

Appendix F: Schedule of Ecological Mitigation Measures

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
Pre-Commencement Phase						
MM3	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.2 Habitats <i>Filago minima</i>	<ul style="list-style-type: none"> A pre-construction survey will take place to map its distribution along tracks in the summer before construction commences. 		
MM4	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.3 Badgers	<p>As required under the Wildlife Acts, mitigation is required to ensure that active setts are not disturbed. Owing to the difficulty of surveying for badgers within closed canopy conifer forests, the following approach will be followed:</p> <ul style="list-style-type: none"> Survey for presence of badgers will be carried out at the time of the tree felling operations. This will be by an ecologist with experience of badger survey and working in association with the tree felling contractor. Survey for badger is preferably carried out in the period October to March when vegetation cover is low. Before any felling commences, the ecologist will survey marginal areas around the plantation for signs of badger presence. Also, any accessible areas within the plantation, such as unplanted gaps, will be searched for signs. Once felling commences, the ecologist will monitor the progression of the works as the required areas are cleared. Should there be any evidence of a badger sett, all work will cease immediately, and a buffer zone will be established where felling works will be restricted. Mitigation will be implemented as considered necessary. This would include 		

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				application to NPWS for permission to close a sett that could be disturbed by the works. Note that since closure of active setts is prohibited during the badger breeding season (December to June inclusive), scheduling of the tree felling process is important to avoid delays.		
MM5	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.5 Common Frog	<ul style="list-style-type: none"> Areas where construction works are due to commence during the period February to August will be checked by the ECoW for the presence of frog spawn, tadpoles and adult frogs. If present, these will be removed under licence from NPWS and transferred to suitable ponds or wetlands in the vicinity. 		
MM6	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.6.1 Bats Buffer	<ul style="list-style-type: none"> Areas of conifer plantation will be felled in order to discourage bat species from flying close to turbines. Based on the most up-to date guidance it is proposed to create buffers of 100 m from blade tip to forestry edge for turbines 3, 4, 5 and 10 as these are based within conifer plantation. In other areas treelines and conifer edges will be cut back to a distance of 65 m from blade tip to top of tree (max height of tree at full growth). Turbines 3, 4, 5 and 10 should have a clearing of 152m. All other turbines require a setback of 110m from woodland, treeline, scrub or hedge. Key-holed wind turbine locations will be cleared of all vegetation. It is important that conifers are not cut and left in situ; appearing like typical recently cut plantation. This habitat type quickly succeeds to scrub, a favourable habitat feature for feeding bats. Instead, land will be cleared and replaced with a low, maintained sward of grassland (mowed once or 		

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				twice each year) or maintained as bare ground with a hardcore surface for the lifetime of the project.		
MM7	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.6.1.1 Bats Vegetation Removal	<ul style="list-style-type: none"> An ecologist/ECoW will supervise areas where vegetation, scrub and hedgerow removal will occur prior to construction. 		
MM8	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.6 Bats Pre-construction Surveys	<ul style="list-style-type: none"> It is recommended that if three years lapse from between planning-stage surveys in 2019 and installation of the wind turbines, it will be necessary to repeat one full season of surveys during the activity period (EUROBATS, 2014). Future survey work should be completed according to best practice guidelines available. The most current guidance documents for Irish wind farms are from NatureScot (NatureScot, 2021) and Northern Ireland Environment Agency (NIEA, 2021). NIEA guidance suggests increased duration of static monitoring of 50 nights a high suitability sites for bats and provides alternative dates for erection of statics when the proposed site is situated in an upland location. 		
MM9	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.8 Pre-construction bat survey	<ul style="list-style-type: none"> It is recommended that if three years lapse from between planning-stage surveys in 2019 and installation of the wind turbines, it will be necessary to repeat one full season of surveys during the activity period. Future survey work should be completed according to best practice guidelines available. The most current guidance documents for Irish wind farms are from NatureScot (NatureScot, 2021) and Northern Ireland Environment Agency (NIEA, 2021). 		

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MM10	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.8 Pre-construction badger survey	<ul style="list-style-type: none"> As it is expected that more than 2 years will have passed since the 2021 baseline survey before construction commences, all work areas will be subject to a pre-construction survey for badger. This survey will give particular focus to the afforested part of site where badger is most likely to occur. 		
MM11	Flora and Fauna	Chapter 6: Aquatic Ecology	6.5.1 Embedded Mitigation	<ul style="list-style-type: none"> The design principle of maintaining set-backs of 65m for turbines and associated infrastructure from watercourses and utilising existing forestry access tracks will be implemented. 		
Construction Phase						
MM25	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.2 Habitats Habitat Loss	<ul style="list-style-type: none"> The project will result in the permanent loss of an estimated 40.2 ha of habitat on site. This loss will be mitigated through a Habitat Enhancement Plan (HEP) which is presented in Appendix 5.5. Updated: The project will result in the permanent loss of an estimated 30 ha of habitat on site. The reference to 26.3 ha Section 5.4.5.2 of the EIAR was a typographical error and this figure should in fact have been 2.63 ha for Borrow Pit A, as detailed in Section 3 of the RFI Response. This loss will be mitigated through a Habitat Enhancement Plan (HEP) which is presented in Appendix 5.5. 		
MM26	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.2 Habitats Ecological Clerk of Works (ECoW)	<ul style="list-style-type: none"> An Ecological Clerk of Works (ECoW) will be on site for the duration of the construction phase. As required, this person will be assisted by a consultant ecologist with expertise in 		

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				<p>peatland habitats. The consultant ecologist will be employed by the client and will be independent of the Contractor.</p> <ul style="list-style-type: none"> As ground excavations are opened up, the ECoW will walk the work corridor with a surveyor and within sensitive peatland areas will mark out (with range poles or equivalent) the extremities of the required work area. This will identify the limit of the work area and will prevent unnecessary incursions by the Contractor onto adjoining intact heath or bog. 		
MM27	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.2 Habitats Ecological Clerk of Works (ECoW)	<ul style="list-style-type: none"> Upon removal, subsequent reuse of the heath and bog surface (cut out as sods or 'turves') will occur within the work footprint. A two-pronged approach will be followed involving <ul style="list-style-type: none"> (i) the immediate re-use along road margins, and (ii) the longer-term use around turbine and hardstand margins (this involves storage). Both approaches are on the basis that the areas of heath and bog have a minimum peat depth of c.20-30 cm, which represents the acrotelm (or living layer) of the bog/heath system. The method involves the removal of the surface layer in sods or 'turves' by a dumper/digger with bucket. Care will be taken to keep the turve as intact as possible and the vegetated side upwards (as far as is feasible). For the use of the turves on the side casting and marginal strips of the new roads, the procedure will be that the contractor will dig out the surface peat turves and place these immediately on the side-casting and marginal strips in the preceding section (250 – 500 m length) that had been 		

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				<p>constructed. These will later be bedded in using the bucket of a digger. This approach will provide almost immediate cover of the bare surfaces.</p> <p>Turves to be used for re-vegetation of areas at the turbines/hardstands will be dug out as above and transported to pre-identified storage areas. The storage areas will be:</p> <ul style="list-style-type: none"> (i) located in areas of the site that is not existing heath or bog habitat, (ii) in parts of the site where disturbance at a later date will not occur. <ul style="list-style-type: none"> • The turves will be off-loaded from a trailer and placed side by side and vegetation side upwards. They will be placed in single layers, i.e. not piled on top of each other. Should storage be for prolonged periods (months), the turves may need to be watered during dry spells. When ready for placement at turbine/hardstand locations, or in areas where substantial bare surfaces occur due to the works, they will be lifted with a dumper and bucket and taken to their destination. Here they will be off-loaded and laid vegetation side up. Should enough turves be available, they will be packed close together. Otherwise, they can be laid across the bare surface to cover the required area. The turves will be bedded in with the bucket of a dumper. • All of the above will be supervised by the ECoW and will be inspected by the project ecologist. • The above process will be followed at the borrow pit north of T4. The surface here will be stripped, and the turves stored 		

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				until the pit is ready for reinstatement. As above, the turves will not be stored on areas of existing heath or bog vegetation. The reinstatement on a peat layer will be monitored by the EcoW and the project ecologist.		
MM28	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.2 Habitats <i>Filago minima</i>	<ul style="list-style-type: none"> The areas where the plant occurs will be avoided by the trench excavations and all works in such areas will be supervised by an ecologist with experience in rare plants. Should the plant occur across an entire width of track, a licence will be sought from NPWS to remove the plants from the required work area and to transplant to a suitable location elsewhere. The application for a licence will be supported by a Management Plan for the species compiled by an ecologist with experience of rare plants and plant translocation schemes. 		
MM29	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.6 Bats Vegetation Removal	<ul style="list-style-type: none"> An ecologist/ECoW will supervise areas where vegetation, scrub and hedgerow removal will during construction. 		
MM30	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.6.1.2 Bats Other Measures	<p>During construction, relevant guidelines for bats will be implemented as appropriate (e.g., NRA guidelines).</p> <ul style="list-style-type: none"> Where possible construction will take place during daylight hours in order to minimise light disturbance on bats. Should fixed lighting be required these will consist of LED luminaires using warm white colours < than 2700 Kelvin. Luminaires will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats. Lighting will be directional and avoid lighting key features suitable for bat activity such as treelines or woodland edge. Some works along the cable route and wind farm site may occur at night 		

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				<p>but the project ecologist/ECOW shall limit night-time works to sections of the route / site which avoid sensitive features (e.g., mature treelines).</p> <ul style="list-style-type: none"> • No upgrade works are proposed on bridges or culverts as part of the proposed works. Should any required works be identified in the future, the bridge shall require a pre-construction survey to assess if a bat roost is present. As necessary, any measures carried out to mitigate the potential impact to bats must be conducted under the terms of an appropriate NPWS wildlife derogation licence. • All mature broadleaf trees within the site were assessed for their potential to host bat roosts. Two ash trees were noted with potential. These trees however will remain unaffected by the proposed development. Given potential roost features (prf) can develop over time all mature broadleaves that may be affected by the development (felled or trimmed) will be reassessed prior to commencement of felling works. The assessment should consist of a Preliminary Ground Level Roost Assessment carried out between November and March followed by an at height full potential roost feature survey on trees with roost potential. Tree-felling will ideally be undertaken in the period late August to late October/early November. During this period bats are capable of flight and may avoid the risks of tree-felling if proper measures are undertaken. A secondary period of tree felling can be undertaken in February. If bats or a bat roost is present then the NPWS must be contacted, and a derogation licence received before the commencement of felling. As part of any derogation licence application an impact assessment, 		

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				mitigation measures and schedule will be required. Felling will be delayed until the bats have gone or been removed.		
MM31	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.7 Kerry Slug	<ul style="list-style-type: none"> • Areas of suitable habitat that occur outside of the footprint of the development will be avoided during the course of construction thereby minimising the loss and disturbance of Kerry Slug habitat (this measure is dealt with under Section 5.6.2). • Immediately prior to undertaking works in areas of suitable habitat (wet heath / blanket bog / rock outcrop), the project ecologist will check for the presence of Kerry Slug. Should slugs be discovered, then they will be transferred to suitable habitat in the surroundings. Similar on-going monitoring of suitable habitat within works areas will continue throughout the construction phase. Such monitoring will be undertaken during periods of wet weather when slugs are most active and feeding on the surface and therefore at greater risk of impacts by movement of machinery. It is noted that a derogation licence for the above has been sought from the NPWS. 		
MM32	Flora and Fauna	Chapter 6: Aquatic Ecology	6.5.2.3 Mitigation by Reduction	<ul style="list-style-type: none"> • During the construction phase the appointed Contractor(s) will ensure that the following mitigation is adhered to in line with IFI (2016) Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters: • No works will take place within the 65m buffer zone of watercourses except for the watercourse crossings, road development and drainage measures. • The site compound and any temporary soil storage areas will be located at a minimum distance of 65m from any 		

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				<p>watercourse. All drainage from these facilities will be directed through a settlement pond with appropriate capacity and measures to provide spill containment.</p> <ul style="list-style-type: none"> • All site drainage, as described in the surface water management plan and shown on associated drawings, will be directed through either sediment traps, settlement ponds and / or buffered drainage outfalls to ensure that total suspended solid levels in all waters discharging to any watercourse will not exceed 25mg/l (IFI, 2016). All construction site run-off will be channelled through a stilling process to allow suspended solids to settle out and through a spill-containment facility prior to discharge. • Daily monitoring of all sediment traps and settlement ponds will be undertaken by the Environmental Manager or Ecological Clerk of Works to ensure satisfactory operation and/or maintenance requirements. A full specification for the water quality monitoring is presented in the WQMP. • The storage of oils, hydraulic fluids, etc., will be undertaken in accordance with current best practice for oil storage (Enterprise Ireland, BPGCS005). • All machinery operating at the Site will be fully maintained and routinely checked to ensure no leakage of oils or lubricants occurs. All fuelling of machinery will be undertaken at a discrete "fuel station" designated for the purpose of safe fuel storage and fuel transfer to vehicles. 		

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				<ul style="list-style-type: none"> • Any extensions to existing drainage culverts on the Site Access Roads will be undertaken in dry conditions and in low flow. • The pouring of concrete, sealing of joints, application of water-proofing paint or protective systems, curing agents, etc., will be completed in the dry to avoid pollution of the freshwater environment. There will be no batching or storage of cement allowed in the vicinity of any watercourse crossing construction area. • Procedures will be put in place to ensure the full control of raw or uncured waste concrete to ensure that watercourses will not be impacted. • Should there be any incidents of pollution to watercourses, immediate steps as specified in the drainage network peat (CEMP-Management Plan 1) will be undertaken to resolve the cause of the pollution and where feasible, mitigate against the impact of pollution. • Re-seeding / re-vegetation of all areas of bare ground or the placement of Geo-jute (or similar) matting will take place prior to the operational phase to prevent silt-laden run-off. Seed mixes will contain only suitable native species of plant that occur in the local area. • Silt traps erected during the construction phase within roadside and artificial drainage will be replaced with stone check dams for the lifetime of the project. These stone check dams will only be placed within artificial drainage systems 		

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				<p>such as roadside drains and not in natural streams or drainage lines.</p> <ul style="list-style-type: none"> A full review of construction stage temporary drainage will be undertaken by the Developer (in conjunction with the Project Hydrologist/ Site Engineer and the Project Ecologist) following the completion of construction, and drainage removed or appropriately blocked where this will not interfere with infrastructure. 		
MM33	Flora and Fauna	Chapter 7: Ornithology	7.5.1.2 Measures to prevent disturbance to breeding Hen Harriers	<ul style="list-style-type: none"> To prevent any potential disturbance to nesting and/or foraging Hen Harriers, works will be restricted along the identified section to the period outside of the breeding season (March-August). This will ensure that the breeding Hen Harrier population within the SPA is not disturbed. 		
MM34	Flora and Fauna	Chapter 7: Ornithology	7.5.1.3 Measures to prevent disturbance to sensitive bird species	<ul style="list-style-type: none"> The study has identified Red Grouse and Snipe (both Red-listed) as the species most sensitive to disturbance that are known to nest within the site. Should any of these species be recorded breeding within 500m of the works area (as established through monitoring during construction), a buffer zone shall be established around the expected location of the nest and works will be restricted until it can be demonstrated by an ecologist that the species has completed breeding in the identified area. Any restricted area that is required to be set up will be marked clearly marked using hazard tape fencing and all site staff will be alerted through toolbox talks. 		

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MM61	Site Drainage	Chapter 9: Hydrology and Hydrogeology	9.5.2.8 Watercourse Crossings Proposed Mitigation Measures	<ul style="list-style-type: none"> All watercourse crossings must be designed to facilitate peak, or storm discharge rates so as to avoid localised flooding and associated issues during storm events. The OPW is responsible for the implementation of the regulations and consent to construct any bridge will be sought from the OPW via their application process. Details on the application process and guidance/requirements of the bridge design and considerations in terms of flow can be found in the OPW guide Construction, Replacement, or Alteration of Bridges and Culverts (A Guide to Applying for Consent under Section 50 of the EU (Assessment and Management of Flood Risks) Regulations SI 122 of 2010 and Section 50 of The Arterial Drainage Act, 1945). This application and consent process will mitigate against the potential for the design of the new bridge leading to significant adverse impacts. The requirements of OPW have been incorporated into the design of the proposed watercourse crossings. Preliminary design details are included in drawings ref. 6225-PL-WC 1-7. All crossings will have clear span structures. Single span structures are structures which span the width of the channel with no associated instream support and do not affect the bed of the river or water body. This ensures that the bank and instream habitats are maintained, and the river bed is not impacted. Where existing closed culverts/pipes are in place at existing watercourse crossings, extending the existing closed culvert will minimise construction activities required and in turn 		

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				<p>minimise potential impacts when compared to removal and replacing the entire watercourse crossing.</p> <ul style="list-style-type: none"> • With reference to ecology, none of the proposed watercourse crossing locations are associated with areas, or immediately proximate to surface water features with significant ecological sensitivity or importance. The principal risk to ecological sensitivities associated with proposed watercourse crossing works is the potential for adverse impacts to water quality downstream of the Site, namely the potential for mobilisation of solids. It is also noted that watercourse crossing methodologies employed will ensure potentially long term/permanent impacts downstream (e.g. scouring etc) or upstream (e.g. passage of fish) will be avoided. • Considering all of the above and considering baseline conditions – including ecological sensitivity and importance of surface water features associated with each of the watercourse crossings, all crossings will be Clear Span Bridges. • This is in line with good practice as defined by relevant guidance (SEPA, 2010) whereby; the course of action serves a demonstrated need, minimises the potential for ecological harm. • Considering the width of all waterbodies associated with crossings discussed here (<2m width) in stream supports will be required for the construction of single span structures. • The design facilitates adequate hydraulic capacity (Volume III). This ensures that the design will maintain the existing 		

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				<p>channel and will facilitate peak discharge events (storm events) without flow being constrained and contributing to flooding or other issues. Values presented Appendix 9.1 – SFRA indicate the potential discharge rate associated with each watercourse crossing during a 1 in 100-year storm event. For existing crossings the channel width will be maintained.</p> <ul style="list-style-type: none"> • In line with the above design consideration, allowance will be made for the transport of sediment through the crossing, not just hydraulic capacity. • The design facilitates adequate freeboard to OPW requirements. The design facilitates passage of woody debris. Freeboard to facilitate navigation and recreation is not applicable in relation to the development and associated surface water features. • For single span structures, abutments will be set back from the river channel and banks to allow the continuation of the riparian corridor underneath the structure. This helps to minimise or prevent the need for bed and bank reinforcement, reduces the risk of creating a barrier to fish passage and allows mammal passage under the structure. The distance between the bridge abutments will be as wide as possible and will maintain the bank habitat, maximising the riparian corridor and allowing the river some space to move. Foundations (of abutments) will be deep enough to minimise or prevent the need for bed or bank reinforcement or bridge weirs or aprons. This will maintain the natural bed material and bed levels, protecting habitat and allowing fish passage. Foundations will be buried deep enough to allow for scour during high flows. 		

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				<p>Construction will be supervised by a suitably qualified engineer who will confirm that the depth is as per the design.</p> <ul style="list-style-type: none"> The design minimises the potential for localised bank and bed erosion. <p>In regard to the Turbine Delivery Route there: Temporary Watercourse Crossings – Temporary Crossing on Sullane River = Single Span Structure.</p> <ul style="list-style-type: none"> This is in line with good practice as defined by relevant guidance (SEPA, 2010) whereby; the course of action serves a demonstrated need, minimises the potential for ecological harm. This feature will require drilling/piling of abutment supports on approach to the river. These will be positioned as far back from the surface water feature as practical. With reference to the proposed bridge design (Drawing Ref. 6225-PL-810), the design includes for the managed storage of arisings in designated areas, and the active management of runoff with including interreceptor drainage, sumps, and silt fences. With reference to Section 9.3.13 Flood Risk Identification the site of the temporary crossing and ancillary infrastructure and materials is within a mapped probable flood zone. To mitigate against any potential for on-site flood risk and consequences, it will be a strict requirement to carry out works at this location during seasonally dry conditions. Exposed soils and fill materials will be reinstated and/or will have erosion control installed as part of the design and sufficient time as to be in place prior to the next seasonally wet period. This will 		

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				<p>minimise the potential for flood events to impact on the construction works, plant machinery or operators etc, and will minimise the potential for entrainment of soils or other materials in high water flow during potential flood events.</p> <p>In regard to the Grid Connection Route: There are 170 culvert crossings proposed for the Grid Connection Route. (* Note: Likely to be additional minor culverts).</p> <ul style="list-style-type: none"> With reference to Section 9.3.13 Flood Risk Identification some portions of the Grid Connection Route are within a mapped probable flood zone. To mitigate against any potential for onsite flood risk and consequences, it will be a strict requirement to carry out works at this location during seasonally dry conditions. Exposed soils and fill materials will be reinstated and/or will have erosion control installed as part of the design and sufficient time as to be in place prior to the next seasonally wet period. This will minimise the potential for flood events to impact on the construction works, plant machinery or operators etc, and will minimise the potential for entrainment of soils or other materials in high water flow during potential flood events. There remains the potential for the actual construction of such crossings to have significant adverse impacts on the receiving watercourse/s through general construction activities. Relevant guidance documents (Section 9.2.2) have been consulted and applicable mitigation measures have been incorporated into the design of the proposed bridges and construction methodology of same. These will be 		

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				adhered to with a view to mitigating and reducing any potential impact on the receiving watercourse.		
Operational Phase						
MM76	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.6.2.1 Bats Feathering of Blades	<ul style="list-style-type: none"> All turbines will enact a feathering protocol when wind speeds are below the cut-in speed of the turbine. Feathering entails pitching turbine blades at 90 degrees or parallel to the wind to reduce their rotation speed while idling to below two revolutions per minute. 		
MM77	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.6.2.2 Bats Curtailment	<ul style="list-style-type: none"> At turbines where high bat activity was recorded during the baseline surveys in 2019 and 2021 (namely T1, T3, T6, T8, T9, T10, T11, T12 & T13), and as updated in pre-construction surveys, cut-in speeds will be increased during the bat activity season (April-October) where temperatures are optimal for bat activity (above 11 degrees) to 5 m/s from 30 minutes prior to sunset to 30 minutes after sunrise at all turbines within the site (Betts, 2020). It is noted that it is possible to refine the wind farm's curtailment program to an individual turbine level, allowing turbines of lower collision risk to operate when higher risk turbines are curtailed. Should the operator want to move to this more sophisticated solution, a regime can be implemented on certain times and dates, corresponding with those periods when the highest level of bat activity is expected to occur. In order for this to be achieved a static monitoring program should be completed at each turbine location linking real time bat activity with real time weather data (based on within the wind farm). 		

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MM78	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.5.7 Kerry Slug	<ul style="list-style-type: none"> • Areas of suitable habitat that occur outside of the footprint of the development will be avoided during the course of construction thereby minimising the loss and disturbance of Kerry Slug habitat. • Immediately prior to undertaking works in areas of suitable habitat (wet heath / blanket bog/rock outcrop), the project ecologist will check for the presence of Kerry Slug. Should slugs be discovered, then they will be transferred to suitable habitat in the surroundings. Similar on-going monitoring of suitable habitat within works areas will continue throughout the construction phase. Such monitoring will be undertaken during periods of wet weather when slugs are most active and feeding on the surface and therefore at greater risk of impacts by movement of machinery. The transfer of Kerry Slugs will be subject to a derogation licence from the Department of Housing, Local Government and Heritage (which has been applied for a time of writing). 		
MM79	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.8 On-going monitoring during construction	<ul style="list-style-type: none"> • An Ecological Clerk of Works (ECoW) will be on site for the duration of the construction phase and will support the role of the site Environmental Manager. As required, this person will be assisted by a consultant ecologist with expertise in peatland habitats. The consultant ecologist will be employed by the client and will be independent of the Contractor. • As ground excavations are opened up, the ECoW will walk the work corridor with a surveyor and within sensitive peatland areas will mark out (with range poles or equivalent) the extremities of the required work area. This will identify the limit of the work area and will prevent unnecessary incursions by the Contractor onto adjoining intact heath or bog. 		

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MM80	Flora and Fauna	Chapter 5: Terrestrial Ecology	5.8 Re-vegetation of bare surfaces	<ul style="list-style-type: none"> • An ecological objective is to minimise the area of exposed peat surface and to encourage revegetation. This will be achieved by the removal and subsequent reuse of the heath and bog surface (cut out as sods or 'turves') within the work footprint. A two-pronged approach will be followed involving <ul style="list-style-type: none"> (i) the immediate re-use along road margins, and (ii) the longer-term use around turbine and hardstand margins (this involves storage). • Both approaches are on the basis that the areas of heath and bog have a minimum peat depth of c.20-30cm, which represents the acrotelm (or living layer) of the bog/heath system. The method involves the removal of the surface layer in sods or 'turves' by a dumper/digger with bucket. Care will be taken to keep the turve as intact as possible and the vegetated side upwards (as far as is feasible). • For the use of the turves on the side casting and marginal strips of the new roads, the procedure will be that the contractor will dig out the surface peat turves and place these immediately on the side-casting and marginal strips in the preceding section (250–500m length) that had been constructed. These will later be bedded in using the bucket of a digger. This approach will provide almost immediate cover of the bare surfaces. <p>Turves to be used for re-vegetation of areas at the turbines/hardstands will be dug out as above and transported to pre-identified storage areas. The storage areas will be:</p>		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				<ul style="list-style-type: none"> (i) located in areas of the site that is not existing heath or bog habitat. (ii) in parts of the site where disturbance at a later date will not occur. <ul style="list-style-type: none"> • The turves will be off-loaded from a trailer and placed side by side and vegetation side upwards. They will be placed in single layers, i.e. not piled on top of each other. Should storage be for prolonged periods (months), the turves may need to be watered during dry spells. When ready for placement at turbine/hardstand locations, or in areas where substantial bare surfaces occur due to the works, they will be lifted with a dumper and bucket and taken to their destination. Here they will be off-loaded and laid vegetation side up. Should enough turves be available, they will be packed close together. Otherwise, they can be laid across the bare surface to cover the required area. The turves will be bedded in with the bucket of a dumper. • All of the above will be supervised by the Environmental Manager and will be inspected by the project ecologist at regular intervals during the works. • The above process will be followed at the borrow pit north of T3. The surface here will be striped, and the turves stored until the pit is ready for reinstatement. As above, the turves will not be stored on areas of existing heath or bog vegetation. The reinstatement on a peat layer will be monitored by the EcoW and the project ecologist, as required. 		
MM81	Flora and Fauna	Chapter 6: Aquatic Ecology	5.8	The following measures will be implemented during the operational phase to ensure the ongoing protection of		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
			Re-vegetation of bare surfaces	watercourses and water quality at the Site and in downstream reaches: <ul style="list-style-type: none"> The Site compound/office will house all potential pollutants within a secure bunded COSSH store for the operational phase of the project. All onsite wastewater treatment facilities will function in full compliance with current water quality requirements (Building Regulations 2010 as amended S.R. 66:2015) to prevent nutrient loading entering aquatic environments. 		
MM82	Flora and Fauna	Chapter 7: Ornithology	7.5.2.1 Measures for White-tailed Eagle	<ul style="list-style-type: none"> Once operational, a programme will be put in place to remove carcasses (mainly of sheep) from the site. This will involve search of the wind farm infrastructure area by site management for the presence of dead and/or injured animals (mostly lame sheep or animals caught in wire fencing). It is noted that such animals are usually identified by a concentration of corvids (ravens and hooded crows). Search would be on a weekly basis. Should a carcass be located, this will be removed at the earliest opportunity by an appointed representative following standard practice for the disposal of carcasses (subject to Health and Safety issues). Injured or trapped animals will be reported to local landowners. <p>Updated through RFI Item 9 (Section 7.2.3 of the RFI Response):</p> <p>The outline of the programme for the removal of sheep carcasses is given in the EIAR (Section 7.5.2.1).</p>		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				<p>The programme will be co-ordinated by the wind farm manager and will be carried out in association with the landowners who graze sheep within the wind farm site.</p> <p>The wind farm manager, or a representative when the manager is off site, will patrol the site formally on a given day each week with the focus on search for sheep carcasses or injured animals (often due to getting caught in wire fences). The search will be aided by the use of binoculars. As noted in section 7.5.2.1, the presence of crows (principally hooded crow & raven but also magpie) gathering at a location is invariably a sign that a carcass or a dying animal is present. In addition, the manager and other regular wind farm personnel will be alert to the presence of carcasses or injured sheep whilst travelling through the wind farm on their normal business.</p> <p>When a carcass is identified or an animal in distress is located, the relevant landowner will be contacted to remove the carcass or tend to the injured animal. Any costs to a landowner will be at the expense of the wind farm operator.</p> <p>It is noted that a programme for the removal of carcasses and injured animals (as mitigation for White-tailed Eagle) has been in operation at the Grousemount Wind Farm since operation commenced in 2019. The proposed programme for Gortyrähilly follows the approach and method in use at Grousemount Wind Farm.</p> <p>DHLGH have asked whether drones could be used after poor weather events to assist in the detection of carcasses or injured animals. It is noted that the proposed method of site</p>		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				<p>coverage from the internal track system is a simple and robust approach and it is expected that there would be few situations where coverage of the site could not be achieved due to weather events. However, the latest available drone technology will be considered at the time and if found practical to use as part of the monitoring will be adapted as a back-up when coverage by road is not possible.</p> <p>It is confirmed that searches will be carried out on a weekly basis from the commencement of the operation of the wind farm to the decommissioning stage.</p>		
MM83	Flora and Fauna	Chapter 7: Ornithology	7.5.2.2 Measures for Kestrel	<ul style="list-style-type: none"> Should monitoring identify more than one Kestrel casualty at a specific turbine(s), proactive measures will be taken to discourage the birds from hunting in the area of the turbine(s). This will involve clearing rank vegetation from around the relevant turbine(s) to make it less suitable for supporting prey items such as small mammals (mice, shrews, voles) and birds (meadow pipit, skylark etc). 		
Decommissioning Phase						
MM94	Decommissioning	Chapter 6: Aquatic Ecology	6.5.4 Decommissioning Phase Mitigation	<ul style="list-style-type: none"> Decommissioning of the Development will be scheduled to take place after the proposed 35-year lifespan of the project. Decommissioning phase impacts for the proposed development are likely to be broadly similar to construction phase impacts, in terms of potential surface water quality impacts from ground disturbance, refuelling and the storage of potentially hazardous materials onsite. The implementation of all mitigation measures detailed for the construction phase will be adopted in full during the 		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				<p>decommissioning phase to ensure all such impacts are avoided.</p> <ul style="list-style-type: none"> When the final Decommissioning Plan is prepared prior to decommissioning and presented as a standalone document, all drainage management measures, which will include maintenance of the operational drainage measures, will be included in that document, as required. However, it should be noted that by the time decommissioning is undertaken after the planned 30-year lifespan of the Development, the areas within the Site will have revegetated resulting in a resumption of the natural drainage management that will have existed prior to any construction. It is not anticipated that the decommissioning phase will interrupt this restored drainage regime in any way with the works proposed. As a minimum measure, areas where freshly placed soil material as part of turbine foundation reinstatement work will be surrounded by silt fencing if deemed necessary until the area has naturally revegetated. Restoration of the Site following decommissioning of infrastructure will require the prior establishment of the new baseline conditions at the Site which will have developed over the intervening 35 years life of the project. These studies will inform any modification or additional sensitivities that may need to be factored in restoration and site-specific measures. 		
MM95	Decommissioning	Chapter 8: Soil and Geology	8.5.4 Decommissioning Phase	<ul style="list-style-type: none"> Ultimately, any such restoration activities will need to be assessed under the scope of multiple environmental disciplines, similar to this EIAR, and the potential synergistic effects. Given that the condition of the environment will likely change over the course of the operational phase of the 		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				<p>Development, particularly in terms of the condition and degree of establishment of blanket bog and associated ecology, and ornithology, it is recommended that the potential for restoration following the decommissioning phase of the Development is evaluated closer to the time (c. 25-30 years). It should be noted that restoration activities do not currently conform to baseline conditions.</p> <ul style="list-style-type: none"> • Excavation and removal of some hardstand areas is planned as part of the Development and will be undertaken during the decommissioning phase. Excavation of all material including concrete turbine foundations will likely not be proposed due to the high impact nature of such works e.g., breaking of reinforced concrete. Extensive vehicular movement on peat is not anticipated to any significant extent considering adequate Turbine Hardstand will have been established, however the risk of fuel or other contaminant spillages, or management of waste are valid hazards during the decommissioning phase of the Development. The mitigation measures described in this EIAR chapter will be adopted and implemented by means of a Decommissioning Plan. • On the basis that a Decommissioning Plan has been established, Management Plan 6 of the CEMP (Appendix 2.1) and will be implemented during the decommissioning works associated with the Development. 		

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
Construction Phase						
MX5	Chapter 5: Terrestrial Ecology	5.9.1 Monitoring Habitats	<ul style="list-style-type: none"> At the end of construction (i.e., when all ground works are complete), a survey on the wind farm site will take place by a qualified ecologist. The extent of bare or disturbed areas will be recorded and a monitoring programme will be set up for vegetation recovery. Monitoring will be by the use of permanent quadrats – details will be worked out by the ecologist at the time, but it is likely that quadrats will be 2 m x 2 m in size and will be geo-referenced and photographed. Vegetation recovery will be monitored over a period as follows: Years 1, 2, 3, 5, 7, 10, 15, 20. Particular attention will be given areas of blanket bog and wet heath where vegetation has been disturbed during construction. If significant erosion-related problems are detected, corrective actions will be taken as necessary. Depending on extent and location of the problem areas, such actions could include sodding of bare patches with turves taken from elsewhere (not from a site of conservation interest) or reseeded with suitably sourced seed appropriate for the Site. An annual report will be prepared for each year of monitoring. 			
MX6	Chapter 6: Aquatic Ecology	6.7 Monitoring Construction	<ul style="list-style-type: none"> In order to verify the efficacy of pollution prevention and mitigation works during construction, Water Quality Monitoring 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<p>will be undertaken prior to, during and post completion of construction works in accordance with the parameters and schedules as set out in the Water Quality Management Plan. Monitoring will be undertaken in all watercourses within the catchment of the construction area. Monitoring will be overseen by a qualified and experienced Environmental Manager or Ecological Clerk of Works.</p> <ul style="list-style-type: none"> The specific monitoring requirements including frequency and parameters, are detailed in the Chapter 9: Hydrogeology and Hydrology and in the Water Quality Management Plan. <p>Baseline monitoring undertaken at the Site as part of this study will be repeated periodically i.e., before, during and after construction phase, to measure any deviations from baseline hydrochemistry that occur at the Site, including discharge rates. The construction and post construction monitoring programme for the Gortyrähilly site will include the following:</p> <ul style="list-style-type: none"> During the construction phase daily inspection of silt traps, settlement ponds, buffered outfalls and drainage channels will be undertaken. Routine measurement of total suspended solids, electrical conductivity, pH and water temperature at selected water monitoring locations at the Site will be carried out. Monitoring of locations where excavations are being dewatered (likely high in solids) will be done in real time. During the construction phase of the project, the development areas will be monitored daily for evidence of groundwater seepage, water ponding and wetting of previously dry spots, and visual monitoring of the effectiveness of the constructed 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<p>drainage and attenuation system so that it does not become blocked, eroded or damaged during the construction process.</p>			
MX8	Chapter 9: Hydrology and Hydrogeology	9.5.2.12.1 Monitoring (Wind Farm Site)	<ul style="list-style-type: none"> • To ensure effective implementation of mitigation measures, environmental auditing, and monitoring of environmental obligations of the Developer, an Environmental Clerk of Works (Ecological Clerk of Works (ECoW)) will be assigned by the Developer to carry out monitoring at the Site during the construction and operational phases of the Development. • The role of the Ecological Clerk of Works (ECoW) will be to actively and continuously monitor site conditions and advise on environmental issues and monitoring compliance, and will not be responsible for implementing measures, the due duty of implementing measures will be held by the Developer / contracted construction operator. The Ecological Clerk of Works (ECoW) will have the authority to temporarily stop works in a particular area of the site to ensure corrective measures are implemented and adverse environmental impacts are minimised if not avoided. <p>Monitoring of pollution prevention and mitigation undertaken by the Ecological Clerk of Works (ECoW) assigned by the Developer will include:</p> <ul style="list-style-type: none"> • Monitoring site pollution prevention plan. • Water quality monitoring. • Advising on required pollution prevention measures (as described in this EIAR) and monitoring their effectiveness. • Liaison with local authorities in relation to pollution instances if applicable. 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<ul style="list-style-type: none"> • Considering the Ecological Clerk of Works (ECoW) will be responsible for monitoring a broad range of environmental factors at the Site, technical monitoring and advice will be sought such as from specialist consultants as the need arises e.g., installation and website for telemetry. <p>The following measures will be implemented for Site monitoring in relation to the hydrological and hydrogeological impacts:</p> <ul style="list-style-type: none"> • The baseline monitoring undertaken at the Site as part of this study will be repeated periodically before, during and after the construction phase of the Development to monitor any deviations from baseline water quality that occur at the Site. This monitoring along with the detailed monitoring outlined below will ensure that the mitigation measures that are in place to protect water quality are working. Specifically, a construction period and post construction monitoring programme for the Site will include the following: <ul style="list-style-type: none"> - During the construction phase, daily inspection of silt traps, buffered outfalls and drainage channels and daily measurement of total suspended solids, electrical conductivity, and pH at selected water monitoring locations on the Site (locations close to active working zones). Monitoring of same during times when excavations are being dewatered (likely high in solids) will be done in real time. In this regard, physiochemical properties will be monitored in real time by means of alarmed telemetry e.g., telemetric monitoring at baseline sampling locations and alarm thresholds established in line with water quality reference concentrations/limits which will be set using relevant instruments for example, Surface 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<p>Water Quality Regulations, <25mg/l Total Suspended Solids (TSS).</p> <ul style="list-style-type: none"> - Continuous Monitoring will be carried out as part of Active Management of construction water management and treatment (Figure 9.12). These monitoring systems will travel with the active construction areas / remain with the Active Management infrastructure. The purpose of this is to recycle water if quality is unfavourable and adjust the dewatering and treatment train accordingly until discharge quality is observed to be acceptable. A small degree of tolerance above reference concentrations is acceptable at this location but only if the discharge from the Active Management train discharges to another Passive Management system or to a non-sensitive vegetated area. If discharging within sensitive areas or buffer zones, the quality of discharge from the Active Management train will be in line with prescribed reference limits (e.g., 25mg/l TSS). - Continuous Monitoring at downstream Baseline SW Monitoring Locations (Figure 9.6) will be carried out using telemetry during the construction phase. Triggering of the threshold at these locations will trigger emergency response and escalation of measures including immediate full site inspection to ascertain to the potential unknown source (bearing in mind that the quality of managed runoff at the site will be known by means of live telemetry and handheld meters). Continuous monitoring at Baseline SW Monitoring Locations will continue into the operational phase until stable conditions are observed e.g., stable conditions in line with baseline conditions for 6 months. 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<ul style="list-style-type: none"> - Post construction: inspection of silt traps, buffered outfalls and drainage channels, measurement of total suspended solids, electrical conductivity, and pH at selected water monitoring locations at the Site will be carried out at a reasonable frequency (weekly initially gradually reduced based on observed stability of conditions), and will also be scheduled following extreme metrological events (Section 9.5.2.1). During the operational phase of the project the stilling ponds and buffered outfalls will be periodically inspected e.g., weekly during maintenance visits to the Site initially and gradually reduced based on observed stability of conditions. - During the construction phase of the project, the Development areas will be monitored daily for evidence of groundwater seepage, water ponding and wetting of previously dry spots, and visual monitoring of the effectiveness of the constructed drainage and attenuation system so that it does not become blocked, eroded or damaged during the construction process. This monitoring will continue at a reasonable frequency (weekly initially gradually reduced based on observed stability of conditions) during the operational phase of the Development, however it is envisaged that any potential issues in this regard will be identified and rectified during the construction phase. - During the construction phase of the project, the Development areas and adjacent receiving drainage systems will be monitored daily for evidence of erosion and other adverse impacts to natural drainage channels and existing degraded areas whereby soils/peat are exposed and prone to enhanced degradation. This monitoring will continue at a reasonable frequency during the operational phase of the Development; 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<p>however it is envisaged that any potential issues in this regard will be identified and rectified during the construction phase.</p> <ul style="list-style-type: none"> - During both the construction and operational phases of the project watercourse crossings will be monitored frequently (daily during construction and intermittently during operational phase i.e., weekly / monthly inspections initially and reduced gradually in line with observed stability and confidence in longer term data obtained. The water course crossings will be monitored in terms of structural integrity and in terms of their impact on respective watercourses. • A detailed inspection and monitoring regime, including frequency is specified in the Construction Environmental Management Plan (CEMP), Management Plan 2, Appendix 2.1. This includes an environmental risk register e.g. constraints linked to the development construction schedule, routine reporting on the performance and effectiveness of drainage and attenuation infrastructure, and any actions taken to rectify or enhance the system. • Site water runoff quality at all surface water monitoring locations will be monitored on a continuous basis during the construction phase of the Development. Monitoring will continue into the operational phase until such time that the Site and water quality have stabilised (stable conditions in line with baseline conditions for e.g. 8 consecutive quarterly monitoring events). This monitoring will be carried out at the downstream surface water baseline sampling location (Figure 9.6) 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<ul style="list-style-type: none"> • Continuous monitoring systems will be in place, particularly in principal surface water features draining the site. For example, remote sensing, or telemetric monitoring sensors (turbidity) will be employed in this regard. • At construction areas requiring drilling (HDD) and/or significant excavations (launch pits, cable joint bays), and in the management of general excavations, arisings will be managed carefully with a view to containing and treating all drained water and runoff which will likely be laden with suspended solids. Active continuous monitoring will be required at these locations in line with the conceptual model presented in Appendix D – Tile 2. The monitoring location will be at the outfall or discharge point of the treatment train at any respective location. Continuous monitoring will include telemetry. • Continuous Monitoring Locations or Telemetric Monitoring Stations (TMS) will use probes to monitor the following parameters: <ul style="list-style-type: none"> - Electrical Conductivity - Turbidity (Data obtained can be equated to estimated Total Suspended Solids (TSS) through calibration) - pH - Temperature - Capacity for additional probes. • TMSs will be self-powered and will be comprised of the following components at a minimum: <ul style="list-style-type: none"> - Remote Telemetry Unit (RTU) – Modem / data hub and transmission. 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<ul style="list-style-type: none"> - Solar panel - Sensor – pH - Sensor – Turbidity - Sensor – Electrical Conductivity - Sensor Cleaning Device (SCD)(Turbidity probe) - Power Management Unit (PMU) - Power Bank (PB) - Website – presenting data trends over time. - Metal stand / frame and protective fencing. - The TMS will have capacity for additional parameters. <ul style="list-style-type: none"> • Telemetric continuous monitoring sampling frequency is generally set at one data point per 15 minutes, however considering the intensive nature of the proposed works, particularly drilling activities, if possible it is recommended that sampling frequency is set at 5 minutes or less with a view to escalating responses to potential discharge quality issues in good time. Data is transmitted to a project website which will display data trends over time. Access to the website can be gained and shared via a website link. • Telemetric Monitoring Systems will be used a key part of Active Management of runoff and construction water at the site, as presented in Figure 9.12 – Tiles no. 7 to 9. • A handheld turbidity meter will be available and used to accurately measure the quality of water discharging from the site at any particular location. The meter will be maintained and calibrated frequently (per the particular unit’s calibration requirements / user manual), and will also be used to check and calibrate remote sensors if they are employed. Quality 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<p>thresholds will be established for the purposes of escalating water quality issues as they arise.</p> <ul style="list-style-type: none"> • Rainfall will be monitored (1 no. rainfall gauge required). This unit will be connected with and displayed with other site water quality telemetry data via the telemetry website. • Surface water runoff control infrastructure will be checked and maintained on an ongoing basis, and stilling ponds and check dams will be maintained (de-sludge / settle solids removed) on an ongoing basis, particularly during the construction phase of the Development. It is important to minimise the agitation of solids during these works, otherwise it will likely lead to an acute significant loading of suspended solids in the drainage network. This can be achieved by temporarily reducing or blocking inking flow and vacuum extracting settled solids or sludge. Where the drainage feature possess relatively significant flow rates, isolating and over pumping is the best course of action. • As part of the Construction Environmental Management Plan (CEMP), Management Plan 2, regular checking and maintenance of pollution control measures are required (in line with frequencies outlined above), with an immediate plan for repair or backup if any breaches of design occur. In the event that established infrastructure and measures are failing to reduce suspended solids to an acceptable level, construction works will cease until remediation or upgrading works are completed. • All details in relation to monitoring will be included in the Surface Water Management Plan (SWMP) (Appendix 2.1). Consultation with relevant stakeholders will be sought prior to 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<p>the SWMP being reviewed and approved by the planning authority.</p> <ul style="list-style-type: none"> Monitoring of potential hydrological impact of the Development, particularly during the operational phase will be inherently linked to the ecological health of the blanket peat (as a functioning ecosystem) and therefore both hydrology and ecology will be considered, and monitored in tandem. For example, impacts to the hydrological regime at the Site can potentially impact on the ecological health or characterisation of the Site, and vice versa. Ecological indicators can potentially provide useful data in relation to the long-term impact of changes to the hydrological regime at the Site. However, as discussed in earlier section of this report (Section 9.4), changes to the management of runoff and in turn the hydrological regime at the site will lead to a positive impact overall when compared to the baseline conditions associated with the site e.g. introduction of intermittent buffered outfalls along the length of the drainage network is in contrast to baseline, this will promote a more even distribution runoff, attenuate runoff and reduce the hydrological response to rainfall, enhanced potential for recharge to ground, and in turn raising bog water levels resulting in wetting of blanket peat at the Site. 			
MX14	Chapter 5: Terrestrial Ecology	5.9.2 Bat monitoring	<p>The following monitoring programme will take place to establish bat activity within the operational wind farm and the number of bat collision fatalities at each turbine.</p> <ul style="list-style-type: none"> The static survey should be completed during the spring, summer and autumn of each year for a minimum of three years commencing from year 1 of the operational phase of the wind farm. This will comprise collection of bat activity, fatality and 			

Ref. No.	Reference Heading	Reference Location	Monitoring Measures	Frequency	Reporting Period	Responsibility
			<p>site-specific weather data in each of the three seasons. Each of the turbines will be monitored using specially trained search dogs.</p> <ul style="list-style-type: none"> The collision monitoring program will require site-specific data on seasonal scavenger removal rates and on the efficiency of detection of animal carcasses by the dogs used for bat searching. Modelling / calculation of the level of bat fatality likely to occur over the active season based on the results of the work. The production of an annual report detailing the approach to, results and conclusions of the work. Statistical analysis of the relationship between weather and fatality levels will be included. The report will be issued to Cork County Council. 			
MX15	Chapter 6: Aquatic Ecology	6.7.1 Post-construction phase monitoring	<ul style="list-style-type: none"> On completion of the construction phase one round of post construction monitoring will be undertaken using the suite of parameters as detailed in the Water Quality Management Plan. During the operational phase of the project the stilling ponds and buffered outfalls will be periodically inspected during maintenance visits to the Site. 			