Chapter 2: Design Iteration and Proposed Varied Development

Figures

2. Design Iteration and Proposed Development

2.1. Site Description

2.1.1. The site of the Proposed Varied Development (**Figure 1.1**) ("the Site") remains as per the Consented Development. The Site is located on the Glencassley Estate, near Lairg. The British National Grid (BNG) reference for the centre point of the Turbine Development Area is 247061, 907201.

2.1.2. The Proposed Varied Development is situated on land adjoining to the northwest of the operational Achany Wind Farm. It is a site that has strong proven wind resource, as well as existing access tracks and other infrastructure connecting into the local road network, which would be utilised during the construction and operational phases, thereby considerably reducing requirements for new tracks and other infrastructure. Within the selected land area, the site was purposely selected due to its relatively shallow peat depths in comparison to surroundings, while land to the north west, featuring deeper peatland, was selected for restoration as part of the Consented Development Habitat Management Plan (see **Appendix 8.10 – Outline HMP** of the **2021 EIAR**).

2.1.3. Out with the site boundary, there are several key settlements including Lairg, Rosehall and Bonar Bridge. Other wind, hydro and electrical infrastructure is present within the wider area, including Rosehall Wind Farm and Shin Hydro. The cumulative impact of the Proposed Varied Development has been considered with these other projects, where relevant to each chapter.

2.1.4. The site is located within the southern fringes of the Reay-Cassley Wild Land Area (WLA34). WLAs are not designated landscapes but are given recognition within the planning system through Policy 4 (g) of NPF4. Furthermore, the Caithness and Sutherland Peatlands Special Area of Conservation (SAC) adjoins the east and northeast boundary of the Proposed Varied Development. Potential effects on the qualities of the WLA and SAC were given due consideration in the 2021 EIA and continue to be considered in this report.

2.2. Design Evolution

2.2.1. The design of the Consented Development was defined and iterated through a rigorous process by the 2021 EIA and technical teams, applying the design principals of prevention, taking cognisance of the constraints and opportunities present at the site. The key factors in determining the layout and technology were minimising impacts to sensitive habitats, avoiding areas of deeper peat, ornithological sensitivities, and minimising landscape and visual impacts as much as possible. The design of the site was repeatedly reviewed via design workshops, before ultimately being fixed immediately prior to the Consented Development application submission in 2021.

2.2.2. The design was further informed and updated as the process of consultation progressed through the period of EIA submission. Particularly, after discussions with consultees

including The Highland Council, the decision was made to reduce the number of turbines from 20 to 18. The design considerations and alterations to the environmental assessment are presented in the 2022 AIR. The 18 turbine layout was granted Section 36 consent with deemed planning permission in May 2023.

2.2.3. In late 2024 the project was put on hold as it had been determined that the project economics had become unsuitable due to challenges affecting the onshore wind industry. After a detailed project feasibility review, the Applicant has established that increasing the tip height of the WTGs (from 149.9m to up to 200m), would help harness more wind energy and increase the energy output from the site. This can be achieved by maintaining the same turbine locations as the Consented Site Layout in order to minimise the impact from the new design. Due to the increase in turbine height and size, the following changes are deemed necessary:

- foundations & hardstands are required to increase,
- new turning heads are required and;
- some minor track realignments are required.

2.2.4. In line with the principals of prevention, all infrastructure realignments have considered avoidance of environmental constraints in order to prevent or minimise environmental impacts wherever possible.

2.2.5. To help convey how the realignment of infrastructure has been minimised for the Proposed Varied Development, a comparison between the Proposed Varied Development and the Consented Development Layout is shown in **Figure 1.4: Varied Development vs Consented Development**.

2.3. Description of Development – Proposed Varied Development

2.3.1. The Proposed Varied Development would include the following permanent key components:

- 18 WTGs each with internal transformers, a maximum tip height of 200m and rotor diameter of up to 138m.
- Crane hardstanding and associated laydown area at each WTG location;
- On site access tracks (of which approximately 13.4km are new access tracks and approximately 6.6km are existing tracks within the operational Achany Wind Farm site, where upgrades may be required to facilitate delivery of the WTG components);
- A new on-site substation, welfare building and store;
- Potential extension to the existing operations building at Achany Wind Farm to accommodate additional staff;
- A network of underground cabling to connect each WTG to the on-site substation;
- A LiDAR unit to collect meteorological and wind speed data, and associated hardstand; and
- Any associated ancillary works required.

2.3.2. In addition to the permanent components, the construction phase would comprise the following temporary facilities:

- Site compound areas, including welfare facilities, site cabins, storage and parking;
- Batching plant facilities for temporary concrete batching plants;
- Temporary telecommunications infrastructure; and
- Borrow pits, comprising both new and the reworking of a borrow pit used previously for Achany Wind Farm.

2.3.3. This Chapter is supported by the figures and technical appendices presented in **Table 2.1:**

Table 2.1: Proposed Development & EIAR Supporting Figures

Figure Title	Information Source	Comment
Figure 2.1: Indicative Turbine Geometry	New information	Presents indicative dimensions of likely candidate turbine models with a 200m tip height.
Figure 2.2: Indicative Turbine Foundation	New information	Presents indicative dimensions of likely foundation requirements to suit proposed 200m tip height turbines.
Figure 2.3: Indicative Access Track Details	2021 EIAR	Presents indicative cross-sectional dimensions of a typical access track build.
Figure 2.3: Indicative LIDAR	2021 EIAR	Presents indicative dimensions for an appropriate LIDAR station, including foundations, fencing etc.
Figure 2.5: Indicative Crane Hardstandings	New Information	Presents indicative dimensions of likely crane hardstands required for erection of 200m tip height turbines.
Figure 2.6: Construction Compound – Indicative Layout	New Information	Presents an updated indicative shape and layout for the construction compound.
Figure 2.7a: Indicative Substation Plan	New Information	Presents an updated indicative substation plan including transformer locations and control buildings.
Figure 2.7b: Indicative Substation Elevations	New Information	Presents indicative diagrams showing the front, side, and rear elevations of the substation compound.
Figure 2.8a: Indicative Operations and Welfare Building	2021 EIAR	Presents an indicative shape and interior layout for an operations and welfare building.

Figure Title	Information Source	Comment
Figure 2.8b: Indicative Operations and Welfare Building – Elevations	2021 EIAR	Presents indicative diagrams showing the front, side, and rear elevations of an operations and welfare building.
Figure 2.9a: Indicative Existing Operation Building Extension	2021 EIAR	Presents an indicative diagram showing the potential extension to the existing operations building at Achany Wind Farm.
Figure 2.9b: Indicative Existing Operation Building Extension - Elevations	2021 EIAR	Presents indicative diagrams showing the front, side, and rear elevations of the extended existing operations building.

2.4. Site Access & Delivery Route

2.4.1. The site access tracks are primarily the same as that of the Consented Development, with some minor route changes brought about by the change in hardstand footprints, which have led to an optimisation of the track alignment and a reduction in track length of approximately 300m. **Plate 2.1** below shows the standard access track at the Operational Achany Wind Farm. These tracks would be extended in the same manner into the Proposed Varied Development. The tracks are typically built to a high standard capable of accommodating construction vehicles and large wind turbine deliveries.

Plate 2.1: Existing Track Infrastructure, Achany Wind Farm

2.4.2. After consideration in the project feasibility review, it was confirmed that the Proposed Varied Development will be able to utilise the same site access and delivery route as the Consented Development.

2.4.3. The proposed access strategy proposes that all turbine abnormal loads would originate from either Nigg or Invergordon and access the site via the A9 to Loch Fleet then the A839 passing through Lairg, before entering the site entrance from the east. This is the same route as was proposed for the Consented Development. A Construction Traffic Management Plan (CTMP) would be prepared and agreed with The Highland Council and Transport Scotland prior to works commencing.

2.5. Proposed Varied Development Components

2.5.1. The following sections detail how the components and installation of the Proposed Varied Development differ from the Consented Development.

WTGS

WTG Specification

2.5.2. The Proposed Varied Development comprises 18 three-bladed horizontal axis WTGs. The WTGs are automatically controlled to ensure each turbine faces directly into the wind. As a result of this, the orientation of the WTGs would alter with changes in wind direction.

2.5.3. The final choice of turbine would be dependent on economics and available technology at the time of construction but would have a maximum blade tip height of up to 200m. **Figure 2.1: Indicative Turbine Geometry** shows indicative dimensions for the proposed turbine envelope as summarised in **Table 2.2** below.

Table 2.2: Turbine Parameters Assumed for the Purposes of Assessment within this EIA Report

Details	Consented	Varied
Rotor diameter (nominal)	136m	138m
Blade length (nominal)	68m	68-69m
Hub height (nominal)	82m	130-132m
Tip height (max)	149.9m	200m
Indicative power output	81MW	81MW
Candidate turbine model	Not yet selected	Not yet selected

2.5.4. The position of all turbines remains the same as the Consented Development. The Grid References for all turbines are as listed in **Table 2.3**.

Table 2.3: WTG Grid References

WTG No.	Grid Reference		WTG No.	Grid Reference	
T1	245163.952	911082.989	T11	246722.000	909421.000
T2	244595.048	910949.995	T12	246915.000	908855.000
T3	245617.670	910921.998	T13	246390.000	909004.000
T4	245979.918	910739.931	T14	245810.499	909163.287
T5	244768.059	910506.254	T15	246333.995	908448.012
T6	246023.000	910241.000	T16	245756.009	908236.996
T7	245495.008	910094.972	T17	246564.000	907472.000
T8	244871.843	910017.815	T18	247025.000	907297.000
T9	245597.429	909695.303	T19	246838.006	906821.004

2.5.5. As with the Consented Development layout, the Proposed Varied Development layout has been informed through detailed engineering assessment work and consideration of environmental constraints. Further detailed topographical and geotechnical surveys will be undertaken post-consent and prior to commencement of construction works.

2.5.6. The locations of the proposed WTGs and associated infrastructure may be subject to micrositing following the aforementioned topographical and geotechnical. Through this S36C application, the Applicant seeks to retain the micrositing condition 11 (and sub-parts thereof) attached to the Consented Scheme that permits micrositing within 50m.

2.5.7. The WTGs would generate electricity in wind speeds between approximately 3m/s and 32m/s (7 to 72mph). At wind speeds greater than this the WTGs would shut down for self-protection.

2.5.8. The turbine towers would be of tapering tubular rolled steel plate construction. The blades would be made from fibre-reinforced epoxy. The finish of the WTGs is proposed to be semi-matt pale grey colour.

2.5.9. A transformer and switchgear would be required for each turbine, which would be located within the structure of each turbine.

2.5.10. Full details of the proposed WTGs would be provided to the Energy Consents Unit and THC prior to the commencement of development in line with Planning Condition requirements.

WTG Installation

2.5.11. WTG components including towers, blades, drivetrains, hubs and nacelles are likely to be transported from the port of entry to the Proposed Varied Development using suitable abnormal load vehicles.

2.5.12. On arrival onto the Site, the WTG components would be delivered and offloaded at the hardstanding of the WTG to be erected. The process for installation has not changed when compared to the Consented Development.

WTG Bases - Foundations

2.5.13. Dependent on the ground conditions at each wind turbine location, a piled or gravity foundation would be used to support the wind turbines. An indicative foundation arrangement showing a gravity foundation solution was shown on Figure 3.3: Indicative WTG Foundation of the 2021 EIAR. Due to the increased size of foundation required for the taller WTGs, a new **Figure 2.2: Indicative WTG Foundation** has been developed and submitted. The new foundations require approximately 553m^3 of concrete and 75 tonnes of steel reinforcement, an increase of 100m^3 in comparison to the original foundations.

2.5.14. Finalised, site-specific designs would be developed once the final candidate turbine is selected and detailed intrusive ground investigations are undertaken during the detailed design phase.

WTG Bases - Hardstandings

2.5.15. The hardstandings for the Proposed Varied Development have increased in size to support the taller WTGs. The new footprint of each hardstand is based on a worst-case scenario. The sum of all WTG hardstand areas is approximately 13.23ha. This includes all hardstands collectively, temporary areas, approximately 0.1ha of access track per hardstand, and 3.5ha of temporary land take for blade laydown. The temporary laydown area will be reinstated when construction is completed. This new hardstand is an increase of approximately 0.4ha per hardstand when compared to the Consented Development.

2.5.16. The hardstands at T03 and T17 were also partially rotated, while keeping the turbine position fixed, in order to minimise or remove any potential for increased impact on peatland or watercourses.

Access Tracks

Access Track Layout

2.5.17. The access track layout[1] is shown on **Figure 1.3: Proposed Varied Development Layout Plan**. As with the Consented Development, from the Site entrance on the A839 access to the Site would be achieved by utilising the existing tracks developed as part of Achany Wind Farm. Existing tracks are typically constructed to a high standard with a running width of around 5.0m. Approximately 6.6km of the existing tracks would be utilised to access the Proposed Varied Development. Approximately 13.4km of new track would be constructed as part of the Proposed Varied Development. Optimisation of the access track layout developed through the project feasibility review means that approximately 300m less access track will require to be constructed when compared to the Consented Development.

2.5.18. As with the Consented Development, new access tracks would have a minimum 4.5-6m wide running surface, plus 0.5m shoulders each side, as illustrated in **Figure 2.3: Indicative Access Track Details**. Some localised widening on corners of the existing access tracks would also be required to access the WTGs during both construction and operation. The access tracks would be designed to incorporate passing places and turning heads that would be suitable for turbine component deliveries, construction plant and 4x4 traffic.

Access Track Construction

2.5.19. It is anticipated that site access tracks would be constructed with locally (on site) won graded rock from borrow pits[2] and, where necessary, geotextiles with the surface course comprising of a durable unbound graded rock surfacing material.

2.5.20. Of the 13.4km of new track, it is anticipated that approximately 9.7km of cut track and 3.7km of floating track design would be utilised for the Proposed Varied Development (see **Figure 2.3** for a cross-section diagram of each). This compares to 15.2km of cut track and 2.0km floated track proposed for the Consented Development.

2.5.21. Where appropriate, peat and soil from excavations on site would be utilised for reinstatement along both sides of the track verges and allowed to regenerate naturally as detailed within the **2021 EIAR Technical Appendix 3.1: Outline CEMP**. It is the intention that all construction methodologies, good practice and embedded mitigation presented within the CEMP will be adopted for the construction of the Proposed Varied Development and therefore this information is not repeated in this EIAR.

[1] Subject to a 50m micrositing limit subject to approval of specialist advisers.

[2] Where the borrow pits do not yield suitable material for certain construction operations such as concrete batching or access track capping, it may be necessary to import material to the Site. This would be determined following detailed ground investigation works.

Access Track Watercourse Crossings

2.5.22. The Consented Development access track routes were designed to minimise watercourse crossings by a combination of avoidance and by using existing crossings wherever possible. This remains true for the Proposed Varied Development and the number of watercourse crossings has not changed. The Watercourse Crossing Assessment presented in **2021 EIAR, Technical Appendix 10.2** remains valid and a revised assessment is not required as part of this EIAR.

2.5.23. All watercourse crossings will be designed based on the principles presented within the 2021 Watercourse Crossing Assessment and in line with best practice and current guidance at the time of construction.

Temporary Construction Compounds

2.5.24. Temporary construction compounds containing welfare; offices; parking for cars and plant; and storage facilities, would be required for construction workers at the locations shown on **Figure 1.3: Proposed Varied Development Layout Plan**. An indicative layout of a construction compound is provided in **Figure 2.6: Construction Compound - Indicative Layout**. The location and indicative layout of the temporary construction compounds has not changed when compared to the Consented Development.

LiDAR

2.5.25. A single permanent Light Detection and Ranging (LiDAR) station would be constructed to collect meteorological data for the operational life of the Proposed Varied Development and has been located to ensure it obtains the best quality data for the Site. **Figure 1.3: Proposed Varied Development Layout Plan** indicates its location, and an indicative plan and elevation are shown on **Figure 2.4: Indicative LiDAR**. It is assumed that the LiDAR would have a maximum reinforced concrete foundation of 4.7m x 3.7m. The inclusion, and location, of the LiDAR station had not changed when compared with the Consented Development.

Substation

2.5.26. The Proposed Varied Development would connect to the electricity transmission network using a new on-site substation, as shown on **Figure 1.3: Proposed Varied Development Layout Plan**. An indicative plan and elevation of the substation is shown on **Figures 2.7a** and **2.7b Indicative Substation Plan & Elevations** respectively. The footprint of this plan has not changed when compared with the Consented Development, however, the transformer configuration within the substation compound has been altered slightly due to changes in the grid connection agreement, requiring an updated indicative design drawing. This is expected to lead to either no change to the substation platform

size, or a small reduction. An updated plan will be provided as part of the satisfaction of planning condition prior to commencement of development.

Operations and Welfare

2.5.27. As with the Consented Development, an operations and welfare facility would be provided within the substation compound area, as shown on **Figures 2.8a** and **2.8b**: **Indicative Operations and Welfare Building**. Additionally, an extension to the existing operations building at Achany Wind Farm was proposed for the Consented Development (refer to **Chapter 3: Description of Development of the 2021 EIAR**), incorporating a store and additional office space, indicative details of which are provided on **Figures 2.9a** and **2.9b: Indicative Existing Operation Building Extension**. The Proposed Varied Development maintains this aspect of the Consented scheme in its S36C application, however, the decision on whether to ultimately exercise this plan is dependent on the requirements of the Wind Turbine Supplier, who would be appointed post consent.

On-site Electrical Cabling

2.5.28. The electrical cabling for the Proposed Varied Development has not changed when compared to the Consented Development, except in the case that the routing of the cabling will be altered slightly to mirror the changes to the access track route as described above.

Grid Connection

2.5.29. The grid connection from the on-site substation to the National Grid is subject to a separate consent application by the Network Operator (Scottish and Southern Electricity Networks). A section 37 application was submitted to the ECU in May 2025 with ECU reference ECU00004847. The application is still in progress, and further information can be found at - Scottish Government - Energy Consents Unit - Application Details.

2.6. Associated Development Components

Concrete Batching

2.6.1. As with the Consented Development, concrete batching is anticipated to be undertaken on site. The proposed location of the batching plant is shown on **Figure 1.3: Proposed Varied Development Layout Plan.**

Borrow Pits

Predicted Aggregate Requirements

2.6.2. It is estimated that approximately 149,000m^3 of stone would be required for the construction of the Proposed Varied Development, including access tracks, structural fill beneath turbine foundations, hardstands at turbine bases and compounds. This volume would be qualified once a balance of plant contractor has completed the detailed design post consent of the varied development.

Borrow Pit Locations

2.6.3. The borrow pits anticipated to be used for the Proposed Varied Development are unchanged from the Consented Development and are shown in **Figure 1.3: Proposed Varied Development Layout Plan**.

Borrow Pit Reinstatement

2.6.4. Following construction, the borrow pits would be reinstated with a suitable restoration profile. The reinstatement methodology is described within the 2021 EIAR of the Consented Development (**2021 EIAR Technical Appendices 3.1, outline CEMP** and **11.1, Borrow Pit Assessment Report**) and it is intended that the measures presented in these documents will be adopted during construction of the Proposed Varied Development and therefore they are not required to be duplicated for the purposes of this EIAR.

2.7. Construction Programme

2.7.1. It is expected that many of the above operations would be carried out concurrently, although predominantly in the order identified in **Table 2.4**, to minimise the overall length of the construction programme. A typical construction period for a wind farm of this size is estimated to be approximately 18 months. The indicative construction programme is illustrated in **Table 2.4,** with the final period dependent on weather and ground conditions experienced at the Site. This remains unchanged from the Consented Development.

2.7.2. Site reinstatement would be programmed and carried out to allow rehabilitation of disturbed areas as early as possible to minimise storage of excavated material on vegetation. Details on reinstatement would be provided within the final CEMP as required to satisfy the planning condition prior to commencement of development.

Table 2.4: Indicative Construction Programme

Quarter	1	2	3	4	5	6
Site Establishment						
Borrow Pit Operation						
Access Track Construction						
Turbine Bases and Hardstandings						
Concrete Works						
Cable Delivery and Installation						
Turbine Delivery & Erection						
Wind Farm Commissioning						
Reinstatement & Restoration						

Working Hours

2.7.3. Working hours are as proposed for the Consented Development:

- 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. No working activities would be planned on Sundays. In the event of work being required out with these hours, e.g. abnormal load deliveries, commissioning works or emergency mitigation works, the Planning Authority would be notified prior to these works taking place, wherever possible.

- Any blasting on site shall only take place between the hours of 10.00 to 16.00 on Monday to Friday inclusive and 10.00 to 12.00 on Saturdays with no blasting taking place on a Sunday or on National Public Holidays, unless otherwise approved in advance in writing by the Planning Authority.

2.8. Environmental Management during Construction

2.8.1. All mitigation and environmental management activities proposed as part of the Consented Development shall be adopted during construction of the Proposed Varied Development.

2.8.2. Prior to construction works, sensitive ecological areas, and other specific sensitive locations (e.g. cultural heritage assets, watercourses) would be marked out as

appropriate on site by specialist advisers (e.g. the ECoW) to avoid unnecessary encroachment and protect sensitive areas during construction. The Principal Contractor would ensure no vehicle movements or other activities take place out with the approved working area.

Micrositing

2.8.3. There may be a requirement to microsite elements of the Proposed Varied Development as a result of additional constraints encountered during site works. Turbines, access tracks, underground cables and crane hard standing areas may be microsited within 50m of the positions shown on **Figure 1.3: Proposed Varied Development Layout Plan**. Beyond this, agreement would be sought from the Planning Authority in consultation with SEPA. Any micrositing would require agreement of the specialist advisors (e.g. the ECoW) as appropriate.

Construction Environmental Management Plan (CEMP)

2.8.4. As previously mentioned, a Construction Environmental Management Plan (CEMP) would be prepared for the Proposed Varied Development prior to commencement of development. The CEMP would provide site specific details of all on-site construction works, reinstatement, drainage and mitigation, and any post construction reinstatement works together with details of their timetabling. An outline CEMP is provided in **Technical Appendix 3.1 of the 2021 EIA Report** for the Consented Development. It is expected that the requirements presented therein will remain the same during construction of the Proposed Varied Development and therefore a CEMP is not required to be updated or duplicated for the purposes of this EIAR.

Site Environmental Management

2.8.5. The Principal Contractor would have overall responsibility for environmental management on the Site. The services of specialist advisors, such as the project ECoW, would be retained as appropriate to be called on as required to advise on specific issues. The Principal Contractor and the Applicant would ensure construction activities are carried out in accordance with the mitigation measures outlined in this EIA Report and those detailed in the final CEMP.

2.8.6. Contractors would be required to adhere to the following to reduce or mitigate the environmental effect of the construction process:

- the conditions of any granted consent;
- relevant environmental regulations; and
- any other relevant mitigation measures identified in this EIA Report.

2.8.7. A copy of any conditions of consent and the CEMP would be incorporated into tender documents and form part of the contract between the Applicant and/or Developer and

the Principal Contractor. The selection criteria for the Principal Contractor would include their record in dealing with environmental issues, and provision of evidence that they incorporate all environmental requirements into their method statements.

Waste Management

2.8.8. Waste management requirements will not change from that of the Consented Development outline CEMP provided in **Technical Appendix 3.1** of the **2021 EIAR** and will comply with all regulations and guidance at the time of construction.

Health and Safety Related Issues

2.8.9. Health and safety would be initially addressed as part of the Pre-Construction Information Pack prepared by the Principal Designer for the project under the Construction (Design and Management) Regulations 2015. The Principal Contractor would be required to prepare a Construction Phase Health and Safety Plan and forward information to the Principal Designer during the works to enable the Health and Safety File to be completed.

2.8.10. Turbines are designed to be safe and are built to withstand extreme wind conditions. The turbines selected for the Proposed Varied Development would have the appropriate health and safety certification.

2.8.11. In accordance with Sections 6(1)(g) and (h) of the Land Reform (Scotland) Act 2003, access rights are not exercisable while building or civil engineering works, or working of minerals, are being carried out. This will be applied throughout the construction working area for health and safety reasons. Measures to manage public access during construction and operation were presented within the Outdoor Access Plan in **Technical Appendix 14.2** of the **2021 EIAR**. These will remain unchanged for Proposed Varied Development.

2.8.12. An Operations and Maintenance Manual for the design life of the wind farm would be prepared, which would cover all operational and decommissioning procedures.

Site Reinstatement

2.8.13. Reinstatement works are generally undertaken during construction (and immediate post-construction phase) and aim to address any areas of ground disturbance and changes to the landscape as part of the construction works. Reinstatement is undertaken as soon as practical following the construction works in each area, such as the re-dressing of road and track verges (and other areas that may be disturbed as a result of the construction process).

2.8.14. As noted above, an outline CEMP is provided in **Technical Appendix 3.1 of the 2021 EIA Report** for the Consented Development. It is expected that all site reinstatement

requirements presented therein will remain the same for the construction of the Proposed Varied Development and therefore an updated CEMP is not required to for the purposes of this EIAR.

Consultations with the Local Community during Construction

2.8.15. Consultation with the local community during the construction of the Proposed Development is an important consideration for the Applicant and the Principal Contractor. A community liaison group would be set up to provide 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.

Site Operation and Maintenance

2.8.16. Once commissioned, it is expected that the Proposed Varied Development would require the continued use of the current existing infrastructure within the Site.

2.8.17. Routine maintenance, inspections and servicing would be carried out on each turbine as required at the Proposed Varied Development, including major component and blade inspections. Appropriate maintenance works would be carried out routinely, and immediately following any unexpected events on site, such as failure of a generator or gearbox.

Track Maintenance

2.8.18. Frequency of track maintenance depends largely on the volume and nature of the traffic using the track, with weathering of the track surface also having an appreciable effect. Heavy plant is particularly wearing and on-going track maintenance would be undertaken as necessary throughout the year. Safe access and management of silt run off from weathered track material would be maintained all year round.

2.8.19. There would be no public vehicular access to the Site.

Site Decommissioning

2.8.20. The decommissioning period for a wind farm of this size is estimated to be 12 months.

2.8.21. Detailed decommissioning proposals would be established and agreed with relevant authorities prior to commencement of decommissioning activities.

2.8.22. Decommissioning of the wind farm would be undertaken at the end of its operational lifespan, anticipated to be 50 years. This is anticipated to involve:

- Decommissioning and removal of the turbines and site substation;
- Removal of concrete to 1m below ground level of the turbine foundations;

- Removal of substation building foundations; and
- Re-instatement of land affected, in accordance with best practice at the time.

2.8.23. At present, it is not anticipated that the access tracks or underground cabling would be removed and would remain in-situ.

2.8.24. Typically, the turbines would be decommissioned and removed from the Site in a manner similar to that of their erection. Cranes would normally be used to split the turbines into sections which would then be transported from the Site.

2.8.25. It is anticipated that turbine foundations would be broken out to a level of 1m below the final ground level. Typically, this would involve the removal of the upstand pedestal to the top surface of the main foundation base. All material arising from demolition would be disposed of responsibly and in accordance with relevant waste management regulations prevailing at the time.

2.8.26. All buildings and equipment would be removed including removal of fencing and of building foundations. All material arising would be disposed of responsibly.