

# EIA Report Chapter 11: Traffic and Transport

Monan Repower

---

**Client:** Constantine Wind Energy (UK) Ltd

**Reference:** C5507-442

Version 2.0

February 2024





**Report Prepared for:**

Constantine Wind Energy (UK) Ltd

**Author:**

Green Cat Renewables Ltd

|                    |                |      |            |
|--------------------|----------------|------|------------|
| <b>Checked by</b>  | Gregor Stewart | Date | 16/01/2024 |
| <b>Approved by</b> | Rob Collin     | Date | 06/02/2024 |

| <b>Issue History</b> | <b>Date</b> | <b>Details</b> |
|----------------------|-------------|----------------|
| V1.0                 | 06/02/2024  | Client Draft   |
| V2.0                 | 19/02/2024  | Submission     |

# Table of Contents

---

|                                       |                                                                 |           |
|---------------------------------------|-----------------------------------------------------------------|-----------|
| <b>11</b>                             | <b>Traffic and Transport</b>                                    | <b>3</b>  |
| 11.1                                  | Introduction                                                    | 3         |
| 11.1.1                                | Approach                                                        | 3         |
| 11.1.2                                | Structure                                                       | 3         |
| 11.1.3                                | Scope                                                           | 4         |
| 11.1.4                                | Limitations                                                     | 4         |
| 11.1.5                                | Scoping Responses                                               | 4         |
| 11.2                                  | Overview of the Abnormal Load Route to Site                     | 5         |
| 11.2.1                                | Abnormal Load Route to Site                                     | 5         |
| 11.2.2                                | Abnormal Load Route Analysis                                    | 6         |
| 11.3                                  | Traffic Increase                                                | 7         |
| 11.3.1                                | Turbine Delivery Vehicles                                       | 8         |
| 11.3.2                                | Cranes                                                          | 9         |
| 11.3.3                                | Site Construction Plant                                         | 9         |
| 11.3.4                                | Construction Materials for Access Tracks and Hardstanding Areas | 9         |
| 11.3.5                                | Construction Materials for Turbine Foundations                  | 9         |
| 11.3.6                                | Personnel/Small Deliveries                                      | 10        |
| 11.3.7                                | Commissioning and Connection Works                              | 10        |
| 11.4                                  | Operational Traffic                                             | 10        |
| 11.5                                  | Mitigation                                                      | 10        |
| 11.5.1                                | General Traffic Management Measures                             | 10        |
| 11.6                                  | Conclusion                                                      | 12        |
| <b>Appendix 11.1 – Outline CTMP</b>   |                                                                 | <b>13</b> |
| 11.7                                  | CTMP                                                            | 13        |
| <b>Appendix 11.2– Monitoring Plan</b> |                                                                 | <b>14</b> |
| 11.8                                  | Monitoring Plan                                                 | 14        |
| 11.8.1                                | Communication                                                   | 14        |
| 11.8.2                                | Condition Surveys                                               | 15        |
| 11.8.3                                | On-Site Meetings / Inspections                                  | 15        |

# 11 Traffic and Transport

## 11.1 Introduction

The Traffic and Transport Assessment has been developed to provide an assessment of how traffic associated with the development will be managed throughout the construction phase of the project. Specific attention has been given to the following items:

- Estimated levels of traffic;
- Consideration of the proposed abnormal load route(s) to include:
  - Swept path assessment for abnormal loads;
  - Safe operation for all traffic on the proposed abnormal load route(s);
  - Safety of road users.
- Approach to framework Construction Traffic Management Plan (CTMP).

### 11.1.1 Approach

The approach of the Traffic and Transport Assessment is as follows:

- Estimate the levels of traffic associated with the construction and operation of the Proposed Development;
- Identify, assess, design, and implement any special procedures or control measures to protect the local road network;
- Outline the content of the CTMP to be produced as part of a pre-commencement planning condition, which will eventually replace the Traffic and Transport Assessment in full. Once fully developed the CTMP will include details of how the construction of the Proposed Development will be managed;
- Produce an outline Monitoring Plan for the CTMP. This Monitoring Plan will detail how the impact of traffic on the local road network will be reviewed and updated throughout the lifetime of the Proposed Development.

### 11.1.2 Structure

The Traffic and Transport Assessment is made up of five subsidiary sections which are listed below:

- Overview of Route to Site:
  - **Section 11.2** summarises the routes to the Site that will be used by construction traffic throughout the development.
- Traffic Increase Assessment
  - **Section 11.3** highlights the potential for increased traffic levels on the public road network within the Study Area.
- General Traffic Management Measures:
  - **Section 11.5** describes the “best practice method” that will be employed during the construction of the Proposed Development.
- Outline CTMP:
  - **Section 11.7** provides an overview of the content that will be included in the CTMP that will be produced to satisfy a pre-commencement planning condition. The Outline CTMP can be viewed in **Appendix 11.1**.

- Monitoring Plan:
  - **Section 11.8** summarises the monitoring plan that should be adopted to ensure the Traffic and Transport Assessment and subsequent CTMP are appropriate and up to date for the project. The monitoring plan can be viewed in **Appendix 11.2**.

### 11.1.3 Scope

As discussed above in **Section 11.1.2**, the Traffic and Transport Assessment is at present an indicative report and will be complemented by a full CTMP following receipt of statutory consultee responses and proposed planning conditions information, as well as revisions when the final detailed design is completed and approved.

Prior to the commencement of works the Traffic and Transport Assessment and CTMP will be used to inform the development of site-specific documents employed by contractors throughout the project delivery phase, which may include the following:

- Construction Method Statement;
- Construction Phase Plan;
- Construction Environmental Management Plan (CEMP).

The Traffic and Transport Assessment has been written for the pre-construction and construction phases of the Proposed Development. During the operational phase, the Proposed Development is unmanned and only requires visits from service and maintenance personnel. As such, these do not cause any significant traffic issues. This Traffic and Transport Assessment does not cover the decommissioning phase of the project and we would expect a future CTMP or planning condition to deal with transport issues relevant to this phase.

### 11.1.4 Limitations

GCR have produced this Traffic and Transport Assessment for the Proposed Development with all the information available to them at the time of preparation to identify the most suitable access route for abnormal load traffic, the key risks associated with this traffic and the key methods which should be employed to minimise the risks.

### 11.1.5 Scoping Responses

**Table 11.1 – Scoping Responses**

| Scoping Response |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Comment          | Consultee/Applicant | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1                | Council (CnES)      | Assessment will identify proffered route for access and will consider the potential effects on traffic during the decommissioning of existing turbines; and construction and operation of the proposed turbines, including measures to minimise any disruption to the local and strategic road networks.                                                                                                                                                                           |
|                  | GCR                 | Covered in this chapter, see <b>Section 11.2, Section 11.3 and Section 11.5</b>                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2                | Council (CnES)      | Traffic Management Plan should be agreed with CnES, Transport Scotland and Police Scotland. Any bridges or structures crossed as part of the Abnormal Load Route should be assessed beforehand. Mitigation works may be required along this route to allow delivery of units. The developer will be responsible for the repair of damages to the road network as a result of the project and it may be in the interest of the developer to survey the route before works commence. |
|                  | GCR                 | Covered in this chapter, see <b>Appendix 11.1 – Outline CTMP</b> .                                                                                                                                                                                                                                                                                                                                                                                                                 |

## 11.2 Overview of the Abnormal Load Route to Site

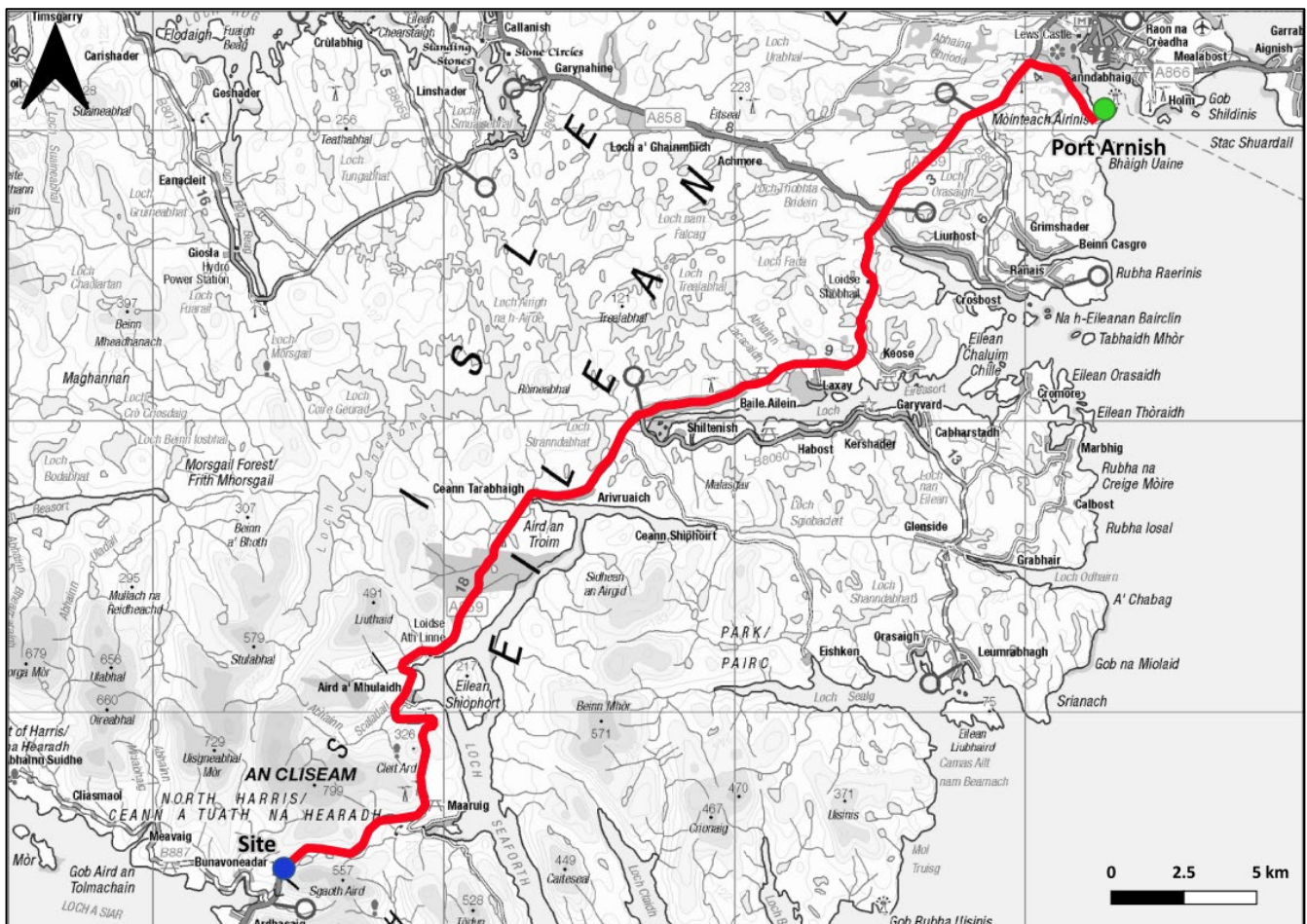
The Proposed Development is located on a hilly landscape approximately 1.2km northeast of Bunavonader and 5km northeast of Tarbert. The Proposed Development will consist of three-wind turbines which are replacing existing smaller turbines. The new turbines will be located close to the current turbine positions and will use the majority of the existing access tracks.

For planning, an EWT DW54X machine has been selected as the candidate turbine for assessment. As well as the wind turbines, the development will consist of the construction of a small section of new access track, crane hard standings, turbine foundations and other ancillary works.

The study of routes was carried out using 1:50,000 and 1:25,000 OS maps. This study shows that there is a possible route for the turbine delivery vehicles to gain access to the Site provided that offsite works are undertaken. It is considered that Port Arnish is the most accessible for turbine delivery. As such, this assessment will focus on the road network from the Port to the Site. One site access option has been considered within the study, the route is detailed below and highlighted in **Figure 11.1**.

### 11.2.1 Abnormal Load Route to Site

- Port Arnish
- Connect to A859 via Arnish Port Road
- Travel southbound along A859 towards Bunavoneader
- Approx 55m before Breedon Ceann an Ora Quarry the Site entrance is located off the A859 (57.938821, -6.825181)



**Figure 11.1 - Abnormal Load Route to Site**

The proposed site entrance with visibility splays and sight line details are shown in drawings:

C5507-GCR-WF-GA-DR-P-0002 Site Layout

C5507-GCR-WF-VS-DR-P-0001 Visibility Splay

The final route will be selected following the outcome of further assessments post-consent.

Once on-site, each of the turbine locations will be accessed via a combination of existing access tracks and new access tracks within the Application Boundary.

### 11.2.2 Abnormal Load Route Analysis

The longest loads involved are the turbine blades with a total vehicle length up to 35m including load overhang. For loads of such size removal of street furniture may be required.

Following the completion of a desk-based study and swept path analysis (SPA) a number of potential pinch points were identified:

Pinch Point 1: Arnish Port Road, Left Turn onto A859

Pinch Point 2: A859 Sharp Bend Approximately 1.10km South-east of Aird a' Mhulaidh

Water Crossing: Kinloch Bridge Crossing

Figure 11.2 shows the identified pinch points along the Abnormal Load Route to Site.

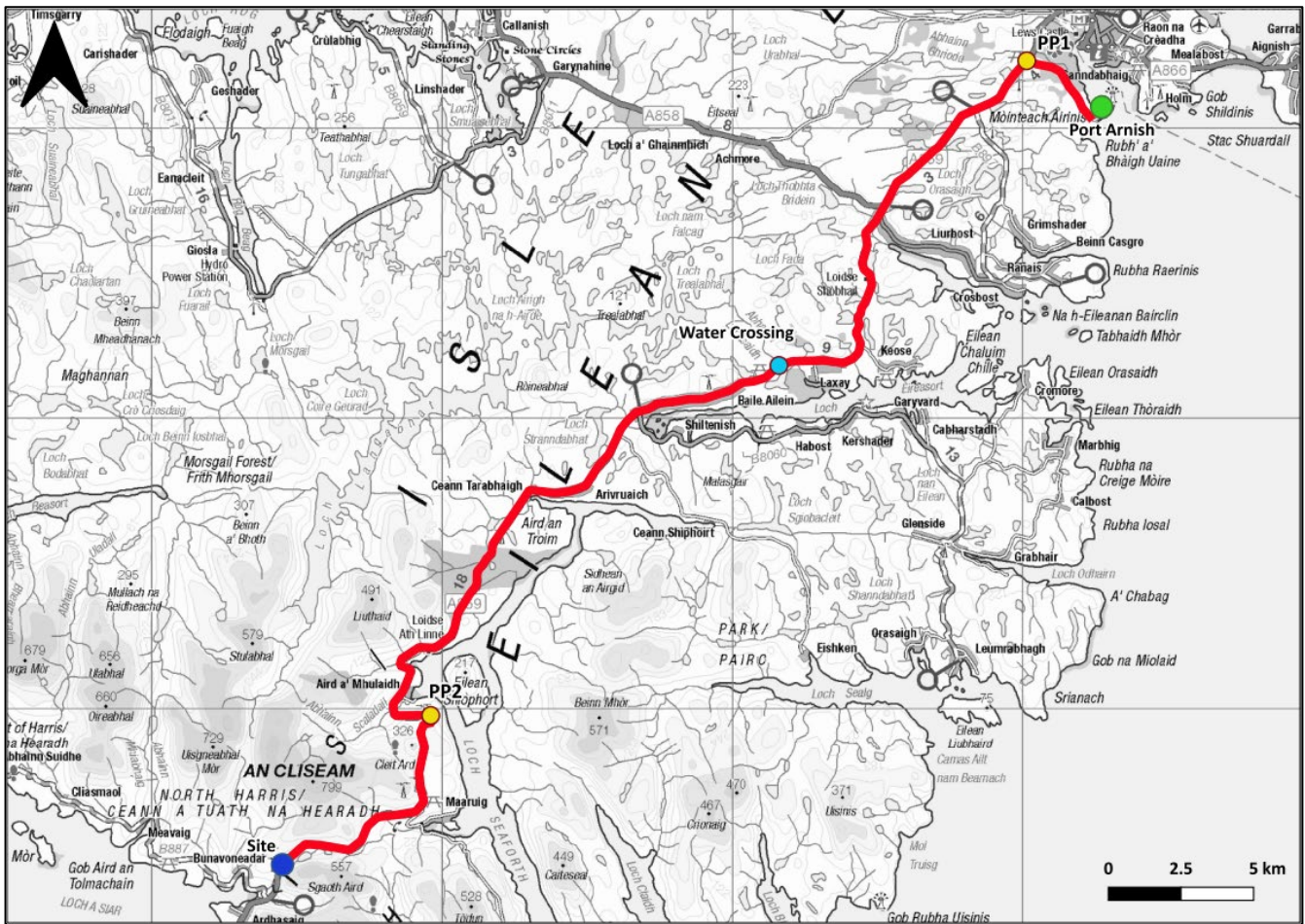


Figure 11.2 - Abnormal Load Route to Site including Pinch Points

### 11.3 Traffic Increase

There will be seven main sources of construction traffic attributed to the Proposed Development. These comprise:

- Deliveries of site compound, welfare and office establishment;
- Removal of existing turbines;
- Deliveries of aggregate for the site access tracks and crane hardstandings;
- Deliveries of concrete for the foundation pours;
- Deliveries of reinforcement steel and cabling;
- Delivery of the turbine components and cranes (blades, tower sections and turbine nacelles); and
- Personal trips to and from the Site.

These deliveries will facilitate the construction of access tracks, hardstandings and turbine foundations, as well as the site compound and the erection of the turbines themselves. **Table 11.2** gives an indicative estimate of the volumes of traffic likely to be involved during the construction phase. The volumes of traffic would be confirmed in the Construction Traffic Management Plan produced to discharge any pre-commencement planning conditions.



**Table 11.2: Estimated construction traffic**

|                                                              | Duration                 | Traffic Load (typical)                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Wind farm construction:</b>                               |                          |                                                                                                                                                                                                                                                                                                           |
| <b>Mobilisation, welfare set up etc.</b>                     | 1 week                   | <ul style="list-style-type: none"> <li>○ 5no. hiab with cabins/welfare facilities</li> <li>○ 7no. flat beds with plant</li> </ul>                                                                                                                                                                         |
| <b>Dismantling and Removal of 3 x Existing wind Turbines</b> | 1 month                  | <ul style="list-style-type: none"> <li>○ 1no. delivery of Crane for dismantling</li> <li>○ 2no. flat bed trailers for removal of wind turbine blades</li> <li>○ 3no. flat bed trailers for removal of generators and hubs</li> <li>○ 4no. flat bed trailers for removal of wind turbine towers</li> </ul> |
| <b>Construction of access tracks and crane hardstanding</b>  | 3 months                 | <ul style="list-style-type: none"> <li>○ 546no. aggregate to be acquired from a local quarry and delivered in 18-20T 8 wheel lorries.</li> <li>○ 6no. HGV delivery of geotextile/geogrid</li> </ul>                                                                                                       |
| <b>Foundation preparation</b>                                | 1-2 weeks per foundation | Per foundation: <ul style="list-style-type: none"> <li>○ 2no. deliveries of concrete for blinding</li> <li>○ 1no. lorry mounted crane for delivery of foundation bolt basket</li> <li>○ 2no. delivery of steel rebar (standard HGV)</li> </ul>                                                            |
| <b>Foundation pour</b>                                       | 1-2 days per foundation  | Per foundation: <ul style="list-style-type: none"> <li>○ Concrete pour requires approximately 490m<sup>3</sup> (~61no. 8m<sup>3</sup> concrete wagons)</li> </ul>                                                                                                                                         |
| <b>Turbine delivery</b>                                      | 2-3 days per turbine     | Per Turbine: <ul style="list-style-type: none"> <li>○ 5no. abnormal loads</li> <li>○ 5no. standard loads</li> </ul>                                                                                                                                                                                       |
| <b>Crane delivery</b>                                        | 1-2 days                 | <ul style="list-style-type: none"> <li>○ 2no. cranes (250t-400t and 90t)</li> <li>○ 12no. ballast lorries</li> </ul>                                                                                                                                                                                      |
| <b>Commissioning and connection works</b>                    | 4 weeks                  | <ul style="list-style-type: none"> <li>○ Electrical equipment (16no. Hiab, typically lorry mounted crane)</li> </ul>                                                                                                                                                                                      |

The following sections provide further details of typical vehicle activity that would be required throughout the construction and operational phases of the development.

### 11.3.1 Turbine Delivery Vehicles

A number of abnormal loads will be needed to deliver the components of the three turbines to Site, specifically:

- The longest loads are the turbine blades with a total vehicle length of up to 35m, including load overhang.
- The widest loads are the turbine generators with a maximum width of 6m.
- The tallest loads are the tower section with a maximum height of 4m.

These dimensions are subject to confirmations at the detailed design stage.

Due to these dimensions, the access route needs a minimum clearance width of 7m and height of 5m and the ability to withstand a maximum axle load of 12 tonnes and a maximum gross weight of 180 tonnes. The transport vehicles involved require a minimum ground clearance of 100mm.

### 11.3.2 Cranes

Two cranes are required to lift the turbine components into place on-site, typically a 250-400-tonne capacity main crane and a 90-tonne capacity support crane. The largest crane proposed to be used on Site is the Liebherr LTM 1450-8.1 mobile crane which is 19.9m long, 4m high, and 3m wide when fully disassembled for travel. The crane has 8 axles, with axle loads up to 12 tonnes; and a total vehicle transport weight of 96 tonnes.

### 11.3.3 Site Construction Plant

This is anticipated to include:

- Two tracked excavators;
- Two dumpers;
- One heavy vibrating roller

Deliveries of these would be likely to take place over the course of one or two days, arriving in the morning hours. The only additional deliveries to Site would be site cabins/welfare facilities, occasional hire equipment and small material deliveries (e.g., rolls of geotextile/drainage pipe spares) which could occur at any hour during the working day.

These vehicles will likely access the Site via the A859 and the proposed access option, however, this will be dependent on where the plant is dispatched from. A finalised access route will be confirmed by the civil contractor appointed to produce the Construction Traffic Management Plan.

### 11.3.4 Construction Materials for Access Tracks and Hardstanding Areas

The Proposed Development will use the existing tracks to access Turbine 2 and Turbine 3. New access tracks will be constructed to access the location of Turbine 1. The Proposed Development will entail the construction of 370m of new access tracks for Turbine 1 and hardstandings to facilitate the sitting positions for each turbine. Approximately 10,900 tonnes of aggregate will be required, which would result in approximately 546 HGV deliveries.

It is the intention to use stone from local quarries such as Breedon Ceann an Ora Quarry located approximately 55m south-west of the site entrance. Deliveries would likely access the Site by connecting to the A859 before turning left at the site entrance.

### 11.3.5 Construction Materials for Turbine Foundations

The preparation of each foundation will require six HGV deliveries of reinforcement steel, an HGV with a foundation anchor ring and up to five concrete wagons to pour a blinding layer. After these deliveries, steel fixers normally take about two weeks to fix the reinforcement steel.

For the main pour at each foundation, it is estimated that approximately 60no. deliveries of concrete would be required. Concrete wagons will be of standard sizes (8m<sup>3</sup>).

The exact access route of concrete vehicles is dependent on the batching plant used, which will be finalised by the civils contractor appointed following a tender process.

The concrete deliveries would be scheduled to arrive at steady intervals, up to 12 per hour, over a one-day period. At worst, an increase in traffic of a single wagon every 5 minutes, would have minimal effect on the local road

network. Traffic management would involve spacing deliveries such that there is a sufficient and consistent supply of concrete. But would avoid unnecessary impact on the public road.

### 11.3.6 Personnel/Small Deliveries

In addition to the traffic described above, during all phases of construction, there will be between 6-12 vehicles per day carrying personnel to the Site. These will be light vehicles – cars, minibuses, or vans – arriving and exiting the Site during the am and pm peak hours. In addition, throughout the project, there may be occasional delivery of visitors and equipment, such as fuel bowsers, survey equipment, testing subcontractors etc. These movements will not require any particular traffic management provisions beyond the route management plan.

### 11.3.7 Commissioning and Connection Works

This stage of the work requires 16 standard HGVs and will have almost no effect on the road network, any traffic that may be required is likely to be light commercial vehicles required at low volume and frequency. As such, no traffic management is proposed.

## 11.4 Operational Traffic

Once the wind farm is operational it is monitored off-site using a telecommunication system. As such, the development will only require maintenance every few months with no other scheduled visits required. In addition, the maintenance would only require a single vehicle to access the Site which would not require any traffic management.

## 11.5 Mitigation

### 11.5.1 General Traffic Management Measures

The following are general traffic management measures which will be employed. Non-compliance will be dealt with by the site manager, with disciplinary actions taken at their discretion. These issues will be captured in the Construction Traffic Management Plan.

#### 11.5.1.1 Site Access

Preferred routes for heavy goods vehicles (HGVs) to and from the Site will be agreed with the local authorities.

#### 11.5.1.2 Hours of Deliveries

Typically, deliveries will fall between the construction hours of 0700hrs to 1600hrs on Monday to Friday, Saturdays between 0700hrs and 1300hrs and at no time on Sundays and Bank Holidays. Turbine component deliveries will be governed by the availability of Police Scotland and may take place outside these times. Care will be taken to avoid local refuse collection, school bus movements, and events where practicable in order to minimise the impact on the local road network.

#### 11.5.1.3 Loading and Unloading of Vehicles

Where possible all loading and unloading of vehicles will take place within the Application Boundary. There will be no requirement to use the highway at any point for loading/unloading.

#### 11.5.1.4 Temporary Warning Signage

On-site signage will consist of construction site signage at the Site entrance displaying the name of the Site and contractor. Temporary warning signage will be placed on the public road near the site entrance to warn road users, cyclists, pedestrians, and equestrians of the nearby construction works.

#### 11.5.1.5 *Traffic Control at Site*

At least one turning bell will be constructed on-site to enable all vehicles to be forward facing when exiting the Site and re-joining the public highway.

#### 11.5.1.6 *Debris/Dust Control*

All vehicles exiting the Site shall be checked for excess dirt and where necessary, wheels will be hand cleaned. The adjacent road shall be periodically inspected for debris on the public highway. Should a surplus of debris be noted, the contractor will endeavour to actively clean the road to ensure that the carriageway is kept clear throughout construction. If excessive quantities of dust are consistently arising from the development, water will be sprayed over the working areas to keep the dust down.

#### 11.5.1.7 *Monitoring*

The local road network shall be monitored throughout construction; where road sweeping is required it shall be undertaken as necessary. Should issues with the condition of the road be noted, the Local Roads Authority shall be notified, and an agreement struck on how best to proceed.

#### 11.5.1.8 *Roadworthiness*

- All vehicles will be kept in safe and efficient operational order, complying with the Roads Traffic Act Construction and Use Regulations. Special attention should be paid to the following requirements:
- All lights must function correctly and be clean, including indicators, brake lights, flashing beacons, reversing lights (and alarms where fitted).
- Steering and brakes must operate correctly and efficiently.
- Tyres must be undamaged and have adequate tread depth remaining.
- All mirrors must be correctly fitted, adjusted and unbroken.
- Suspension is maintained to a standard where noise (particularly when travelling empty) is minimised.
- Exhaust emissions should comply with all legal requirements.
- The vehicle is to be kept clean by regular washing.

Vehicles should contain a first aid kit and fire extinguisher at all times.

Any escort vehicles are to carry 6 x cones, 2 x emergency triangles and beacons. The regional police, who are anticipated to escort blades, nacelle and towers, will also have a provision of lights and cones in case of an emergency.

#### 11.5.1.9 *Driver Conduct*

The Road Traffic Regulations and the advice given in the Highway Code will be included within site health and safety documentation and distributed to all parties. A summary of key aspects is given below:

- **Driving to conditions.** Speed will always be adjusted to varying road and weather conditions. Allowance will also be made for the potential of poor driving standards of other road users.
- **Speed.** Under no circumstances will the speed limit be exceeded. Extra care should be taken when passing villages and built-up areas. To further minimise the impact of heavy vehicles on the local population, speed restrictions on the Site should be adhered to.
- **Driving etiquette.** Care will be taken to drive considerately, minimising impact on other road users.

- **Convoying.** Where practicable grouping of HGVs will be avoided to ensure room for smaller vehicles to overtake easily without having to pass multiple vehicles at once.
- **Reduce Noise.** Efforts will be made to minimise noise from engines, suspensions and tipper bodies, particularly in villages and built-up areas, and especially in the early morning and late at night. Tailgate should be locked when running empty.
- **Parking.** Overnight parking will be off public highways so it does not inconvenience members of the general public.
- **Work Legally.** All drivers shall adhere to Hours Legislation and with the Tacho-graph Regulations.
- **Routing.** Approved routes to and from the delivery point will be used, and the use of narrow and hilly routes which are unsuitable for large vehicles should be avoided where practicable. Where the route restrictions are breached, penalties shall be applied at the site manager's discretion.
- **Safety.** Reflective high-visibility jackets/waistcoats will be worn at all times at the Site, at delivery points, or at the scene of a vehicle accident/breakdown.
- **Accidents and Breakdowns.** Site and delivery vehicles will carry details of breakdown procedures, and contacts to be used in the event of an emergency. At the scene of a road traffic accident (or vehicle breakdown), wherever possible, approaching traffic should be warned of the potential danger by use of warning triangles and traffic cones. Details (names and addresses) of any witnesses will be obtained and emergency services should be contacted.

#### 11.5.1.10 *Emergency Services*

Throughout the construction programme, the site manager will ensure access to the Site is not impeded and congestion does not occur. This will ensure traffic is not backed onto the main road and access is kept clear for emergency service use.

During delivery of components to Site there is the possibility of an emergency arising. Planning of transport operations cannot remove the possibility that a single site access could be blocked to emergency response vehicles. To remedy this, laybys will be installed across the Site, specifically along access tracks.

## 11.6 Conclusion

A suitable route to the Site has been identified to be viable, the finalised route will be presented as part of the Abnormal Load Routing Plan and Construction Traffic Management Plan. We have demonstrated that the turbine components can be safely delivered to the Site and that suitable management plans will be enacted in agreement with the LPA and other key stakeholders, post consent.

## Appendix 11.1 – Outline CTMP

### 11.7 CTMP

The following section summarises the key items expected to be covered in the site specific CTMP which will be prepared prior to the commencement of construction works and agreed with Comhairle nan Eilean Siar (CnES), Transport Scotland and Police Scotland. The exact content may vary depending on the wording of planning conditions associated with the Proposed Development. The CTMP documents will set out in detail:

- Detailed Overview of the Route to Site
  - This section will include all information noted in **Section 11.1.1** of this EIA Report and be updated accordingly to align with any design or technology changes that occur before the commencement of the works.
- Construction Phases, Traffic Volumes, Access Routes, and Management
  - This section will include all information noted in **Section 11.1.1 and 11.1.2** of this EIA Report and will be updated accordingly.
  - A detailed construction programme will also be provided to help capture the durations and quantities of deliveries more accurately. Specific attention will be given to the timings of deliveries of abnormal loads.
- Construction Traffic Management and Banksman
  - Detailed Traffic Management Plans will be produced by a specialist Traffic Management Consultant. These plans will indicate locations of temporary and permanent signage for the Proposed Development and the surrounding delivery routes.
  - A detailed site-specific plan will be developed by the Principal Contractor for the use of Banksman and on-site traffic management.
  - This will include quantities of appointed personnel.
- Communication with Other Developments
  - This section will include details of expected development timelines for other construction sites, specifically renewable energy projects, in the area and identify times where deliveries can be made to minimise the impact on the local road network.
- Operational Traffic Management
- Decommissioning Traffic Management

## Appendix 11.2– Monitoring Plan

### 11.8 Monitoring Plan

#### 11.8.1 Communication

At all times there will be good communications between all parties on the Site and during construction works. The Principal Contractor will be responsible for all contractors on the Site and any issues/conflicts should be brought to their attention in the first instance.

The overall project programme is the responsibility of the Project Manager in consultation with the Principal Contractor and the developer. Any wider technical and programme issues will be managed by the project manager.

##### 11.8.1.1 Project Phases

Throughout the post-planning and construction phase of the Proposed Development there will be various meetings between parties to ensure that good communication is achieved. These meetings will follow the following format:

- Post-Planning Phase
  - Weekly client and project manager meetings. These will include the Principal Contractor and other sub-contractors as necessary.
- Construction phase
  - Daily toolbox talks/briefings on Site. These will be chaired by the appointed Principal Contractors Site Manager and all stakeholders and sub-contractors working on the Site as necessary;
  - Weekly client and project manager meetings;
  - Monthly balance of plant progress meetings.

##### 11.8.1.2 Monthly Progress Meeting Agenda

The monthly balance of plant progress meetings will be used to cover all aspects of the Proposed Development and will look at the following structure:

- Review of outstanding actions;
- Health and safety;
- Security;
- Environmental;
- 3rd party interfaces including consents;
- Design, quality assurance and testing;
- Site progress, programme and look ahead;
- Grid connection and communications;
- Access;
- Any other business.

The following key items, which directly link to the CTMP, will be reviewed in detail:

- Inspection reports;
- Monitoring results and reports;
- Mitigation measures being employed and their effectiveness;
- Incidents and near misses;
- Impact on and feedback from key users:
  - Residents;
  - Agricultural activities;
  - Cyclists.
- Permits, licenses and consents;
- Introduction of new works, new working methods and operational procedures.

### 11.8.2 Condition Surveys

Condition surveys of the proposed construction access route and abnormal load route will be carried out to ensure the quality of the public road is monitored throughout construction phase of the development.

Visual inspections will occur on a weekly basis by the appointed principal contractor and their site teams. In addition to this there will also be formal inspections, with supporting photographic evidence, carried out at the following frequencies:

- Once no later than 1 month prior to the commencement of works;
- Once per month during construction works;
- Once no later than 1 month following completion of construction works.

The results of these formal inspections shall be recorded and shared with Comhairle nan Eilean Siar (CnES) Roads and Infrastructure Department. The Principal Contractor will ensure that where changes in the road quality are identified, out with the above frequencies, they will be communicated to CnES and remedial works will be completed at the earliest opportunity to prevent compounding issues from occurring.

### 11.8.3 On-Site Meetings / Inspections

On-site meetings/inspections will be carried out as necessary to confirm the appropriate use of mitigation measures identified within the CTMP. These meetings/inspections will highlight any further issues/measures which may be relevant either prior to commencement or during the works.

Regular checks of plant and equipment will be undertaken by the contractor to identify any oil or fuel leaks. Records will be kept of all inspections/findings by the contractor for review by the appointed project manager for discussion during regular meetings.

All records will be kept for inspections carried out by the contractor. These records will be kept on-site for internal or external monitoring as required. The records will detail the date, location, frequency, and findings of each inspection along with persons notified and identified actions as appropriate.





---

**Registered Office**

Green Cat Renewables  
Stobo House  
Roslin  
Midlothian  
EH25 9RE

+44 (0) 131 541 0060

[info@greencatrenewables.co.uk](mailto:info@greencatrenewables.co.uk)  
[www.greencatrenewables.co.uk](http://www.greencatrenewables.co.uk)