations identified in TA10.5: Private Water Supplies Assessment (EIA Volume 4); Bovuy PWS, BB_PWS_1 and BB_PWS_2 and at the Brackley Farm PWS (subject to confirmation of the PWS location identified by the landowner). These locations are downstream of the Proposed Development and as such potentially sensitive to alterations in the quality and quantity of surface water supply.</p> <p>Standard procedures will be applied by the Principal Contractor and set out in the CEMP to protect PWS water quality and supply during construction works. To ensure that all drainage measures employed during the construction phase of the Proposed</p>			

¹ SEPA, WAT_SG_29: Engineering in the Water Environment Good Practice Guide, 2008. Available online: https://www.sepa.org.uk/media/150997/wat_sg_29.pdf [Accessed January 2022].

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		<p>Development are maintained appropriately and remain effective, the performance of the drainage measures would be monitored, and drainage management works would be supervised by the ECoW.</p> <p>Works in proximity to PWS identified above shall be carried out in accordance with SSEN Transmission GEMP TG-NET-ENV-518 – Private Water Supplies, as detailed further in TA11.3: Private Water Supplies Assessment (EIAR Volume 4).</p>			
Traffic and Transport (Chapter 12)					
T1	Construction Activities	<p>The following measures would be implemented through a Construction Traffic Management Plan (CTMP) during the construction phase for the Proposed Development;</p> <ul style="list-style-type: none"> Deliveries to Site shall be scheduled to the working times of the Site. Any deliveries to be made out with these working times will be reviewed on a case by case basis taking into account a number of factors including, time and impact on local community, noise and traffic disruption; Specific training and disciplinary measures would be established to ensure the highest standards are maintained to prevent construction vehicles from carrying mud and debris onto the carriageway; Unless otherwise agreed with ABC, construction activities would in general be undertaken during daytime periods only. For weekdays, this would involve work between approximately 07:00 to 19:00 in the summer and 07:30 to 17:00 (or as daylight allows) in the winter. On Saturday the working hours would be approximately 07:00 to 17:00 in the summer and 07:30 to 17:00 (or as daylight allows) in the winter; All reversing operations and the movement of plant/deliveries which will take place on-site will be supervised and controlled; Throughout the project, temporary works access signage will be provided at the junctions where construction traffic will access/egress from the temporary access roads onto the main trunk roads; All tracks will be accessible off the A819 by means of either an existing or new bell mouth junction. Existing access junctions will be assessed for visibility, vehicle movements and types considered allowing an assessment of the safety of the existing junction prior to these being used by project construction traffic; Traffic mitigation measures will be introduced at access /existing bell mouth junctions which are found not to meet DMRB visibility splay standards. These measures may include reduction of speed limit to 30 mph with suitable signage and traffic management employed, as required; The arrangements for Traffic Management (TM) will be communicated to the public and local community directly affected by construction traffic via the SSEN public liaison officer. Other methods of communication which may be implemented by the project team include letter drops to landowners in the immediate vicinity to planned TM works, online update notices communicated via SSEN website and local press releases; and All visitors and new staff must undertake a Site induction. During the induction, personnel will be made aware of the Traffic Management Plan and Site rules. ABC may request that an agreement to cover the cost of abnormal wear on its network is made. <p>Video footage of the pre-construction phase condition of the construction vehicles route would be recorded to provide a baseline of the condition of the road prior to any construction work commencing. This baseline would inform any change in the road condition during the construction phase. Any necessary repairs would be coordinated with ABC's roads team. Any damage caused by traffic associated with the Proposed Development during the construction period that would be hazardous to public traffic would be repaired immediately.</p> <p>Damage to road infrastructure caused directly by construction traffic would be made good and street furniture that is removed on a temporary basis would be fully reinstated. It is anticipated that a Section 96 Agreement will be developed with ABC to ensure that the road network does not deteriorate as a result of the proposed construction traffic.</p> <p>There would be a regular road review and any debris and mud would be removed from the carriageway using an onsite road sweeper to ensure road safety for all road users.</p>	Section 12.5, EIAR Volume 2 and Appendix 12.2: Construction Traffic Management Plan, EIAR Volume 4	Appointed Contractor	During Construction
Noise and Vibration (Chapter 13)					
N1	Construction activities	<p>Construction noise will be limited to a short time, however it is best practice that construction is controlled with a CNMP, in accordance with the guidance and procedures outlined in BS5228-1. Procedures should include:</p>	Section 13.5, EIAR Volume 2 and Technical Appendix 13.3: Outline Construction Noise Management Plan	Appointed Contractor	During construction

Ref.	Issue	Mitigation/ Monitoring Response	EIA Report Reference	Responsibility	Timing
		<ul style="list-style-type: none"> • Minimising the noise as much as is reasonably practicable at source. • Attenuation of noise propagation. • Carrying out identified high noise level activities at a time when they are least likely to cause a nuisance to residents. • Providing advance notice of unavoidable periods of high noise levels to residents. • In order to maintain a low impact on the noise environment, consideration will be given to attenuation of construction noise at source by means of the following: <ul style="list-style-type: none"> – Giving due consideration to the effect of noise, in selection of construction methods. – Avoidance of vehicles waiting or queuing, particularly on public highways or in residential areas with their engines running. – Scheduling of deliveries to arrive during daytime hours only. Care should be taken to minimise noise while unloading delivery vehicles. Delivery vehicles will comply with the Traffic Management Plan (TMP), which should follow routes that minimise residential roads. – Ensure plant and equipment are regularly and properly maintained. All plant should be situated to sufficiently minimise noise impact at nearby properties. – Fit and maintain silencers to plant, machinery, and vehicles where appropriate and necessary. – Operate plant and equipment in modes of operation that minimise noise, and power down plant when not in use. – Use electrically powered plant rather than diesel or petrol driven, where this is practicable. • Working typically will not take place outside of daytime defined hours. 07:00 to 19:00 in summer and 07:30 to 17:00 (or within daylight hours) in winter Monday to Saturday. • Consideration will be given to the attenuation of construction noise in the transmission path by means of the following: <ul style="list-style-type: none"> – Locate plant and equipment liable to create noise as far from noise sensitive receptors as is reasonably practicable or use natural land topography to reduce line of sight noise transmission. – Noise screens, hoardings and barriers should be erected where appropriate and necessary to shield high-noise level activities. – Provide lined acoustic enclosures for equipment such as static generators and when applicable portable generators, compressors, and pumps. <p>The nature and effect of the construction operations results in the need to minimise noise produced during these activities. Best practicable means will be employed to minimise noise produced by the works. In establishing criteria, controls and working methods, account will be taken of guidance provided in BS5228-1.</p> <p>In setting working hours, consideration is given to the fact that the level of noise through the normal working day is more easily tolerated than during the evening and night-time. Essential work outside of defined daytime hours should be subject to prior notification to the ABC and consultation with the local community.</p>			
Forestry (Chapter 14)					
F1	Felling activities	<p>Good practice measures have been incorporated into the environmental management controls set out in Chapter 2: Description of the Proposed Development (EIAR Volume 2), including:</p> <ul style="list-style-type: none"> • adherence to Forestry Commission (Scottish Forestry) Guidelines e.g., to ensure protection and enhancement of the water environment; and • implementation of tree harvesting and extraction methods to ensure minimisation of soil disturbance and compaction. <p>All woodland removal operations contracted by the Applicant would adhere to the UK Forestry Standard (UKFS).</p>	Section 14.5, EIAR Volume 2	Appointed Contractor	During construction
F2		<p>The permanent loss of native broadleaved woodland areas would be mitigated by a reduction in the operational corridor width (from 85 m through the conifer compartments to 60 m through the broadleaved sections, and further reductions where possible) and seek</p>	Section 14.5, EIAR Volume 2	Applicant/ Appointed Contractor	During Construction

Ref.	Issue	Mitigation/ Monitoring Response	EIA Report Reference	Responsibility	Timing
		to further retain scrub/understorey layers in areas where existing tree cover does not breach safety clearances and allows for safe construction activity.			
F3		OHL Woodland Reports will aim to reduce the risk of future wind throw by identifying felling to stable forest edges (outside of the OC). The delivery of the felling identified in the OHL Woodland Reports will require working jointly with the forest owner to deliver felling and restocking outwith the OC.	Section 14.5, EIAR Volume 2	Applicant	During construction