

ROGGEVELD WINDFARM

40 km north of Matjiesfontein, Western Cape South Africa

PROJECT TYPE: Bulk earthworks, access roads, concrete bases and plinths

CLIENT:
Nordex Energy for G7 / Red Rocket

VALUE:
R 245 million

CONSULTANTS:
BVI

PROJECT DURATION:
14 Months

DATE OF PROJECT:
April 2019

PROJECT DESCRIPTION:

47-turbine, 147MW project developed by Red Rocket and constructed by EPC contractor Nordex Energy South Africa. Concor successfully completed the civil balance of plant work, including turbine bases spread over a construction footprint of 40 hectares.

Among the challenges was the area's topography, with the highest point at 1 485 metres above sea level and the site offices a full 200 metres lower. Accessing the sites for the wind turbine bases and hard stands was over difficult terrain, and required the construction of 34 km of access roadway. Blasting, excavation and cleaning of each site was followed with the pouring of blinding and installation of levelling legs. About 2000 tonnes of steel reinforcing was used. Final installation of the levelling template, with corrugated sleeves in the foundation for anchoring the concrete towers, were grouted into the foundation once assembled. Shuttering was installed, preparing the base for the ready-mix pour. Some 25,000 m³ of ready-mix was used, supplied from Concor's own on-site batch plant.

This project won the Civil Engineering category in Construction World's Best Projects 2020. It also received a Highly Commended Award in the AfriSam Innovation in Sustainable Construction category

