

Your Ref.: Wind Garden WEF – JG Afrika

Our Ref.: 5274 – Wind Garden WEF

22 April 2022

Savannah Environmental (Pty)Ltd  
First Floor, Block 2  
5 Woodlands Drive Office Park  
Cnr Woodlands Drive & Western Service Road  
Woodmead,  
2191

**ATTENTION: JO-ANNE THOMAS**

Dear Jo-Anne

**PROPOSED WIND GARDEN WIND FARM – AMENDMENTS TO THE LAYOUT**

Your email dated 18 March 2022 refers. In order to address outstanding I&AP concerns, changes have been made to the layout of the proposed Wind Garden Wind Energy Facility. The changes include a reduction in the number of turbines (from 47 turbines to 23 turbines) and the use of a shorter hub height (from 120m to 115m).

The original traffic impact assessment submitted to you on 01 December 2020 calculated that the delivery of the turbine components to the site will generate the following trips:

*Consequently, for each steel wind turbine three (3) abnormal loads will be required for the blades, six (6) abnormal loads for the tower sections and another abnormal load for the nacelle. All further components will be transported with normal limitation haulage vehicles. With approximately ten (10) abnormal loads trips (3 trips for blades, 6 trips for tower sections and 1 trip for the nacelle), the total trips to deliver the components of 47 turbines to the proposed site will be around 470 trips (10 trips x 47 turbines). This would amount to less than 1 vehicle trip per day (470 trips / 30 months / 22 working days per month) for a construction period of 30 months. Should the turbines be delivered during an 18-month period, the vehicle trips would amount to 1.19 vehicle trips per day.*

The change to the number of turbines and the change in the hub height will result in the following change to the abovementioned calculation:

The tower sections are transported in 20m sections. For a 115m hub height, five (5) sections of 20m and one (1) section of 15m would be required. For each steel wind turbine three (3) abnormal loads will be required for the blades, six (6) abnormal loads for the tower sections and another abnormal load for the nacelle. All other components will be transported with normal limitation haulage vehicles. With approximately ten (10) abnormal loads trips (3 trips for blades, 6 trips for tower sections and 1 trip for the nacelle), the total trips to deliver the components of 23 turbines to the proposed site will be around 230 trips (10 trips x 23 turbines). This would amount to 0.35 vehicle trips per day (230 trips / 30 months / 22 working days per month) for a construction period of 30 months. Should the turbines be delivered during an 18-month period, the vehicle trips would amount to 0.58 vehicle trips per day.

Given the above, it can be concluded that the changes in the layout will not have a significant impact on the estimated abnormal trips (remains less than 1 abnormal trip per day). The reduction in turbines, however, will result in fewer abnormal trips to the site and will have an impact on the volume of construction material required and the overall project construction period.

The potential impacts associated with the changes to the layout of the proposed Wind Garden Wind Farm are deemed acceptable from a transport perspective as the impact rating remains as per the original transport impact assessment i.e., medium significance before and of **low significance** after mitigation.

Yours faithfully

**IRIS WINK**  
for: **JG AFRIKA (PTY) LTD**