

2.2.2 Project Need and Desirability

Bush encroachment can be defined as thickening of aggressive undesired woody species, resulting in an imbalance of the grass: bush ratio, a decrease in biodiversity, a decrease in carrying capacity and eventual economic losses. The phenomenon of bush encroachment in Namibian savannas is regarded as part of the desertification process since the increase in the extent and density of woody vegetation occurs at the expense of other desirable grasses and forbs, resulting in an alarming reduction in productivity.

It is generally accepted that the decline in the carrying capacity of Namibia's rangelands could be anything from 100% or more. The overriding problem caused by high densities of invader bush is its absolute superiority in competing for water in the upper layers of the soil. It is of utmost importance that the productivity of our natural rangelands is maintained at the highest possible level. Namibia cannot afford to have a biological system where, because of bush encroachment and a veld in poor condition, more than 50% of the annual rainfall is lost. The practical implication is that, even if a farm gets 300mm of rain, it will effectively be reduced to 150mm. The frequency of artificial droughts created in this way cannot be afforded.

2.3. PROJECT LOCATION

The Farm Eindpaal No. 164 has a land area extent of approximately 4302 Hectares and situated about 35 km north-west of Gobabis in the Okorukambe (Steinhausen) Constituency of the Omaheke Region (**Figure 7**) and GPS coordinates provided in **Table 3**.

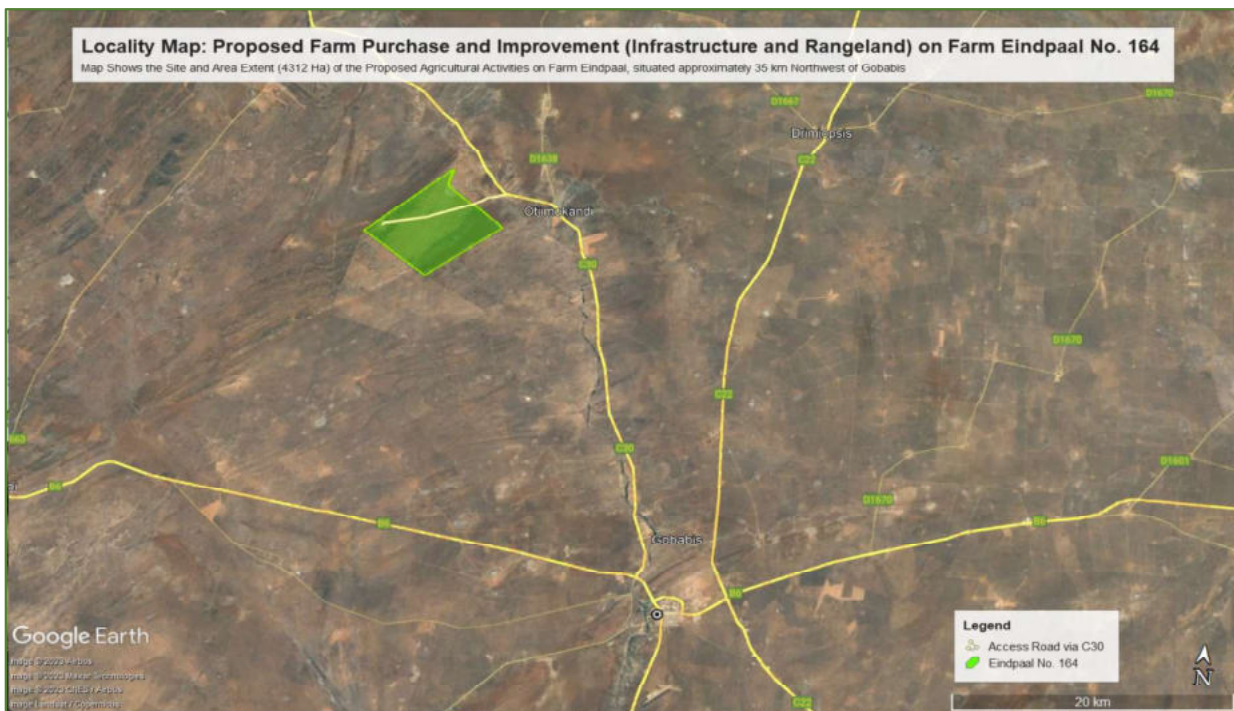


Figure 7: Show the location and area extent (4301 Ha) Farm Eindpaal No. 164, Omaheke Region

Table 3: Corner coordinates of the proposed development site

Corner point	Latitude	Longitude
A – Farm Eindpaal Corner Point 1	-22.224801°	18.773413°
B – Farm Eindpaal Corner Point 2	-22.195491°	18.724967°
C – Farm Eindpaal Corner Point 3	-22.142326°	18.784059°
D – Farm Eindpaal Corner Point 4	-22.156468°	18.781360°
E – Farm Eindpaal Corner Point 2	-22.185107°	18.825144°

The Farm is accessible initially via the Trans-Kalahari (B6) highway, connecting the Gobabis to the capital Windhoek, and about 4 km branching off in the north-western direction along the C30 district road. Approximately, 35 kilometers, the Farm access road is located on the left side and through Farm Hennopsrus No. 589.

2.4. SUPPORTING INFRASTRUCTURE

2.4.1 Farmhouse and staff complement

The farm already host a number of existing accommodation facilities, which the proponent wishes to upgrade to Morden housing designs i.e. these includes the main farmhouse, labourers quarters fitted with the necessary ablution and kitchen facilities. It furthers host a number of other cattle post housing for the labourers too.

Where practical and possible, it is strictly recommended that for unskilled labour, local community members are employed and thus accommodated at their existing homestead to mitigate and reduce potential conflict with the conservancy wildlife and livestock management protocols.

During the operational period, it is anticipated that about 10 – 15 persons will be employed, and may be accommodated on the farm during their employment period and allowed to visit relatives and families during their off-periods e.g. holidays.

Therefore, it is highly recommended that sufficient ablution facilities must be provided and limited to within the farmhouse and staff-quarters accommodation footprint.

2.4.2 Water supply

Water will be required for both domestic consumption and for livestock production (drinking for the cattle), and fortunately the already has four existing boreholes currently in operation with an average of six to eight (6-8) cubic metre yields. However, given that these boreholes are currently pumped with outdated windmill pumps, the proponent wishes to upgrade these by replacing the windmills with solar-powered pumps.

For ease of management, the existing reservoirs will be replaced with large top-sealed reservoir into which all boreholes will be pumping water for distribution throughout the farm along one high volume pipeline. Although, it is not clear what the actual water requirement shall be, it assumed that since there is no deviation of animal stocking rate from the sustainable carrying capacity, the existing boreholes has sufficient capacity to sustain both the domestic and livestock water requirements.