

Appendix 4.2: Schedule of Mitigation

1 Schedule of Mitigation

1.1 Introduction

- 1.1.1 The purpose of this appendix is to provide a summary of mitigation measures identified within the Gordonbush Extension Wind Farm Environmental Statement (2015), the Gordonbush Extension Wind Farm Further Environmental Information Report (2016), and this EIA Report to prevent, reduce or offset the effects of the Proposed Varied Development on the receiving environment. All of the mitigation measures identified for the Consented Development would be adopted by the Proposed Varied Development. Where Conditions of Consent are in place to secure these mitigation measures, this is referenced.
- 1.1.2 During the construction phase these shall be detailed within, and implemented through the Construction Environmental Management Plan (CEMP). A draft CEMP is included in Appendix 4.1 of this EIA Report.
- 1.1.3 Table 1 provides details of those mitigation measures identified throughout the EIA process.

Table 1 – Summary of Mitigation Measures

| Topic | Issue | Mitigation Reference | Mitigation / Monitoring Measure | Condition of Consent | Responsibility |
|---------|---------------------------------------|----------------------|--|----------------------|-------------------------|
| General | Environmental Management | G1 | Prior to construction works, sensitive ecological areas, and other specific sensitive locations (e.g. watercourses) would be identified and marked out as appropriate on site by specialist advisers in order to avoid unnecessary encroachment and protect sensitive areas during construction. The contractor would ensure that no vehicle movements or other activities take place outwith the approved working area. Micrositing may be required as a result of additional constraints encountered during site works. Any micrositing would require to be agreed with the specialist advisors (e.g. the ecological clerk of works) as appropriate. | Condition 23 | SSE / Contractor / ECoW |
| General | Environmental Management | G2 | A draft Construction Environmental Management Plan (CEMP) is included in Appendix 4.1. This document includes mitigation measures proposed in the EIA Report and would be updated with conditions of consent, and site specific construction method statements. The CEMP will provide details of Pollution Prevention measures and Site Waste Management Plans. | Condition 23 | SSE / Contractor / ECoW |
| General | Restoration and Reinstatement | G3 | Disturbed ground would be reinstated as required using best practice techniques of vegetation and habitat reinstatement. Site restoration and reinstatement methods would be agreed with the statutory authorities prior to construction commencing and following the principles set out within the CEMP. | Condition 23 | Contractor / ECoW |
| General | Consultation with the local Community | G4 | Consultation with the Local Community during the construction of the development would be an important consideration. At Gordonbush Wind Farm, a community liaison group was set up providing the local community with information about key construction activities and a mechanism by which concerns from within the local community could be shared and discussed. A similar working group would be established during the construction of the development. | Condition 20 | SSE |
| General | Working Hours | G5 | Construction activities are anticipated to be between 07.00 and 19.00 hours Mondays to Fridays, and 07.00 to 14.00 hours on Saturdays between April and September. In winter months (i.e. between October and March), working hours are anticipated to be between 07:30 and 17:00 Mondays to Fridays and 07:30 and 14:00 on Saturdays. No working activities would be | Condition 15 | Contractor |

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| | | | <p>planned on Sundays during any period. In the event of work being required outwith these hours, e.g. abnormal load deliveries, commissioning works or emergency mitigation works, the Planning Authority will be notified prior to these works taking place, wherever possible.</p> <p>Operation of crushing equipment located within / next to borrow pits will generally be limited to 08.00 to 18.00 hours Mondays to Fridays and 08.00 to 13.00 hours Saturdays, with no operation on Sundays.</p> | | |
| Ecology and Nature Conservation | Ecological Clerk of Works | EN1 | An Ecological Clerk of Works (ECoW) would be appointed during the construction period, as required. | Condition 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Micro-siting | EN2 | Final location of site infrastructure in or close to sensitive habitats to be micro-sited, in consultation with the ECoW to minimise impacts. | Condition 11, 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Exclusion Zones | EN3 | 50m exclusion zone will be maintained between working areas, machinery and watercourses (except watercourse crossing points). Exclusion zones will be demarcated where necessary by the ECoW. | Condition 11, 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Working Areas | EN4 | Demarcation of defined working areas during construction phase to prevent unnecessary entry to and disturbance of sensitive habitats including otter and water vole habitat along the watercourses. | Condition 11, 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Best Practice Measures | EN5 | Relevant Pollution Prevention Guidelines would be followed. | Condition 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Best Practice during construction | EN6 | Adoption of best practice techniques of track and turbine base construction to ensure that drainage patterns and water quality within the development site and environs are maintained; materials inappropriate to site geology are not used in the construction; and to minimise habitat take. | Condition 7, 11, 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | | EN7 | Adoption of best practice techniques to ensure stored materials (including fuel, concrete etc.) do not contaminate soils or watercourses. | Condition 23 and 24 | Contractor / ECoW |

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| Ecology and Nature Conservation | | EN8 | Adoption of best practice techniques in borrow pits to ensure any pumped drainage water is settled prior to any discharge to watercourses. | Condition 14, 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Restoration | EN9 | Early restoration of all road batters, peat mounding, turbine bases, site compounds and borrow pits to minimise effects due to soil/peat exposure and erosion and to optimise the chances of successful use of rescued live plant material. Use of plant material native to and preferably collected in the locality (including lifting and replacement of turf where timescales allow) and avoidance of fertilisers and lime. | Condition 14, 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Pre-construction Surveys | EN10 | Pre-construction otter, water vole, pine marten, wildcat, badger and reptile surveys would be undertaken within three months prior to construction works commencing (or during the suitable survey period prior to works commencing). | Condition 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Species Protocols | EN11 | Site specific mammal, reptile and bird protection protocols would be produced in the CEMP. | Condition 23 and 24 | Contractor / ECoW |
| Ecology and Nature Conservation | Species Protocols | EN12 | Provision and implementation of an Otter Species Protection Plan for the duration of the construction period. | Condition 23 | SSE / Contractor / ECoW |
| Ecology and Nature Conservation | Potential Impacts to Reptiles | EN13 | Advance of works, checks for reptiles and any necessary translocations. | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Good Practice Measures | HHG1 | Good practice measures will be applied in relation to soil/peat storage, ground stability, pollution risk, sediment management and management of surface runoff rates and volumes. These measures will form part of the CEMP. | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Drainage Plan | HHG2 | Prior to construction a site specific drainage plan would be prepared taking into account existing local drainage which may not be mapped and incorporate any specific mitigation measures. | Condition 23 and 24 | Contractor / ECoW |

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| Hydrology, Hydrogeology & Geology | Wet Weather Protocol | HHG3 | A wet weather protocol would be developed and would detail procedures to be adopted by all staff during heavy rainfall. Tool box talks would be given to personnel, and the inspection and maintenance regimes of sediment and runoff control measures would be adopted during these periods. | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Soil Storage and Management | HHG4 | Soils taken for temporary use would be stockpiled in storage bunds and replaced following completion of construction. Topsoil and subsoil would be stripped and stored separately following best practice for re-use. Permanent excavation and removal of surface soil and peat, where appropriate and agreed with landowners, would be stockpiled and re-spread within the development area as construction works are completed. | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Peat Management Plan | HHG5 | A draft Peat Management Plan is included in the 2015 ES (Appendix 9.3). This document includes information on the peat conditions on-site, activities that will require peat excavation, identification of restoration and reinstatement options and details on the handling and storage of excavated peat | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Ground Stability | HHG6 | Good construction practice to prevent peat instability within areas that contain peat deposits, as defined in the Peat Landslide Hazard Risk Assessment in the 2015 ES Appendix 9.1. Detailed design and construction practices would need to take account of the particular ground conditions and the specific works at each location through the construction period. An experienced and qualified engineering geologist/geotechnical engineer would be appointed as a supervisor to provide advice during the setting out, micro-siting and construction phases of development. | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Erosion and Sedimentation | HHG7 | Good practice measures for the management of erosion and sedimentation would be carried out to ensure there is no contamination in the drainage system. Section specific drainage plans would be produced prior to construction in sensitive areas and would incorporate measures to minimise release of sediment into surface watercourses. | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Maintenance of Existing Surface Water Flow Paths | HHG8 | Best practice measures would be adopted to ensure the existing water catchment areas to the areas of high GWDTE are maintained. During construction an ECoW would assess the effectiveness of the measures. | Condition 23 and 24 | Contractor / ECoW |

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| Hydrology, Hydrogeology & Geology | Surface Water Runoff | HHG9 | Measures would be built into the development design to ensure no increase in surface water runoff from the site. This would include the design of drainage systems, the appropriate use of Sustainable Drainage Systems (SuDS) and development of site specific drainage plans. | Condition 23 and 24 | Contractor / ECoW |
| Hydrology, Hydrogeology & Geology | Water Abstractions | HHG10 | The location of any water supply abstractions for construction activities would be identified at detailed design. Any new abstractions would be agreed with SEPA prior to commencement of construction and would comply with CAR authorisation requirements. | Condition 23 and 24 | Contractor / ECoW |
| Ornithology | Nesting Birds during Construction | | Where construction is scheduled during the nesting period (March to July inclusive), the following measures to protect nesting birds would be implemented: | Condition 23 and 24 | Contractor / ECoW |
| | | O1 | A pre-construction survey should be undertaken to check whether any birds are settling to nest close to proposed access tracks or construction sites, where there might be a risk of the nest being destroyed. | | |
| | | O2 | Monitoring of construction sites should be undertaken throughout the nesting season, to detect birds settling to nest on areas close to construction activity. | | |
| | | O3 | Postponement of construction activities which would risk disturbance or the destruction of a bird's nest, until deterrence or nest protection measures have been put in place. | | |
| | | O4 | Implementation of deterrence measures within potential construction sites to move any such birds discovered at an early stage of settling or protection of any nests discovered. Measures include providing information to all construction personnel concerning the law relating to birds and actions to be taken if nesting birds were detected, use of scaring devices to move settling birds and protection of established nests and broods by marker tape. | | |
| Ornithology | Monitoring | O5 | Any post-construction bird monitoring for the Proposed Varied Development will be agreed with SNH in light of the monitoring scope and results from the adjoining Gordonbush Wind Farm. Insights gained from the Gordonbush Wind Farm bird monitoring may negate the need for any | Condition 25 (HMP) | ECoW / Qualified Ornithologist |

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| | | | additional monitoring at the Proposed Varied Development (specifically, if post-construction monitoring shows key species are absent and levels of bird activity are low). Should monitoring be required, the scope, duration and reporting will be included as part of the HMP, secured through Condition 25 of the existing consent. | | |
| Cultural Heritage | Pre-construction Survey | CH1 | Prior to construction works, further investigation would be advisable of mounds (Site 63) to verify their identification as field clearance mounds, and to recover any environmental and datable evidence. | Condition 22 | Professional Archaeologist |
| Cultural Heritage | Monitoring | CH2 | Monitoring for potential sub-surface archaeological features in the vicinity of turbine 8, and associated access tracks during ground breaking works. This should be done to a brief for archaeological work provided by The Highland Council Historic Environment Team. | Condition 22 | Professional Archaeologist |
| Traffic and Transport | General Modifications | T1 | A Route Survey Report has identified any modifications required for the transportation of turbine equipment in Appendix 12.1. Parts of the local road network were upgraded as part of Gordonbush Wind Farm construction to accommodate associated abnormal loads traffic. | Condition 17 and 18 | SSE / Contractor |
| Traffic and Transport | Road Maintenance | T2 | Prior to construction works, it will be necessary to establish the current condition of the roads to establish a baseline for subsequent repairs. | Condition 17 | Contractor |
| Traffic and Transport | Traffic Management Measures | T3 | Measures would be introduced to minimise the intrusive effects of construction related traffic such as police escort, regulated site working hours, warning and speed control signs in agreement with the roads authority, along with the establishment of a construction liaison committee. | Condition 17 | SSE / Contractor |
| Traffic and Transport | Traffic Management | T4 | A Traffic Management Plan, detailing ways to reduce the impact of construction traffic, would be developed. | Condition 17 | SSE / Contractor |
| Traffic and Transport | Monitoring | T5 | Mud and debris on the surrounding road network would be monitored and inspections of the mitigation work would be undertaken on a regular basis to confirm measures are proving effective at reducing effects. Where necessary, mitigation measures would be reviewed and amended. | Condition 17 | SSE / Contractor |
| Noise | Best Practice | N1 | During construction works the following mitigation measures would be | Condition 23 and | SSE / Contractor |

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| | during Construction | | <p>undertaken:</p> <p>All activities that may give rise to audible noise at surrounding properties and heavy goods vehicles to the site would be limited to the hours 07:00-19:00 Monday to Friday and 07:00-13:00 on Saturdays, with no activities on a Sunday. Winter hours may be reduced further (see Mitigation Reference G5).</p> <p>All construction activities shall adhere to good practice set out in BS 5228.</p> <p>All equipment will be maintained in good working order and any associated noise attenuation such as engine casing and exhaust silencers will remain fitted at all times.</p> <p>Where flexibility exists, activities will be separated from residential neighbours by the maximum possible distances.</p> <p>A management scheme will be developed to control the movement of vehicles to and from the Development.</p> <p>Construction plant capable of generating significant noise and vibration levels will be operated in a manner to restrict the duration of the higher magnitude levels wherever practical.</p> | 25 (Noise) | |
| Noise | Turbine Selection | N2 | The selection of final wind turbine to be installed at the Development would be made on the basis of enabling the relevant ETSU-R-97 noise limits to be achieved at the surrounding properties. | Condition 25 (Noise) | SSE |
| Noise | Monitoring | N3 | In the event of a noise complaint, noise levels resulting from the operation of the wind farm would be measured in order to demonstrate compliance with the conditioned noise limits. This should be done in accordance with ETSU-R-97 and include penalties for any tonal characteristics of the noise (if present). | Condition 25 (Noise) | SSE |
| Other Issues | Aviation Lighting | OI1 | The Applicant would agree a suitable aviation lighting scheme with the Ministry of Defence (MOD). | Condition 16 | SSE |

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| Other Issues | Ice Throw | O12 | To avoid or reduce the risk of ice throw, increased awareness would be provided to service crews and the associated risks, along with providing notices at access points alerting members of the public of the risks under certain conditions. | Condition 7 | SSE / Contractor |
| Other Issues | Dust | O13 | Measures to control dust would be put in place and are considered in the draft CEMP. | Condition 23 | SSE / Contractor |