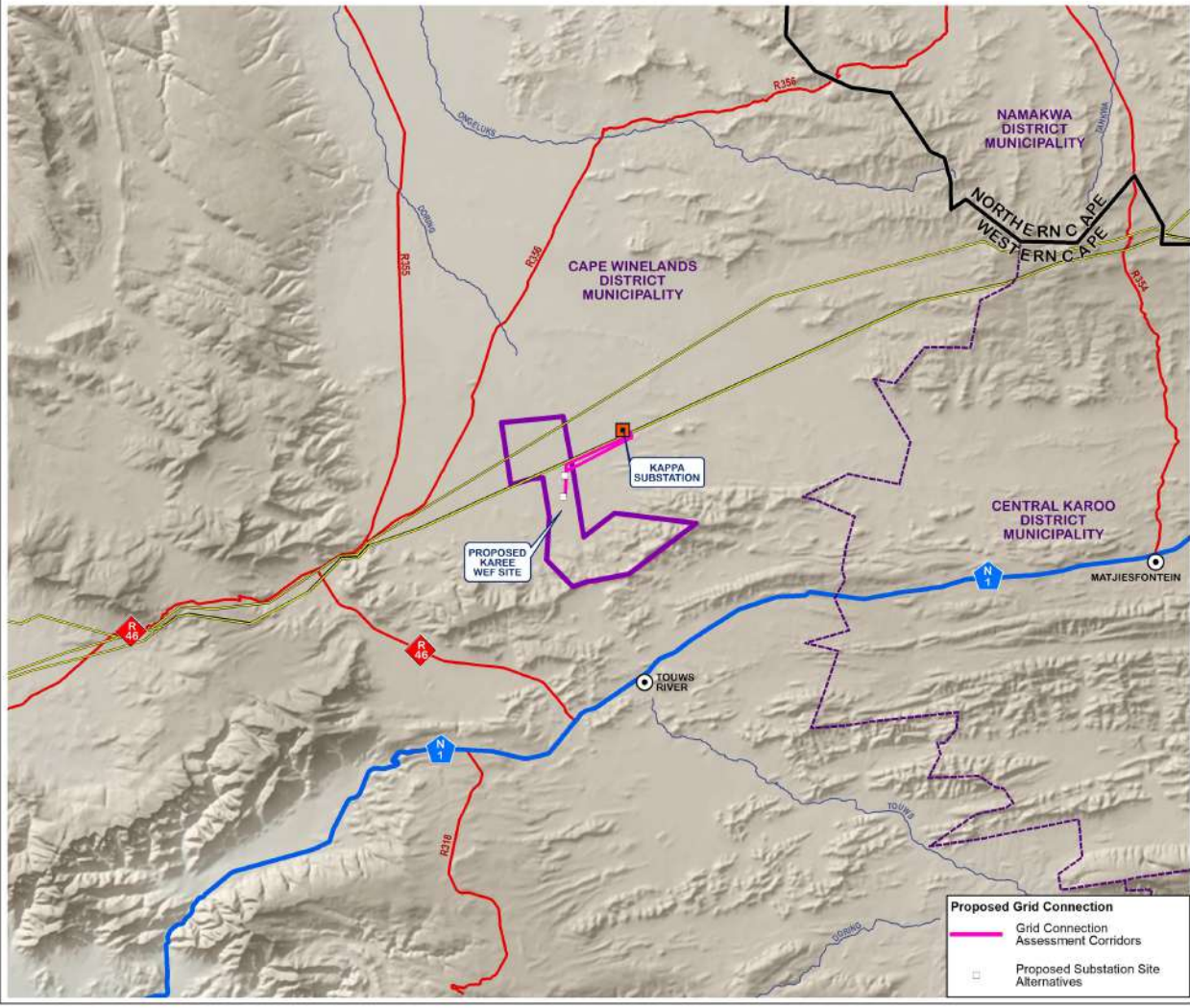


PROPOSED GRID CONNECTION FOR KAREE WIND ENERGY FACILITY
NEAR TOUWS RIVER, WESTERN CAPE PROVINCE
REGIONAL CONTEXT

- Legend**
- ⊙ Main Towns
 - Provincial Boundaries
 - - - District Municipal Boundaries
 - National Route
 - Main Arterial Routes
 - Main Rivers
 - Existing High Voltage Power Lines (>=400kV)
 - Kappa Substation
 - ▭ Karee WEF Application Site



SIVEST
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Project No 16168	Prepared By KLS	Date 26/03/2021
Map Ref No 16168-KAG_01	Revision 0	Date

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Proposed Grid Connection


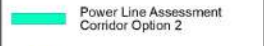
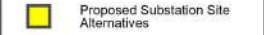
- Grid Connection Assessment Corridors
- ▭ Proposed Substation Site Alternatives

**PROPOSED
GRID CONNECTION FOR
KAREE WIND ENERGY
FACILITY
NEAR TOUWS RIVER,
WESTERN CAPE PROVINCE
PROPOSED ROUTE ALIGNMENT**

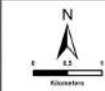
Legend

-  Secondary Roads
-  Rivers
-  Existing High Voltage Power Lines (>=400kV)
-  Existing Substation
-  Protected Areas
-  Farm Portions
-  Karee WEF Application Site

Proposed Grid Connection

-  Power Line Assessment Corridor Option 1
-  Power Line Assessment Corridor Option 2
-  Proposed Substation Site Alternatives

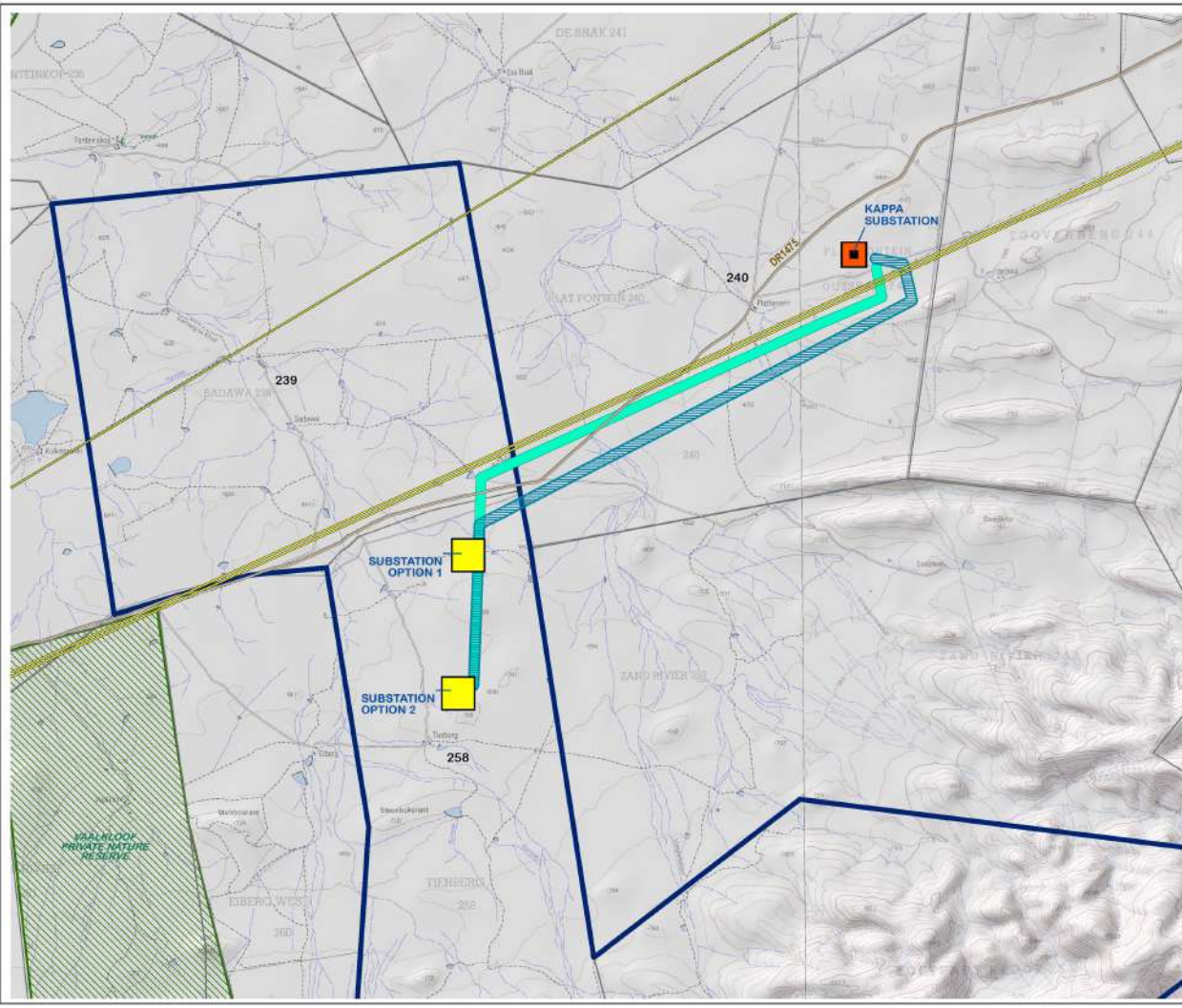
SOURCE: SIBOMA 2012, RGA 2014



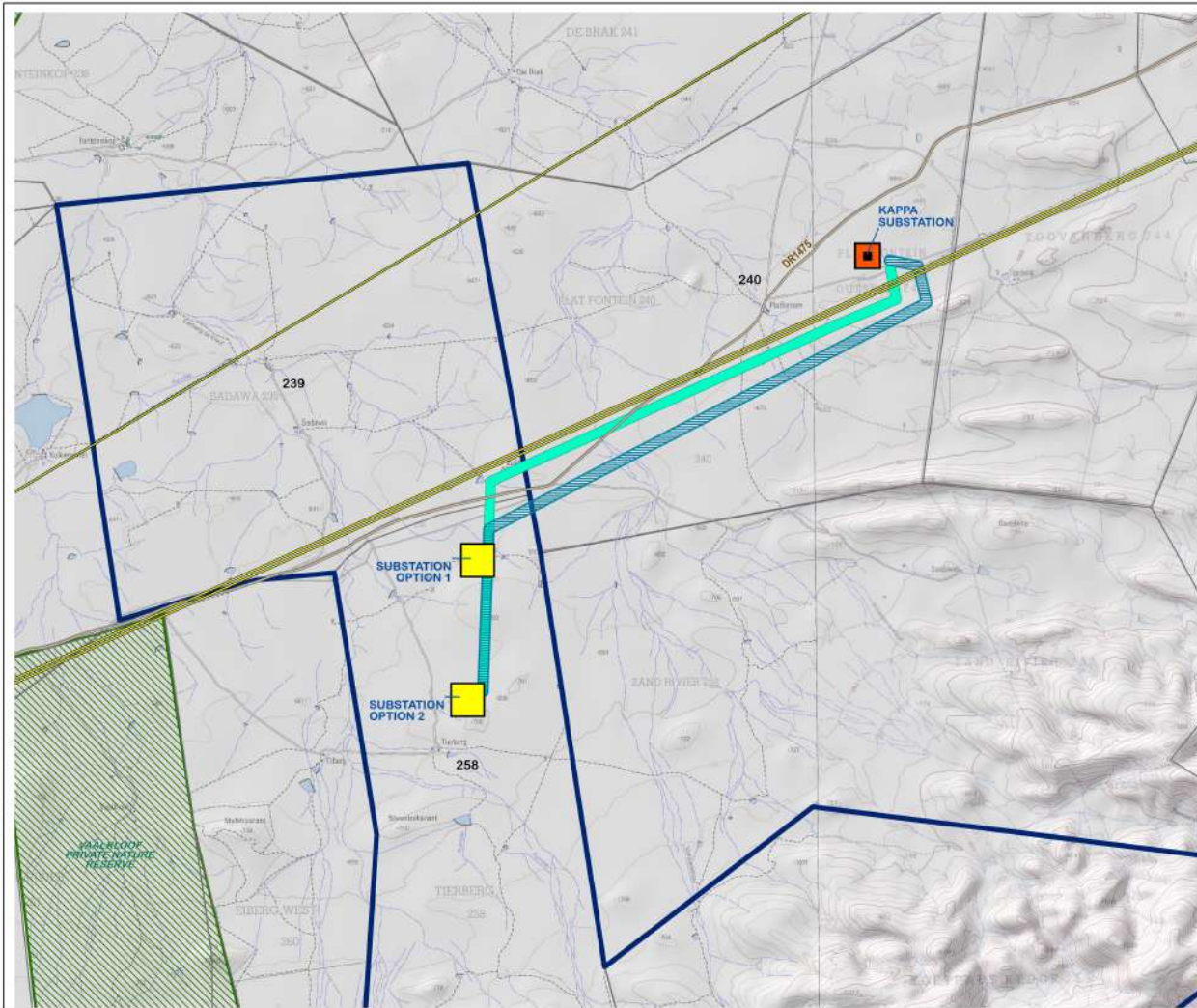
Project No 16168	Prepared By KLS	Date 07/06/2021
Map Ref No 16168-KAG_02	Revision 0	Date

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PROPOSED GRID CONNECTION FOR KAREE WIND ENERGY FACILITY
NEAR TOUWS RIVER, WESTERN CAPE PROVINCE
PROPOSED ROUTE ALIGNMENT



- Legend**
- Secondary Roads
 - Rivers
 - Existing High Voltage Power Lines (>=400KV)
 - Existing Substation
 - Protected Areas
 - Farm Portions
 - Karee WEF Application Site
- Proposed Grid**
- Power Line Assessment Corridor Option 1
 - Power Line Assessment Corridor Option 2
 - Proposed Substation Site Alternatives

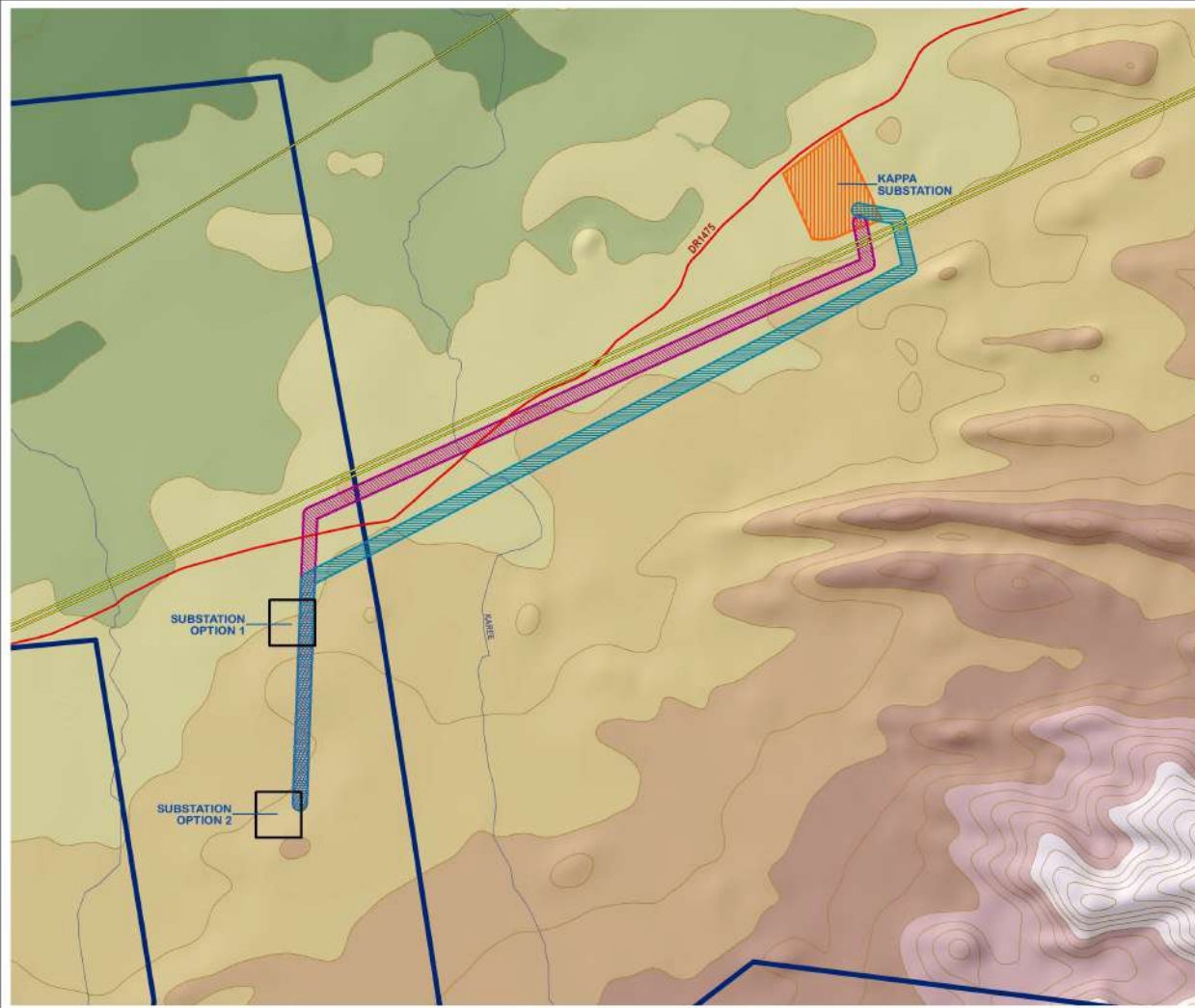
SOURCE: DEMARCATION BOARD, 2011
 ESKOM, 2012
 NGA, 2014

 0 0.5 1 Kilometers		ENVIRONMENTAL DIVISION 13 MULDERSDOOR BURGVA 1138 SOMERSETBURG SOUTH AFRICA Phone: +27 11 853 8888 Fax: +27 11 853 3755 Email: sivist@eskom.co.za
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**PROPOSED
GRID CONNECTION FOR
KAREE WIND ENERGY
FACILITY
NEAR TOUWS RIVER,
WESTERN CAPE PROVINCE
TOPOGRAPHY**



- Legend**
- Secondary Roads
 - Rivers
 - Contours (100m Interval)
 - Contours (20m Interval)
 - Existing High Voltage Power Lines (>=400kV)
 - Existing Substation
 - Karee WEF Application Site
- Proposed Grid Connection**
- Power Line Assessment Corridor Option 1
 - Power Line Assessment Corridor Option 2
 - Proposed Substation Site Alternatives
- Elevation (msl)**
- High: >900m
 - Low: <=620m

SOURCE: ESKOM, 2012
NERSA, 2011
NGI, 2014

N

0 100 200
Metres

SIVEST

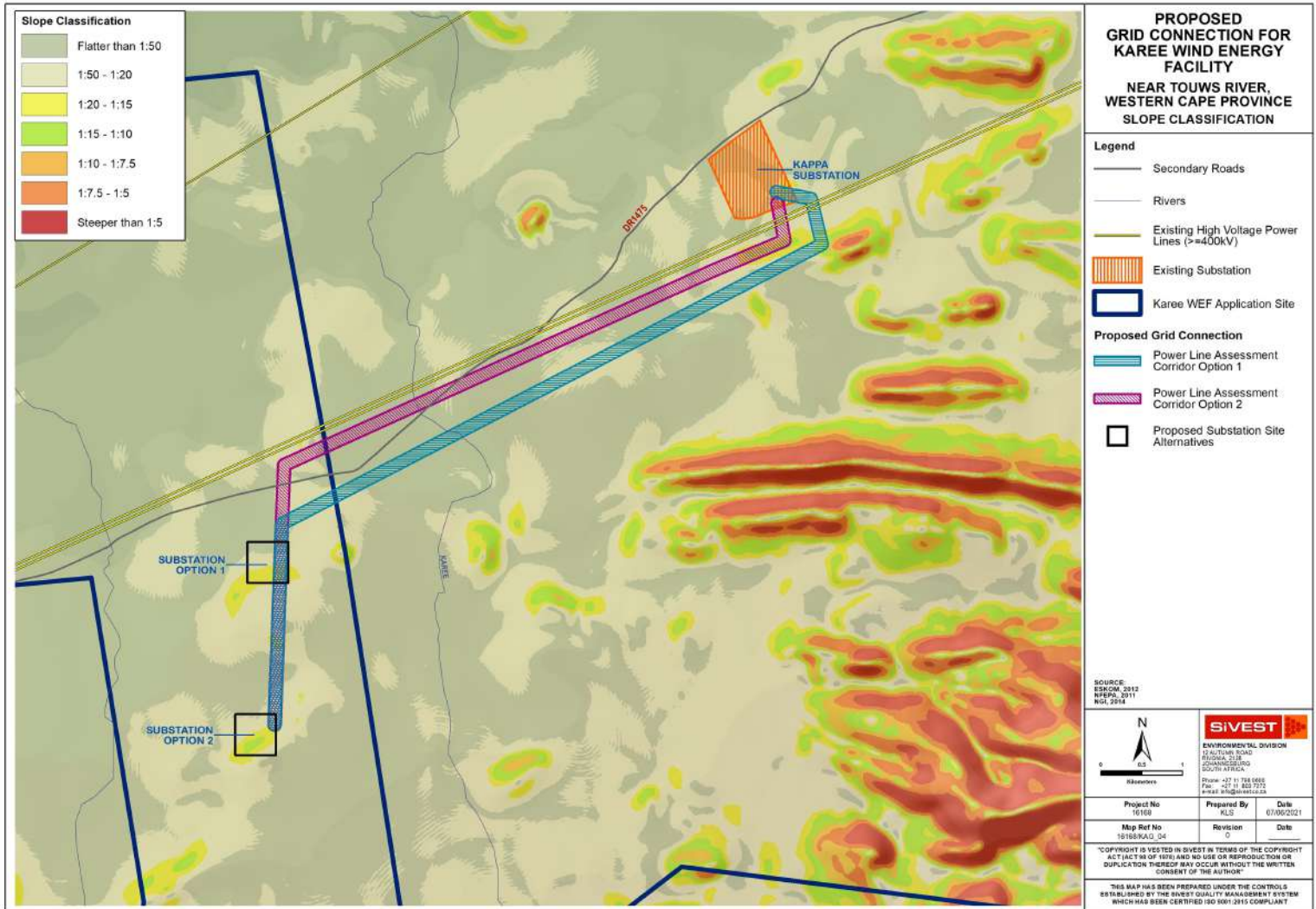
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Slope Classification

Flatter than 1:50
1:50 - 1:20
1:20 - 1:15
1:15 - 1:10
1:10 - 1:7.5
1:7.5 - 1:5
Steeper than 1:5

PROPOSED GRID CONNECTION FOR KAREE WIND ENERGY FACILITY
NEAR TOUWS RIVER, WESTERN CAPE PROVINCE
SLOPE CLASSIFICATION

- Legend**
- Secondary Roads
 - Rivers
 - Existing High Voltage Power Lines (>=400kV)
 - Existing Substation
 - Karee WEF Application Site
- Proposed Grid Connection**
- Power Line Assessment Corridor Option 1
 - Power Line Assessment Corridor Option 2
 - Proposed Substation Site Alternatives

SOURCE: ESKOM, 2012
 INFRA, 2011
 NGL, 2014

 0 100 200 Meters		ENVIRONMENTAL DIVISION 12 ALTYERS ROAD ROSMARE, CAPE TOWN WESTERN CAPE PROVINCE SOUTH AFRICA
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Map Ref No 16168-KAG_04	Revision 0	Date

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PROPOSED GRID CONNECTION FOR KAREE WIND ENERGY FACILITY
NEAR TOUWS RIVER, WESTERN CAPE PROVINCE
VEGETATION CLASSIFICATION



- Legend**
- Secondary Roads
 - Rivers
 - Existing High Voltage Power Lines (>=400kV)
 - Existing Substation
 - Karee WEF Application Site
- Proposed Grid Connection**
- Power Line Assessment Corridor Option 1
 - Power Line Assessment Corridor Option 2
 - Proposed Substation Site Alternatives
- Vegetation Classification**
- Matjiesfontein Quartzite Fynbos
 - Matjiesfontein Shale Renosterveld
 - Tanqua Karoo

SOURCE:
 ESKOM, 2012
 NEMA, 2011
 SANBI, 2018

N

Kilometers

SIVEST

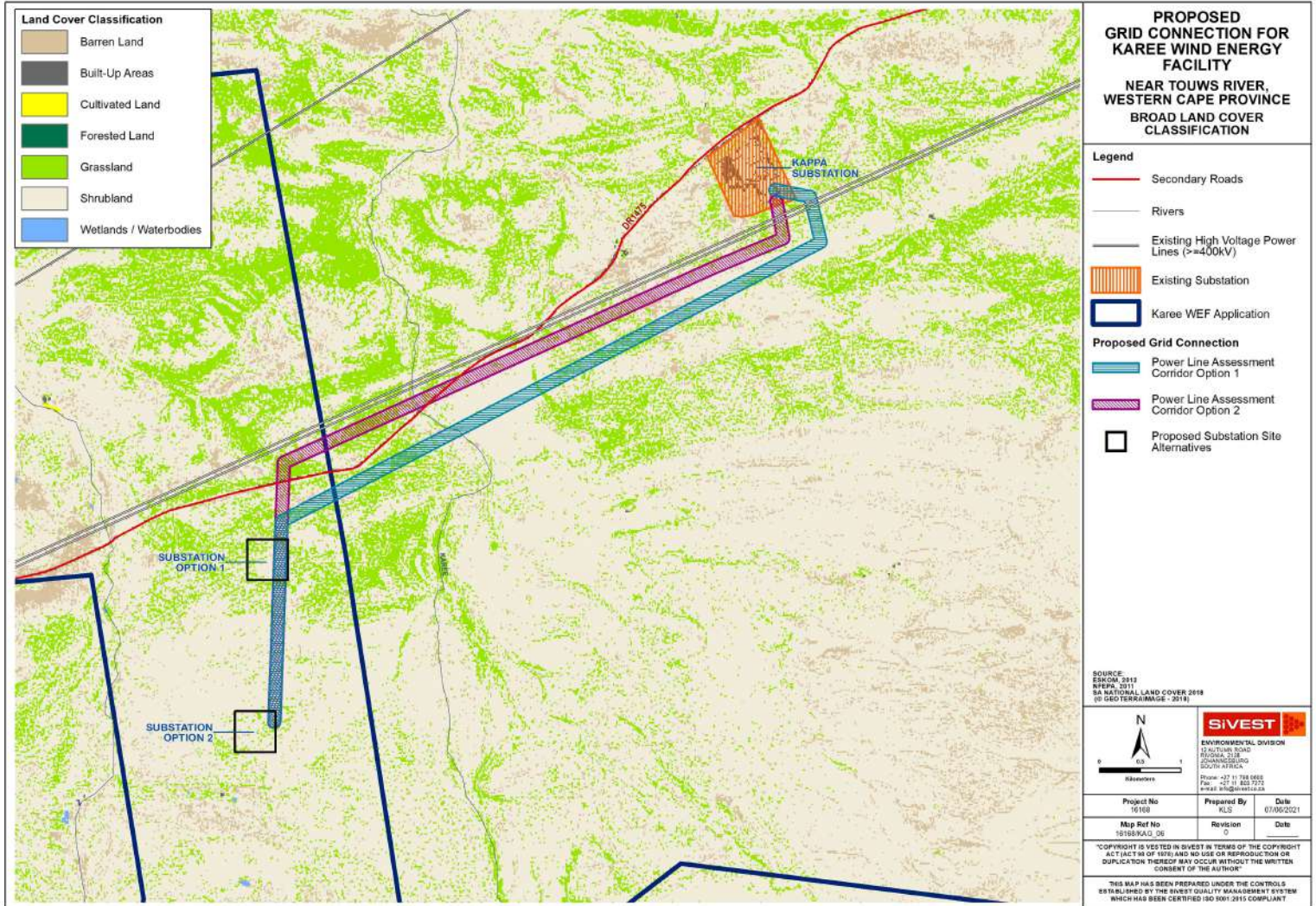
ENVIRONMENTAL DIVISION
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**PROPOSED
GRID CONNECTION FOR
KAREE WIND ENERGY
FACILITY
NEAR TOUWS RIVER,
WESTERN CAPE PROVINCE
CRITICAL BIODIVERSITY AREAS**



- Legend**
- Secondary Roads
 - Rivers
 - Existing High Voltage Power Lines (>=400kV)
 - Existing Substation
 - Karee WEF Application
- Proposed Grid Connection**
- Power Line Assessment Corridor Option 1
 - Power Line Assessment Corridor Option 2
 - Proposed Substation Site Alternatives
- CBA Classification**
- CBA 1
 - CBA 2
 - ESA 1
 - ESA 2
 - Other Natural Areas

SOURCE:
ESKOM 2012
MSEP, 2011
WESTERN CAPE BIODIVERSITY SPATIAL PLAN, 2017

N

Kilometers

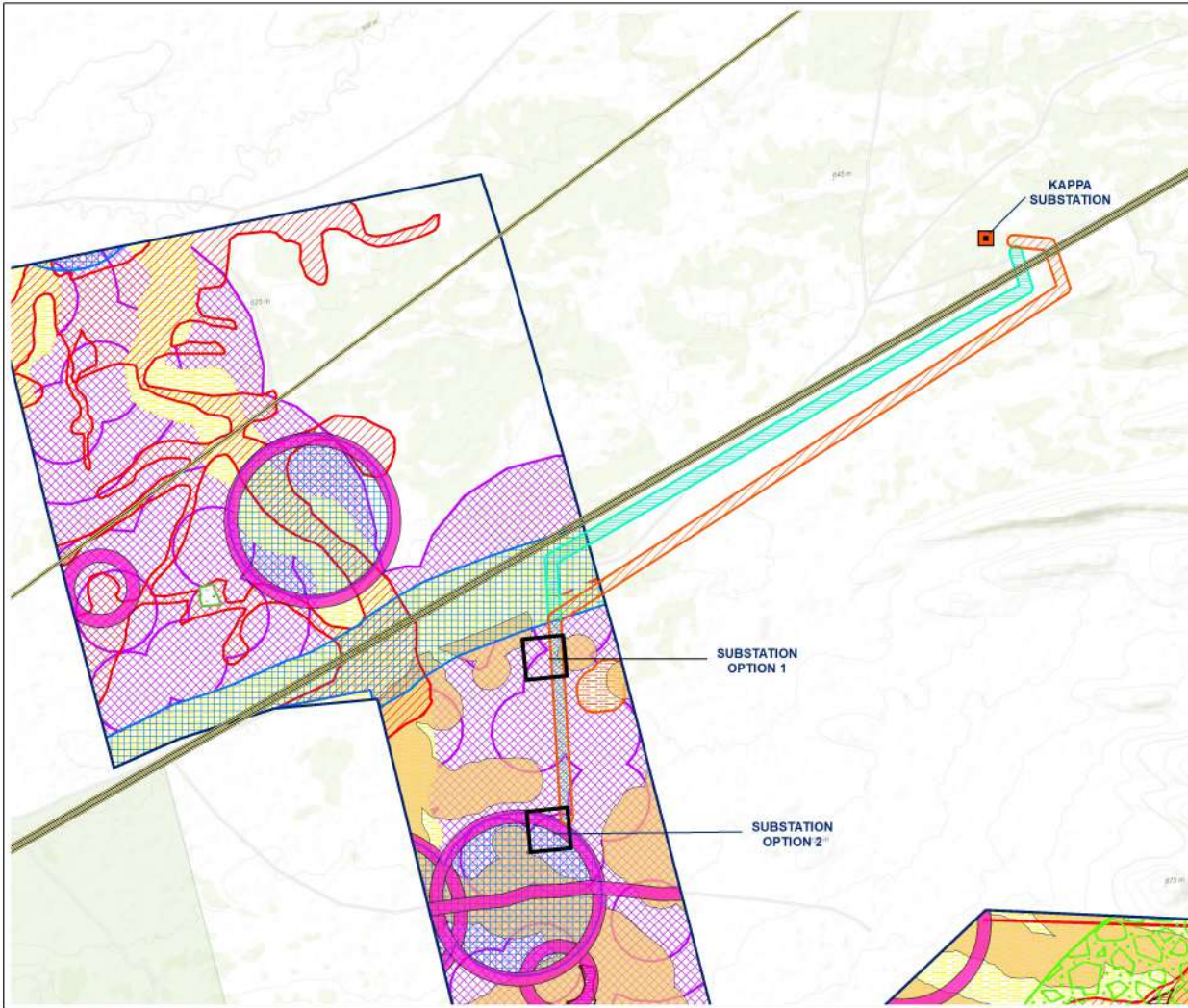
ENVIRONMENTAL DIVISION
12 ALTYERS ROAD
PO BOX 2550
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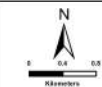
**PROPOSED
GRID CONNECTION FOR
KAREE WIND ENERGY
FACILITY**
**NEAR TOUWS RIVER,
WESTERN CAPE PROVINCE**
SENSITIVITY LAYOUT



Legend

- Existing High Voltage Power lines (>=400kV)
- Existing Substation
- Karee WEF Application
- Proposed Grid Connection**
- Powerline Assessment Corridor Option 1
- Powerline Assessment Corridor Option 2
- Proposed Substation Site Alternatives
- Environmental Sensitivities (inclusive of buffers)**
- Agricultural
- Avifaunal
- Bat (No-Go)
- Bat (High Sensitivity)
- Bat (Medium Sensitivity)
- Heritage (Archaeological & Palaeontological)
- Heritage (Cultural)
- Noise
- Terrestrial & Aquatic (No-Go)
- Visual

Source:
NGI, 2014





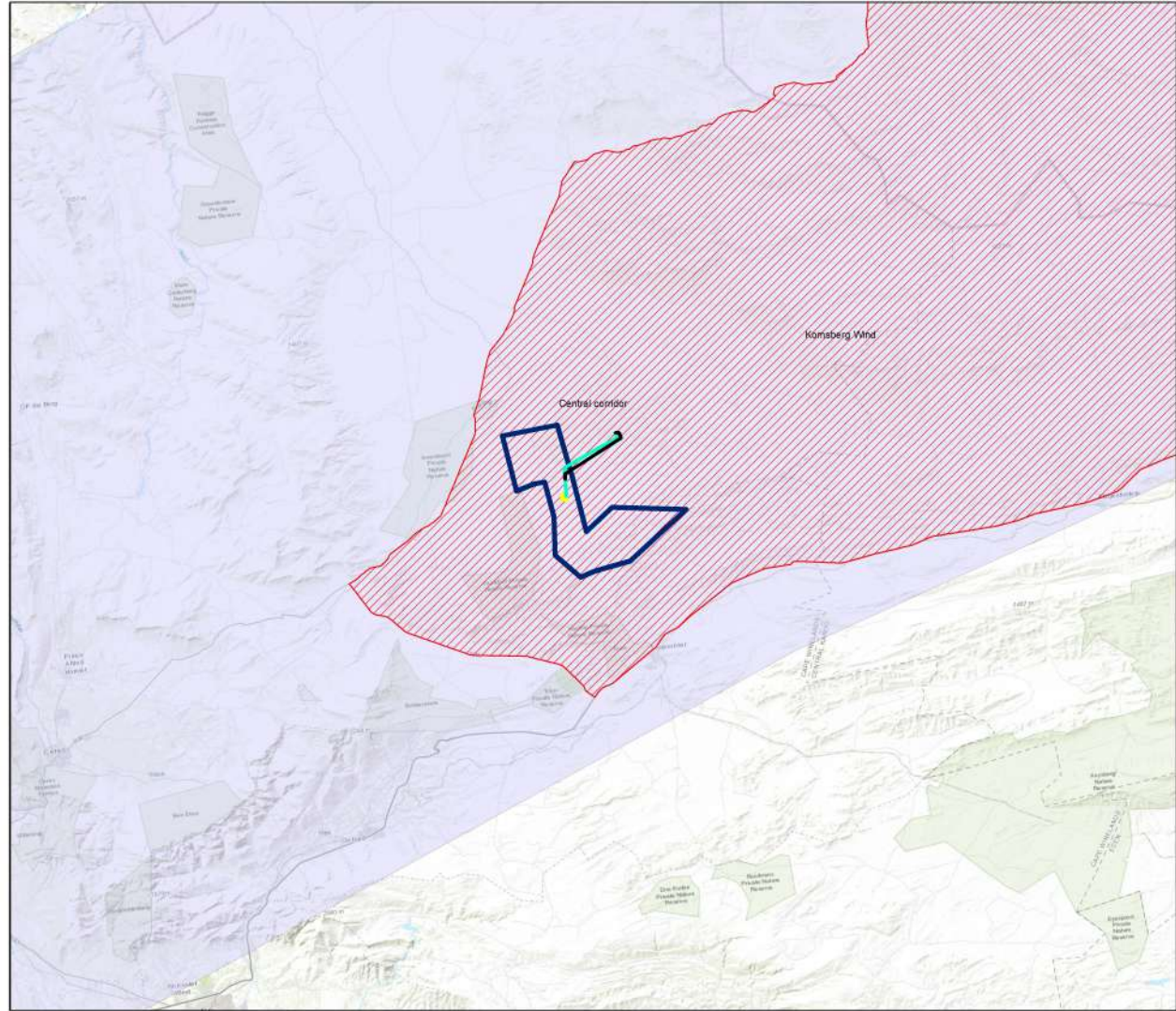
Project No 16168	Prepared By SB	Date 16/09/2022
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PROPOSED GRID CONNECTION FOR KAREE WIND ENERGY FACILITY
NEAR TOUWS RIVER, WESTERN CAPE PROVINCE
EGI & REDZ

- Legend**
-  Phase 1 REDZs
 -  Power Corridors
 -  Karee WEF Application
- Proposed Grid Connection**
-  Powerline Assessment Corridor Option 1
 -  Powerline Assessment Corridor Option 2
 -  Substations



Source:
 DFFE, 2022

		 ENVIRONMENTAL DIVISION 4 PENCARROW CRESCENT 16101, WOODBANE, WESTERN CAPE PROVINCE SOUTH AFRICA Phone: +27 21 921 1350 Fax: +27 21 921 1350 Email: info@sivest.co.za
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