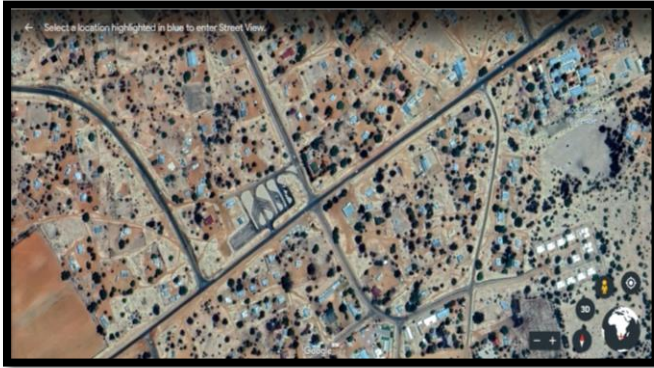


VACUUM SEWER SYSTEM GOODHOPE, BOTSWANA



SITUATION

Goodhope is a village situated in the southern part of Botswana. It has a flat and rocky terrain. It was decided to install a sewage system as the village was growing. It was found that with its rocky soil, it was going to be expensive to go for a gravity sewer system. Excavating deep trenches to maintain the required slope was going to be difficult and cost more. A 11.3 km Roediger vacuum sewer system was installed as a cheap and effective alternative. With the longest vacuum line of 7km in length, two air admittance systems were installed.

TECHNICAL DATA

No. of inhabitants: 1.500 PE

Vacuum pipeline network: 11.3 km

Commissioning: October 2010

VACUUM STATION

Vessel; 2x 10m³ steel vacuum tank vertically installed, buried in the ground

Vacuum pumps: 3 pieces

Suction capacity: 7.5kW, 302m³ per hour each

Discharge pumps 2 pieces

Biofilter: rectangular, approximately 6m³

Construction time: 1 year

