

SITE SENSITIVITY VERIFICATION REPORT

**Application for the proposed removal of natural vegetation
on Erven 359, Kakamas North Settlement,
Gordonia administrative district.**

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Prepared for:

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Contents

| | | |
|-----|--|---|
| 1. | Introduction, Background & Location..... | 3 |
| 2. | Methodology | 7 |
| 3. | Outcome of the Screening Report | 7 |
| 4. | Site Sensitivity Verification Report..... | 8 |
| 4.1 | Landscape / Visual Impact Assessment | 8 |
| 4.2 | Archaeological and Cultural Heritage Impact Assessment | 8 |
| 4.3 | Palaeontology Impact Assessment | 8 |
| 4.4 | Terrestrial Biodiversity Impact Assessment | 8 |
| 4.5 | Aquatic Biodiversity Impact Assessment | 8 |
| 4.6 | Avian Impact Assessment | 8 |
| 4.7 | Socio Economic Impact Assessment..... | 9 |
| 4.8 | Plant Species Assessment | 9 |
| 4.9 | Animal Species Assessment..... | 9 |

1. Introduction, Background & Location

The ECO Balance Planning Co. was appointed by Bakenrant Boerdery Pty. Ltd. to facilitate the application for Environmental Authorization for the proposed removal of natural vegetation on Erven 359, Kakamas North Settlement, Gordonia district.

The proposed development triggers three (3) listed activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended):

| Detailed description of listed activities associated with the project | |
|---|---|
| Listed activity as described in GN R.327 | Description of project activity that triggers listed activity |
| 9 The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water— (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area. | An irrigation water pipeline connecting the existing abstraction point at the Orange River and the proposed new table grape orchards is included in the proposed development. |
| Listed activity as described in GN R. 325 | Description of project activity that triggers listed activity |
| 13 The physical alteration of virgin soil to agriculture, or afforestation for the purposes of commercial tree, timber or wood production of 100 hectares or more. | The proposal is for the alteration of virgin soil and removal of natural vegetation for the cultivation of table grapes. At present the estimated footprint is 107ha. |
| 15 The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan. | The proposal is for the alteration of virgin soil and removal of natural vegetation for the cultivation of table grapes. It is anticipated that the botanical / terrestrial biodiversity study may decrease the footprint of the original proposal. |
| Listed activity as described in GN R. 324 | Description of project activity that triggers listed activity |
| 12 The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. G. Northern Cape I. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the | The greater part of the development site has been classified as CBA 2 in the Northern Cape CBA map and the south and eastern parts of the site are mapped as CBA 1 sites. |

| | |
|---|--|
| <p>publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</p> <p>II. Within critical biodiversity areas identified in bioregional plans;</p> <p>III. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuary, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; or</p> <p>IV. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.</p> | |
|---|--|

As a result of the above a Scoping / EIA processes needs to be implemented.

The Applicant, Bakenrant Boerdery Pty Ltd, recently acquired Erven 359 Kakamas North Settlement, Gordonia. The property is located north west of Kakamas, north of the Orange River.

The Applicant wishes to remove natural vegetation in certain parts of the farm in order to plant table grapes aimed for the export market. These areas are marked as white polygons in Figure 5 below and total approximately 107ha. It should be noted that this is the original proposal by the applicant and input from Specialist may result in layout changes.

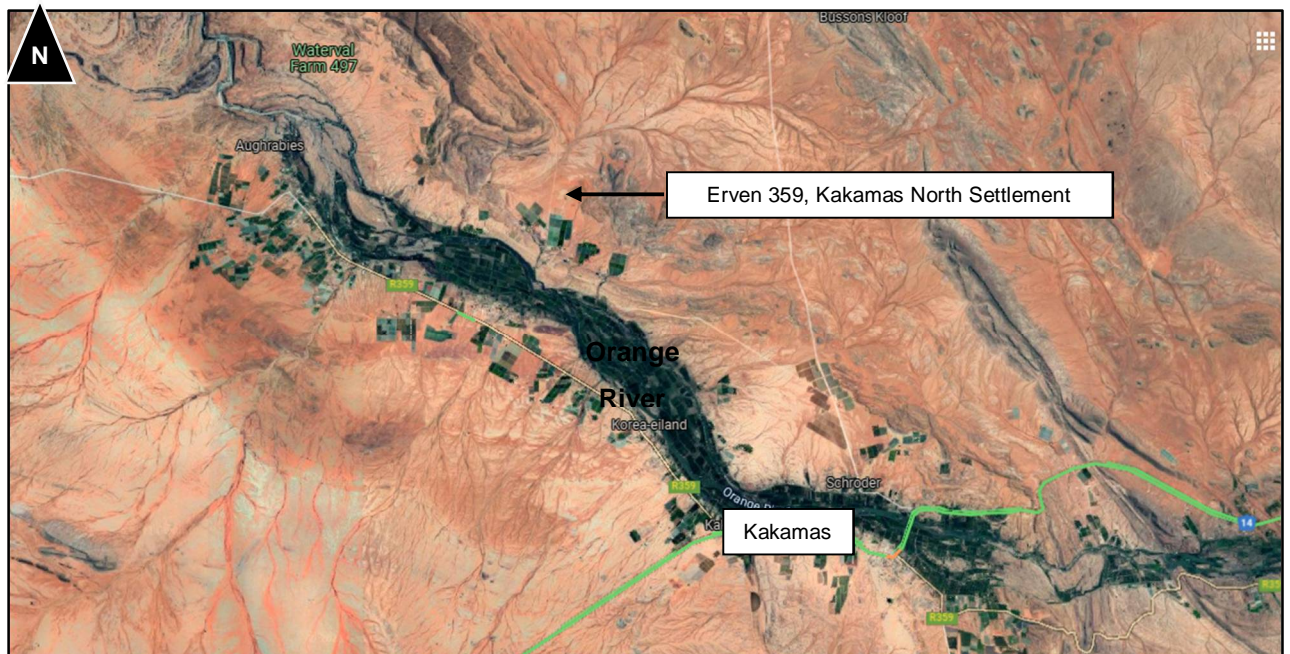


Figure 1. Erven 359 north west of Kakamas.



Figure 2. The property boundaries of Erven 359 north of Augrabies.

The property falls within the Kai !Garib Municipality and lies adjacent to the east of the road to Riemvasmaak and to the north of the Orange River. The study area is located to the north of existing agricultural developments in currently undeveloped land.

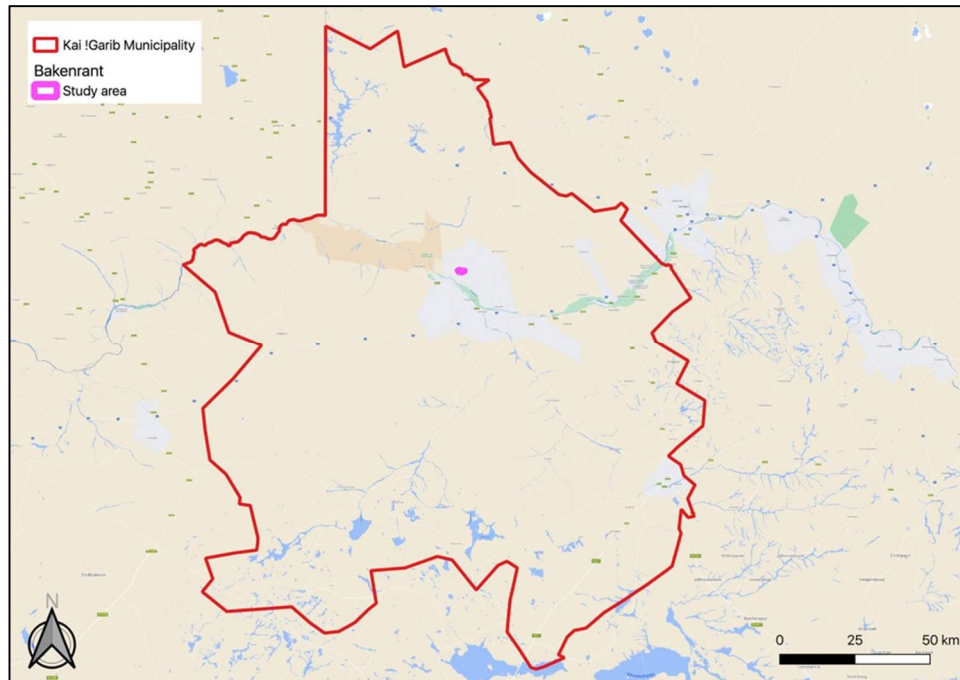


Figure 3. The study area in relation to the Kai !Garib municipal boundary and the towns overlaid on a Google Maps™ image.



Figure 4. Property boundaries of Erven 359 Kakamas North Settlement.

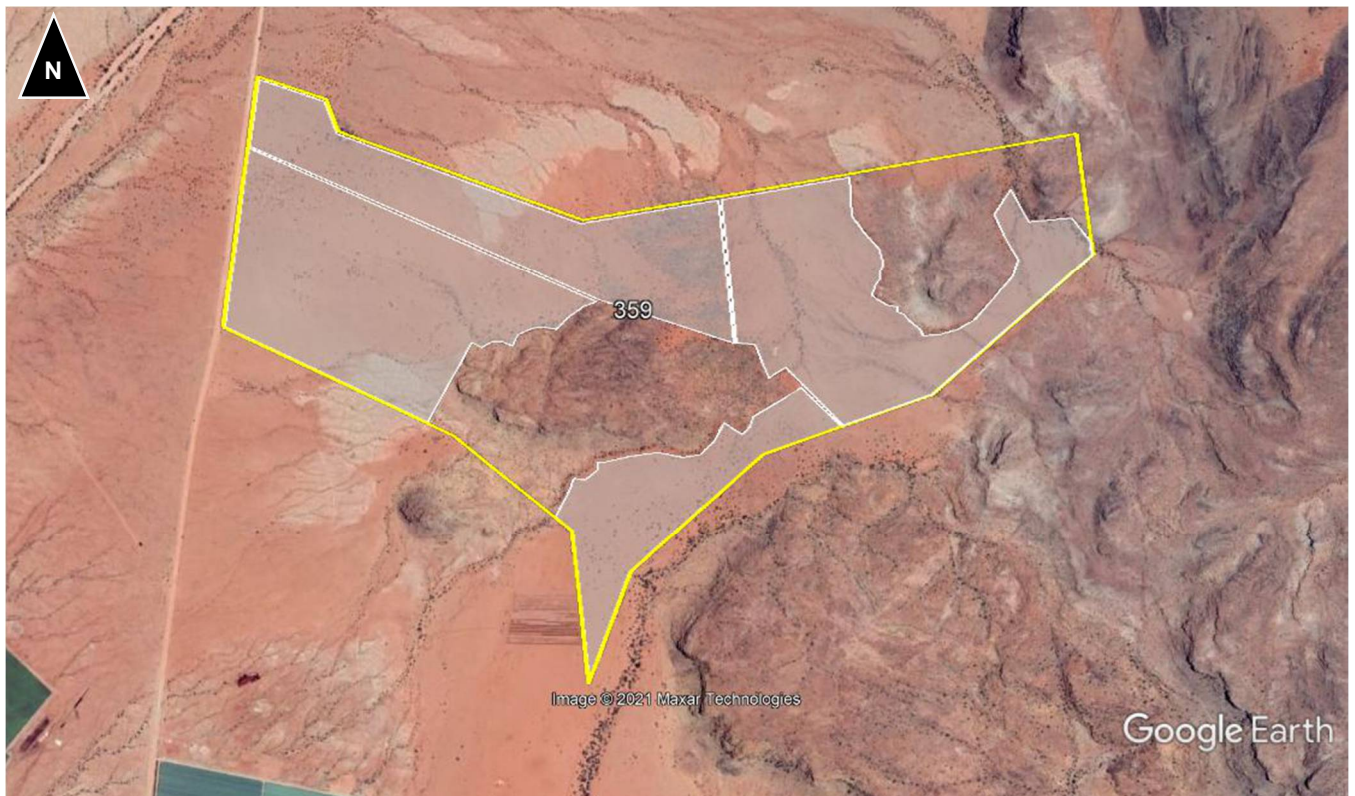


Figure 5. The proposed development areas are indicated as white coloured polygons.

2. Methodology

Input into this site verification report was informed by a combination of desktop analysis, specialist reports, satellite imagery, site visits / on-site inspections and meetings with the Proponent and project team (WULA consultant, Specialists). The Screening Tool, Google Earth Pro and SANBI Biodiversity GIS websites were consulted to identify any constraints in terms of biodiversity conservation mapping and data have been used to inform the Scoping and EIA study. Planning documents (e.g. SDF, IDP, etc.) from the local and provincial municipalities have also been and will continue to be consulted to inform the socio-economic aspects of the study.

3. Outcome of the Screening Report

The Screening Report generated for the proposed development highlighted the following site development environmental themes:

| THEME | VERY HIGH | HIGH | MEDIUM | LOW |
|--|-----------|------|--------|-----|
| Agricultural Theme | | | | X |
| Animal Species Theme | | | X | |
| Aquatic Biodiversity Theme | | | | X |
| Archaeological and Cultural Heritage Theme | | | | X |
| Civil Aviation Theme | | | X | |
| Defence Theme | | | | X |
| Palaeontology Theme | | | X | |
| Plant Species Theme | | | X | |
| Terrestrial Biodiversity Theme | X | | | |

The following list of specialist assessments was identified in the Screening Report for inclusion in an assessment report:

1. Landscape / Visual Impact Assessment
2. Archaeological and Cultural Heritage Impact Assessment
3. Palaeontology Impact Assessment
4. Terrestrial Biodiversity Impact Assessment
5. Aquatic Biodiversity Impact Assessment
6. Avian Impact Assessment
7. Socio-Economic Assessment
8. Plant Species Assessment
9. Animal Species Assessment

As a result of the above, this Site Sensitivity Verification Report is compiled to determine whether Specialist Assessments or Compliance Statements for the abovementioned specialist studies are required for the proposed development.

4. Site Sensitivity Verification Report

4.1 Landscape / Visual Impact Assessment

We are of the opinion that a Landscape / Visual Impact Assessment is not required. The proposed development comprises the expansion of an agricultural development on agricultural farm land, within a rural / farming area north of the Orange River in the Augrabies Kakamas region. This area is dominated by agricultural activities, mostly in the form of permanent crops such as table grapes and citrus.

The property occurs on a generally flat area with very small undulations and seasonal drainage lines. (The drainage lines are prominent features in the landscape.) Rocky outcrops and one small hill occur on the edges of the property; however, most of these areas are excluded from the proposed development area.

4.2 Archaeological and Cultural Heritage Impact Assessment

A Heritage Impact Assessment (HIA), comprising of an Archaeological and a desktop Paleontological study, was conducted by UBIQUE Heritage Consultants. Both reports were submitted to SAHRIS and feedback is awaited.

4.3 Palaeontology Impact Assessment

The Screening Tool Report identified a Medium Sensitivity for the Palaeontology theme within the proposed development footprint. A desktop Paleontological study was conducted by UBIQUE Heritage Consultants and was submitted to SAHRIS Feedback is awaited.

4.4 Terrestrial Biodiversity Impact Assessment

A Terrestrial Biodiversity Impact Assessment has been conducted by a SACNASP registered Botanical specialist, Mr. Greg Nicolson (CAPENSIS).

4.5 Aquatic Biodiversity Impact Assessment

The proposed study area is located within a very dry, warm climate mostly associated with deserts and receives an annual rainfall of approximately 124mm. It is located within the arid Kalahari Basin in the Northern Cape. No surface water whatsoever occurs within the vicinity of the site. There are no rivers or surface streams in close proximity to the study area. The drainage channels that do exist in on the property are almost perpetually dry, only conveying water during the odd occasion when it rains heavy in the area. In most cases with the drainage channels around the property, some of these streams also only flow for a limited distance before they merely disappear into the Kalahari Basin sand.

The Screening Tool Report indicates a Low Sensitivity rating for the Aquatic Biodiversity theme and thus an Aquatic Biodiversity Impact Assessment will not be undertaken.

4.6 Avian Impact Assessment

The Screening Tool Report indicates a medium animal species sensitivity with specific mentioning of *Aves-Neotis ludwigii*. *Neotis ludwigii* (Ludwig's bustards) has a large distributional range centred on the dry biomes of the Karoo and Namib in southern Africa (IUCN, 2017). This species is classified as Endangered both regionally and globally as the population has undergone a very rapid population decline due to collisions with power lines (IUCN, 2017). This species inhabits open lowland and upland plains with grass and light thornbush, sandy open shrub veld and semi-desert in the arid and semi-arid Namib and Karoo biomes (IUCN, 2017).

The proposed development is for the clearing of natural vegetation for the cultivation of table grapes and will result in the destruction of natural habitat. It should be noted that vast areas of intact similar habitat and similar vegetation type are surrounding the proposed development site. These areas will most probably remain their status quo and act as habitat to avian elements such as Ludwig's Bustards. An Animal Species Assessment will therefore not be undertaken.

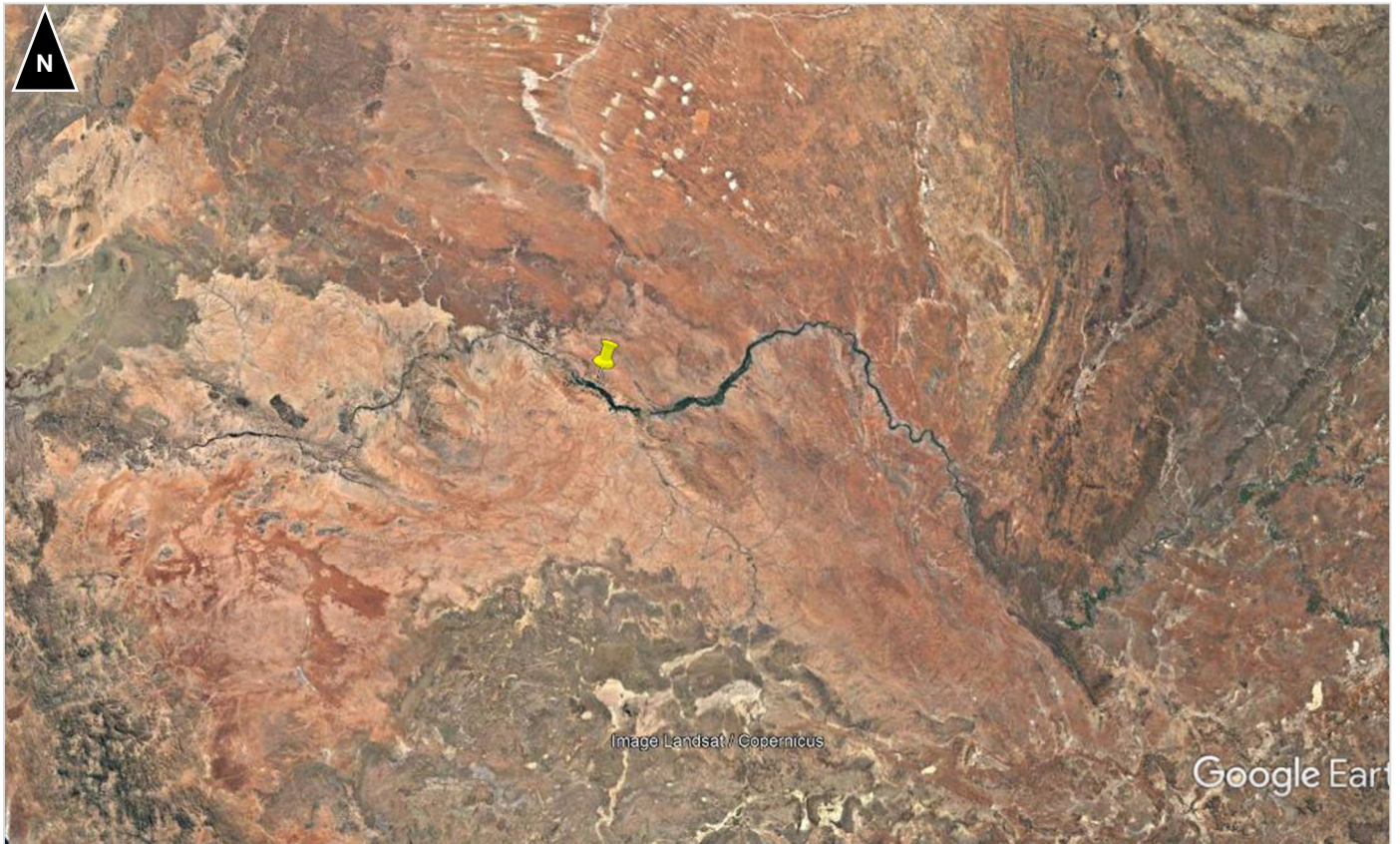


Figure 6. The property concerned is marked with a yellow coloured pin. Note the vast areas undeveloped areas in the greater area.

4.7 Socio Economic Impact Assessment

All comments received from I&APs will be addressed and responded to by the EAP and project team. Conditions and measures will be implemented to mitigate any impacts on socio-economic development within the area and surrounds. Therefore, it is envisaged that a Socio-economic Assessment will not be required.

4.8 Plant Species Assessment

A Plant Species Assessment has been conducted by a SACNASP registered Botanical specialist, Mr. Greg Nicolson (CAPENSIS).

4.9 Animal Species Assessment

The Screening Tool Report indicates a medium animal species sensitivity with specific mentioning of Aves-*Neotis ludwigii*. *Neotis ludwigii* (Ludwig's bustards) has a large distributional range centred on the dry biomes of the Karoo and Namib in southern Africa (IUCN, 2017). This species is classified as Endangered both regionally and

globally as the population has undergone a very rapid population decline due to collisions with power lines (IUCN, 2017). This species inhabits open lowland and upland plains with grass and light thornbush, sandy open shrub veld and semi-desert in the arid and semi-arid Namib and Karoo biomes (IUCN, 2017).

The proposed development is for the clearing of natural vegetation for the cultivation of table grapes and is likely to lead to the destruction of natural habitat. It should be noted that vast areas of intact similar habitat and similar vegetation type are surrounding the proposed development site. These areas will most probably remain their status quo and act as habitat to all faunal elements. An Animal Species Assessment will therefore not be undertaken.
