

### Legend

- Roads
- NFEPA rivers
- Provincial boundaries
- WEF Boundaries**
  - Umsinde and Khangela Eoyeni
  - Ishwati Eoyeni
- Proposed Umsinde to Gamma powerline**
  - Proposed Umsinde to Gamma powerline
  - Preferred alternative assessment corridor and extended corridor
  - Alternative 1
  - Alternative 1 assessment corridor (400m)
  - Alternative 2
  - Alternative 2 assessment corridor (400m)
- Proposed Switching Stations**
  - Ishwati Collector Switching Station
  - Ishwati Collector Switching Station assessment radius (300m)
  - Khangela Collector Switching Station
  - Khangela Collector Switching Station assessment radius (300m)
  - Umsinde Facility Substation
  - Umsinde Facility Substation assessment radius (300m)
  - Gamma Substation Yard
- Proposed Ishwati access road**
  - Proposed Ishwati access road
- National Wetlands Map 5 (2018)**
  - River
  - Floodplain wetland
  - Depression wetland
  - Channelled valley-bottom wetland
  - Unchannelled valley-bottom wetland
  - Seep wetland
  - Wetland flat
- Northern Cape CBA Categories (2016)**
  - CBA 1
  - CBA 2
  - ESA
  - ONA
- Western Cape CBA**
- Beaufort West BSP (2017)**
  - CBA 1
  - CBA 2
  - ESA 1
  - ESA 2
  - ONA

31° 40.633'S  
23° 24.405'E

31° 42.407'S  
23° 39.506'E

31° 44.202'S  
23° 46.714'E

31° 45.534'S  
23° 45.489'E

31° 48.717'S  
23° 57.712'E

31° 51.223'S  
24° 01.426'E



Prepared for:  
Nala Environmental Consulting Firm

Prepared by:  
Ecofluence Consulting

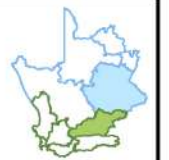
**ENVIRONMENTAL IMPACT ASSESSMENT**  
Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Locality Map**

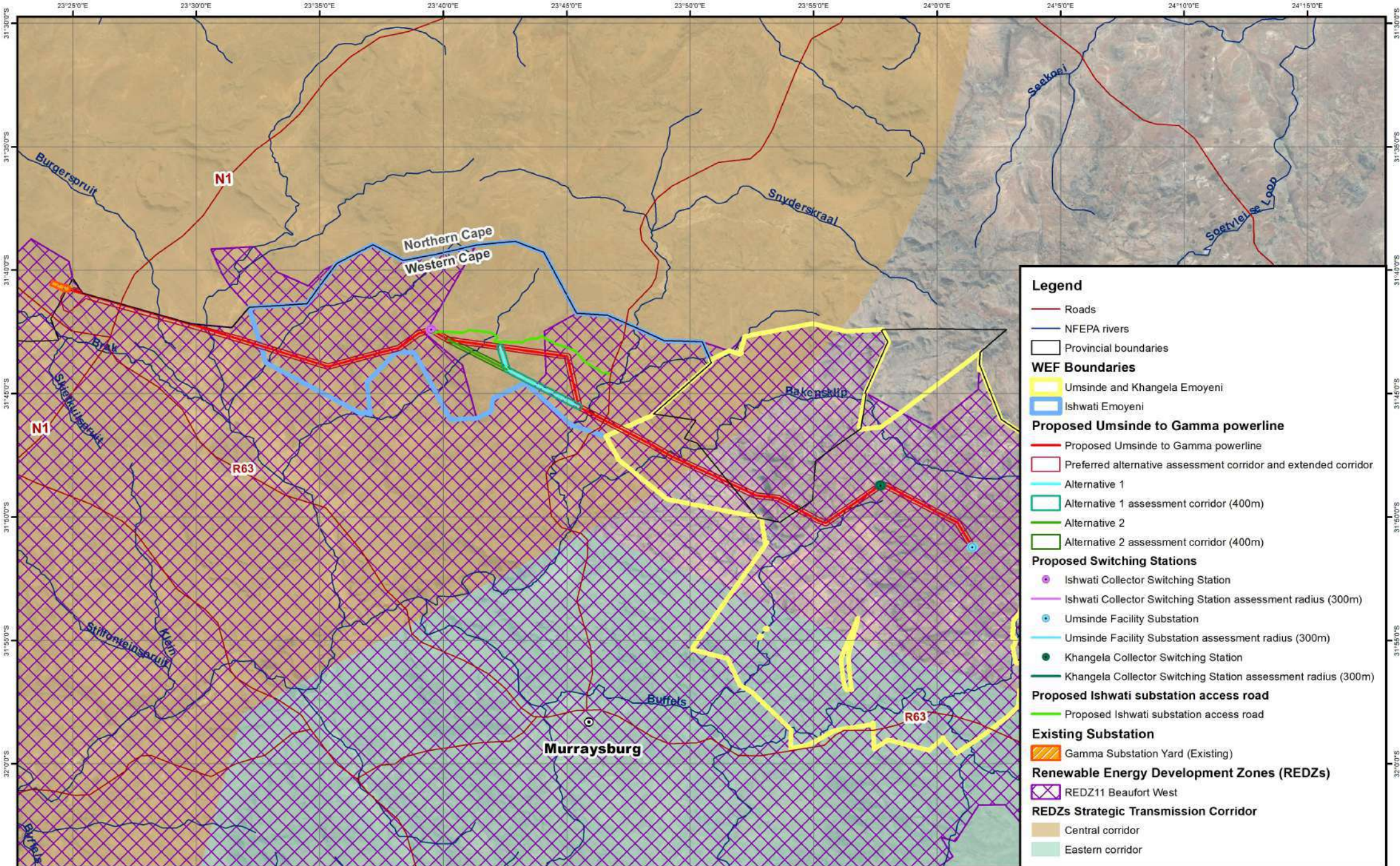
Prevailing wind direction:  
Northwest: From April to September (6 months)  
Southeast: From October to March (6 months)

Province	Municipality
Northern Cape	Liburuti Local Municipality
Western Cape	Central Karoo District Municipality

Coordinate System: GCS WGS 1984  
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Date: September 2022







**Legend**

- Roads
- NFEPA rivers
- Provincial boundaries

**WEF Boundaries**

- Umsinde and Khangela Emoeni
- Ishwati Emoeni

**Proposed Umsinde to Gamma powerline**

- Proposed Umsinde to Gamma powerline
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- Alternative 2 assessment corridor (400m)

**Proposed Switching Stations**

- Ishwati Collector Switching Station
- Ishwati Collector Switching Station assessment radius (300m)
- Umsinde Facility Substation
- Umsinde Facility Substation assessment radius (300m)
- Khangela Collector Switching Station
- Khangela Collector Switching Station assessment radius (300m)

**Proposed Ishwati substation access road**

- Proposed Ishwati substation access road

**Existing Substation**

- Gamma Substation Yard (Existing)

**Renewable Energy Development Zones (REDZs)**

- REDZ11 Beaufort West

**REDZs Strategic Transmission Corridor**

- Central corridor
- Eastern corridor



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**ENVIRONMENTAL IMPACT ASSESSMENT**

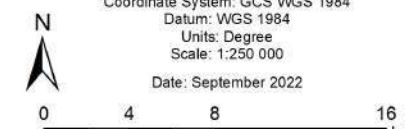
Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**REDZ and REDZ Strategic Transmission Corridor Map**

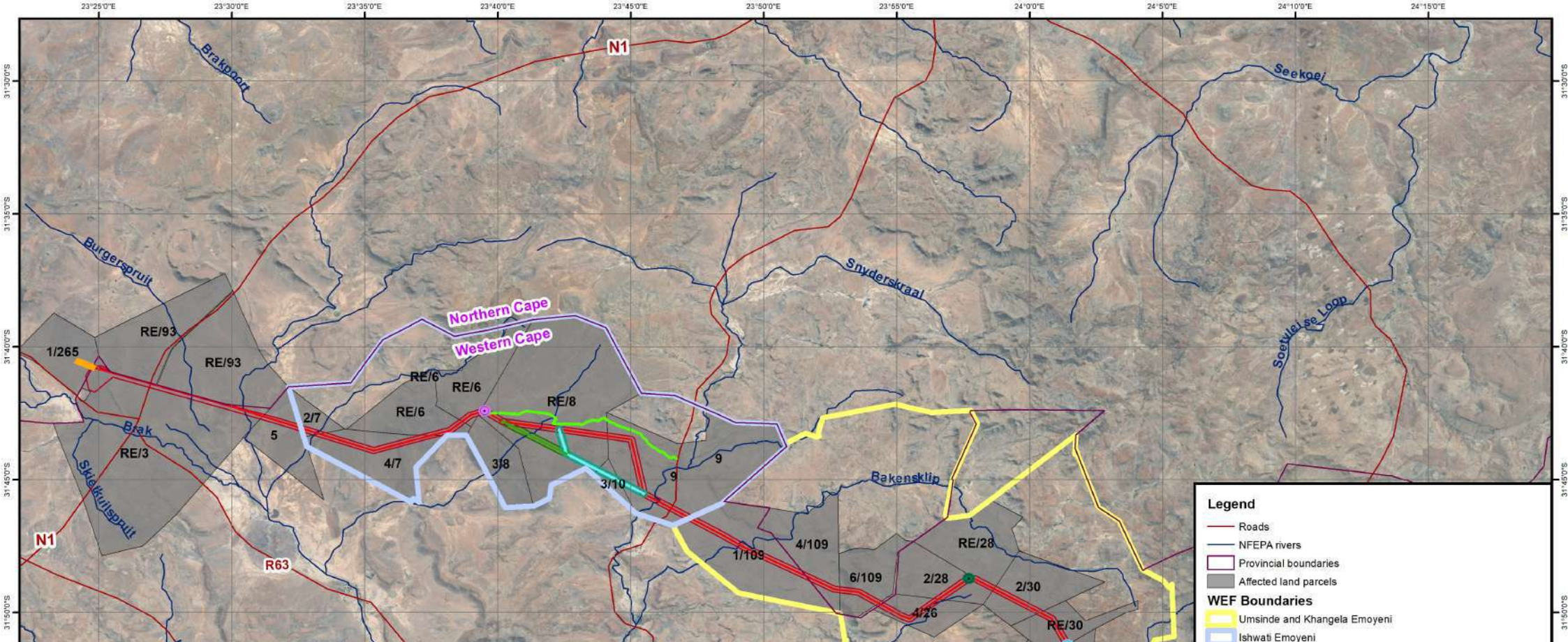
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**Affected Land Parcels**

No	SG21 Code	Parcel No	Property description	Province	Municipality Name
1	C08000000000026500001	1/265	Portion 1 of the Farm Uitvlugtfontein No 265	NC	Ubuntu LM
2	C05200000000003000000	RE/3	Remainder of the Farm Schietkuil No 3	WC	Central Karoo DM
3	C05200000000005000000	5	Farm Kleinioskop No 5	WC	Central Karoo DM
4	C05200000000007000002	2/7	Portion 2 of the Farm Allemansfontein No 7	WC	Central Karoo DM
5	C05200000000007000004	4/7	Portion 4 of the Farm Allemansfontein No 7	WC	Central Karoo DM
6	C05200000000006000000	RE/6	Remainder of the Farm Leeuwenfontein No 6	WC	Central Karoo DM
7	C05200000000008000000	RE/8	Remainder of the Farm Driefontein No 8	WC	Central Karoo DM
8	C05200000000009000000	9	Farm Rietpoort No 9	WC	Central Karoo DM
9	C05200000000010000003	3/10	Portion 3 of the Farm Badsfontein No 10	WC	Central Karoo DM
10	C05200000000006000000	RE/6	Remainder of the Farm Leeuwenfontein No 6	WC	Central Karoo DM
11	C063000000000109000000	1/109	Portion 1 of the Farm Klipplaat No 109	WC	Central Karoo DM
12	C063000000000109000004	4/109	Portion 4 of the Farm Klipplaat No 109	NC	Ubuntu LM
13	C063000000000109000006	6/109	Portion 6 of the Farm Klipplaat No 109	NC	Ubuntu LM
14	C052000000000026000004	4/26	Portion 4 of the Farm Driefontein No 26	WC	Central Karoo DM
15	C052000000000028000002	2/28	Portion 2 of the Farm Swavel Kranse No 28	WC	Central Karoo DM
16	C052000000000028000000	RE/28	Remainder of the Farm Swavel Kranse No 28	WC	Central Karoo DM
17	C052000000000030000002	2/30	Portion 2 of the Farm De Hoop No 30	WC	Central Karoo DM
18	C052000000000030000000	RE/30	Remainder of the Farm De Hoop No 30	WC	Central Karoo DM
19	C052000000000152000001	1/152	Portion 1 of the Farm No 152	WC	Central Karoo DM

**Legend**

- Roads
- NFEPA rivers
- Provincial boundaries
- Affected land parcels
- WEF Boundaries**
- Umsinde and Khangela Emoenyi
- Ishwati Emoenyi
- Proposed Grid**
- Proposed Umsinde to Gamma grid
- Preferred alternative assessment corridor and extended corridor
- Alternative 1
- Alternative 1 assessment corridor (400m)
- Alternative 2
- Alternative 2 assessment corridor (400m)
- Proposed Switching Stations**
- Ishwati Collector Switching Station
- Ishwati Collector Switching Station assessment radius (300m)
- Umsinde Facility Substation
- Umsinde Facility Substation assessment radius (300m)
- Khangela Collector Switching Station
- Khangela Collector Switching Station assessment radius (300m)
- Gamma Substation Yard
- Proposed Ishwati substation access road**
- Proposed Ishwati substation access road



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**ENVIRONMENTAL IMPACT ASSESSMENT**  
Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

Province	Municipality
Northern Cape	Ubuntu Local Municipality
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**Landowner Map**

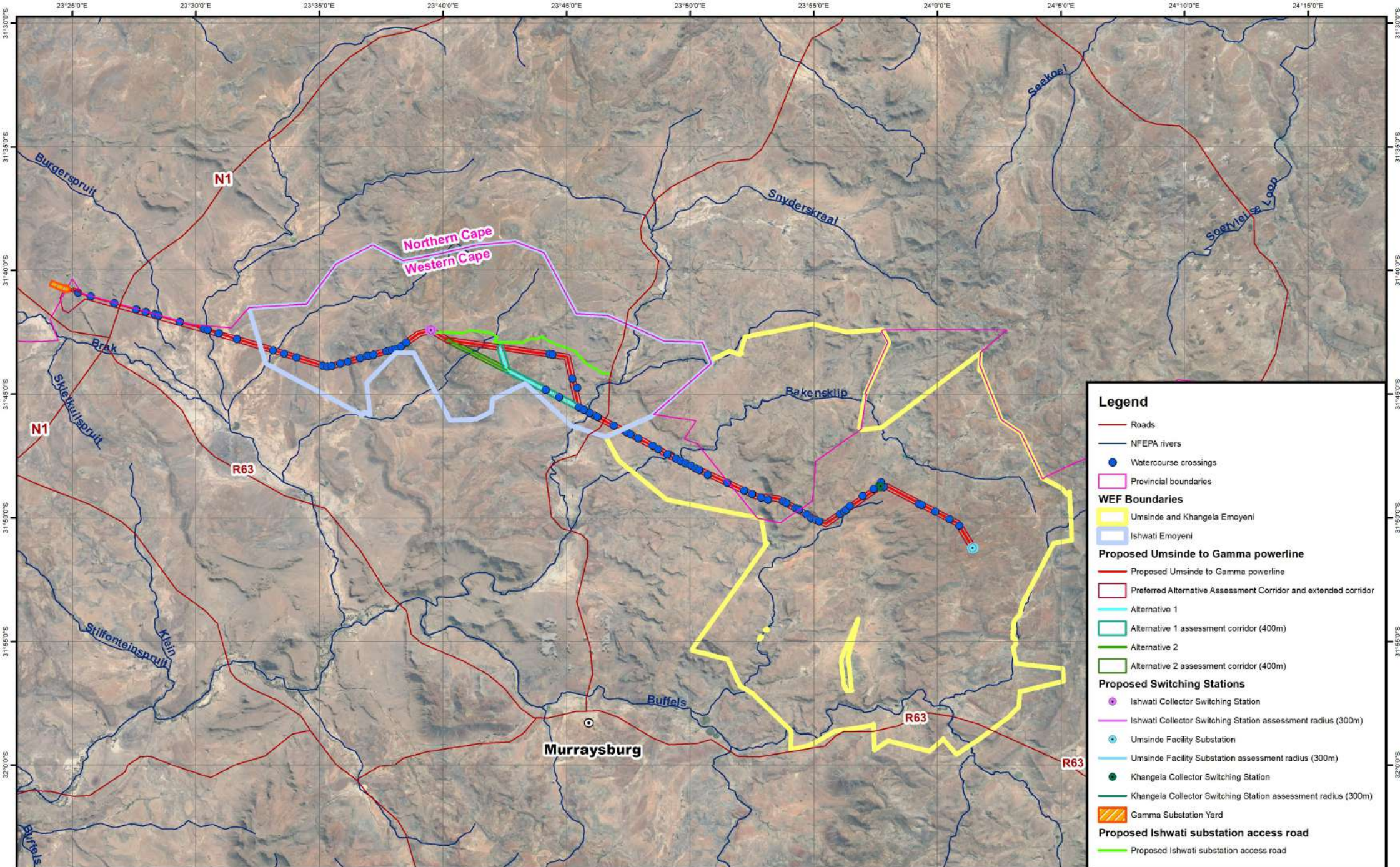
Prevailing wind direction:  
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From October to March (6 months)

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### Legend

- Roads
- NFEPA rivers
- Watercourse crossings
- Provincial boundaries

#### WEF Boundaries

- Umside and Khangela Emoyeni
- Ishwati Emoyeni

#### Proposed Umside to Gamma powerline

- Proposed Umside to Gamma powerline
- Preferred Alternative Assessment Corridor and extended corridor
- Alternative 1
- Alternative 1 assessment corridor (400m)
- Alternative 2
- Alternative 2 assessment corridor (400m)

#### Proposed Switching Stations

- Ishwati Collector Switching Station
- Ishwati Collector Switching Station assessment radius (300m)
- Umside Facility Substation
- Umside Facility Substation assessment radius (300m)
- Khangela Collector Switching Station
- Khangela Collector Switching Station assessment radius (300m)
- Gamma Substation Yard

#### Proposed Ishwati substation access road

- Proposed Ishwati substation access road



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**ENVIRONMENTAL IMPACT ASSESSMENT**

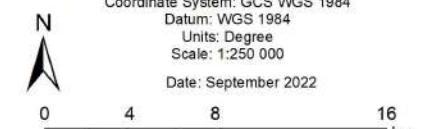
Proposed Ishwati, Khangela and Umside Powerline routes, access tracks and associated infrastructure.

*Layout map: Full extent*

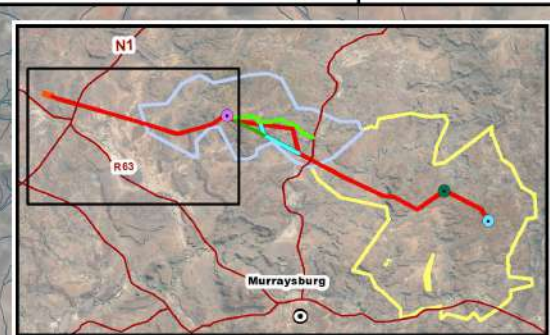
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Watercourse Crossing	GPS Coordinates		Watercourse Crossing	GPS Coordinates	
	Latitude	Longitude		Latitude	Longitude
1	31° 40.895'S	23° 25.233'E	16	31° 43.839'S	23° 35.129'E
2	31° 41.036'S	23° 25.743'E	17	31° 43.889'S	23° 35.303'E
3	31° 41.303'S	23° 26.688'E	18	31° 43.853'S	23° 35.487'E
4	31° 41.551'S	23° 27.579'E	19	31° 43.738'S	23° 35.826'E
5	31° 41.647'S	23° 27.969'E	20	31° 43.660'S	23° 36.141'E
6	31° 41.776'S	23° 28.327'E	21	31° 43.518'S	23° 36.634'E
7	31° 41.815'S	23° 28.474'E	22	31° 43.458'S	23° 36.905'E
8	31° 42.067'S	23° 29.346'E	23	31° 43.453'S	23° 36.987'E
9	31° 42.354'S	23° 30.316'E	24	31° 43.389'S	23° 37.208'E
10	31° 42.405'S	23° 30.479'E	25	31° 43.261'S	23° 37.699'E
11	31° 42.538'S	23° 30.925'E	26	31° 43.238'S	23° 37.813'E
12	31° 42.772'S	23° 31.654'E	27	31° 43.229'S	23° 37.905'E
13	31° 43.233'S	23° 33.111'E	28	31° 43.178'S	23° 38.061'E
14	31° 43.362'S	23° 33.570'E	29	31° 43.082'S	23° 38.300'E
15	31° 43.536'S	23° 34.080'E	30	31° 42.930'S	23° 38.518'E

**Legend**

- Roads
- Rivers
- Proposed Watercourse crossings (within 400m)
- Provincial boundaries
- Ishwati Emoyeni WEF

**Proposed Gamma to Ishwati grid section**

- Proposed Gamma to Ishwati powerline
- Preferred alternative assessment corridor and extended corridor

**Proposed Switching Stations**

- Ishwati Collector Switching Station
- Ishwati Collector Switching Station assessment radius (300m)
- Gamma Substation Yard



Prepared for:  
Nala Environmental Consulting Firm

Prepared by:  
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**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Layout Map: Gamma to Ishwati grid section**

Prevailing wind direction:  
NW: From April to September (6 months)  
SE: From October to March (6 months)

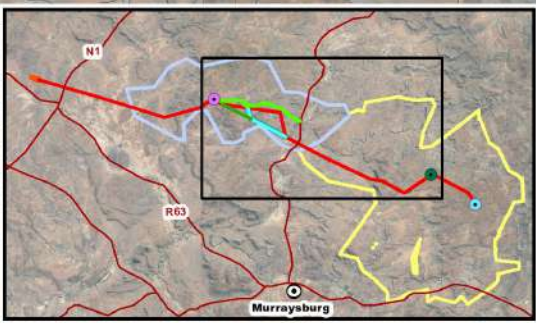
Province	Municipality
Northern Cape	Ubuntu Local Municipality
Western Cape	Central Karoo District Municipality

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Scale: 1:100 000

Date: September 2022







Watercourse Crossing	GPS Coordinates		Watercourse Crossing	GPS Coordinates	
	Latitude	Longitude		Latitude	Longitude
31	31° 42.866'S	23° 40.290'E	58	31° 47.823'S	23° 49.804'E
32	31° 43.284'S	23° 41.134'E	59	31° 47.901'S	23° 49.951'E
33	31° 43.688'S	23° 41.937'E	60	31° 48.006'S	23° 50.198'E
34	31° 42.898'S	23° 41.616'E	61	31° 48.066'S	23° 50.364'E
35	31° 43.027'S	23° 42.364'E	62	31° 48.259'S	23° 50.708'E
36	31° 44.009'S	23° 42.534'E	63	31° 48.621'S	23° 51.486'E
37	31° 43.178'S	23° 43.374'E	64	31° 48.904'S	23° 52.183'E
38	31° 43.261'S	23° 44.255'E	65	31° 49.041'S	23° 52.498'E
39	31° 43.293'S	23° 44.328'E	66	31° 49.190'S	23° 52.867'E
40	31° 44.504'S	23° 43.539'E	67	31° 49.215'S	23° 53.392'E
41	31° 44.270'S	23° 45.237'E	68	31° 49.404'S	23° 53.891'E
42	31° 44.826'S	23° 44.149'E	69	31° 49.442'S	23° 53.813'E
43	31° 45.124'S	23° 44.700'E	70	31° 49.598'S	23° 54.228'E
44	31° 44.812'S	23° 45.526'E	71	31° 49.640'S	23° 54.290'E
45	31° 45.537'S	23° 45.494'E	72	31° 49.691'S	23° 54.376'E
46	31° 45.845'S	23° 46.109'E	73	31° 49.860'S	23° 54.672'E
47	31° 45.739'S	23° 45.958'E	74	31° 50.021'S	23° 54.889'E
48	31° 45.629'S	23° 45.691'E	75	31° 50.088'S	23° 55.079'E
49	31° 46.235'S	23° 46.853'E	76	31° 50.152'S	23° 55.217'E
50	31° 46.547'S	23° 47.440'E	77	31° 49.854'S	23° 56.055'E
51	31° 46.717'S	23° 47.775'E	78	31° 49.748'S	23° 56.220'E
52	31° 46.785'S	23° 47.899'E	79	31° 49.677'S	23° 56.303'E
53	31° 47.088'S	23° 48.482'E	80	31° 49.532'S	23° 56.461'E
54	31° 47.290'S	23° 48.698'E	81	31° 49.124'S	23° 56.975'E
55	31° 47.414'S	23° 48.959'E	82	31° 48.830'S	23° 57.425'E
56	31° 47.492'S	23° 49.051'E	83	31° 48.558'S	23° 57.715'E
57	31° 47.708'S	23° 49.547'E	84	31° 48.759'S	23° 57.831'E

**Legend**

- Rivers
- Proposed watercourse crossings (within 400m)
- Provincial boundaries

**WEF Boundaries**

- Umsinde and Khangela Emoyeni
- Ishwati Emoyeni WEF

**Proposed Ishwati - Khangela grid section**

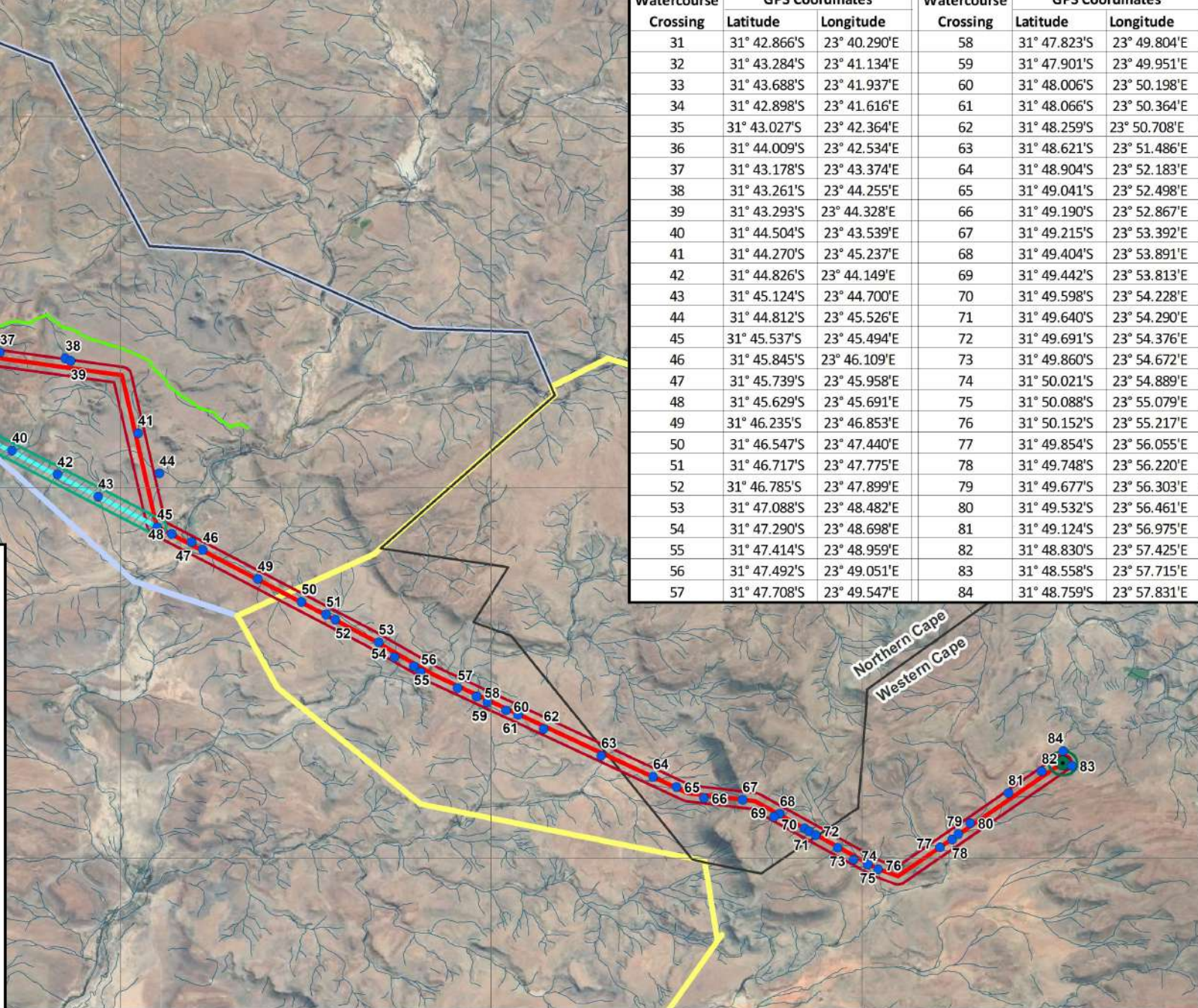
- Proposed Ishwati - Khangela powerline
- Preferred alternative assessment corridor (400m)
- Alternative 1
- Alternative 1 assessment corridor (400m)
- Alternative 2
- Alternative 2 assessment corridor (400m)

**Proposed Switching Stations**

- Proposed Khangela Collector Switching Station
- Proposed Khangela Collector Switching Station assessment radius (300m)
- Ishwati Collector Switching Station
- Ishwati SS 300m buffer

**Proposed Ishwati substation access road**

- Proposed Ishwati substation access road



Prepared for:  
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**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

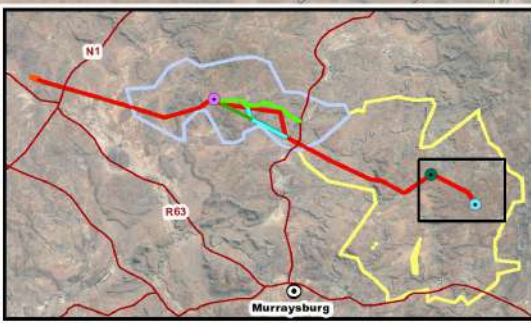
**Layout Map: Ishwati to Khangela grid section**

Prevailing wind direction:  
NW: From April to September (6 months)  
SE: From October to March (6 months)

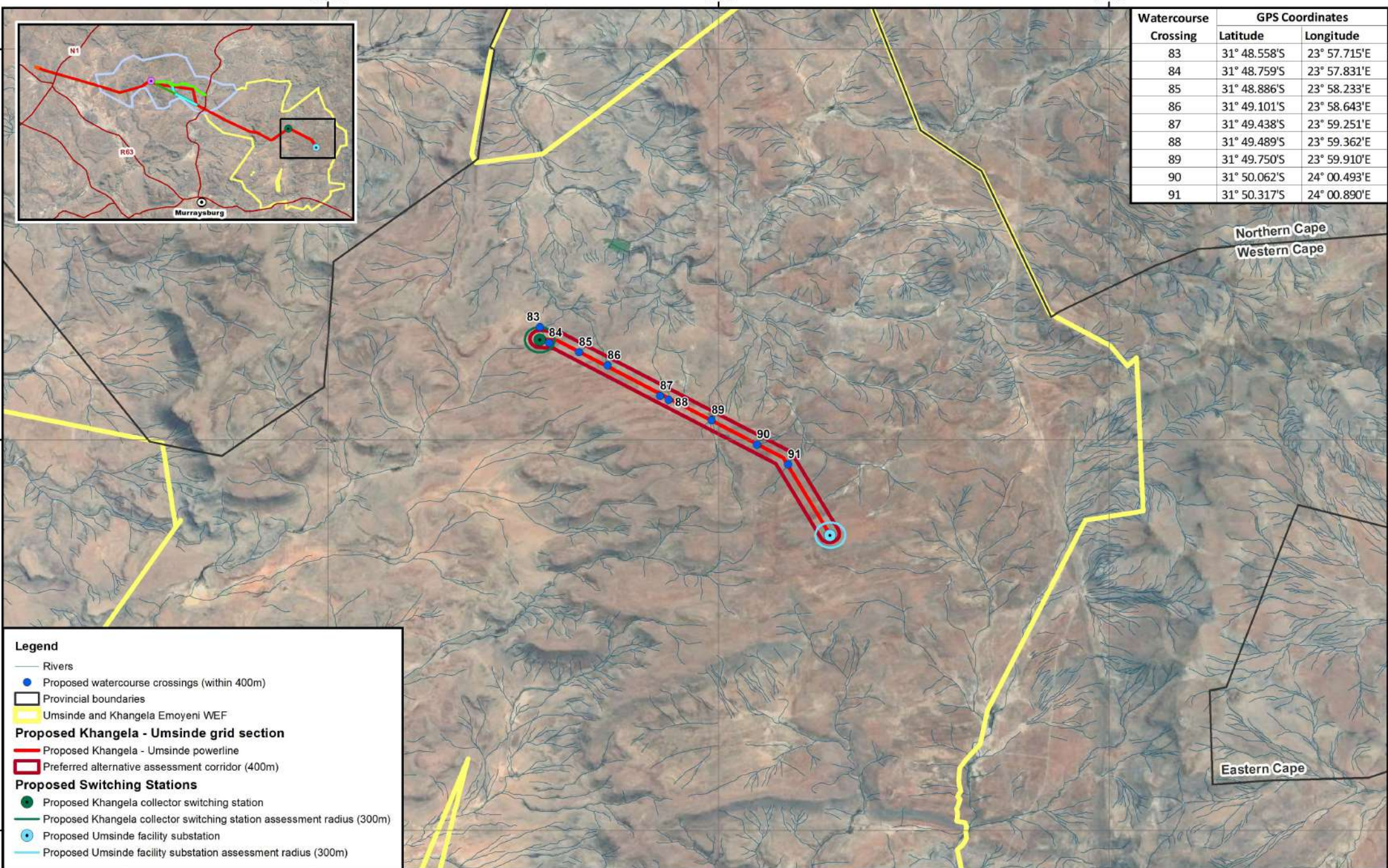
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Watercourse Crossing	GPS Coordinates	
	Latitude	Longitude
83	31° 48.558'S	23° 57.715'E
84	31° 48.759'S	23° 57.831'E
85	31° 48.886'S	23° 58.233'E
86	31° 49.101'S	23° 58.643'E
87	31° 49.438'S	23° 59.251'E
88	31° 49.489'S	23° 59.362'E
89	31° 49.750'S	23° 59.910'E
90	31° 50.062'S	24° 00.493'E
91	31° 50.317'S	24° 00.890'E



**Legend**

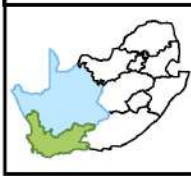
- Rivers
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- Umsinde and Khangela Emoyeni WEF

**Proposed Khangela - Umsinde grid section**

- Proposed Khangela - Umsinde powerline
- Preferred alternative assessment corridor (400m)

**Proposed Switching Stations**

- Proposed Khangela collector switching station
- Proposed Khangela collector switching station assessment radius (300m)
- Proposed Umsinde facility substation
- Proposed Umsinde facility substation assessment radius (300m)



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**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Layout Map: Khangela to Umsinde grid section**

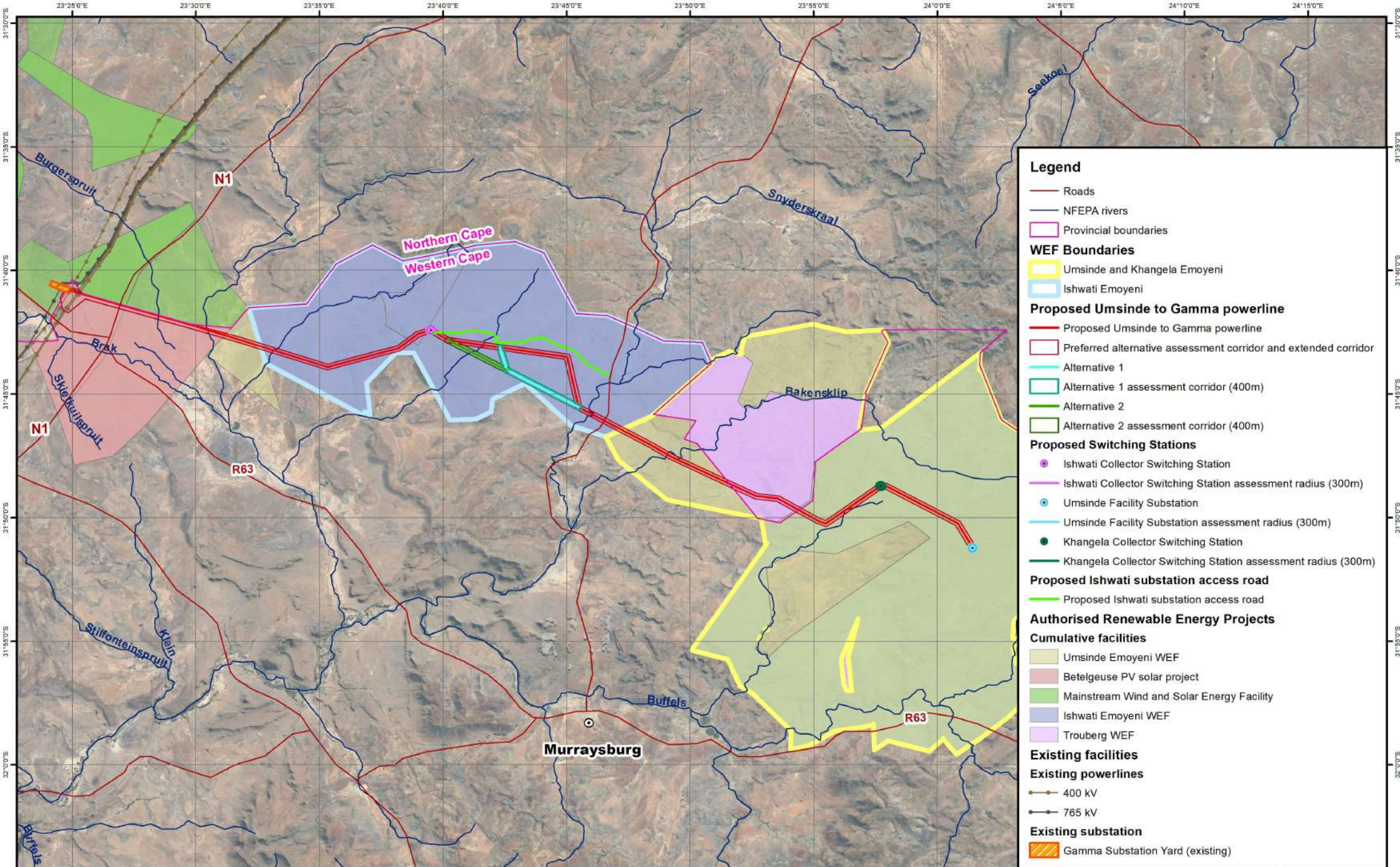
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- Ishwati Collector Switching Station assessment radius (300m)
- Umsinde Facility Substation
- Umsinde Facility Substation assessment radius (300m)
- Khangela Collector Switching Station
- Khangela Collector Switching Station assessment radius (300m)
- Proposed Ishwati substation access road**
- Proposed Ishwati substation access road
- Authorised Renewable Energy Projects**
- Cumulative facilities**
- Umsinde Emyeni WEF
- Betelgeuse PV solar project
- Mainstream Wind and Solar Energy Facility
- Ishwati Emyeni WEF
- Trouberg WEF
- Existing facilities**
- Existing powerlines**
- 400 kV
- 765 kV
- Existing substation**
- Gamma Substation Yard (existing)



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**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Cumulative Map**

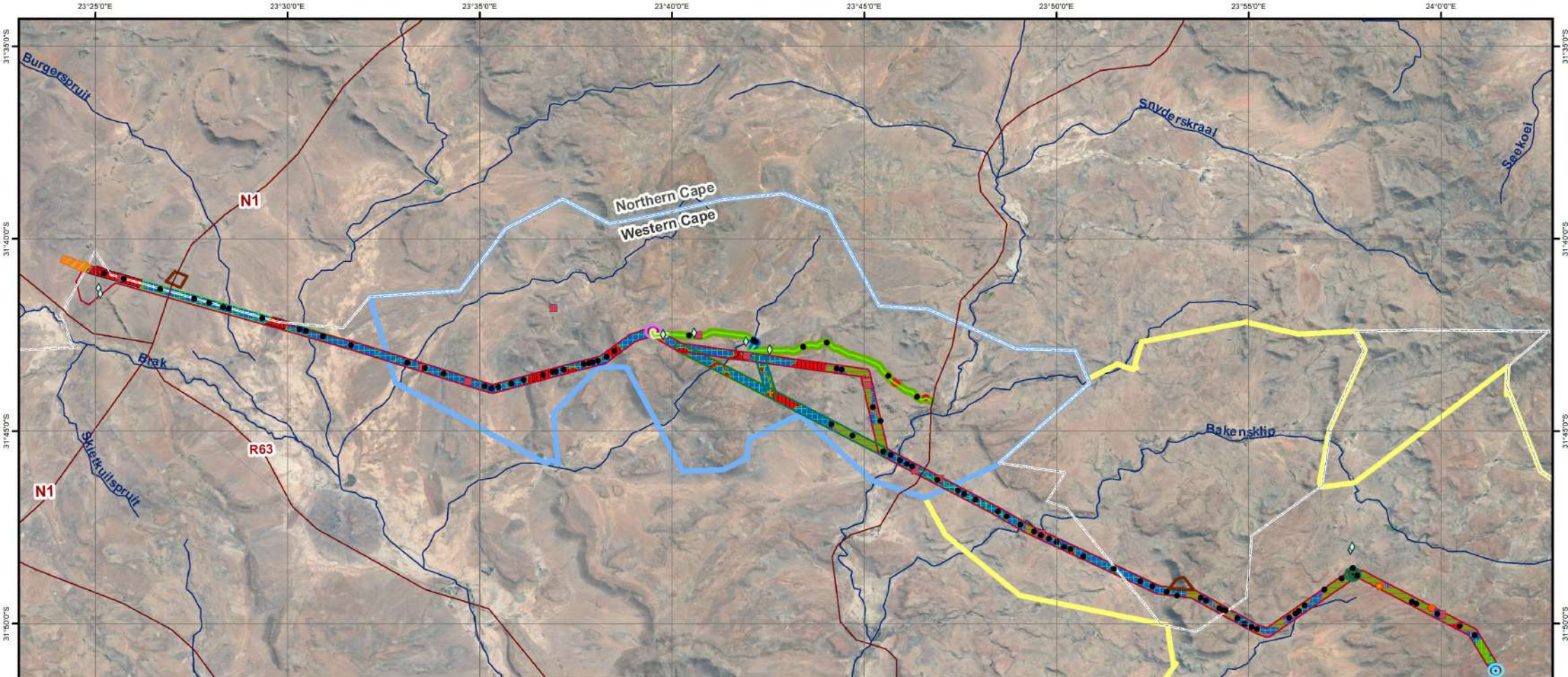
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- Ishwati Emoyeni

**Proposed Umsinde to Gamma Grid**

- Preferred alternative assessment corridor and extended corridor
- Alternative 1 assessment corridor (400m)
- Alternative 2 assessment corridor (400m)

**Proposed Ishwati substation access road**

- Proposed Ishwati substation access road

**Proposed Switching Stations**

- Ishwati Collector Switching Station
- Ishwati Collector Switching Station assessment radius (300m)
- Umsinde Facility Substation
- Umsinde Facility Substation assessment radius (300m)
- Khangela Collector Switching Station
- Khangela Collector Switching Station assessment radius (300m)

**Existing Substation**

- Gamma Substation Yard (existing)

**Specialist sensitivities**

**Palaeontological sensitivity**

- Palaeontological sensitivity
- Fossil sites

**Heritage Sensitivity**

- Burial ground - No Go (50m buffer)
- Informal graves - No Go (50m buffer)
- Kraal - No Go (30m buffer)
- Midden - No Go (30m buffer)
- Old Farmhouse - No Go (30m buffer)
- Structure - No Go (30m buffer)
- Surface scatter - No Go (30m buffer)
- OHL sites (including rock-art)
- Rock Engraving sites
- Rock Engraving - No Go (20m buffer)

**Terrestrial sensitivity**

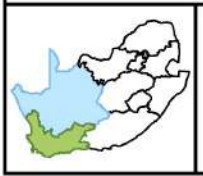
- Very high
- High
- Medium
- Very low

**Avifauna sensitivity**

- Very high
- High
- Medium

**Soil sensitivity**

- High (Crop Boundary)



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**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Sensitivity Map: Full extent**

**Prevailing wind direction:**

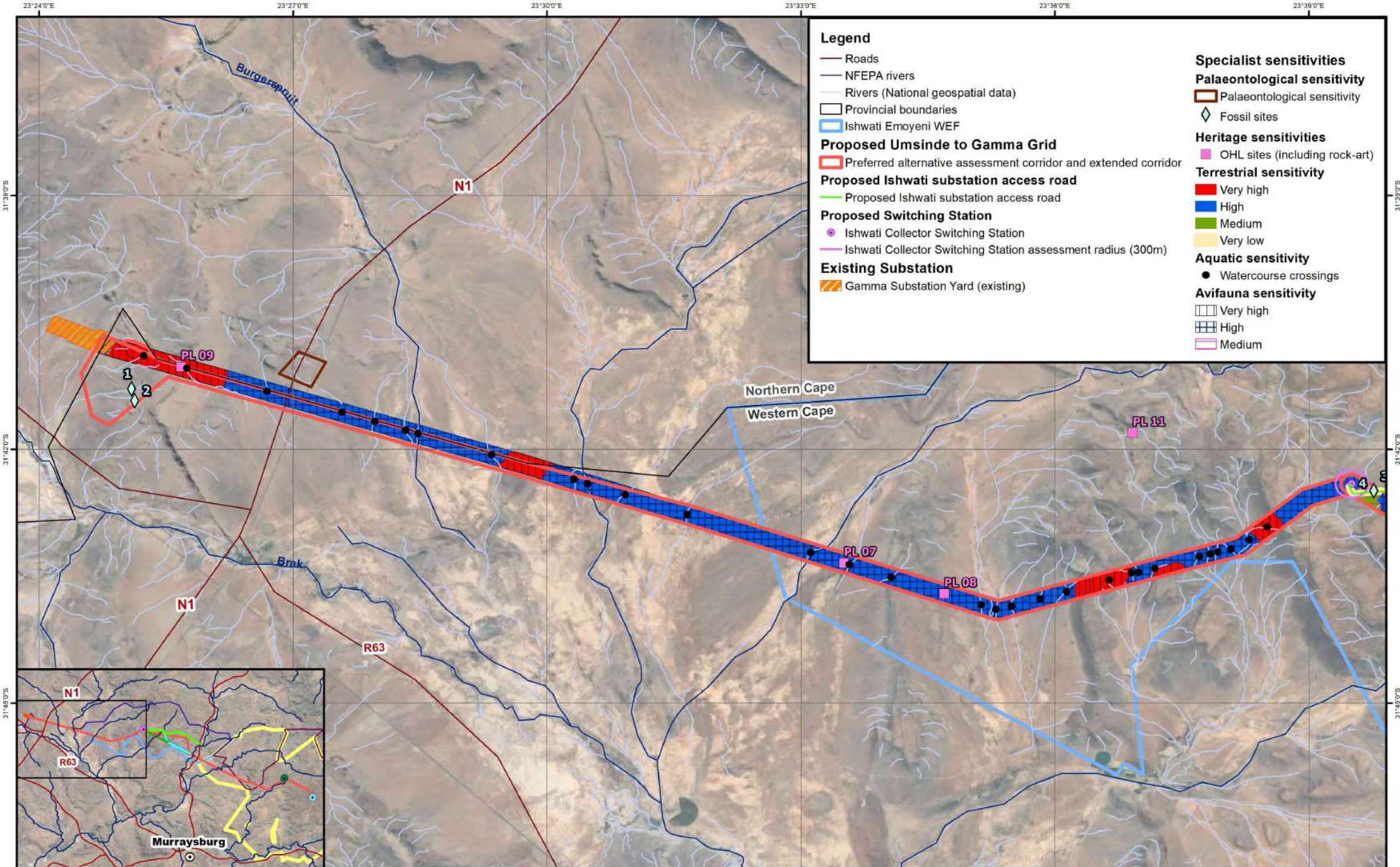
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Datum: WGS 1984  
Units: Degree  
Scale: 1:180 000  
Date: September 2022







**Legend**

- Roads
- NFEPA rivers
- Rivers (National geospatial data)
- Provincial boundaries
- Ishwati Emoyeni WEF

**Proposed Umsinde to Gamma Grid**

- Preferred alternative assessment corridor and extended corridor

**Proposed Ishwati substation access road**

- Proposed Ishwati substation access road

**Proposed Switching Station**

- Ishwati Collector Switching Station
- Ishwati Collector Switching Station assessment radius (300m)

**Existing Substation**

- Gamma Substation Yard (existing)

**Specialist sensitivities**

**Palaeontological sensitivity**

- Palaeontological sensitivity
- Fossil sites

**Heritage sensitivities**

- OHL sites (including rock-art)

**Terrestrial sensitivity**

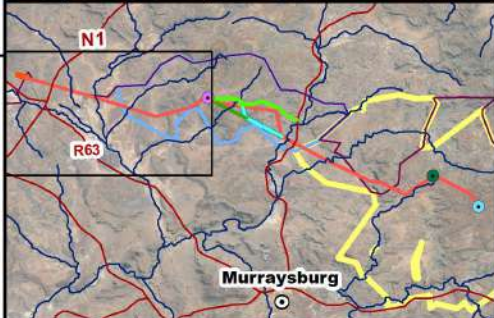
- Very high
- High
- Medium
- Very low

**Aquatic sensitivity**

- Watercourse crossings

**Avifauna sensitivity**

- Very high
- High
- Medium



Prepared for:  
Nala Environmental Consulting Firm

Prepared by:  
Ecofluence Consulting

**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Sensitivity Map: Gamma to Ishwati Grid section**

**Prevailing wind direction:**

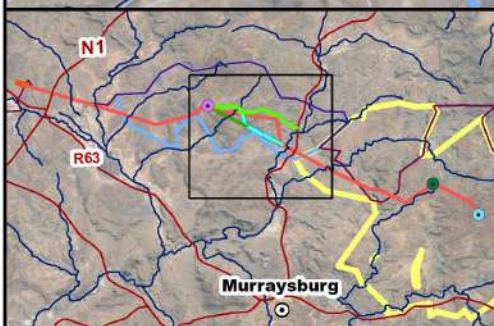
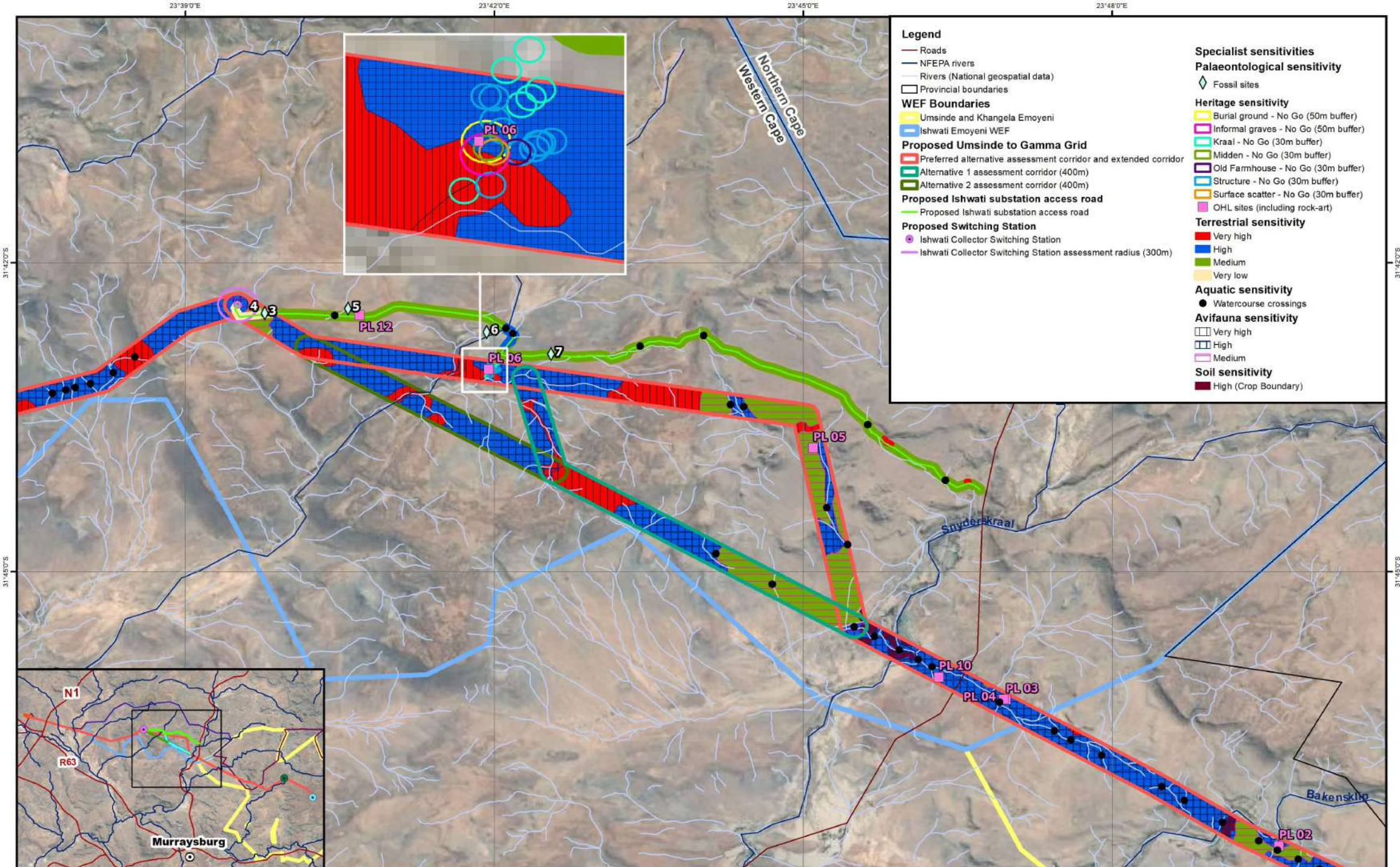
Northwest: From April to September (6 months)  
Southeast: From October to March (6 months)

Province	Municipality
Northern Cape	Ubuntu Local Municipality
Western Cape	Beaufort West Local Municipality

Coordinate System: GCS WGS 1984  
Datum: WGS 1984  
Units: Degree  
Scale: 1:73 000  
Date: September 2022







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**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Sensitivity Map: Ishwati to Khangela Grid Alternative section**

**Prevailing wind direction:**

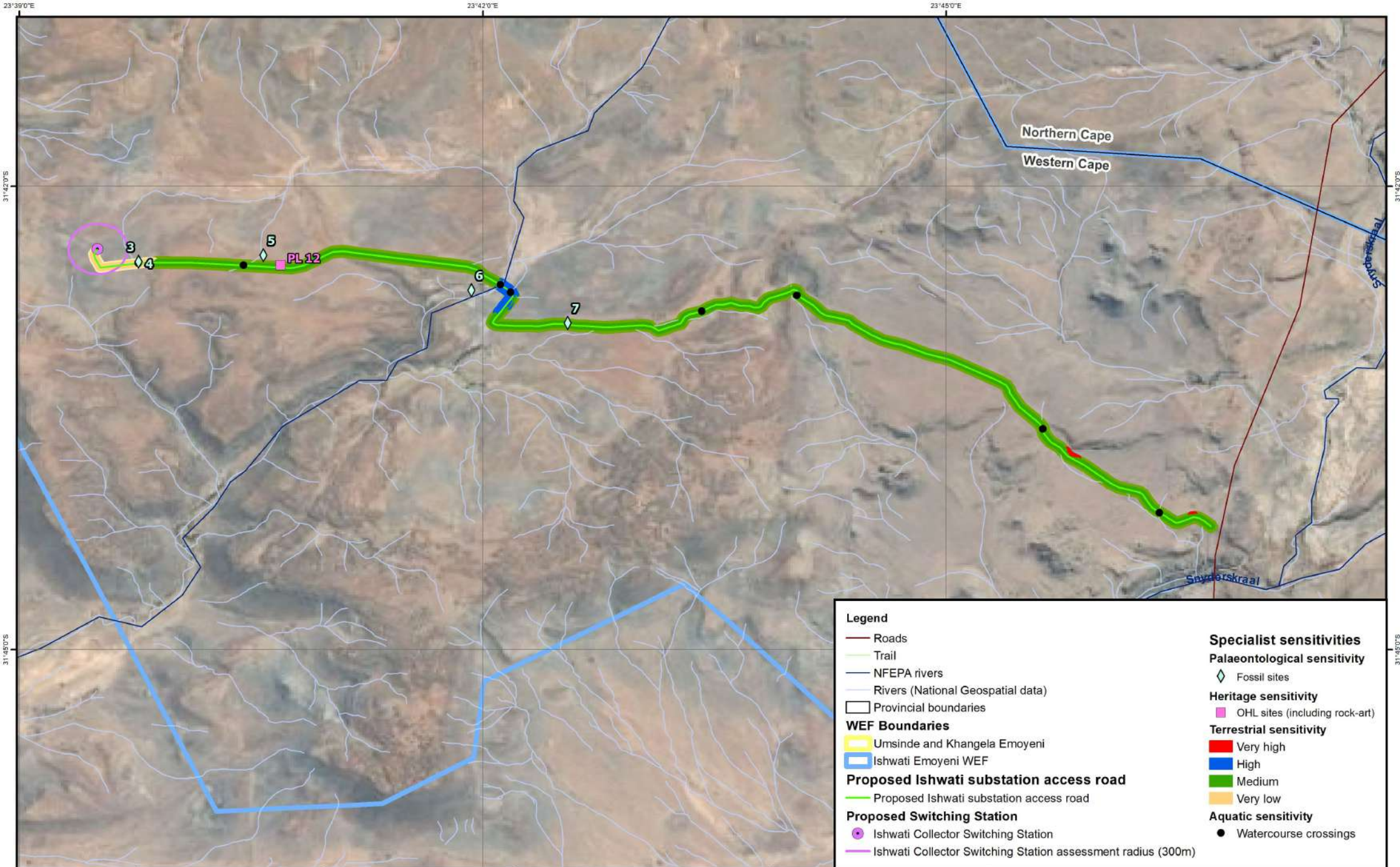
Northwest: From April to September (6 months)  
Southeast: From October to March (6 months)

Province	Municipality
Northern Cape	Ubuntu Local Municipality
Western Cape	Beaufort West Local Municipality

Coordinate System: GCS WGS 1984  
Datum: WGS 1984  
Units: Degree  
Scale: 1:60 000  
Date: September 2022







**Legend**

- Roads
- Trail
- NFEPA rivers
- Rivers (National Geospatial data)
- Provincial boundaries

**WEF Boundaries**

- Umsinde and Khangela Emoyeni
- Ishwati Emoyeni WEF

**Proposed Ishwati substation access road**

- Proposed Ishwati substation access road

**Proposed Switching Station**

- Ishwati Collector Switching Station
- Ishwati Collector Switching Station assessment radius (300m)

**Specialist sensitivities**

**Palaeontological sensitivity**

- Fossil sites

**Heritage sensitivity**

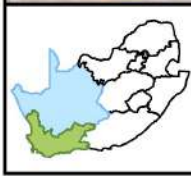
- OHL sites (including rock-art)

**Terrestrial sensitivity**

- Very high
- High
- Medium
- Very low

**Aquatic sensitivity**

- Watercourse crossings



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**ENVIRONMENTAL IMPACT ASSESSMENT**

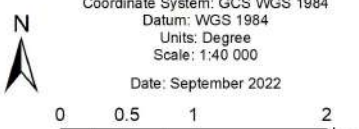
Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Sensitivity Map: Proposed Ishwati access road**

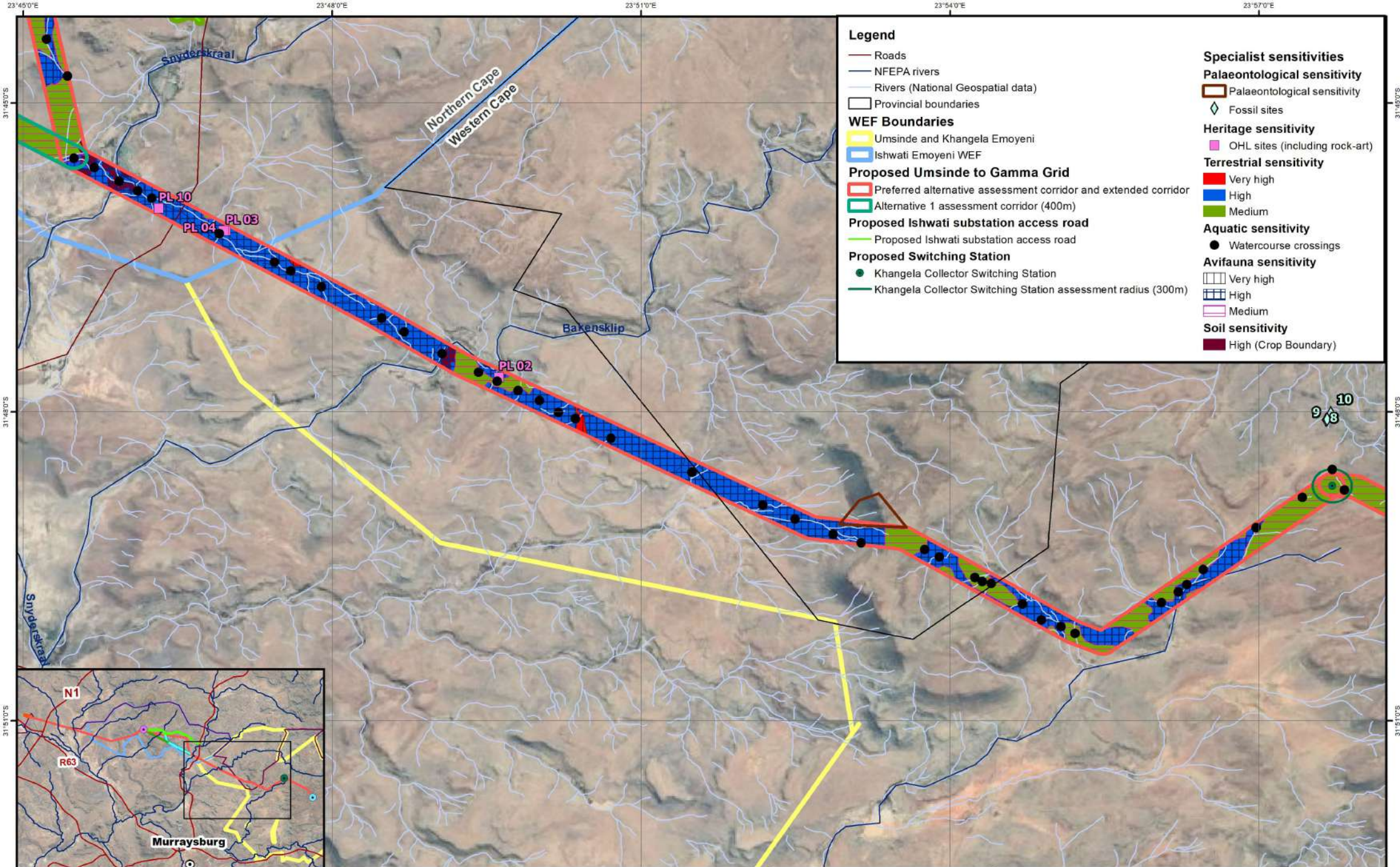
Prevailing wind direction:  
Northwest: From April to September (6 months)  
Southeast: From October to March (6 months)

Province	Municipality
Northern Cape	Ubuntu Local Municipality
Western Cape	Beaufort West Local Municipality

Coordinate System: GCS WGS 1984  
Datum: WGS 1984  
Units: Degree  
Scale: 1:40 000  
Date: September 2022





**Legend**

- Roads
- NFEPA rivers
- Rivers (National Geospatial data)
- Provincial boundaries

**WEF Boundaries**

- Umsinde and Khangela Emoyeni
- Ishwati Emoyeni WEF

**Proposed Umsinde to Gamma Grid**

- Preferred alternative assessment corridor and extended corridor
- Alternative 1 assessment corridor (400m)

**Proposed Ishwati substation access road**

- Proposed Ishwati substation access road

**Proposed Switching Station**

- Khangela Collector Switching Station
- Khangela Collector Switching Station assessment radius (300m)

**Specialist sensitivities**

**Palaeontological sensitivity**

- Palaeontological sensitivity
- Fossil sites

**Heritage sensitivity**

- OHL sites (including rock-art)

**Terrestrial sensitivity**

- Very high
- High
- Medium

**Aquatic sensitivity**

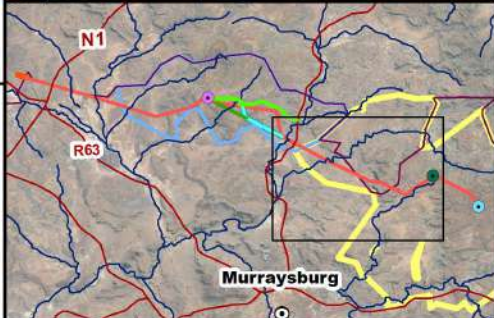
- Watercourse crossings

**Avifauna sensitivity**

- Very high
- High
- Medium

**Soil sensitivity**

- High (Crop Boundary)



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**ENVIRONMENTAL IMPACT ASSESSMENT**

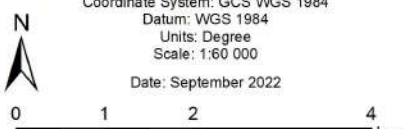
Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Sensitivity Map: Ishwati to Khangela Grid section**

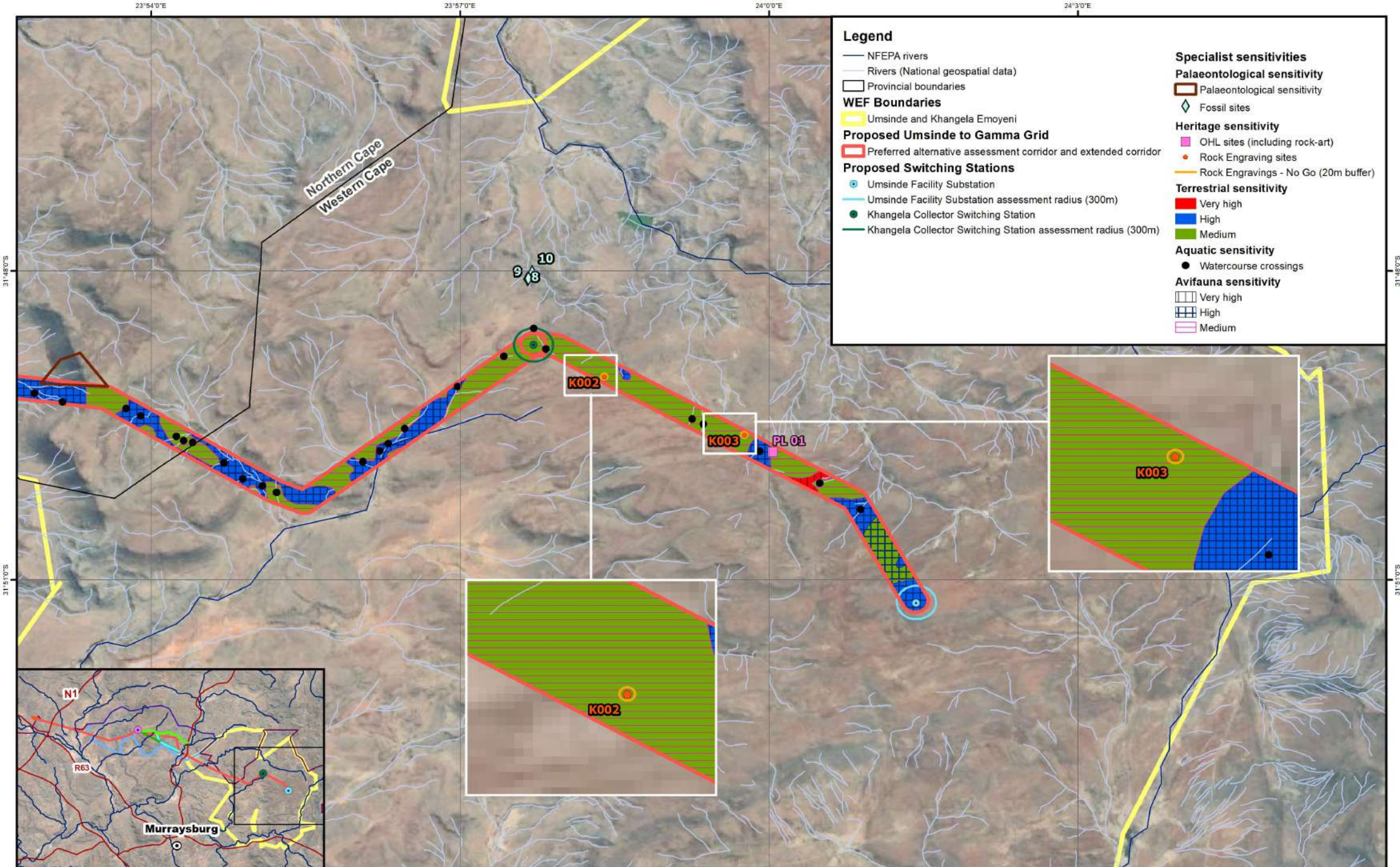
Prevailing wind direction:  
Northwest: From April to September (6 months)  
Southeast: From October to March (6 months)

Province	Municipality
Northern Cape	Ubuntu Local Municipality
Western Cape	Beaufort West Local Municipality

Coordinate System: GCS WGS 1984  
Datum: WGS 1984  
Units: Degree  
Scale: 1:60 000  
Date: September 2022





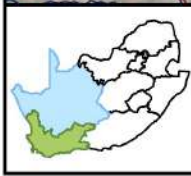
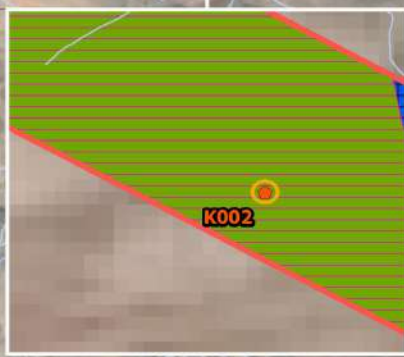
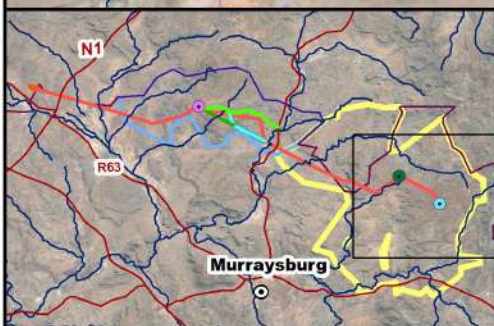



**Legend**

- NFEPA rivers
- Rivers (National geospatial data)
- Provincial boundaries
- WEF Boundaries**
- Umsinde and Khangela Emoyeni
- Proposed Umsinde to Gamma Grid**
- Preferred alternative assessment corridor and extended corridor
- Proposed Switching Stations**
- Umsinde Facility Substation
- Umsinde Facility Substation assessment radius (300m)
- Khangela Collector Switching Station
- Khangela Collector Switching Station assessment radius (300m)

**Specialist sensitivities**

- Palaeontological sensitivity**
- Palaeontological sensitivity
- Fossil sites
- Heritage sensitivity**
- OHL sites (including rock-art)
- Rock Engraving sites
- Rock Engravings - No Go (20m buffer)
- Terrestrial sensitivity**
- Very high
- High
- Medium
- Aquatic sensitivity**
- Watercourse crossings
- Avifauna sensitivity**
- Very high
- High
- Medium



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**ENVIRONMENTAL IMPACT ASSESSMENT**

Proposed Ishwati, Khangela and Umsinde Powerline routes, access tracks and associated infrastructure.

**Sensitivity Map: Khangela to Umsinde Grid section**

**Prevailing wind direction:**

Northwest: From April to September (6 months)  
Southeast: From October to March (6 months)

Province	Municipality
Northern Cape	Ubuntu Local Municipality
Western Cape	Beaufort West Local Municipality

Coordinate System: GCS WGS 1984  
Datum: WGS 1984  
Units: Degree  
Scale: 1:60 000  
Date: September 2022

