

Start:
32° 38.152'S
20° 57.799'E

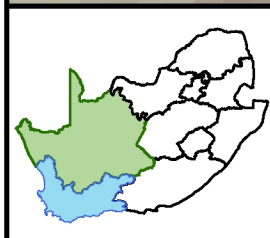
End:
32° 38.282'S
20° 57.854'E

32° 37.968'S
20° 57.806'E

32° 38.080'S
20° 57.859'E

Legend

- Rivers (NBA 2018)
- Project area**
 - Sutherland project area
 - Authorised Rietrug WEF
- Authorised Sutherland Facilities**
 - Authorised 132kV Acrux to Koring Gridline (DFFE Ref: 14/12/16/3/3/1/2077)
 - Authorised Sutherland 500m Grid Corridor (DFFE Ref: 14/12/16/3/3/1/2077)
- Acrux Substation**
- Authorised on-site substation**
 - Authorised Switching Station (Eskom) (DFFE Ref: 14/12/16/3/3/1/2457)
 - Authorised 33kV/132kV Substation (IPP) (DFFE Ref: 14/12/16/3/3/1/2458)
 - Authorised 132kV powerline from the Acrux substation (Eskom, DFFE Ref: 14/12/16/3/3/2457)
- Proposed Sutherland WEF Facilities (DFFE REF: 12/12/20/1782/2)**
 - Proposed internal access roads and underground cabling
 - Proposed turbine hardstands
 - Proposed turbine locations
 - WEF buildable areas



Prepared for:
Nala Environmental Consulting Firm

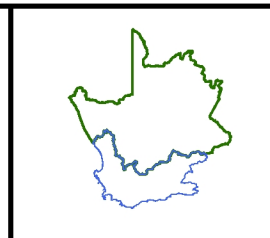
Prepared by:
Ecofluence Consulting

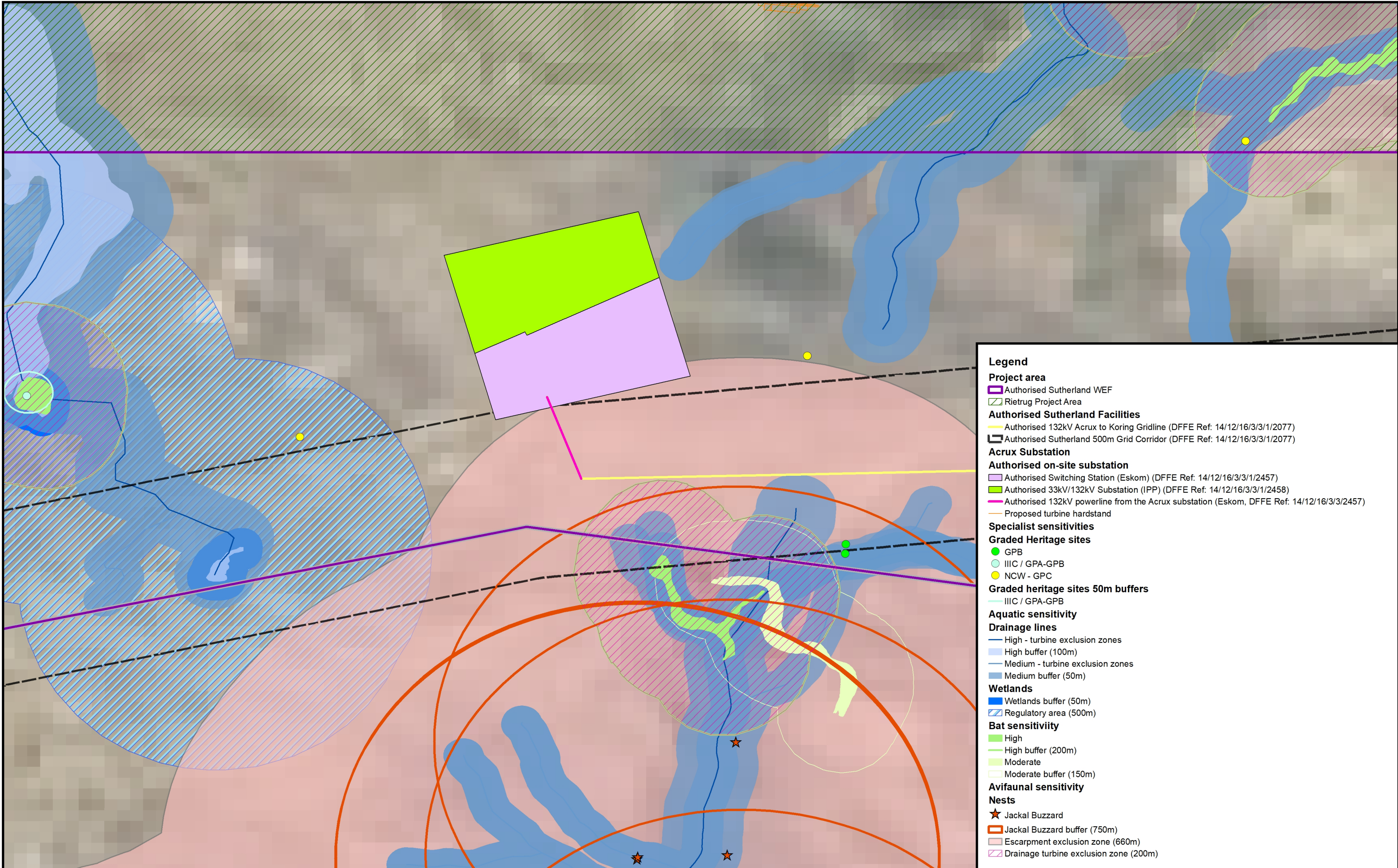
FINAL LAYOUT MAP
Eskom and IPP section

Proposed Sutherland and Rietrug
Wind Energy Facilities, Grid and
associated infrastructure.

Province	Northern Cape	Western Cape
District Municipality	Namakwa	Central Karoo
Local Municipality	Karoo Hoogland	Laingsburg

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Scale: 1:10 000
Date: December 2022





Legend

Project area

- Authorized Sutherland WEF
- Rietrug Project Area

Authorized Sutherland Facilities

- Authorized 132kV Acrux to Koring Gridline (DFFE Ref: 14/12/16/3/3/1/2077)
- Authorized Sutherland 500m Grid Corridor (DFFE Ref: 14/12/16/3/3/1/2077)

Acrux Substation

Authorized on-site substation

- Authorized Switching Station (Eskom) (DFFE Ref: 14/12/16/3/3/1/2457)
- Authorized 33kV/132kV Substation (IPP) (DFFE Ref: 14/12/16/3/3/1/2458)
- Authorized 132kV powerline from the Acrux substation (Eskom, DFFE Ref: 14/12/16/3/3/2457)
- Proposed turbine hardstand

Specialist sensitivities

Graded Heritage sites

- GPB
- IIIC / GPA-GPB
- NCW - GPC

Graded heritage sites 50m buffers

- IIIC / GPA-GPB

Aquatic sensitivity

Drainage lines

- High - turbine exclusion zones
- High buffer (100m)
- Medium - turbine exclusion zones
- Medium buffer (50m)

Wetlands

- Wetlands buffer (50m)
- Regulatory area (500m)

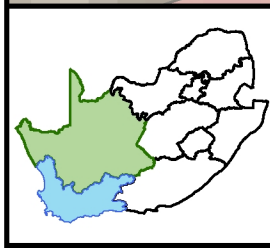
Bat sensitivity

- High
- High buffer (200m)
- Moderate
- Moderate buffer (150m)

Avifaunal sensitivity

Nests

- Jackal Buzzard
- Jackal Buzzard buffer (750m)
- Escarpment exclusion zone (660m)
- Drainage turbine exclusion zone (200m)



Prepared for:
Nala Environmental Consulting Firm



Prepared by:
Ecofluence Consulting

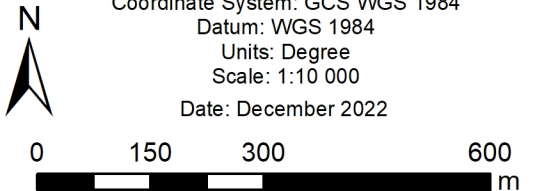
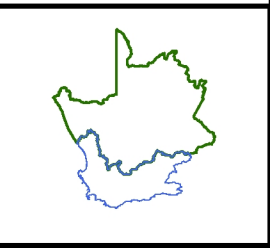


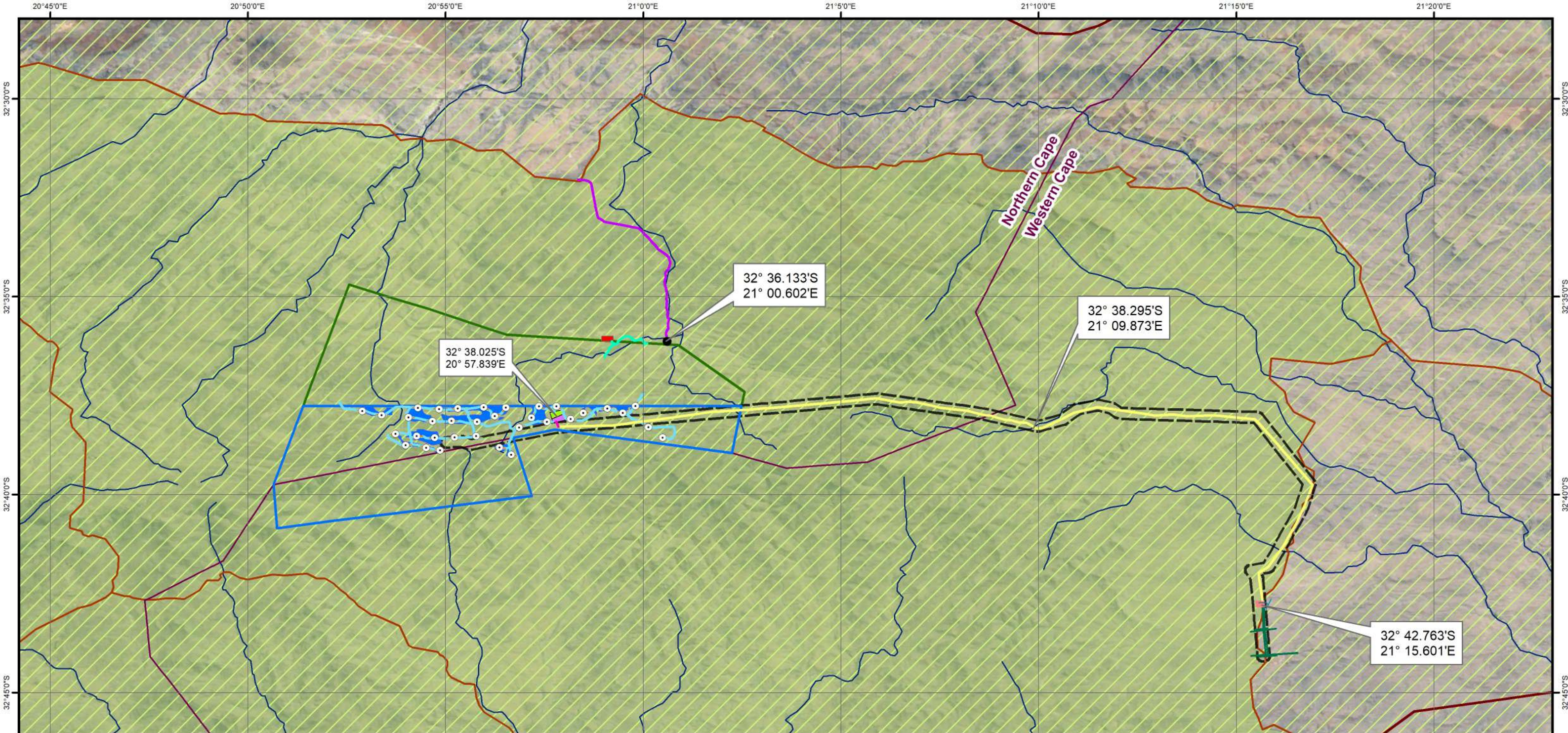
**FINAL LAYOUT MAP OVERLAIN
ON SPECIALIST SENSITIVITIES:
Eskom and IPP section**

**Proposed Sutherland and Rietrug
Wind Energy Facilities, Grid and
associated infrastructure.**

Province	Northern Cape	Western Cape
District Municipality	Namakwa	Central Karoo
Local Municipality	Karoo Hoogland	Laingsburg

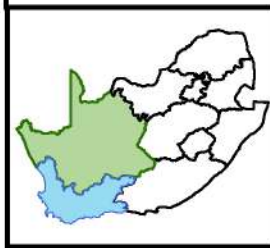
Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Scale: 1:10 000
Date: December 2022



Legend

- Roads
- Rivers (NBA 2018)
- Provincial boundaries
- Project area**
 - Sutherland project area
 - Authorised Rietrug WEF
- REDZs**
 - Komsberg Wind
- Strategic Transmission corridor**
 - Central corridor
- Authorised Sutherland Facilities**
 - Authorised 132kV Acrux to Koring Gridline (DFFE Ref: 14/12/16/3/3/1/2077)
 - Authorised Sutherland 400kV powerlines (DFFE Ref: 14/12/16/3/3/1/2077)
 - Authorised Sutherland 500m Grid Corridor (DFFE Ref: 14/12/16/3/3/1/2077)
- Acrux Substation**
 - Authorised on-site substation**
 - Authorised Switching Station (Eskom) (DFFE Ref: 14/12/16/3/3/1/2457)
 - Authorised 33kV/132kV Substation (IPP) (DFFE Ref: 14/12/16/3/3/1/2458)
 - Authorised 132kV powerline from the Acrux substation (Eskom, DFFE Ref: 14/12/16/3/3/2457)
- Proposed Sutherland "WEF" Facilities (DFFE Ref: 12/12/20/1782/2)**
 - WEF access road
 - Proposed internal access roads and underground cabling
 - Proposed turbine hardstands
 - Proposed turbine locations
 - WEF buildable areas
- Batching Plant**
 - Batching site
 - Batching site access road
 - Batching plant access point
- Koring MTS**
 - Proposed 400kV MTS site
 - Proposed road



Prepared for:
Nala Environmental Consulting Firm

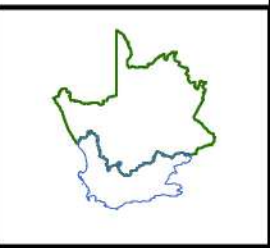
Prepared by:
Ecofluence Consulting

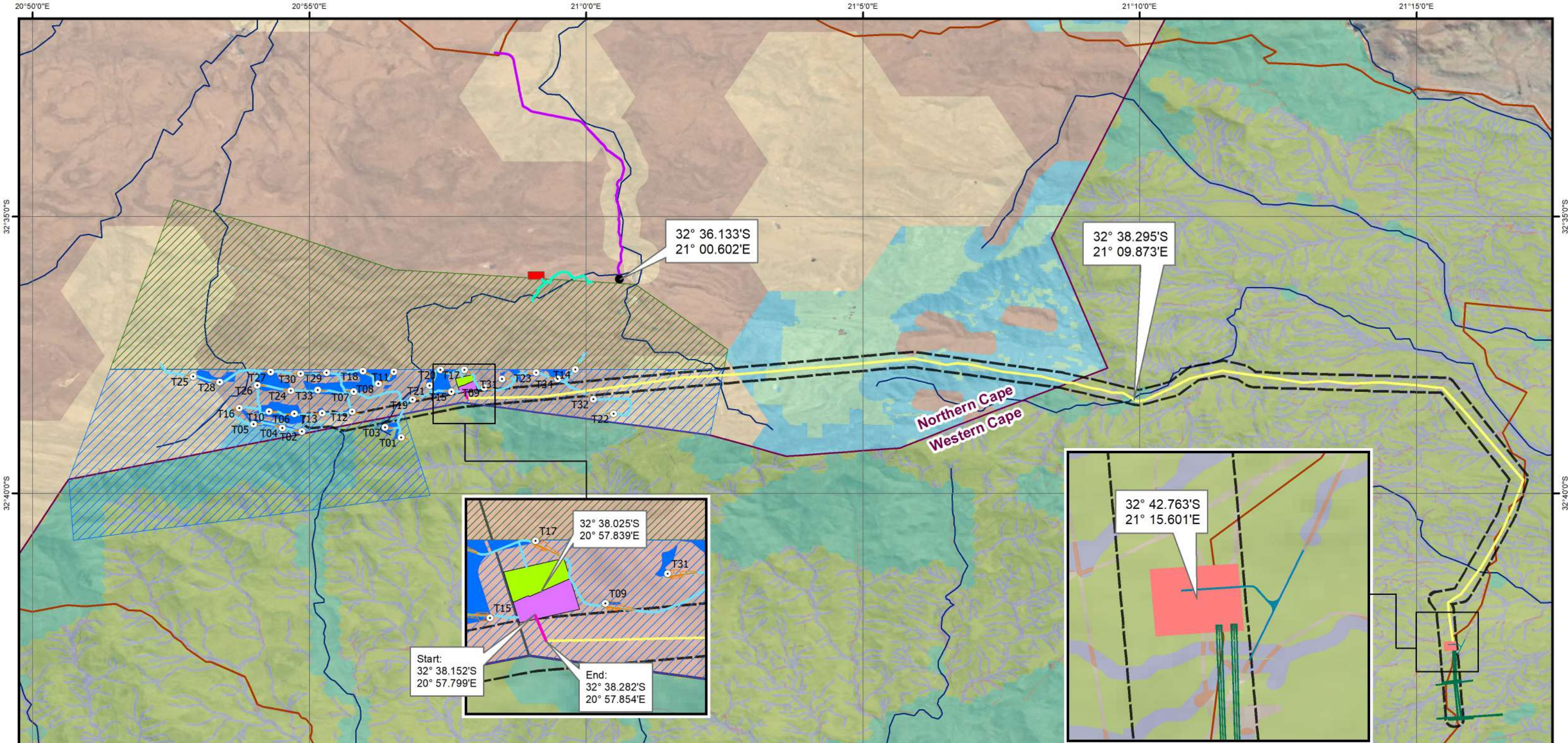
FINAL LAYOUT MAP OVERLAIN ON THE REDZ AND STRATEGIC TRANSMISSION CORRIDOR MAP

Proposed Sutherland Wind Energy Facilities, Grid and associated infrastructure.

Province	Northern Cape	Western Cape
District Municipality	Namakwa	Central Karoo
Local Municipality	Karoo Hoogland	Laingsburg

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Scale: 1:175 000
Date: December 2022





- Legend**
- Roads
 - Rivers (NBA 2018)
 - Provincial boundaries
 - Project area**
 - Sutherland project area
 - Authorised Rietrug WEF

- Authorised Sutherland Facilities**
- Authorised 132kV Acrux to Koring Gridline (DFFE Ref: 14/12/16/3/3/1/2077)
 - Authorised Sutherland 400kV powerlines (DFFE Ref: 14/12/16/3/3/1/2077)
 - Authorised Sutherland 500m Grid Corridor (DFFE Ref: 14/12/16/3/3/1/2077)
- Acrux Substation**
- Authorised on-site substation**
- Authorised Switching Station (Eskom) (DFFE Ref: 14/12/16/3/3/1/2457)
 - Authorised 33kV/132kV Substation (IPP) (DFFE Ref: 14/12/16/3/3/1/2458)
 - Authorised 132kV powerline from the Acrux substation (Eskom, DFFE Ref: 14/12/16/3/3/2457)

- Proposed Sutherland "WEF" Facilities (DFFE Ref: 12/12/20/1782/2)**
- WEF access road
 - Proposed internal access roads and underground cabling
 - Proposed turbine hardstands
 - Proposed turbine locations
 - WEF buildable areas

- Batching Plant**
- Batching site
 - Batching site access road
 - Batching plant access point
- Koring MTS**
- Proposed 400kV MTS site
 - Proposed road

- Northern Cape CBA Categories (2017)**
- CBA 1
 - CBA 2
 - ESA
 - ONA
- Western Cape CBA Categories Laingsburg BSP (2017)**
- CBA 1
 - ESA
 - ESA 2
 - ONA

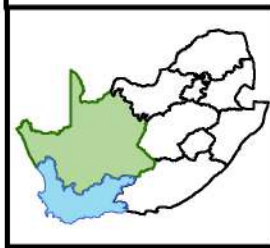
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20° 57.799'E

End:
32° 38.282'S
20° 57.854'E

32° 36.133'S
21° 00.602'E

32° 38.295'S
21° 09.873'E

32° 42.763'S
21° 15.601'E



Prepared for:
Nala Environmental Consulting Firm

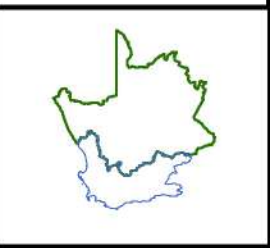
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Ecofluence Consulting

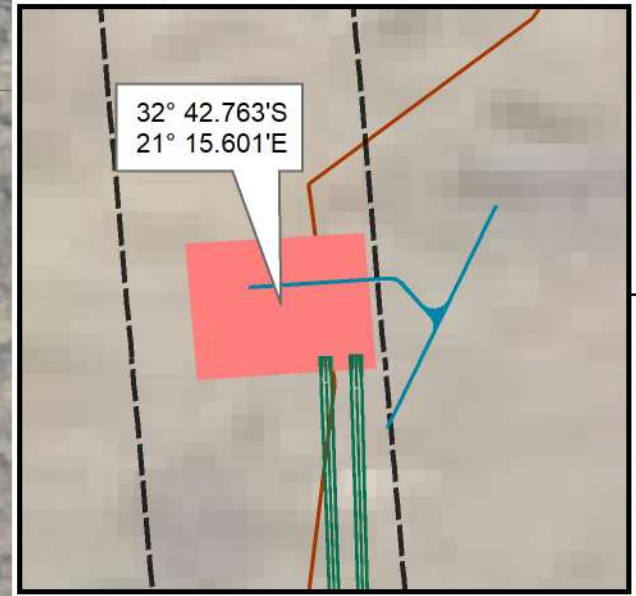
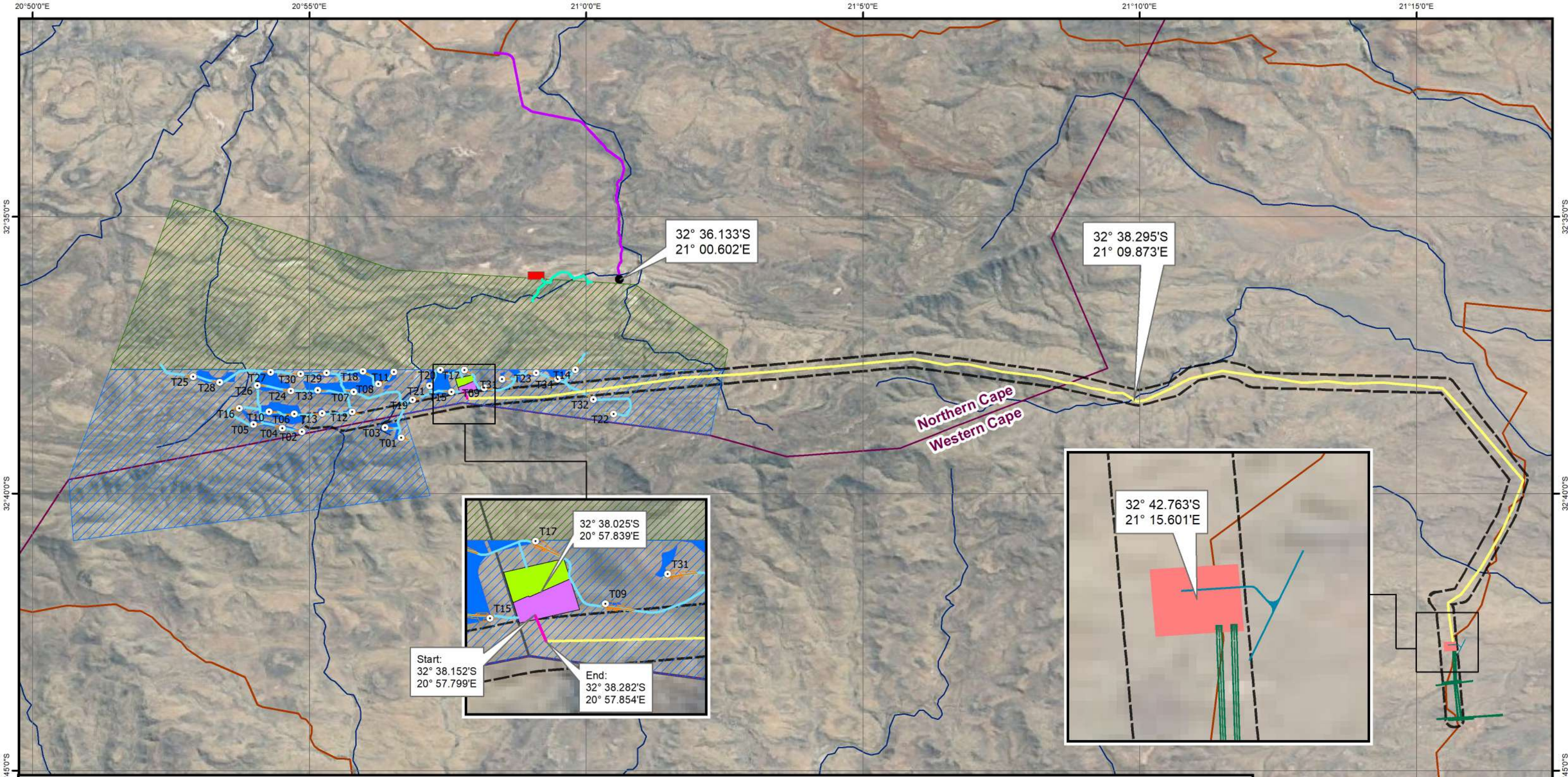
FINAL LAYOUT MAP OVERLAIN ON THE CRITICAL BIODIVERSITY AREAS MAP

Proposed Sutherland Wind Energy Facilities, Grid and associated infrastructure.

Province	Northern Cape	Western Cape
District Municipality	Namakwa	Central Karoo
Local Municipality	Karoo Hoogland	Laingsburg

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Scale: 1:125 000
Date: December 2022





Legend

- Roads
- Rivers (NBA 2018)
- Provincial boundaries

Project area

- Sutherland project area
- Authorised Rietrug WEF

Authorised Sutherland Facilities

- Authorised 132kV Acrux to Koring Gridline (DFFE Ref: 14/12/16/3/3/1/2077)
- Authorised Sutherland 400kV powerlines (DFFE Ref: 14/12/16/3/3/1/2077)
- Authorised Sutherland 500m Grid Corridor (DFFE Ref: 14/12/16/3/3/1/2077)

Acrux Substation

Authorised on-site substation

- Authorised Switching Station (Eskom) (DFFE Ref: 14/12/16/3/3/1/2457)
- Authorised 33kV/132kV Substation (IPP) (DFFE Ref: 14/12/16/3/3/1/2458)
- Authorised 132kV powerline from the Acrux substation (Eskom, DFFE Ref: 14/12/16/3/3/2457)

Proposed Sutherland "WEF" Facilities (DFFE Ref: 12/12/20/1782/2)

- WEF access road
- Proposed internal access roads and underground cabling
- Proposed turbine hardstands
- Proposed turbine locations
- WEF buildable areas

Batching Plant

- Batching site
- Batching site access road
- Batching plant access point

Koring MTS

- Proposed 400kV MTS site
- Proposed road



Prepared for:
Nala Environmental Consulting Firm

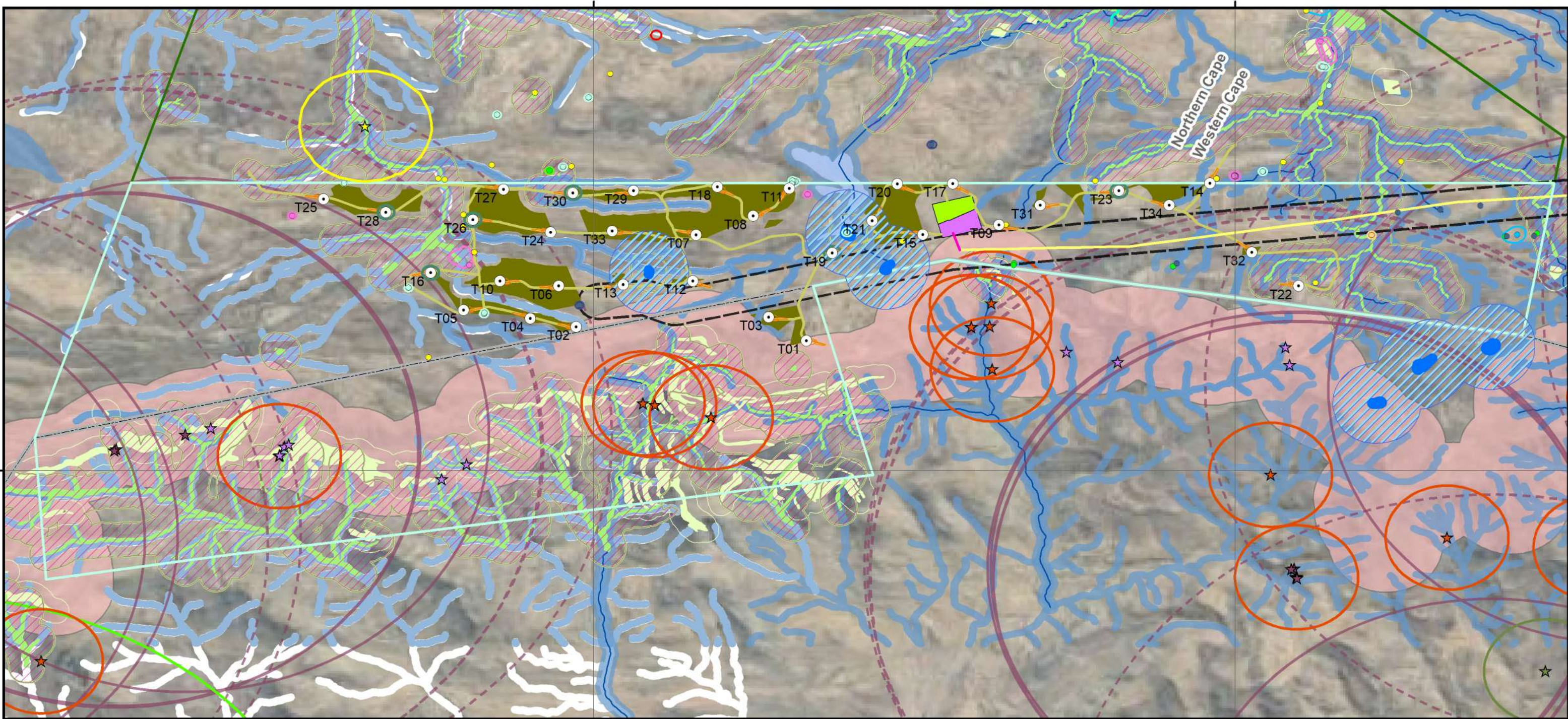
Prepared by:
Ecofluence Consulting

FINAL LAYOUT MAP
Proposed Sutherland Wind Energy Facilities, Grid and associated infrastructure.

Province	Northern Cape	Western Cape
District Municipality	Namakwa	Central Karoo
Local Municipality	Karoo Hoogland	Laingsburg

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Scale: 1:125 000
Date: December 2022





Legend

- Roads
- Provincial boundaries
- Project area**
 - Sutherland project area
 - Authorised Rietrug WEF
- Authorised Sutherland Facilities**
 - Authorised 132kV Acruz to Koring Gridline (DFFE Ref: 14/12/16/3/3/1/2077)
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 - Authorised 132kV powerline from the Acruz substation (Eskom, DFFE Ref: 14/12/16/3/3/1/2457)
 - Proposed internal access roads and underground cabling
 - Proposed turbine hardstands
 - Proposed turbine locations
 - WEF buildable areas
 - Batching site access road
- Specialist sensitivities**
 - Heritage sensitivity**
 - Palaeontology - No Go
 - Heritage sites**
 - Graded sites**
 - GPA
 - GPB
 - GPC
 - IIIA
 - IIIC / GPA-GPB
 - NCW - GPC
 - Graded heritage sites 50m buffers**
 - GPA
 - GPB
 - GPC
 - IIIC / GPA-GPB
- Aquatic sensitivity**
 - Drainage lines**
 - High - turbine exclusion zones
 - High buffer (100m)
 - Medium - turbine exclusion zones
 - Medium buffer (50m)
 - Wetlands**
 - Wetlands buffer (50m)
 - Regulatory area (500m)
 - Bat sensitivity**
 - High
 - High buffer (200m)
 - Moderate
 - Moderate buffer (150m)
 - Turbine blade length buffer (100m)
- Avifaunal sensitivity**
 - Nests**
 - African Harrier Hawk
 - Black Harrier
 - Jackal Buzzard
 - Verreaux's Eagle
 - White-necked Raven
 - Avifaunal buffers**
 - African Harrier Hawk buffer (750m)
 - Black Harrier buffer - all infrastructure exclusion zone (800m)
 - Jackal Buzzard buffer (750m)
 - Martial Eagle buffer (5km)
 - Verreaux's Eagle buffer (3.7km)
 - Verreaux's Eagle buffer - medium (5.2km)
 - Escarpment exclusion zone (660m)
 - Drainage turbine exclusion zone (200m)
 - Drainage turbine exclusion zone (50m)

Prepared for:
Nala Environmental Consulting Firm

Prepared by:
Ecofluence Consulting

**FINAL LAYOUT MAP OVERLAIN
ON SPECIALIST SENSITIVITIES:
WEF section**

**Proposed Sutherland Wind Energy
Facilities, Grid and associated
infrastructure.**

Province	Northern Cape	Western Cape
District Municipality	Namakwa	Central Karoo
Local Municipality	Karoo Hoogland	Laingsburg

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Scale: 1:55 000
Date: December 2022