Chapter 15 Schedule of Environmental Commitments

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List of Abbreviations

Abbreviation	Description
AIL	Abnormal Indivisible Loads
BDMP	Bird Disturbance Management Plan
BEMP	Biodiversity Enhancement Management Plan
CAA	Civil Aviation Authority
CAR	Controlled Activities (Scotland) Regulations
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic management Plan
DS	Drainage Strategy
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
HEIA Report	Historic Environment Scotland
MOD	Ministry of Defence
OAMP	Outdoor Access Management Plan
OEMP	Operation Environment Management Plan
PMP	Peat Management Plan
PWS	Private Water Supply
SEPA	Scottish Environmental Protection Agency
SPP	Species Protection Plan

TPC	Travel Plan Coordinator
THC	The Highland Council
TMP	Traffic Management Plan
WSI	Written Scheme of Investigation
WQMP	Water Quality Management Plan

15. Schedule of Environmental Commitments

15.1. Introduction

15.1.1. Best practice in EIA recommends the use of a Schedule of Environmental Commitments, which can act as a quick reference for anyone interested in the mitigation measures to which the Applicant has committed to implementing and upon which the assessment of residual effects presented in this EIA Report has been based. It will be utilised by the Applicant's design team throughout development of the detailed design, and the appointed Contractors will be required to allow for, and ultimately implement, each of the measures in this schedule as a minimum.

15.1.2. **Table 15.1** presents a Schedule of Environmental Commitments for the Proposed Development, listed according to the relevant environmental topic area.

Table 15.1 – Schedule of Environmental Commitments

Environmental Subject Area	Environmental Commitment	Timing
The Proposed Development		
Micrositing	A micro-siting allowance of up to 50 m in all directions is being sought in respect of each turbine and all other associated infrastructure in order to address any potential difficulties which may arise in the event that pre-construction surveys identify unsuitable ground conditions or environmental constraints that could be avoided by relocation. It is proposed that the micro-siting of all infrastructure will be subject to an appropriately worded planning condition	Construction
Turbines, Turbine Foundations and Crane Hardstandings	A full ground investigation will be completed prior to construction. This will inform final foundation and crane hardstanding design.	Pre-construction
	Detailed construction drawings with final dimensions will be provided prior to commencement once the final turbine model has been selected.	Pre-construction
	Turbines will be painted an off-white or light grey colour with low reflectivity semi-matt finish, or similar, as agreed with the Local Planning Authority.	Operation
Access Tracks	Existing on-site access tracks and wayleaves, where possible, will be retained, re-used and upgraded (where necessary).	Construction
	New access tracks will be made largely of locally sourced stone and from the on-site borrow pits (if suitable).	Construction
	Prior to construction, any required improvements to public roads will be undertaken and appropriate highway safety measures will be agreed with THC and Transport Scotland, with necessary signage or traffic control measures implemented throughout the construction phase on the agreed basis.	Pre-construction
Water crossings	The final detailed design for all water crossings, including any potential upgrades or amendments required to existing crossings, will be addressed through an appropriately worded condition and in accordance with the requirements of the Water Environment (Controlled Activities) (Scotland) Regulations 2011.	Pre-construction
Drainage	A detailed drainage design will be undertaken and submitted to the Scottish Ministers, in consultation with the Scottish Environment Protection Agency (SEPA), for approval prior to construction.	Pre-construction

Construction compounds & batching plant	Prior to commencing construction work, a detailed appraisal of the areas will be required, including an assessment by the project ecologist and also trial pits and/or boreholes to confirm the nature of the sub-strata.	Pre-construction
	The detailed location, size and engineering properties of the construction compounds will be confirmed prior to the start of construction, after the turbine supplier and model have been confirmed.	Pre-construction
	On completion of construction works, it is proposed that all temporary structures be removed, and the compound temporary laydown areas and batching plant will be restored.	Post-construction
Grid connection, substation, energy storage & cabling	The design of the substation and control room building is relatively flexible and where appropriate may be clad in local materials to match in with the surroundings	Construction
	Details of the final design of all components of the substation and energy storage compound are proposed to be secured through an appropriately worded planning condition.	Pre-construction
Borrow pits	Detailed site investigations prior to construction will be carried out to further confirm the rock type, rock characteristics and suitability, as well potential volumes to be extracted from the search area. The final borrow pit(s) identified during the geotechnical evaluation will be defined within the Construction Environmental Management Plan (CEMP).	Pre-construction
Construction hours	Normal construction hours will be between 07:00 and 19:00 Monday to Friday and 07:00 to 13:00 on a Saturday. During the turbine erection phase, operations may proceed round the clock to ensure that lifting processes are completed safely. Delivery of abnormal loads may be made out with normal construction hours, as agreed with the relevant authorities.	Construction
Construction traffic	The Applicant will ensure that the vehicles will be routed as agreed with The Highland Council (THC), Transport Scotland and Police Scotland.	Construction
	Final details of construction traffic management will be confirmed in a finalised CTMP and CEMP to be agreed with THC prior to commencement of construction.	Pre-construction
Construction Environment Management Plan (CEMP)	The Principal Contractor shall produce and adhere to a CEMP. The Principal Contractor and/or Applicant will consult with THC, SEPA, NatureScot and Historic Environment Scotland (HEIA Report) on relevant aspects of the CEMP. The CEMP will remain a 'live' document and the contractor will amend and improve the CEMP as required throughout the construction and decommissioning period.	Pre-construction

	The CEMP shall describe how the Applicant will ensure suitable management of, but not limited to, the below aspects during construction of the Proposed Development. A draft CEMP is included in **Appendix 3.1**: • noise and vibration; • dust and air pollution; • surface and groundwater; • ecology and ornithology (including protection of habitats and species); • cultural heritage; • waste (construction and domestic); • details of the size, location and volumes to be extracted from borrow pits, as well as restoration after construction; • pollution incidence response (for both land and water); and • site operations (including maintenance of the construction compound, working hours, monitoring of construction procedures and safety of the public).	Pre-construction
	Prior to commencement of construction activities, a pollution prevention strategy, contained within a CEMP, will be agreed with SEPA.	Pre-construction
Operation Environmental Management Plan (OEMP)	The Applicant will implement an OEMP. Similar to the CEMP, the OEMP will set out how the Applicant will manage and monitor environmental effects throughout the operation of the Proposed Development. The OEMP will also be developed in consultation with THC, SEPA, NatureScot and HEIA Report where relevant.	Pre-construction
Public Access	There are no Core Paths within the site boundary or the wider Estate. There are however a number of local tracks / paths which intersect the site. The most used path being the Corrieyairack Pass which runs between Laggan and Fort Augustus. The site access track will cross the non-designated section of the Corrieyairack Pass, approximately 500 m south of the site access junction and a crossing point will be formed at this location. An outline Outdoor Access Management Plan (OAMP) is included in **Appendix 3.2**. Which outlines how public access will be managed during the construction and operation of the Proposed Development.	Construction

Landscape & Visual		
The primary mitigation adopted in relation to the Proposed Development is embedded within the design of the Proposed Development and relates to the consideration that was given to avoiding and minimising landscape and visual effects during the evolution of the Proposed Development layout.		
Physical Landscape	Ground disturbance on-site would be restricted as far as practicable, and any soil materials excavated would be retained on the site for re-use on areas to be re-vegetated following the construction phase. The reuse of existing tracks for sections of access tracks would minimise the amount of new track required as part of the Proposed Development, and so minimising further landscape and visual effects where possible.	Construction/Operation
Turbine Lighting	A reduced lighting scheme has been agreed with the CAA and will be implemented. It is also proposed that visibility sensors are installed on relevant turbines to measure prevailing atmospheric conditions and visibility range. Should atmospheric conditions (for example an absence of low cloud cover, rain, mist, haze or fog) mean that visibility around the site is greater than 5 km from the Proposed Development, CAA policy permits lights to operate in a lower intensity mode of 200 candela (being a minimum of 10% of their capable illumination). If visibility is restricted to 5 kms or less, the lights would operate at 2000 candela.	Operation
Ornithology		
A Bird Disturbance Management Plan ('BDMP')	The BDMP will detail measures to ensure legal compliance and safeguard breeding birds known to be in the area and will include species-specific guidance. The BDMP shall include pre-construction surveys and good practice measures during construction	Construction
Pre-construction Surveys	Pre-construction surveys will be undertaken to check for any new breeding bird activity in the vicinity of the construction works. Specific pre-construction surveys for lekking black grouse will be undertaken during the main black grouse lekking season (March to May) to provide an up-to-date understanding of where black grouse are lekking within 750 m of the Proposed Development.	Pre-construction
Restrictions to construction activity	If pre-construction surveys do record lekking black grouse within a potential disturbance zone, all potentially disturbing construction activities would be prohibited until a risk assessment is undertaken, which would consider the likelihood and possible implications of the associated construction activities on the lek and set out necessary measures to ensure that no disturbance occurs. Restrictions to construction activity would likely be within two hours of dawn during core lekking period of March to May.	Construction

	To minimise the possibility of disturbance outside these times to any leks within 750 m of access tracks, a maximum speed limit of 15 mph will be enforced, and personnel will remain within vehicles wherever possible. Where possible, gates within 750 m of lek sites will remain open after first arrival, therefore avoiding the need for every subsequent entry to open and close the gate and the associated potential disturbance to the lek due to pedestrian activity.	
Ecological Clerk of Works ('ECoW')	To ensure all reasonable precautions are taken to avoid disturbance to birds and comply with environmental legislation, prior to construction and decommissioning the Applicant will appoint a suitably qualified Ecological Clerk of Works ('ECoW') who will advise the Applicant and the Principal Contractor on all ornithological matters (with the assistance of a suitably qualified/licenced ornithologist if required). The ECoW will be required to be present on Site during the construction and decommissioning periods and will carry out monitoring of works and briefings with regards to any ornithological sensitivities on the site to the relevant staff within the Principal Contractor and subcontractors.	Construction & Decommissioning
Biodiversity Enhancement Plan (BEMP)	The BEMP will include habitat enhancement measures which would be of benefit to ornithological species. The main management measures of the BEMP would be: Restore and enhance the wet modified and blanket bog habitats (424.63 ha) - Objective: Increase the abundance and distribution of major peat forming species, particularly Sphagna (particularly key blanket mire indicator species such as Sphagnum papillosum and S. medium). Enhance habitat for Black Grouse (19.11 ha) - Objective: Plant native broadleaved woodland to optimise habitat for black grouse. Enhance Habitat for Golden Eagle (231 ha) - Objective: Improve the condition of dry heath, wet heath and blanket bog habitats in order to improve golden eagle prey resource. The outline BEMP is provided in **Appendix 8.6**.	Operation
Ecology & Nature Conservation		
Biodiversity Enhancement Management Plan (BEMP)	A Biodiversity Enhancement Management Plan (BEMP) for the Proposed Development will ensure the loss of blanket bog and wet modified bog is compensated for and enhancement is delivered. The BEMP will include provisions for the maintenance, restoration and/or enhancement of bog habitats and other upland habitats within the site, as detailed in the outline BEMP (**Appendix 8.6**).	Post-construction

	The detailed BEMP will be agreed with the Local Authority and NatureScot in advance of construction and would ensure the Proposed Development secures significant biodiversity enhancements in line with NPF4 Policy 3 (Scottish Government, 2023), through restoring degraded habitats and strengthening nature networks.	
Ecological Clerk or Works (ECoW)	To ensure all reasonable precautions are taken to avoid negative effects on habitats, protected species and aquatic interests, a suitably qualified Ecological Clerk of Works (ECoW) will be appointed prior to the commencement of construction to advise the Applicant and the Contractor on all ecological matters. The ECoW will be required to be present on-site during the construction phase and will carry out monitoring of works and briefings with regards to any ecological sensitivities on the site to the relevant staff of the Contractor and subcontractors.	Pre-construction
Species Protection Plan (SPP)	The SPP details measures to safeguard protected species known or likely to be in the area. The SPP includes pre-construction surveys and good practice measures during construction. Pre-construction surveys will be undertaken to check for any new protected species or features in the vicinity of the construction works. The results of the pre-construction surveys will be used to update the outline SPP ahead of construction starting. The SPP will remain a live document to be updated as required and in agreement with the ECoW where changes to the distribution and status of protected species and features are recorded.	Construction
Construction Environmental Management Plan (CEMP)	This document will detail how the successful Contractor would manage the works in accordance with all commitments and mitigation detailed in the EIA Report, the SPP, statutory consents and authorisations, and industry good practice and guidance for environmental management, including implementation of appropriate pollution prevention (particularly in relation to watercourses).	Construction
Hydrology, Geology & Hydrogeology		
Pre-construction Site Investigations	Pre-construction site investigations will be conducted to determine the ground and groundwater conditions across the site, focusing on areas where construction is proposed to inform micrositing. The investigations will include targeted monitoring and assessment of the groundwater levels and flows beneath the site. The investigations within the borrow pit search areas will allow selection of specific extraction areas and avoidance of deep peat.	Pre-construction
Watercourses	A 50 m buffer will be maintained around all surface watercourses wherever possible, except where watercourse crossings are required.	Construction
Floated tracks	Where it is not possible to avoid routing tracks over localised areas of deep peat, those localised stretches of track over deep peat would be floated to avoid the requirement for excavation of peat. Floating roads would be designed to ensure suitability for site traffic during construction and operation.	Construction

Peat Management Plan (PMP)	A PMP will be produced in consultation with SEPA, THC and NatureScot. This will set out details of how any peat excavated will be stored, re-used and managed. **Appendix 9.2** provides a draft of the PMP.	Construction
Water Quality Monitoring	If it is assessed that there will be potential effects to surface watercourses or groundwater, baseline water quality monitoring will be undertaken as required. This may also include groundwater level and flow monitoring. A Water Quality Management Plan (WQMP) will be prepared and agreed with THC, in consultation with SEPA, prior to commencement of construction. It is anticipated that this will include a programme of pre-construction monitoring, over a period to be set out in the plan.	Pre-Construction
Construction Environment Management Plan (CEMP)	Following review of best practice outlined in relevant guidance and legislation, including SEPA guidance 'Prevention of Pollution from Civil Engineering Contracts: Special Requirements', a CEMP will be compiled (an outline of which is provided in **Appendix 3.1**). The Principal Contractor will implement measures outlined within the CEMP, as agreed with relevant consultees, including SEPA, NatureScot and THC. This will also include a construction method statement, which will account for: • Pollution Risk Assessment; • Identification of Controlled Waters and temporary discharge points to these watercourses; • Planning and design of dewatering activities to minimise the local drawdown; • Planning and design of pollution control measures, in particular during earthworks; • Storage of fuel and chemicals in a designated area in accordance with best practice procedures, outwith 50 m buffers of watercourses and water bodies; • Borrow pit management measures; • Designated area for concrete batching; • Pollution control system management, including dewatering of excavations; • Contingency planning and emergency procedures; and • On-going monitoring of construction procedures.	Pre-Construction
Watercourse crossings	All watercourse crossings and site discharges will be regulated under the Controlled Activities (Scotland) Regulations (CAR) licensing regime and all necessary licences will be sought from SEPA prior to the commencement of any operations on site. Detailed design will be included within a Construction Method Statement to be agreed with THC and SEPA.	Pre-Construction
Drainage Strategy	Prior to construction, a detailed Drainage Strategy (DS) will be developed and agreed with SEPA and THC.	Pre-Construction

Private Water Supplies (PWS)	Additional mitigation will include water quality monitoring of the PWS Ard Aluinn at its source and supply, following consent by the resident. The following monitoring schedule is proposed and outlined within **Appendix 9.6** and within **Appendix 3.1** CEMP. • Monthly for 12 months prior to construction, following this a baseline monitoring report will be produced and maximum and minimum thresholds for parameters will be agreed with THC in consultation with SEPA; • Monthly throughout the construction phase; and • Monthly for 12 months following construction. The residents will be provided with emergency contact details in the event of impacts to their water supply. If there is considered to be potential impact, the on-site ECoW will organise testing of the supply as soon as is practicable.	Construction
Cultural Heritage		
Written Scheme of Investigation (WSI)	The scope and nature of the programme of cultural heritage mitigation will be outlined in a written scheme of investigation (WSI) and agreed with THC in advance of construction.	Pre-construction
Photographic recording & Topographic survey	It is proposed that the asset MHG22966, Knollbuck Farmstead, is subject to a programme of pre-construction photographic recording and topographic survey of any upstanding features which may relate to the asset. A watching brief of ground breaking works in this area is also proposed.	Pre-construction
Fencing of heritage assets	It is proposed the heritage assets will in the first instance be fenced off or physically demarcated prior to construction works commencing in order to avoid any accidental impacts. The location of all assets, will be shown on a map and communicated to the on-site contractors as part of a Cultural Heritage toolbox talk with the requirement to avoid uncontrolled plant movements or spoil storage etc in the area during construction.	Pre-construction
Temporary Haul Mats	Temporary haul road mats will be used to protect the crossing point of the Corrieyairack Pass, Military Road (HA9). These will be placed over the Military Road to allow for movement over HA9 without causing damage. No earthworks or ground breaking works are proposed on or in the vicinity of The protective mats would be removed following the construction phase.	Construction
Archaeological Watching Brief	The purpose of such a watching brief would be to determine the presence, character, extent and significance of any currently unknown archaeological features or artefacts that may be disturbed by ground-breaking works. The extent and location of such works would be agreed with THC Historic Environment Team.	Construction

Noise & Vibration		
Construction Noise	Good practice measures, as set out in BS 5228, will be followed during construction to limit unnecessary noise. A CEMP will be prepared detailing measures used to control noise from construction works, which will be submitted to THC for approval prior to commencement of construction works.	Construction
Fixed (non-turbine) plant noise	Noise from non-turbine operational plant will comprise noise from the substation compound and battery energy storage facility. The items of plant and sound power levels are yet to be finalised, however, noise from any non-turbine plant will be attenuated by acoustic enclosure (if required), such that it meets the derived non-turbine noise limits.	Operation
Wind turbine noise	No specific mitigation is proposed; however the sound power level of the selected model will be confirmed, and further modelling will be undertaken to confirm that the Proposed Development will meet the consented noise limits. If at turbine procurement the Vestas V162-7.2 turbine is confirmed as the chosen model for the Proposed Development, then the serrated blade turbine will be used as it has a slightly lower sound power level and is typically supplied as standard.	Operation
Traffic & Transport		
Construction Traffic Management Plan (CTMP)	The CTMP will detail the management of traffic to and from site, including abnormal loads and daily workers' commute. It shall also include mitigation for impacts to public transport, local private access and public footpaths/rights of way, cycleways and bridleways. The Contractor and/or Applicant shall amend and improve the CTMP as required throughout the construction and decommissioning period.	Pre-construction
	During the construction period, a project website, blog or Twitter feed would be regularly updated to provide the latest information relating to traffic movements associated with vehicles accessing the site. This would be agreed with THC.	
Staff Sustainable Access Plan	A Staff Travel Plan will be deployed where necessary, to manage the arrival and departure profile of staff and to encourage sustainable modes of transport, especially car-sharing. A package of measures could include: • appointment of a Travel Plan Coordinator (TPC); • provision of public transport information; • mini-bus service for transport of site staff; • promotion of a car sharing scheme; and • car parking management.	Construction/ Operation

Abnormal Indivisible Loads (AIL) Traffic	An AIL Traffic Management Plan (TMP) will also be developed to ensure road safety for all road users during transit of development loads. The TMP will outline measures for managing the convoy and set out procedures for liaising with the emergency services to ensure that police, fire and ambulance vehicles are not impeded by the loads. This is normally undertaken by informing the emergency services of delivery times and dates and agreeing communication protocols and lay-over areas to allow overtaking.	Pre-construction
Operational/Maintenance Traffic	The site entrance junction and access track will be well maintained and monitored during the operational life of the development. Regular maintenance will be undertaken to keep the site access track drainage systems fully operational and to ensure there are no run-off issues onto the public road network.	Operation
Outdoor Access Management Plan	The OAMP will provide outline information on how public access rights would be managed during the construction and operational phases of the Proposed Development. The purpose of the OAMP is to plan site tracks and recreational paths to maintain public access routes during construction.	Pre-construction
Access route	Prior to commencement, there will be confirmation of the following: • there are no roadworks or closures that could affect passage of loads; • no underground services on the route at risk; and that the relevant Police / escort authorities are satisfied with the route being used and that the appropriate roads authorities have been further contacted.	Pre-construction
Socio-Economics, Tourism & Recreation		
No significant negative adverse socio-economic, tourism and recreation effects associated with the Proposed Development have been identified, therefore, no mitigation measures are necessary.		
Aviation & Radar		
Aviation lighting	A lighting design was proposed to all relevant aviation stakeholders for approval or comment. All parties, including the CAA and the MOD, have approved the reduced lighting design. Details of the approved design are as follows (outlined in **Appendix 14.1**): • Medium intensity steady red (2000 candela) lights on the nacelles of turbines 1, 2, 7 and 8 (four in total); • a second 2000 candela light on the nacelles of the above turbines to act as alternatives in the event of a failure of the main light;	Operation

- the lights on these turbines to be capable of being dimmed to 10% of peak intensity when the visibility as measured at the wind farm exceeds 5km; and
- infra-red lights to MoD specification installed on the nacelles of all eight turbines.