

**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**

WITHIN THE
KAROO HOOGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE

SENSITIVITY LAYOUT

Legend

- Foot Paths
- Access Roads (existing)
- Klipkraal Phase 2 WEF Site

Proposed WEF Components

- Proposed Turbine Locations
- Cabling
- Internal Roads
- Switching Yard
- Offices and Buildings
- Battery Storage Area

Environmental Sensitivities (No-Go)

- Aquatic Features
- Avifaunal Sensitivity
- Bat Sensitivity
- Heritage Sensitivity
- Noise Sensitivity
- Riverine Rabbit Sensitivity
- Terrestrial Sensitivity (incl Dwarf Tortoise)

Environmental Sensitivities (minor encroachment allowed)

- Bat Medium Sensitivity
- Terrestrial High Sensitivity

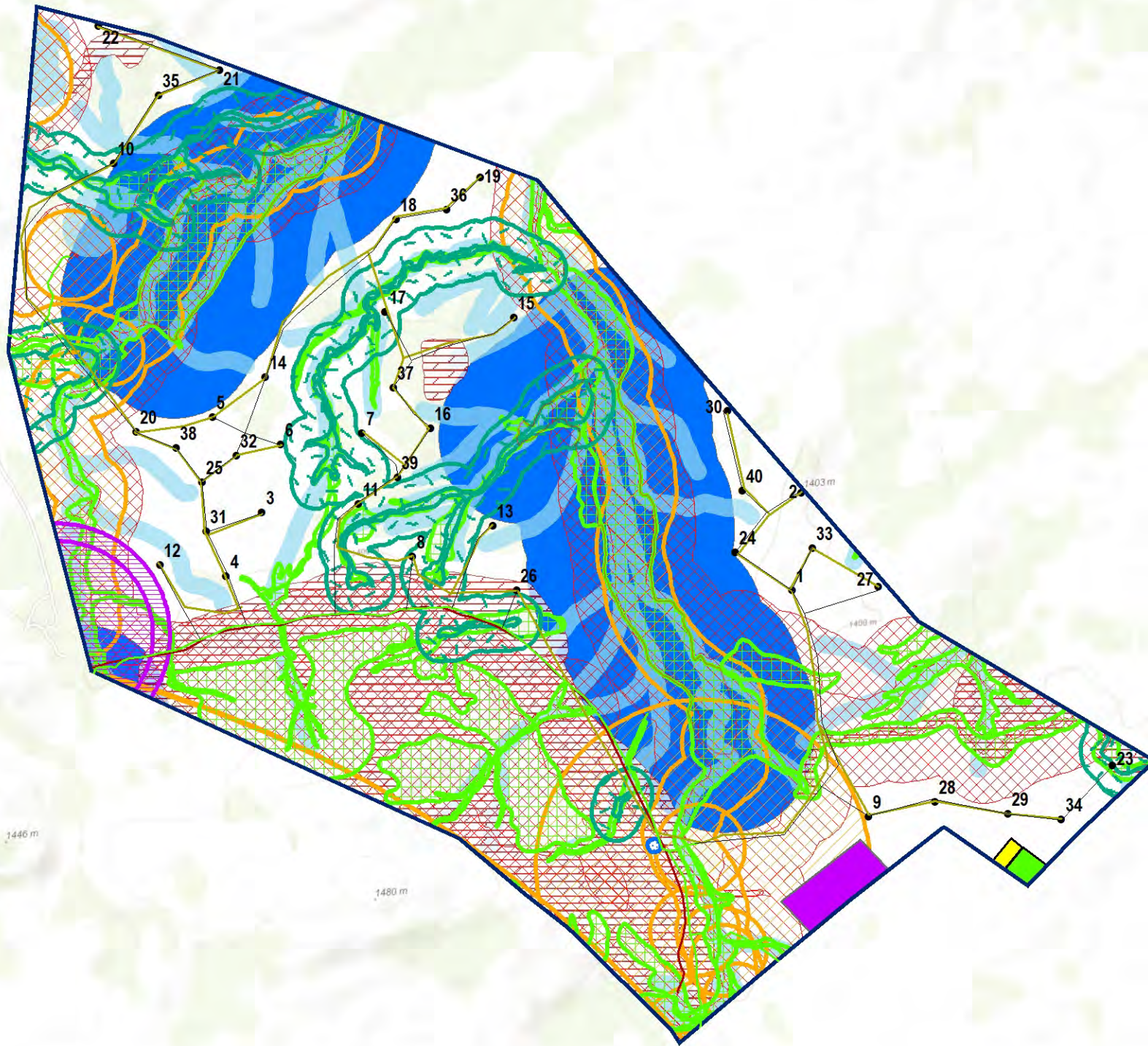
Source:
NGI, 2014

 0 0.15 0.3 Kilometers	 SiVEST ENVIRONMENTAL DIVISION 4 PENCARROW CRESCENT LA LUCIA RIDGE OFFICE ESTATE UMHLANGA ROCKS 4320 Phone: +27 31 581 1500 Fax: +27 31 581 2371 e-mail: info@sivest.co.za
------------------------------	--

Project No 16891	Prepared By SB	Date 07/02/2023
Map Ref No 16891	Revision 0	Date

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT





**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**





WITHIN THE
KAROO HOOGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE

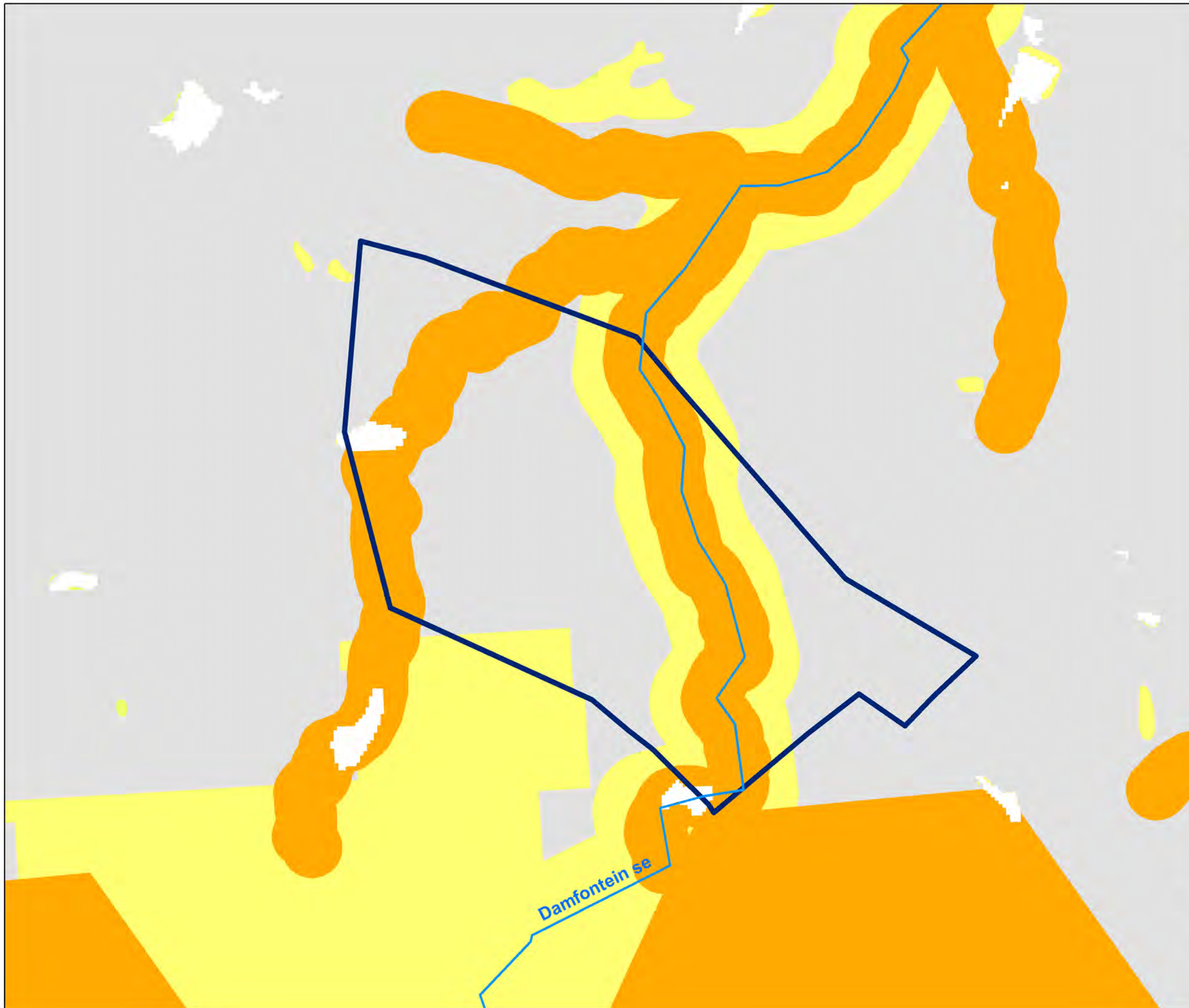
CRITICAL BIODIVERSITY AREAS

Legend

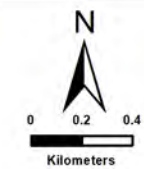
-  Rivers
-  Klipkraal Phase 2 WEF Site

CBA Classification

-  CBA 1
-  CBA 2
-  ESA
-  Other Natural Areas



Source:
NFEPA 2011
NORTHERN CAPE BIODIVERSITY SPATIAL PLAN 2017



ENVIRONMENTAL DIVISION
4 PENCARROW CRESCENT
LA LUCIA RIDGE OFFICE ESTATE
UMHLANGA ROCKS
4320

Phone: +27 31 581 1500
Fax: +27 31 581 2371
e-mail: info@sivest.co.za

Project No 16891	Prepared By SB	Date 10/08/2022
Map Ref No 16891	Revision 0	Date

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

















THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT

**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**

WITHIN THE
KAROO HOOGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE

BROAD LANDCOVER CLASSIFICATION

Legend

-  Rivers
 -  Klipkraal Phase 2 WEF Site
- Land Cover Classification**
-  Artificial Dams (including canals)
 -  Cultivated Commercial Permanent Orchards
 -  Dense Forest & Woodland
 -  Dry Pans
 -  Herbaceous Wetlands (previously mapped)
 -  Low Shrubland (Fynbos)
 -  Low Shrubland (Nama Karoo)
 -  Low Shrubland (other)
 -  Natural Grassland
 -  Open Woodland
 -  Other Bare
 -  Roads & Rails (major linear)
 -  Sparsely Wooded Grassland
 -  Village Scattered (Bare & Low Veg/ Grass combo)



Source:
NFEPA 2011
2018 SA NATIONAL LAND COVER
(© GEOTERRAIMAGE - 2018)

 	 ENVIRONMENTAL DIVISION 4 PENCARROW CRESCENT LA LUCIA RIDGE OFFICE ESTATE UMHLANGA ROCKS 4320 Phone: +27 31 581 1500 Fax: +27 31 581 2371 e-mail: info@sivest.co.za
--	---

Project No 16891	Prepared By SB	Date 10/08/2022
Map Ref No 16891	Revision 0	Date _____

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT

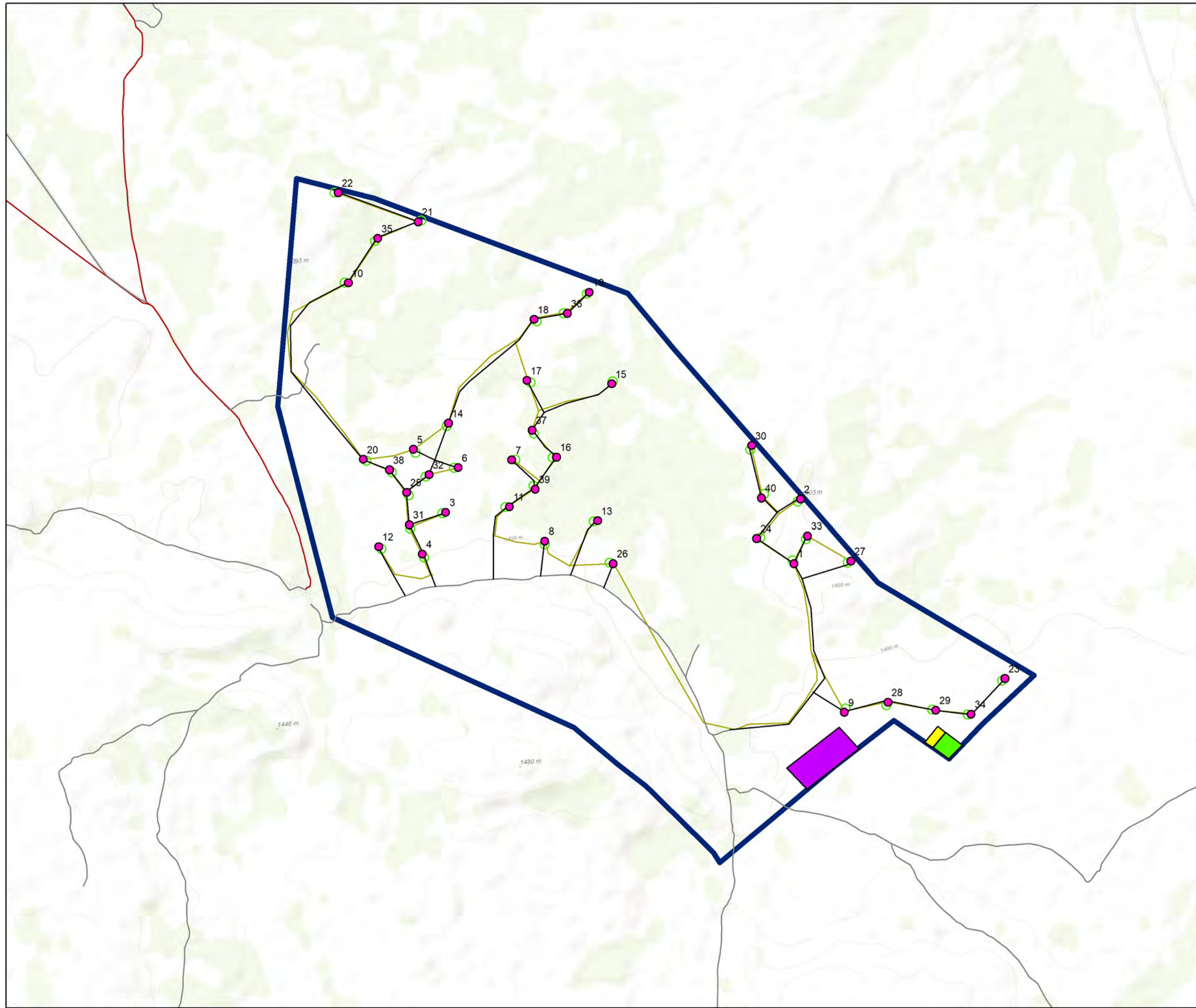
**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**

WITHIN THE
KAROO HOOGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE

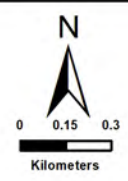
PROPOSED LAYOUT

Legend

- Foot Paths
- Access Roads (existing)
- Klipkraal Phase 2 WEF Site
- Proposed Turbine Locations
- Foundations
- Cabling
- Internal Roads
- Switching Yard
- Offices and Buildings
- Battery Storage Area



Source:
NGI, 2014



SIVEST

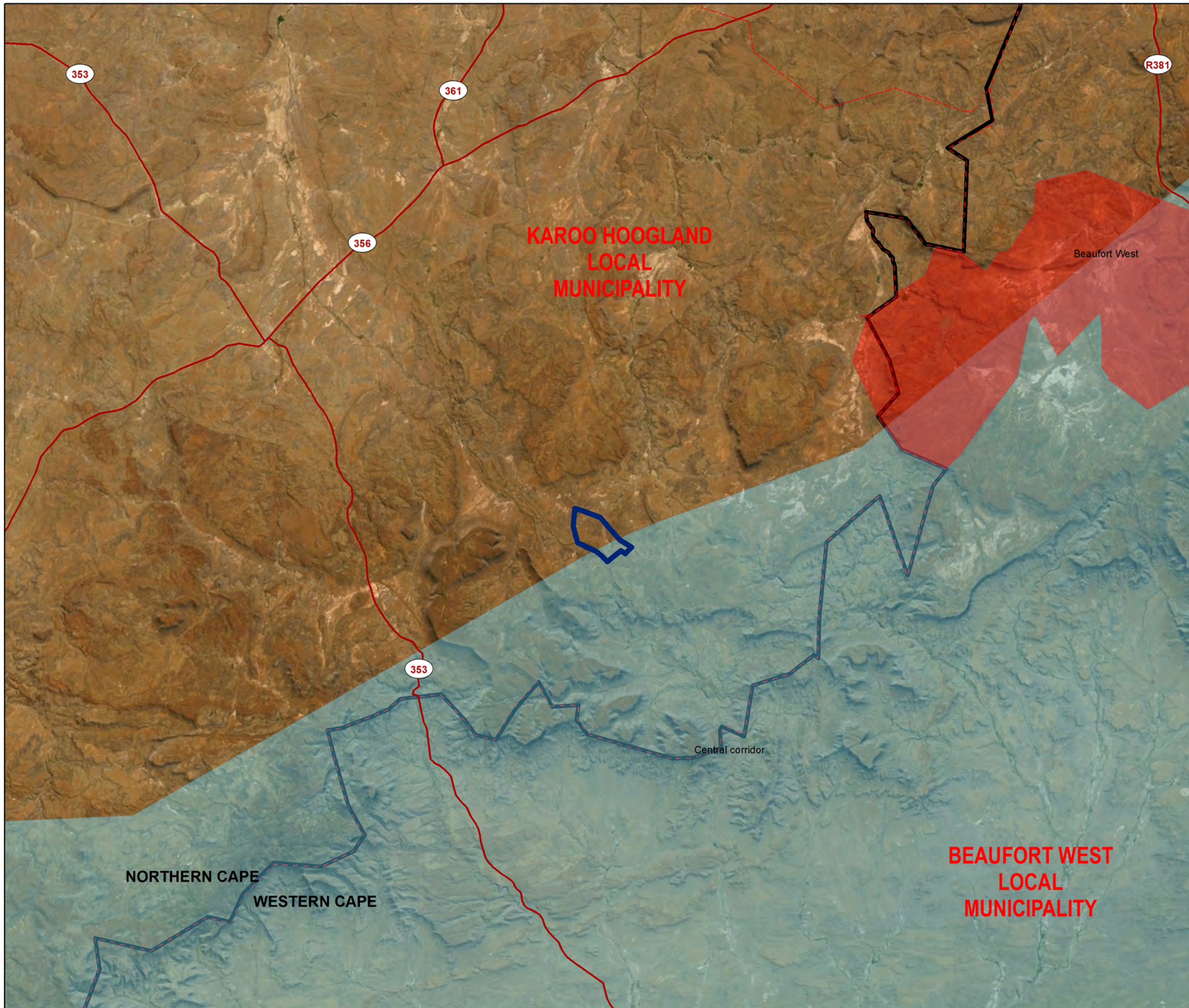
ENVIRONMENTAL DIVISION
4 PENCARROW CRESCENT
LA LUCIA RIDGE OFFICE ESTATE
UMHLANGA ROCKS
4320

Phone: +27 31 581 1500
Fax: +27 31 581 2371
e-mail: info@sivest.co.za

Project No 16891	Prepared By SB	Date 30/01/2023
Map Ref No 16891	Revision 0	Date







"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT

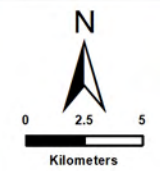


**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**
WITHIN THE
KAROO HOOGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE
**RENEWABLE ENERGY
DEVELOPMENT ZONES**

Legend

-  Main Arterial Routes
-  Local Municipal Boundaries
-  Provincial Boundary
-  Phase 2 REDZs
-  Power Corridors
-  Klipkraal Phase 2 WEF Site

Source:
NGI, 2014
MUNICIPAL DERMACATION BOARD, 2016

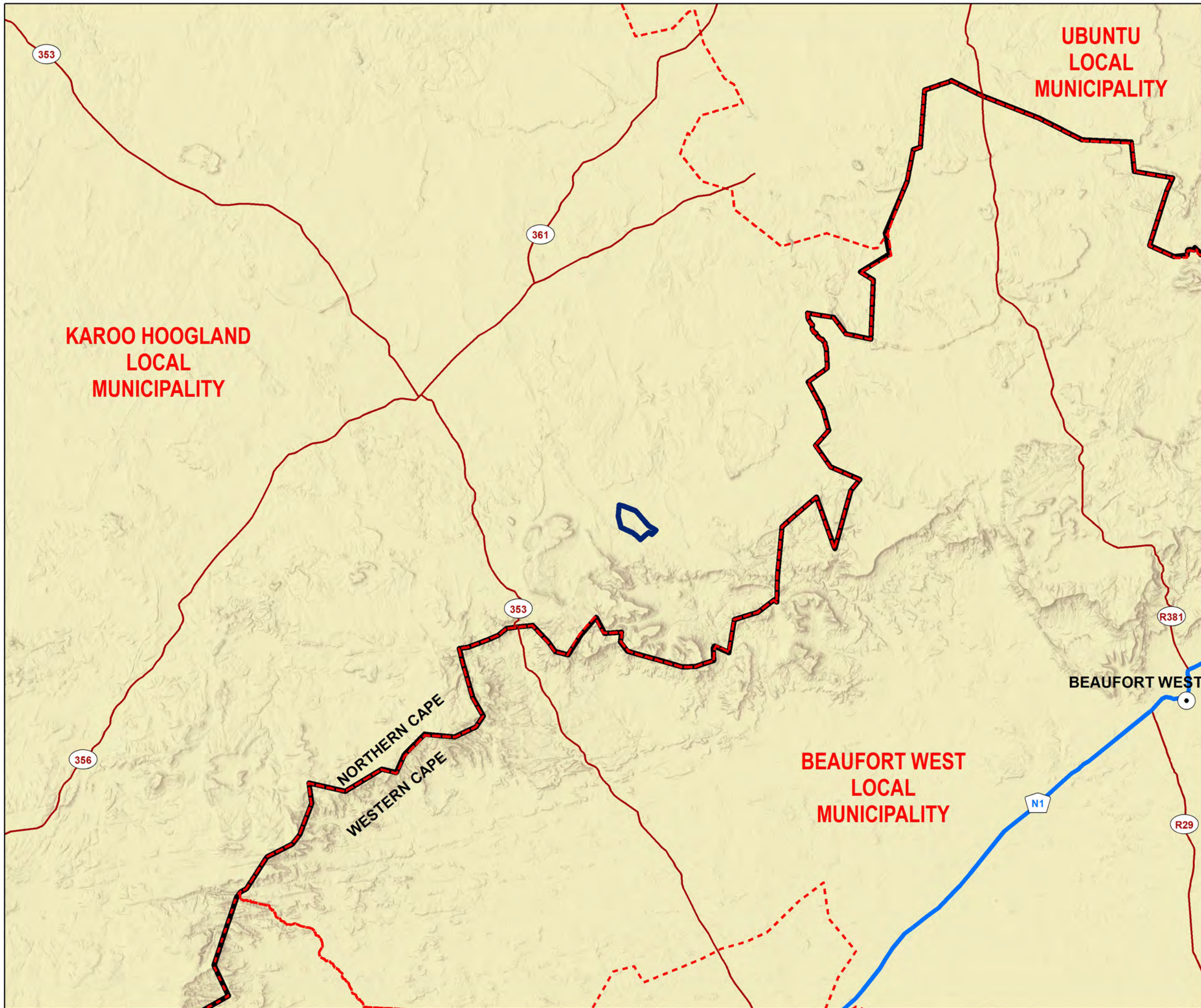


SIVEST
ENVIRONMENTAL DIVISION
4 PENCARROW CRESCENT
LA LUCIA RIDGE OFFICE ESTATE
UMHLANGA ROCKS
4320
Phone: +27 31 581 1500
Fax: +27 31 581 2371
e-mail: info@sivest.co.za

Project No 16891	Prepared By SB	Date 11/08/2022
Map Ref No 16891	Revision 0	Date _____

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT



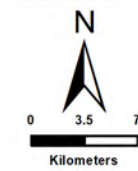
PROPOSED CONSTRUCTION OF THE KLIPKRAAL WIND ENERGY FACILITY PHASE 2
 WITHIN THE KAROO HOOGLAND LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE
REGIONAL CONTEXT

Legend

- Main Towns
- National Route
- Main Arterial Routes
- Local Municipal Boundaries
- Provincial Boundary
- Klipkraal Phase 2 WEF Site



Source:
 NGI, 2014
 MUNICIPAL DERMACATION BOARD, 2016

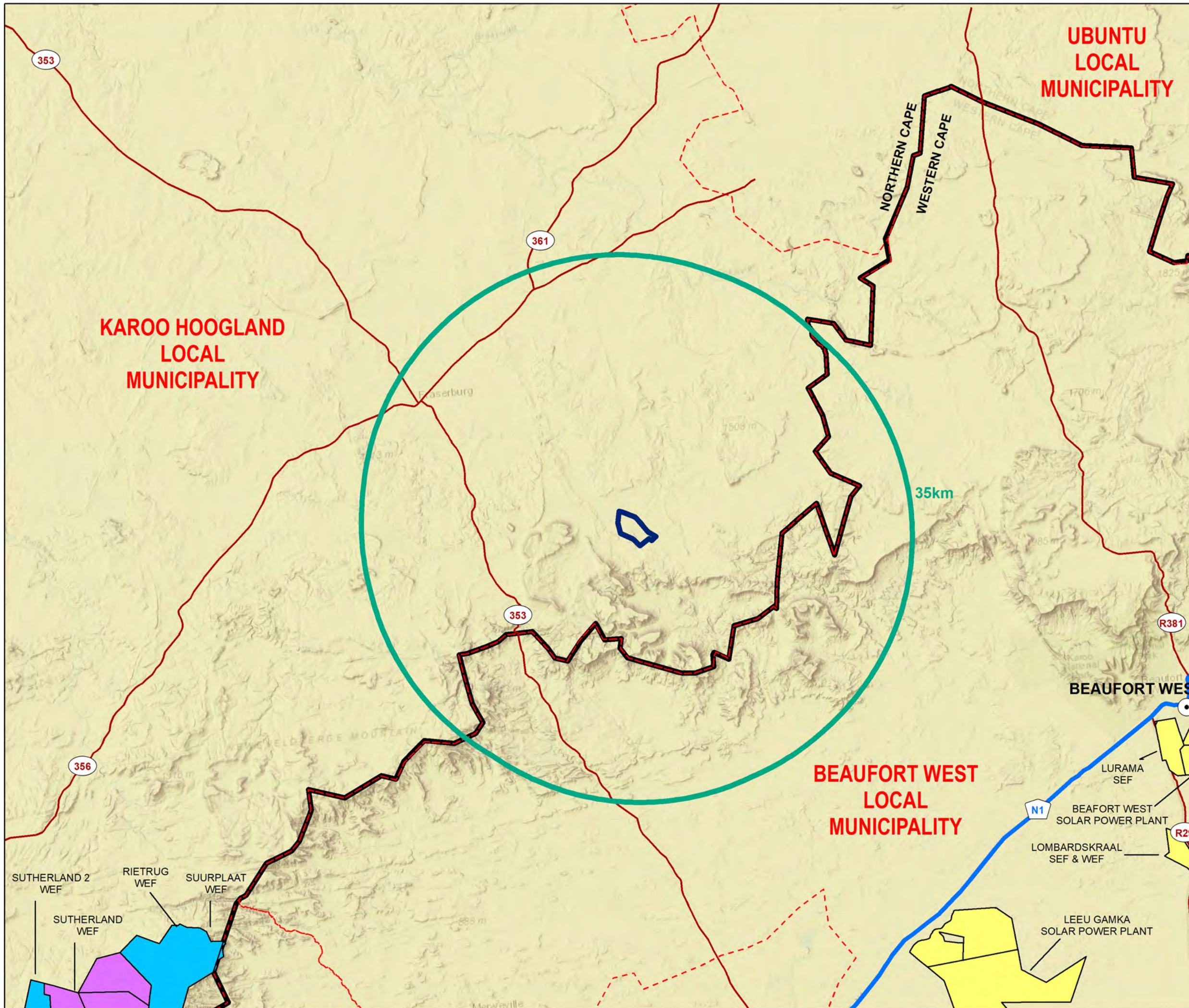


SIVEST
 ENVIRONMENTAL DIVISION
 4 PENCARROW CRESCENT
 LA LUCIA RIDGE OFFICE ESTATE
 UMHLANGA ROCKS
 4320
 Phone: +27 31 581 1500
 Fax: +27 31 581 2371
 e-mail: info@sivest.co.za

Project No 16891	Prepared By SB	Date 12/08/2022
Map Ref No 16891	Revision 0	Date

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT



PROPOSED CONSTRUCTION OF THE KLIPKRAAL WIND ENERGY FACILITY PHASE 2
 WITHIN THE KAROO HOOGLAND LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE
RENEWABLE ENERGY PROJECTS (NEW AND PROPOSED)

- Legend**
- Main Towns
 - National Route
 - Main Arterial Routes
 - Local Municipal Boundaries
 - Provincial Boundary
 - Klipkraal Phase 2 WEF Site
 - 35km Radius
- Renewable Energy Sites**
- Solar PV
 - Onshore Wind
 - No Technology

Source: NGI, 2014
 MUNICIPAL DERMACATION BOARD, 2016
 DFFE, 2020

SIVEST

ENVIRONMENTAL DIVISION
 4 PENCARROW CRESCENT
 LA LUCIA RIDGE OFFICE ESTATE
 UMHLANGA ROCKS
 4320

Phone: +27 31 581 1500
 Fax: +27 31 581 2371
 e-mail: info@sivest.co.za

Project No 16891	Prepared By SB	Date 11/08/2022
Map Ref No 16891	Revision 0	Date

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT

**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**
WITHIN THE
KAROO HOOGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE
SITE LOCALITY

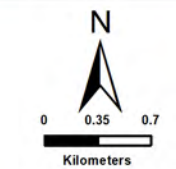
Legend

-  Local Access
-  Farm Portions
-  Klipkraal Phase 2 WEF Site

SOUTH AFRICA



Source:
NGI, 2014

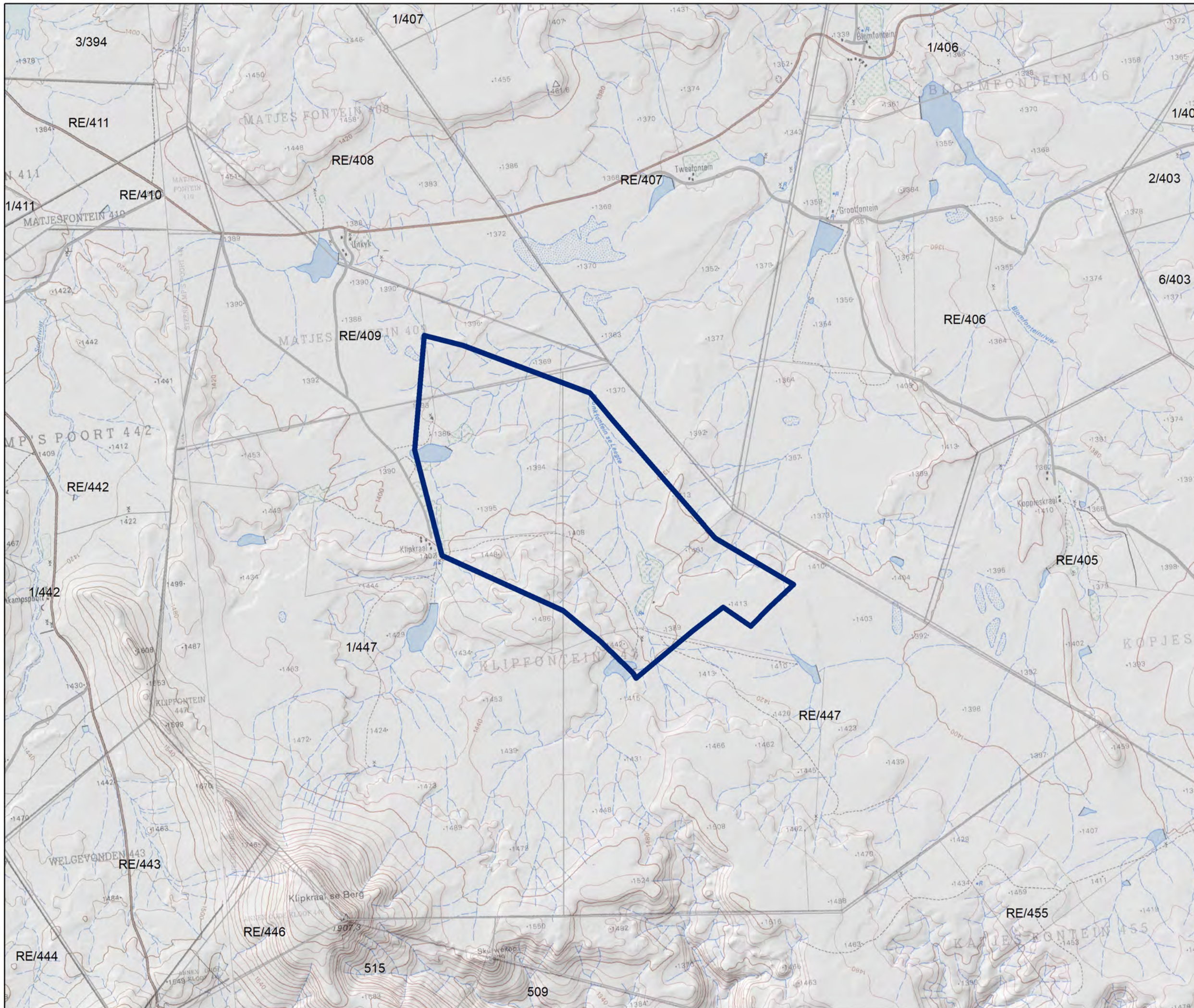


ENVIRONMENTAL DIVISION
4 PENCARROW CRESCENT
LA LUCIA RIDGE OFFICE ESTATE
UMHLANGA ROCKS
4320
Phone: +27 31 581 1500
Fax: +27 31 581 2371
e-mail: info@sivest.co.za

Project No 16891	Prepared By SB	Date 12/08/2022
Map Ref No 16891	Revision 0	Date

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT






**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**




WITHIN THE
KAROO HOOGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE

TURBINE SENSITIVITY LAYOUT

Legend

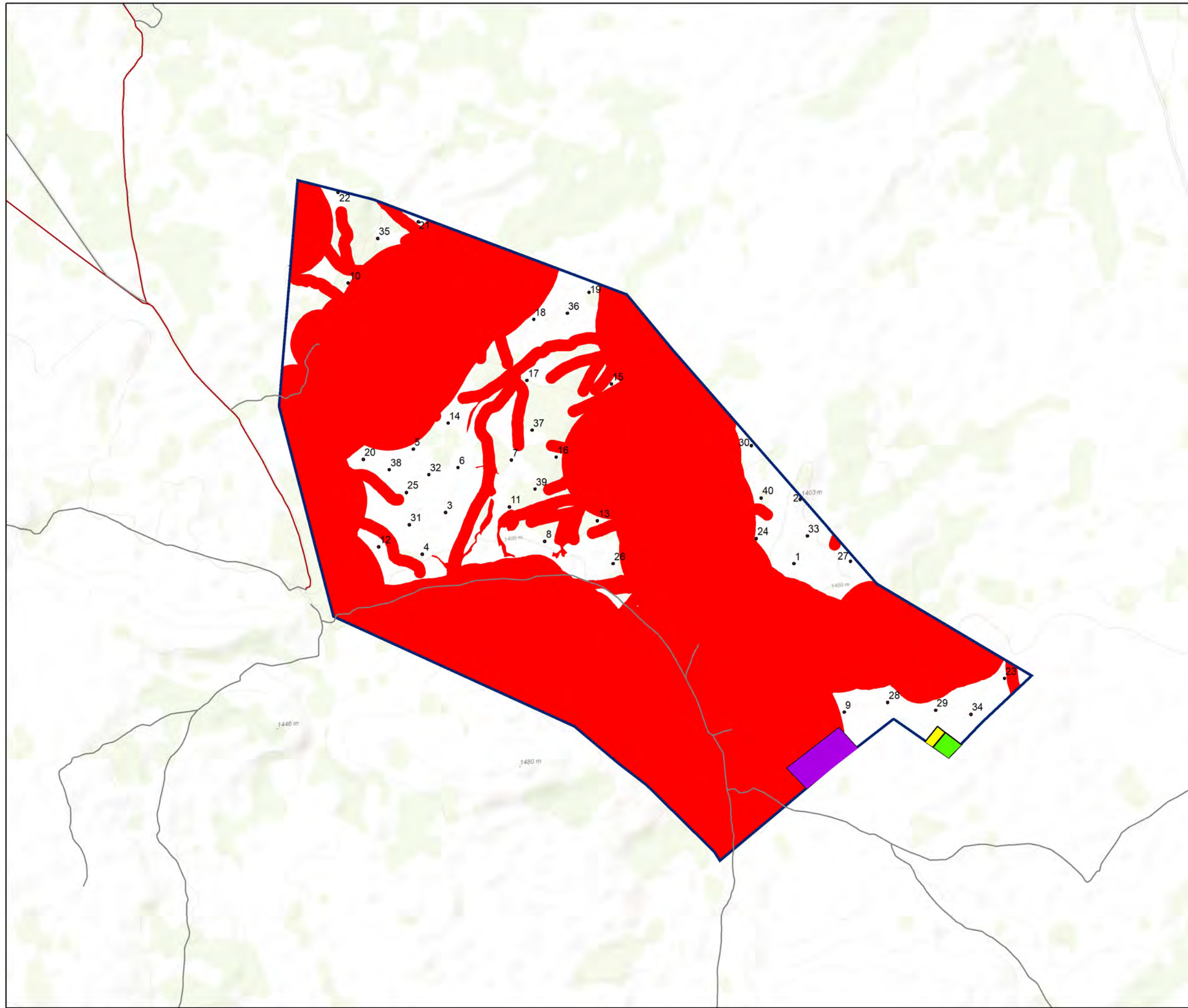
-  Foot Paths
-  Access Roads (existing)
-  Klipkraal Phase 2 WEF Site

Proposed WEF Components

- Proposed Turbine Locations
-  Switching Yard
-  Offices and Buildings
-  Battery Storage Area

Sensitivity Category

-  No-Go



Source:
NGI, 2014

 	 ENVIRONMENTAL DIVISION 4 PENCARROW CRESCENT LA LUCIA RIDGE OFFICE ESTATE UMHLANGA ROCKS 4320 Phone: +27 31 581 1500 Fax: +27 31 581 2371 e-mail: info@sivest.co.za
--	---

Project No 16891	Prepared By SB	Date 07/02/2023
Map Ref No 16891	Revision 0	Date

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"



THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT

**PROPOSED CONSTRUCTION
OF THE KLIPKRAAL
WIND ENERGY FACILITY
PHASE 2**

WITHIN THE
KAROO HOUGLAND LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE

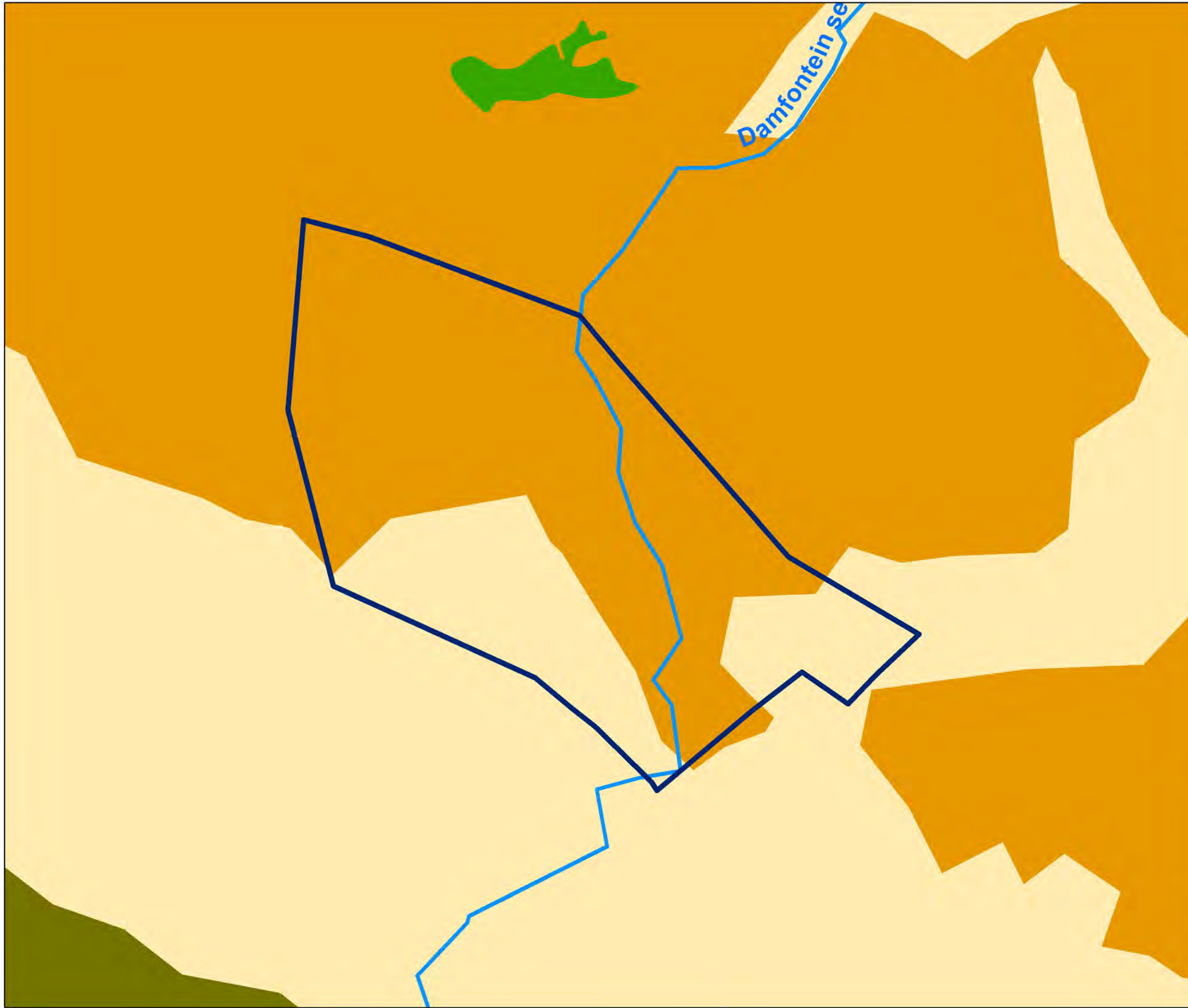
VEGETATION CLASSIFICATION

Legend

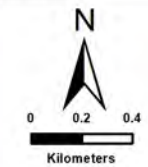
-  Rivers
-  Klipkraal Phase 2 WEF Site

Vegetation Classification

-  Bushmanland Vloere
-  Eastern Upper Karoo
-  Roggeveld Shale Renosterveld
-  Western Upper Karoo



Source:
NFEPA 2011
SANBI 2018



ENVIRONMENTAL DIVISION
4 PENCARROW CRESCENT
LA LUCIA RIDGE OFFICE ESTATE
UMHLANGA ROCKS
4320

Phone: +27 31 581 1500
Fax: +27 31 581 2371
e-mail: info@sivest.co.za

Project No 16891	Prepared By SB	Date 12/08/2022
Map Ref No 16891	Revision 0	Date _____

"COPYRIGHT IS VESTED IN SIVEST IN TERMS OF THE COPYRIGHT ACT (ACT 98 OF 1978) AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF THE AUTHOR"

THIS MAP HAS BEEN PREPARED UNDER THE CONTROLS ESTABLISHED BY THE SIVEST QUALITY MANAGEMENT SYSTEM WHICH HAS BEEN CERTIFIED ISO 9001:2015 COMPLIANT