Chapter 13
Schedule of Mitigation

13 Schedule of Mitigation

Contents

13.1 Introduction 13-1

This page is intentionally blank.

13 Schedule of Mitigation

13.1 Introduction

13.1.1 Best practice in Environmental Impact Assessment (EIA) recommends the use of a Draft Scheme of Mitigation, which can act as a quick reference for anyone interested in the mitigation measures which the Applicant has committed to implementing and upon which the assessment of residual effects presented within the EIA Report has been based. It will be utilised by the Applicant throughout development of the detailed design, and the appointed contactors will be required to allow for, and ultimately implement, each of the measures in the schedule as a minimum.

13.1.2 **Table 13.1** presents a Schedule of Mitigation for the Proposed Development, listed according to the relevant environmental topic area. Individual EIA Report chapters should be referred to for full details of the mitigation.

Table 13.1 – Schedule of Mitigation

Subject Area	Mitigation Measure	Timing
Chapter 3: Project Description		
Micrositing	A micrositing allowance of 100 metres (m) in all direction is being sought in respect of each turbine in order to address any potential difficulties which may arise in the event that pre-construction surveys identify unsuitable ground conditions or unforeseen environmental constraints. It is proposed the final positioning will be addressed through an appropriately worded condition.	Construction
Turbine, turbine foundations & crane hardstanding	Final turbine dimensions will be determined based upon turbine availability and procurement prior to construction.	Pre-construction
	A full ground investigation will be completed prior to construction. This will inform final foundation and crane hardstanding design.	Pre-construction
	The area above the foundations will be backfilled up to the turbine with topsoil and seeded with a native seed mix to encourage re-vegetation.	Post-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
Solar photovoltaic modules and mounting frames	A full ground investigation will be completed prior to construction.	Pre-construction
	Final module dimensions will be determined based upon availability and procurement prior to construction.	Pre-construction
	Detailed construction drawings with final dimensions will be provided prior to commencement once the final model has been selected.	Pre-construction
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 of locally sourced stone, and/or potentially from 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 South Lanarkshire Council (SLC) and Transport Scotland,	Pre-construction

Subject Area	Mitigation Measure	Timing
	with necessary signage or traffic control measures implemented throughout the construction phase on the agreed basis.	
Watercourse Crossings	The final solution and 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 Environmental Authorisations Scotland Regulations (2018) as amended (EASR).	Pre-construction
Drainage	A detailed drainage design will be undertaken and submitted to the Local Planning Authority, in consultation with the Scottish Environment Protection Agency (SEPA), for approval prior to construction.	Pre-construction
Grid connection & LDES	The detailed design of the components of the substation and Long Duration Electricity Storage (LDES) compounds will be provided prior to construction of those Proposed Development elements; it is proposed that this will be secured by an appropriately worded condition.	Pre-construction
	Appropriate safety, operational and maintenance measures will be implemented, including system monitoring, preventative maintenance, suitable system spacing and enclosure design, compliance with recognised standards, drainage provision via SuDS, provision of Fire and Rescue Service access, and the preparation of an Outline Battery Storage Safety Management Plan (OBSMP), a Detailed Battery Storage Safety Management Plan (DBSMP), Outline Emergency Response Plan (OERP) and an Emergency Response Plan (ERP).	Pre-construction, Construction and Operation
Construction compounds & temporary laydown area	Prior to commencement of construction, 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 and temporary turbine laydown area 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 areas be removed and restored.	Post-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 each search area. The final borrow pit(s) identified during the geotechnical evaluation will be defined within the Construction Environmental Management Plan (CEMP).	Pre-construction

Subject Area	Mitigation Measure	Timing
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 outwith 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 SLC, Transport Scotland and Police Scotland.	Construction
Construction Environment Management Plan	The Contractor shall produce and adhere to a CEMP. This shall be developed in consultation with Scottish Ministers, NatureScot, SEPA, Historic Environment Scotland (HES) and SLC. The Contractor shall amend and improve the CEMP as required throughout the construction and decommissioning period.	Pre-construction, Construction
	The CEMP shall describe how the Contractor will ensure suitable management of aspects including, but not limited to, the below, during construction of the Proposed Development: • 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); • pollution incidence response (for both land and water); and • site operations (including maintenance of the construction compound, working hours and safety of the public). An Outline CEMP is included in **Technical Appendix 3.2.**	Pre-construction, Construction
	Prior to commencement of construction activities, a pollution prevention strategy, contained within a CEMP, will be agreed with SEPA.	Pre-construction
Construction Traffic Management Plan	The Construction Traffic Management Plan (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	Pre-construction, Construction

Subject Area	Mitigation Measure	Timing
	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.	
Operation Environmental Management Plan	The Applicant will develop an Operation Environmental Management Plan (OEMP) in consultation with the Scottish Ministers, NatureScot, SEPA and SLC. The OEMP will set out how the Applicant will manage and monitor environmental effects throughout operation.	Pre-operation
Public Access	If required, a temporary diversion will be put in place for the construction period for affected core path sections, with suitable alternatives clearly signposted. It is proposed that details of temporary path diversions can be secured by an appropriately worded condition.	Construction
Aviation Lighting	Aviation lighting will be installed on three of the proposed eight turbines (**Technical Appendix 3.5**). The lighting requirements will be agreed with the Civil Aviation Authority (CAA) and Ministry of Defence (MoD), with the lights meeting the requirements set out in Article 222 of the UK Air Navigation Order (ANO)	Construction and Operation
Radar	Mitigation Measures to be agreed between the Applicant, National Air Traffic Services (NATS) and Glasgow Airport, likely involving the use of existing radar mitigation systems (such as the Glasgow TERMA radar) and the wider multi-radar network to address turbine-related interference.	Pre-construction
Shadow Flicker Nuisance	Shadow Flicker Mitigation Protocol (if required).	Operation
Local Employment	Implementation of a Responsible Contracting Policy (**Technical Appendix 3.7**).	Pre-Construction
Chapter 6: Landscape and 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.		
Embedded Mitigation	The design rationale adopted included: • opportunity to develop further renewable energy development within an already productive landscape and within an established wind farm picture; • avoid inconsistent turbine spacing, to minimise visual confusion and ensure a balanced / compact array from key views; • a review of whether turbines of up to 200 m could be accommodated at the site in a manner which would not be out of context with the overarching characteristics of the landscape;	Pre-application (design)

Subject Area	Mitigation Measure	Timing
	• reducing turbine height to 180 m for T2 and T4 to reduce visual impacts from Douglas; • appropriate offsets from all properties and settlements maintained to ensure no property would experience an overbearing visual impact such that it became an unattractive place to live; • alignment of the Proposed Development turbines with existing wind farms ensures that the Proposed Development would appear as part of an agreeable overall array in key views; • siting of the solar PV, LDES and substation on lower-lying land and adjacent to existing woodland to provide screening; • taking all other engineering and environmental constraints into account; and • considering the layout of other structures and ancillary features of the Proposed Development to utilise existing infrastructure as far as possible.	
Reduced Visible Aviation Lighting Scheme	Mitigation of visible turbine lighting has been embedded into the design of the Proposed Development to reduce the intensity of lighting in certain atmospheric conditions by reducing the intensity and reducing the amount of vertical downwards lighting in order to reduce the visual impact experienced by receptors below the lights. In total three of the eight turbines (T1, T6 and T8) are proposed to be fitted with visible red 2,000/200 candela (cd) lights on the nacelle of each turbine. These will operate in the reduced 200 cd intensity where meteorological visibility is greater than 5 km and where visibility is less than 5 km the lights will operate at 2,000 cd.	Pre-application (design)
Visual mitigation during operation	The turbines would be painted an off-white colour with a low reflectivity semi-matt finish (or similar as agreed with the Local Planning Authority), widely regarded to be the least intrusive in the landscape when seen against the sky in a host of weather conditions typically experienced in the UK.	Operation
Chapter 7: Ecology		
Biodiversity Enhancement and Management Plan	An Outline Biodiversity Enhancement Management Plan (OBEMP) has been produced for the Proposed Development (**Technical Appendix 7.5**). The aims of the OBEMP are: • Upland Moorland and Peatland Restoration and Enhancement; • Native Broadleaved Woodland & Riparian Corridor Creation/Enhancement; • Breeding Wader Enhancement; and • Breeding Barn Owl Additional Enhancement.	Construction and Operation

Subject Area	Mitigation Measure	Timing
Species Protection Plan	A Species Protection Plan (see **Technical Appendix 7.4**) will be implemented to ensure all reasonable precautions are taken by the Applicant and their contractors to safeguard protected species from disturbance, injury and death and to protect any structure or place, which any such protected species uses for growth, breeding, resting, shelter or protection during the construction and decommissioning of the Proposed Development. The Aim of the SPP will be fulfilled by the Applicant adopting the following objectives throughout the construction and decommissioning of the Proposed Development: • Objective A – Implement a monitoring and protection plan for protected species; • Objective B – Follow an approved procedure if an active feature is found; and • Objective C – Ensure adequate education and awareness of site personnel.	Construction and Operation
Habitat Fragmentation and Destruction	Implementation of CEMP. Pre-construction surveys of spawning habitat. Avoiding in-stream works during spawning and incubation periods (October to April) where spawning habitat identified upstream of the watercourse crossing. Design of new watercourse crossings to maintain connectivity.	Pre-application (design) and Construction
Pre-construction surveys	Pre-construction surveys for protected species; obtaining licence(s) for disturbance from NatureScot (if required).	Pre-construction
Embedded Mitigation	Embedded mitigation with buffers around turbines to key habitat features have calculated and implemented.	Pre-application (design)
Ecological Clerk of Works (ECoW)	Provision of an ECoW to oversee the implementation of committed mitigation.	Construction
Chapter 8: Ornithology		
Biodiversity Enhancement Management Plan	Implementation of an extensive BEMP which will improve and create new habitats for Important Ornithological Features, in particular breeding waders. The BEMP also aims to aid establishment of a successful barn owl breeding territory.	Operation
Construction Environmental Management Plan and Ecological Clerk of Works	Implementation of a CEMP, including a timetable of actions; this will form part of the contract documents to ensure delivery of mitigation specified in the EIA Report. In addition, the CEMP will incorporate the provision of an ECoW to oversee the implementation of committed mitigation.	Pre-construction and Construction

Subject Area	Mitigation Measure	Timing
Chapter 9: Geology, Hydrology, Hydrogeology & Peat		
Embedded Mitigation	Embedded mitigation, including minimum buffers from watercourses, use of existing infrastructure as far as practicable, minimising requirement for watercourse crossings, siting infrastructure to almost entirely avoid peat. Detailed final design of watercourse crossings to be implemented, in accordance with good practice and EASR.	Pre-application (design)
Watercourse Crossings	Regulation of watercourse crossings by EASR, to include maintenance and removing any blockages.	Pre-construction and Construction
CEMP and Environmental Clerk of Works	Implementation of mitigation measures outlined in CEMP. Includes committed best practice measures. Will be implemented by Principal Contractor. Best practice will be verified by on-site Environmental Clerk of Works (EnvCoW).	Pre-construction and Construction
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 deeper peat.	Pre-construction
Drainage Strategy	Implementation of a Drainage Strategy, to include trackside and cross-drainage.	Pre-construction
Biodiversity Enhancement Management Plan	Implementation of BEMP, including peatland restoration and enhancement with aftercare and monitoring.	Operation
Operational Environmental Management Plan	Best practice to be outlined within OEMP and implemented by operation and maintenance contractor. Implement best practice and correct storage of fuels and management plans in the event of spills.	Operation
Chapter 10: Cultural Heritage		
Written Scheme of Investigation and Archaeological Clerk of Works	Appointment of an Archaeological Clerk of Works (AcoW). Archaeological monitoring (watching briefs) in areas of heightened archaeological potential and the sites of surviving historic agricultural remains. Mitigation to be agreed with West of Scotland Archaeology Service and detailed in a Written Scheme of Investigation (WSI).	Pre-construction and Construction

Subject Area	Mitigation Measure	Timing
Chapter 11: Noise & Vibration		
Construction noise	Production and implementation of CEMP and CTMP.	Pre-construction, Construction
Operation of the wind turbines	Implementation of noise mitigation strategy (embedded mitigation).	Operation
Operational of non-turbine fixed plant	Specification and location of plant such that noise limits are met at noise-sensitive receptors (embedded mitigation).	Pre-application (design), Operation
Chapter 12: Traffic & Transport		
Construction Traffic Management Plan	Implementation of CTMP.	Construction and Decommissioning