Appendix J: Traffic Management Plan

1. OBJECTIVE: MANAGE THE TRAFFIC GENERATION OF THE PROJECT

The objective of the traffic management plan is the prevention of incidents from the use of vehicles and disturbance of local traffic on public roads during the construction, operation, rehabilitation and decommissioning phases of the proposed projects. This Plan has been prepared to enable the Contractor and developer to identify and implement all legal and best practice requirements in respect of the management of traffic associated with the project. The purpose of the Plan is to ensure that traffic management (and management of vehicles and equipment in respect of the Project) is undertaken in a safe and efficient manner. As such, the management of traffic in terms of this plan is intended to avoid and minimise traffic risks to (and impacts on) the health and safety of the local community and any personnel on site during the Project, under both routine and non-routine circumstances. The requirements of this Plan shall apply to all construction personnel including any Sub-contractor appointed to provide vehicles, machinery or drivers for the Project.

2. TARGETS:

To ensure compliance with the national traffic laws, local authority by laws and any other statutory requirements relating to traffic management.

3. TRAFFIC MANAGEMENT PLAN IMPLEMENTATION

3.1. Traffic Volumes

- a) Traffic volumes are most likely to increase during the construction phase. However, due to the remote location of the site, and the low volume of traffic on public roads in the area the impact is expected to be low.
- b) Avoid construction vehicles movement on public roads during peak traffic times (namely 06-00 09:00 and 16:00 19:00).
- c) Limit use of private cars by arranging mini bus transport service for workers;

3.2. Licensing, roads and Maintenance

The Contractor must ensure that

- a) All Project vehicles comply with relevant traffic and transport licencing requirements (such as with regard to licensing requirements relating to the transportation of over-sized loads or hazardous materials, including hazardous waste).
- b) All drivers of vehicles used during the Project shall have the requisite licences to operate any vehicle (or machinery) operated by them on Site or on any public roads.
- c) All Project vehicles shall have valid roadworthy certificates and licences
- d) Existing road infrastructure must be used, wherever possible for providing access to the wind energy facility
- e) In so far as new roads are required to be constructed near water resources (including drainage lines), the following requirements are applicable:
 - Provision must be made for fauna (such as toads) to pass under roads (for example, through the use of culverts);
 - Bridge design must be such that it minimises impacts on riparian areas and must be permeable;
 - Culverts must be designed so as to allow free flow of water and must be maintained in good working order.
 - Hard road surfaces must be kept as narrow as possible.
- f) All vehicles and machinery used during the Project shall be regularly maintained and repaired where necessary. In this regard, all construction and passenger vehicles used during the Project shall be inspected by an appropriately qualified mechanic

- regularly as required following the commencement of the Project. The Project Managers shall ensure that regular inspections are undertaken of construction and passenger vehicles to ensure that they are in good working order and are not overloaded. Site-specific traffic plan to be developed and implemented during the detailed design phase prior to construction.
- g) Limit dust generation by applying dust suppressants (e.g., spraying with water) and postponing dust generating activities during period of strong winds and enforcing a strict speed limit of 40 km/h on unpaved roads.
- Maintain the pre-construction condition of public roads being utilised by construction vehicles. Preconstruction condition of roads should be supported by photographic evidence for record-keeping.
- In the event that the condition of public roads being used by construction vehicles are significantly degraded due to use, the developer should restore road condition to its pre-construction condition
- j) Use only well trained, suitably qualified and experienced drivers in possession of an appropriate and valid driver's license;
- k) Adhere to existing roads and road rules associated with them (for instance speed limits).
- I) Ensure that roadworthy and safety standards are implemented for construction vehicles.

3.3. Traffic routing, speed limits and signage

- a) The movement of all vehicles to and from site shall be along designated public roads and site access roads. The most appropriate route for large Project vehicles (such as trucks and buses) transporting equipment, materials and employees (along public roads) to and from the site must be determined in consultation with the local Municipality, local road traffic authorities and the local community. A copy of the approved routes must be maintained on site together with this Plan
- b) Strictly regulate speed limit of construction vehicles in all construction areas.
- c) Implement clear and visible signalling to indicate the movement of vehicles and when turning onto or off access roads to ensure safe access to and from the site. Clear and visible signage must be placed on and around site, clearly demarcating safe entry and exit points;
- Demarcate and strictly control parking areas so that vehicles are limited to specific areas only;

3.4. Authorisation relating to the transportation of abnormal loads

- a) The NRTA and associated regulations prescribe the permissible vehicle dimensions and masses of vehicles travelling on public roads. Where vehicles will exceed these requirements and where the load cannot be dismantled without significant cost / effort, it must be classified as an abnormal load and an exemption must be obtained in terms of section 81 of the NRTA.
- According to the EPC Heads of Terms all transport permits will be obtained by the Contractor. This must be clearly indicated in the Contract.
- c) Obtain permits from relevant administrative authority in the event of abnormal load transportation to and from site.
- d) Monitor for overloading of vehicles;
- e) Require all drivers to abide by standard road and safety procedures on site;
- f) When travelling on public roads all speed limits and rules of the road must be adhered to; and

3.5. Monitoring actions to be conducted by the ECO

- a) Maintain incidents / complaints register for community complaints;
- Monitor dust generation and implementation of management actions detailed above.
- c) A copy of this Plan must be maintained on site by the ECO and all employees working at the site. Sub-contractors must be trained to ensure compliance with this Plan.

3.6. Pedestrian And Passenger Safety

3.6.1. Employees

All contractor and developer personnel transported to and from the Site shall be safely accommodated in appropriate passenger vehicles. No employee shall be transported on the back of open trucks. The Construction Safety Officer must ensure that this requirement is adhered to at all times.

All vehicles transporting employees must be appropriately maintained and not carry more passengers than the number of persons for whom seating accommodation is provided.

Assembly points for passengers embarking passenger vehicles must be located a safe distance from areas/routes of high vehicle traffic. Roads and areas used by construction vehicles shall, as far as possible be avoided by all personnel. Designated pedestrian routes shall be demarcated where appropriate.

Vehicle and pedestrian safety shall be emphasised in the Safety Induction Training required to be provided by the Contractor. All employees and construction personnel shall be trained and informed as to the dangers and risks posed by construction and other traffic, such training shall also include appropriate precautionary measures required to be undertaken to facilitate safe and efficient traffic management (e.g. checking for traffic before crossing roadways and utilising designated pedestrian routes). Drivers shall be adequately trained in the recognition and avoidance of road hazards, vehicle maintenance and safety

3.6.2. Stakeholder Engagement

The traffic safety procedures, transport routes and construction schedules intended to be applied during the construction phase shall be finalised in consultation with members of the local community, the local authority and affected landowners prior to the commencement of construction activities.

The scope of such engagement should include the designation of routes for construction vehicles, procedures for complaints and emergency procedures shall be concluded in consultation with local community members, affected land owners and local emergency and traffic authorities.

In this regard, appropriate measures shall be taken to ensure that:

- The routes used by construction vehicles (as far as possible) avoid areas of high pedestrian traffic;
- adequate signage is used to warn local community members of hazards (e.g. site access, construction vehicles turning);
- information dissemination and awareness is conducted to inform community members of increased traffic risks and appropriate precautionary measures; and
- community members are aware of the Contractors' construction (and delivery) schedules.

3.7. Emergency Responses and Reporting of Hazards

Prior to the commencement of the Project, local emergency services (ambulance and medical services, police and fire and rescue) must be consulted by the contractor in relation to the availability of emergency services to attend to road accidents associated with the Project. In the event that any traffic hazard is identified on site by any person or Project personnel, such hazard shall be immediately reported to the Site Manager who shall take the appropriate measures to avoid an incident or accident being caused. Drivers of project vehicles will be required to undertake first aid training and all project vehicles shall carry first aid supplies which should be adequate to cater for the number of passengers carried on the vehicle in question. In the event that an accident occurs

on-site or off-site, the on-site emergency procedure must be followed. In the event that an accident occurs off-site, it shall immediately be reported to the relevant emergency service providers by the driver, and in the event that the driver is incapacitated, by any other passenger on such vehicle.

3.8. Review of This Management Plan

This Plan shall be reviewed periodically during the life time of the Project to facilitate on going and effective management of traffic.