

**APPENDIX 3:
FINAL SITE SENSITIVITY VERIFICATION REPORT**

Appendix 3 - Site Sensitivity Verification Report

Norm for the Exclusion of the Development and Expansion of Solar Photovoltaic facilities in areas of Low or Medium Environmental Sensitivity

Development and operation of a 1.5 MW Solar Photovoltaic facility located on a 1.7 ha area on Portion 16 of Tygerfontein 347, Albertinia, Hessequa Local Municipality

A 1.5 MW solar facility is to be implemented by the developer, Outeniqua Game Farm Pty Ltd. The solar facility will supply the proposed Greens Development, and the remaining power will be supplied to the Hessequa local municipality.

LOCATION

The project site is located on portion 16 of Farm Tygerfontein 347 in Albertinia, falling within Hessequa Local Municipality and the Garden Route District Municipality. The project area is an estimated 3 ha in extent and the solar facility including the 11kV mini substation will be an estimated 1.7 ha in extent.

SOLAR FACILITY

The design of the solar facility has been provided by Lourens du Preez of Pro-Plan drawing office. According to the plans (January 2026), the solar facility will consist of:

- 12 power stacks (solar structure); each = 125 kW
- 12 inverters; each = 125 kW; $12 \times 125 = 1500 \text{ kW}; = 1.5 \text{ MW}$
- 11000-volt (11 KV) mini sub station
- Electrical distribution cabinet
- Electrical control room with smooth steeled cement screed floor
- Trench with steel cover between two rows of power stacks
- Six (6) LED tube lights
- Day / night switch
- 15-amp wall plug
- External wall light
- Each solar structure will be:
 - o 4m high
 - o 5.5 meter wide with a shoulder of 0.6 meters on either side (i.e. 6.7m)
 - o 20.6 meter in length
 - o Foundation block of 0.6 m³
 - o Square tube columns of 100x100mm
 - o 54 solar panels per structure - The position for solar panels will be according to manufacturer according to SANS 1307 and SANS 10106 & ENG standards.

The components will be manufactured off site and assembled on site. The site is located on an area of low terrestrial, fauna, soils, flora, heritage sensitivity and medium sensitivity for aquatic as verified by the respective specialists. Registration of the 1.5 MW solar facility is required to be registered with the CA and comply to the EMP.

EAP Services

A screening tool has been developed by the Department of Forestry, Fisheries and Environmental Affairs (DFFE). The Screening Tool identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site.

A Screening Report referred to in Regulation 16(1)(v) of the EIA Regulations 2014, must accompany any application for Environmental Authorisation. A screening report was generated for the proposed project, and the following environmental sensitivities are identified on the solar PV footprint:

- Agricultural potential is Very High
- Terrestrial Biodiversity is Very High
- Plant species sensitivity is Medium
- Animal Species sensitivity is Medium
- Aquatic Sensitivity is Low
- Palaeontology is low
- Archaeology and heritage is Low

The following has been carried out:

- The EAP has carried out two site visits with the first in July 2025 and the second in December 2025.
- Upstream consulting were appointed to carry out a site visit, verification, delineation of aquatic features and compilation of a compliance statement. (Refer to Appendix A1)
- Jamie Pote carried out a site visit to verify the sensitivities of terrestrial biodiversity features (including fauna and flora) and compilation of a compliance statement (Refer to Appendix A2)
- Gavin Schafer carried out a soil assessment (Refer to Appendix A3)
- Karen van Ryneveld carried out a heritage assessment (REGISTRATION NR:2005/180719/23) (Refer to Appendix A4)

The verification of sensitivities and are provided in Table 1.

Table 1: Verification of environmental sensitivity identified in DFFE screening tool report

Agricultural theme	STR - Very High Sensitivity	Verification - Low sensitivity
<p>The soils on the solar site (Ms I; land capability V): ORTHIC A/HARD ROCK: A light grey sand to loamy sand some 20 to 35 cm deep abruptly overlies hard rock. These soils have a very low potential due to restricted depth and low WHC. Erosion hazard is medium and compaction hazard is medium low. Restricted depth due to hard rock. Soil structure is described as a = apedal; w=weak, m=moderate and b=blocky Clay percentage at the A-horizon is an estimated 6%; clay percentage at the B-horizon is an estimated 40% The agricultural / soil potential of the solar site is verified as Low.</p>		
Animal Species theme	STR - Medium Sensitivity	Verification - Low sensitivity
<p>The project is located on a brownfield site and has been disturbed within the past ten years on an ongoing basis. A large portion of the site has been cleared and is void of cover, and where untransformed, the vegetation is degraded from livestock use, with dominance of grasses and alien invasives (<i>Acacia cyclops</i>).</p> <p>It is not representative of Albertinia sand fynbos and has no remnant natural vegetation (Albertinia Sand Fynbos) thus constituting negligible conservation value.</p> <p>The site falls within the general distribution range of endemic fauna species and other species with a highly localised distribution, some of which are Critically Endangered, Endangered, Vulnerable or Rare. Some of these species are also only from a single or a few populations.</p> <p>No Endangered or Critically Endangered fauna species were confirmed to be present nor are known to be present in the affected area or immediate vicinity, nor is suitable habitat present as the site has been historically and recently transformed and all-natural vegetation removed. A small herd of Springbok is kept on the site and burrows in the sandy pastures are indicative of Cape Dune Mole-Rat (<i>Bathyergus suillus</i>), neither being of conservation concern.</p> <p>Habitats verified on the site include: Transformed, invaded, secondary grassland (pasture), dam. SCC identified as medium sensitivity in the STR includes: <i>Aneuryphymus montanus</i> (insect), <i>Afrotis afra</i> (birds) & Sensitive species 5. No natural habitat remains on site.</p> <p>Site observations confirmed none of the flagged fauna Species of Conservation Concern being present, and no suitable habitat for such species being present, hence the proposed activity does not pose any threat to Flora Species of Conservation Concern.</p> <p>The specialist (Jamie Pote; SANASP registration: 115233) has prepared a compliance statement to verify the sensitivity as low sensitivity. (Kindly refer to Appendix 3b)</p> <p>Fauna species typically found in natural vegetation which is under threat are unlikely to favour this habitat and are thus likely already displaced, other than species typical of transformed or urbanised landscapes. Species include mainly species typical of transformed farming areas, perhaps having the occasional visit from less common species that typically occur in natural areas that are in transit or are acclimated to the modified environment.</p>		
Aquatic Biodiversity	STR - Low sensitivity	Verification - Low sensitivity

The National Wetland Map 5 (NBA, 2018) does not show mapped wetlands on the property and there are no rivers indicated by the various river inventories (Upstream consulting, 2025). In terms of the Western Cape Biodiversity Spatial Plan (CapeNature 2023) there are no aquatic Critical Biodiversity Areas (CBA habitat -aquatic) within the property. Additionally, no rare or endangered biota were found during site assessment.

Anthropogenic aquatic features on the eastern section of the land portion and south of the solar project site is a degraded livestock watering dam and will not be impacted on by the facility.

The fieldwork ground-truthing provided confirmation that there are no natural aquatic features on the portion 16. There are however artificial aquatic features, namely a dam in the west formed in the excavated quarry and the drainage channel connecting from the current mining excavations to the dam, as well as a small watering hole for livestock in the east. There are no artificial aquatic features within the footprint of the SPVEF.

The low sensitivity for aquatic biodiversity identified in the screening tool is therefore verified as there are no natural aquatic features occurring within the property

Paleontological theme	STR - Low sensitivity	Verification - Low sensitivity
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The components will be manufactured off site and assembled on site. The site have been disturbed by various land uses on an ongoing basis for at least 40 years. No deep excavations are required for the project. No further studies are deemed necessary.

Archaeological and Cultural Heritage theme	STR - Low sensitivity	Verification - Low sensitivity
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No surface archaeological or cultural heritage sites were identified at the SF portion of the study site, approximately 3/18.5ha, with development centred on 1.7/3ha. From an archaeological and cultural heritage perspective there are no Fatal Flaws with the proposed Residential and Solar Development, Tygerfontein project. Consideration of a No Development option is, therefore, irrelevant.

Plant Species Assessment	STR - Medium sensitivity	Verification - Low sensitivity
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The entire site would be considered to be No Natural Area Remaining (NNAR), which is confirmed by analysis of historical aerial imagery, land cover maps and Landsat imagery, as outlined in the sections below. No Sand Fynbos is present, with some secondary what would typically be considered thicket elements noted, including the occasional small shrub and succulent elements.

Several different habitats can be differentiated within the property

- Transformed – Includes hardened surfaces such as buildings, roads, gardens, grassed lawns and unvegetated areas including the old quarry area. A single dwelling with landscaped gardens is present in the north-west corner as well as several buildings and an extensive unvegetated area on the entire north-east side. An extensive quarry is also present on the north-west corner of the site.
- Invaded – The site has several scattered clumps of dense alien invasion, primarily black wattle (*Acacia mearnsii*) and Rooikrantz (*Acacia cyclops*), predominantly along a berm of overburden from the quarry along the western and southern boundaries as well as several scattered clumps around the quarry and dwelling. Occasional indigenous elements occur on the edges of wattle clumps including small tree and shrub species such as *Diospyros dichrophylla*, *Putterlickia pyracantha* and *Searsia spp.*
- Secondary Grassland (pastures) – The remaining extent of the site has common agricultural and palatable grasses, predominantly *Cynodon dactylon* (Kweek), managed as grazing for historical livestock use. Current ‘grassland pastures’ are generally old lands comprising kweek grass where some annual and pioneer herbaceous elements have regenerated and include the occasional *Diospyros dichrophylla* small tree and various other weedy herbs and shrubs. There is no evidence of species remaining that would be typical or more specifically indicative of Albertinia Sand Fynbos, being present or even as secondary regeneration, including flora genera such as *Cliffortia*, *Erica*, *Agathosma*, *Anthospermum*, *Euryops*, *Leucadendron*, *Muraltia*, *Metalasia*, *Restio*, *Elegia* and *Thamnochortus*. This is indicative of the fact that the site would be considered to me transformed with no natural area remaining and thus would be incorrectly designated as CBA.

- Dam – the quarry area also contains a waterbody which is fed by runoff from the eastern side of the site, via a man-made channel surrounded by dense wattle and some riparian elements including occasional sedges.

The site falls within the general distribution range of several endemic flora species and other species with a highly localised distribution, some of which are Critically Endangered, Endangered, Vulnerable or Rare. Some of these species are also only from a single or a few populations.

No Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area or immediate vicinity, nor is suitable habitat present as the site has been historically and recently transformed and all-natural vegetation removed.

Site observations also confirmed none of the flagged flora Species of Conservation Concern being present, and no suitable habitat for such species being present, hence the proposed activity does not pose any threat to Flora Species of Conservation Concern. A small herd of Springbok is kept on the site and burrows in the sandy pastures are indicative of Cape Dune Mole-Rat (*Bathyergus suillus*), neither being of conservation concern.

Terrestrial Biodiversity Impact	STR - Very High Sensitivity	Verification - Low sensitivity
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The site is confirmed by the terrestrial biodiversity to have no remaining natural vegetation and does not meet the criteria of CBA or ESA as it is a previously disturbed site. There will not likely be any significant overall impact to the designated CBA 1 or 2 targets within the broader area, nor regionally, nor does the site contribute to the conservation of the vegetation unit as no species typical of this unit are present. The correct designation is No Natural Area Remining (NNAR), as per WC BSP (2017), not as designated by WC BSP (2023).(Pote, 2025)

Socio-Economic	NA	Verification - NA
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Aspects related to socio-economic impacts will be addressed in the basic assessment, however no specific specialist study was deemed to be required.

Civil Aviation Assessment	STR - Medium sensitivity	Verification - Low sensitivity
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A civil aviation assessment / compliance statement is excluded as the proposed development will not have an impact on civil aviation aerodrome.

Defence theme	STR - High sensitivity	Verification - Low sensitivity
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A defence them compliance statement is excluded as the proposed development will not have an impact on the defense theme.