






Engie Sannaspos Solar Project, Freestate Province.

Development area to be assessed
in the EIA phase

Legend

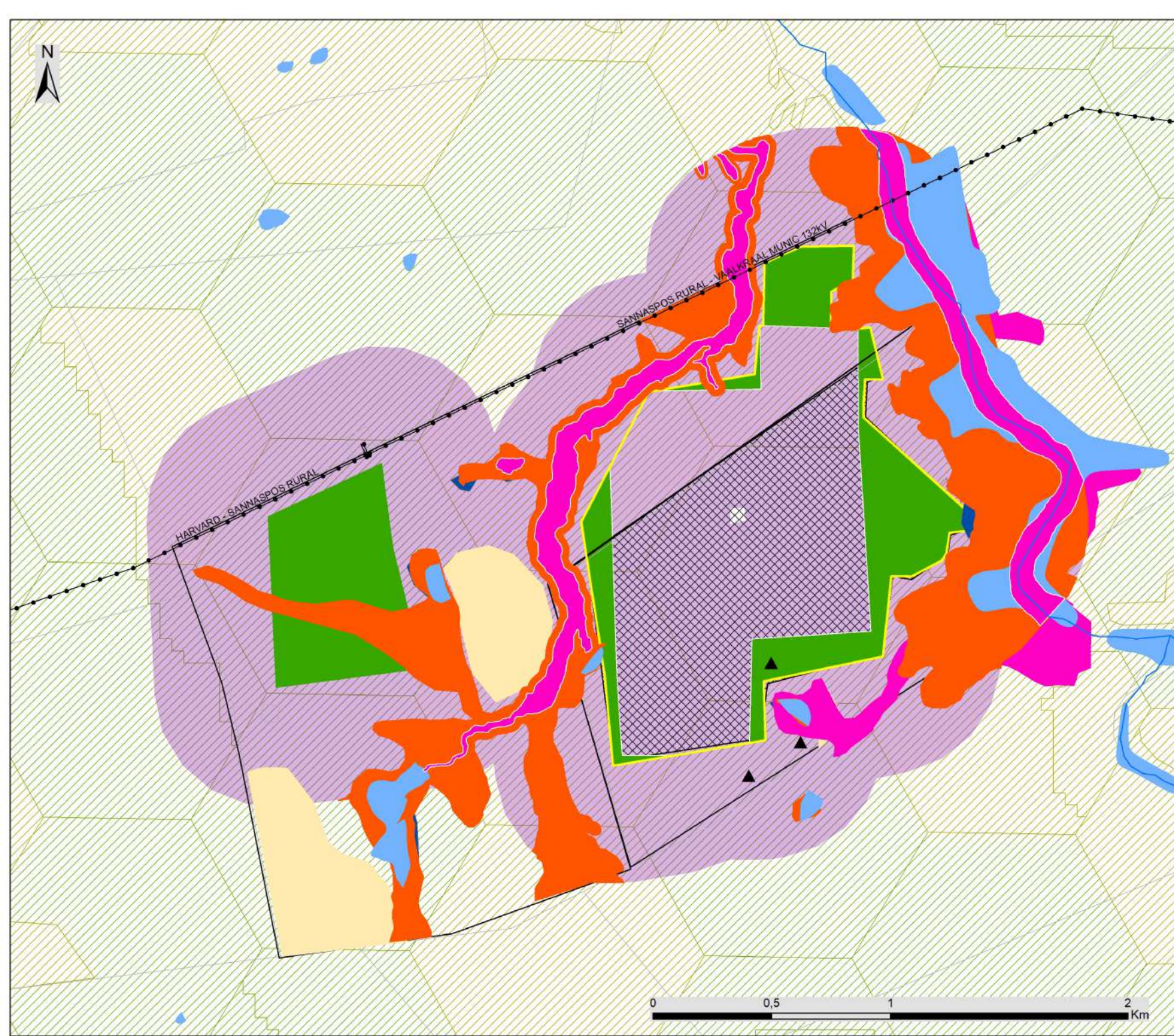
-  Rivers
-  National Route
-  Existing Power Line
-  Proposed Development Area
-  Sannaspos Authorised Area

Environmental Sensitivities

-  Cemetary and Historic Stone Shed
-  Sannaspos Farm Boundary
-  Sannaspos Solar Park
-  Dams Pans
-  Arable Farm Land
-  Medium Sensitivity Areas
-  High Sensitivity Areas (no-go areas)
-  500m Regulated Area (wetlands)
-  NFEPA_Wetlands
-  ESA1
-  ESA2

Scale: 1: 15 000
Projection: LO25
Map Reference: Engie Sannaspos development envelope

savannah
environmental



Engie Sannaspos Solar Project, Freestate Province.

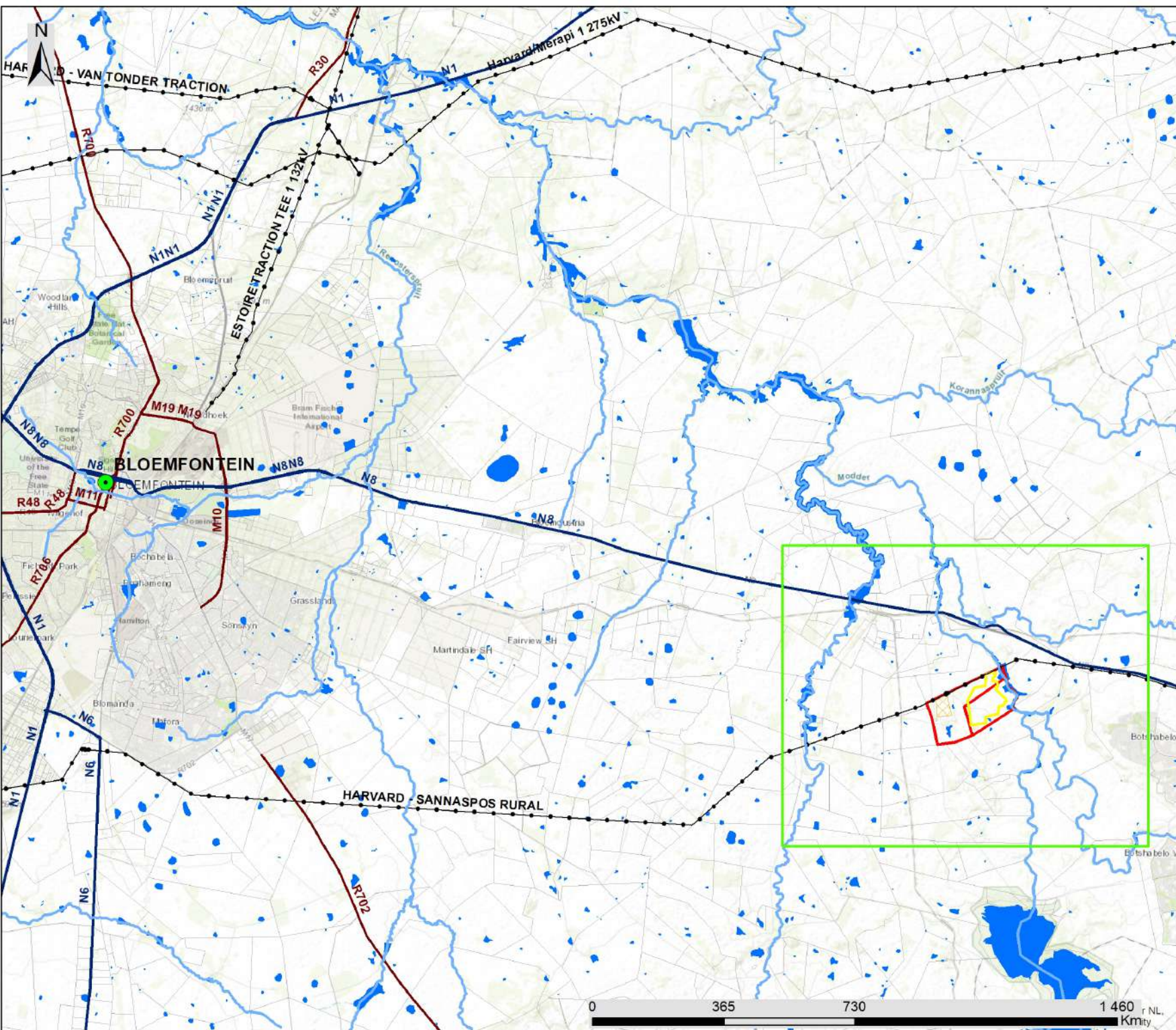
Locality Map

Legend

-  Town
-  Rivers
-  Existing Power Line
-  National Route
-  Regional Road
-  Farm Portion
-  Project Site
-  Sannaspos Farm Boundary
-  Sannaspos Solar Park and Additional Footprint
-  Proposed 10MW Area
-  NFEPA_Wetlands

Scale: 1: 150 000
 Projection: LO25
 Map Reference: Engie Sannaspos Locality

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Engie Sannaspos Solar Project, Freestate Province.

Farm Portion Map

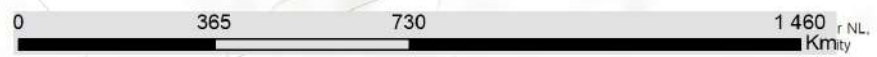
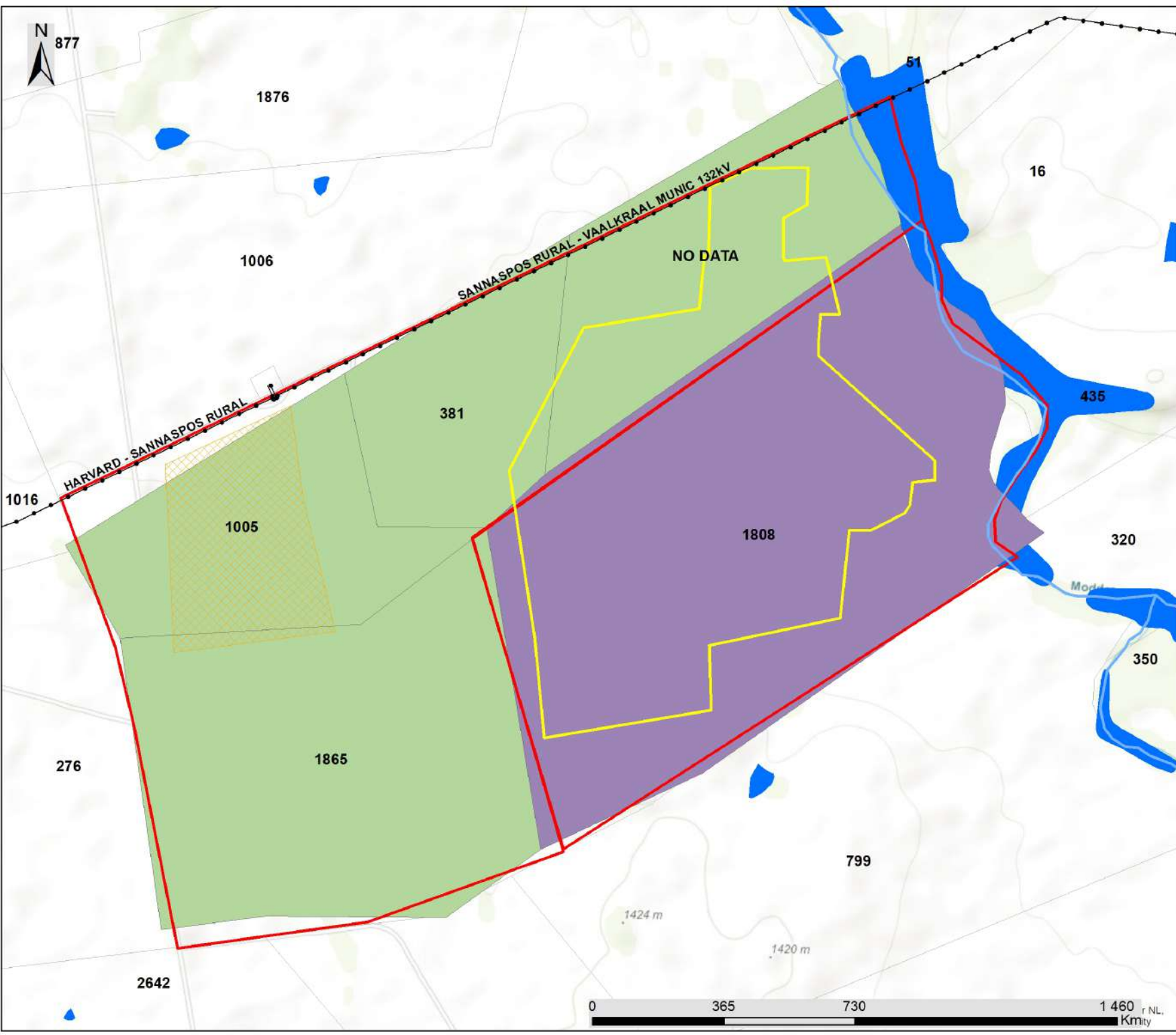
Legend

-  Rivers
-  Existing Power Line
-  Farm Portion
-  Sannaspos Solar Park and Additional Footprint
-  Sannaspos Farm Boundary
-  Proposed 10MW Area
-  NFEPA_Wetlands

Farm Name

-  1005 of Farm Lejwe 2962
-  Farm Basemkop 1808
-  1865 of Farm Lejwe 2962
-  381 of Farm Lejwe 2962
-  Farm Lejwe 2962

Scale: 1: 13790
 Projection: LO25
 Map Reference: Engie Sannaspos Farm Portions



Engie Sannaspos Solar Project, Freestate Province.

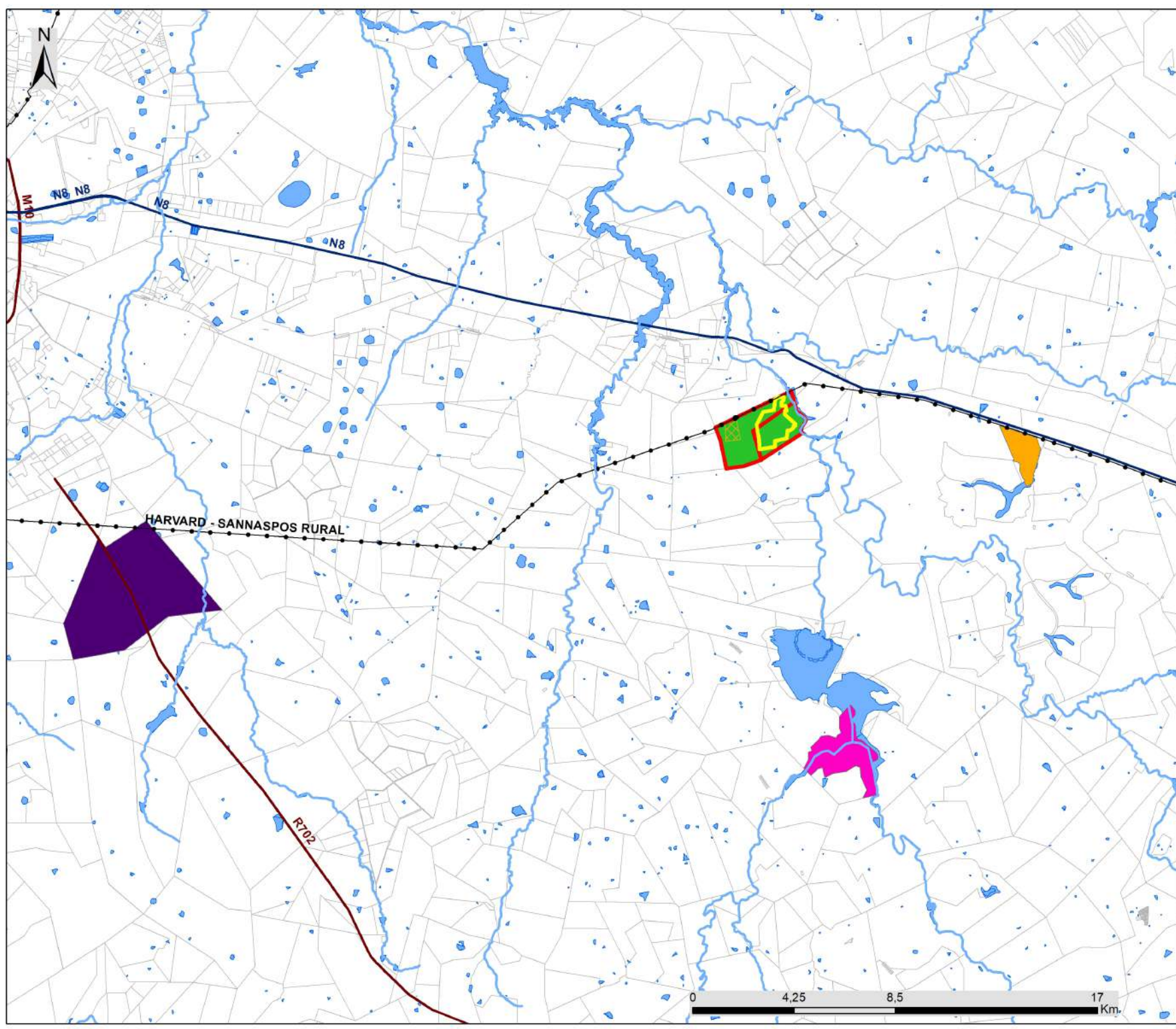
Cumulative Map

Legend

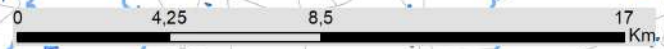
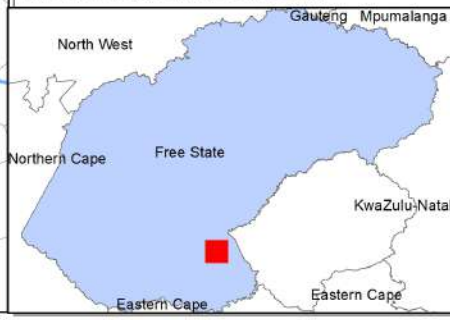
- Rivers
- Existing Power Line
- National Route
- Sannaspos Farm Boundary
- Sannaspos Solar Park
- Sannaspos 10MW Proposed
- NFEPA_Wetlands
- Farm Portion

Other Known Renewable Energy Facilities (based on affected property)

- Terra Works Proposed Solar PV Plant (Approved)
- Engie Sannaspos Solar PV (Approved)
- Pulida Solar Farm (Operational)
- Serurebele Solar Power Plant (Approved)







Scale: 1: 150 000
Projection: LO25
Map Reference: Engie Sannaspos Cumulative Map




Engie Sannaspos Solar Project, Freestate Province.

Proposed development area for the infrastructure layout considering environmental sensitivities

Legend

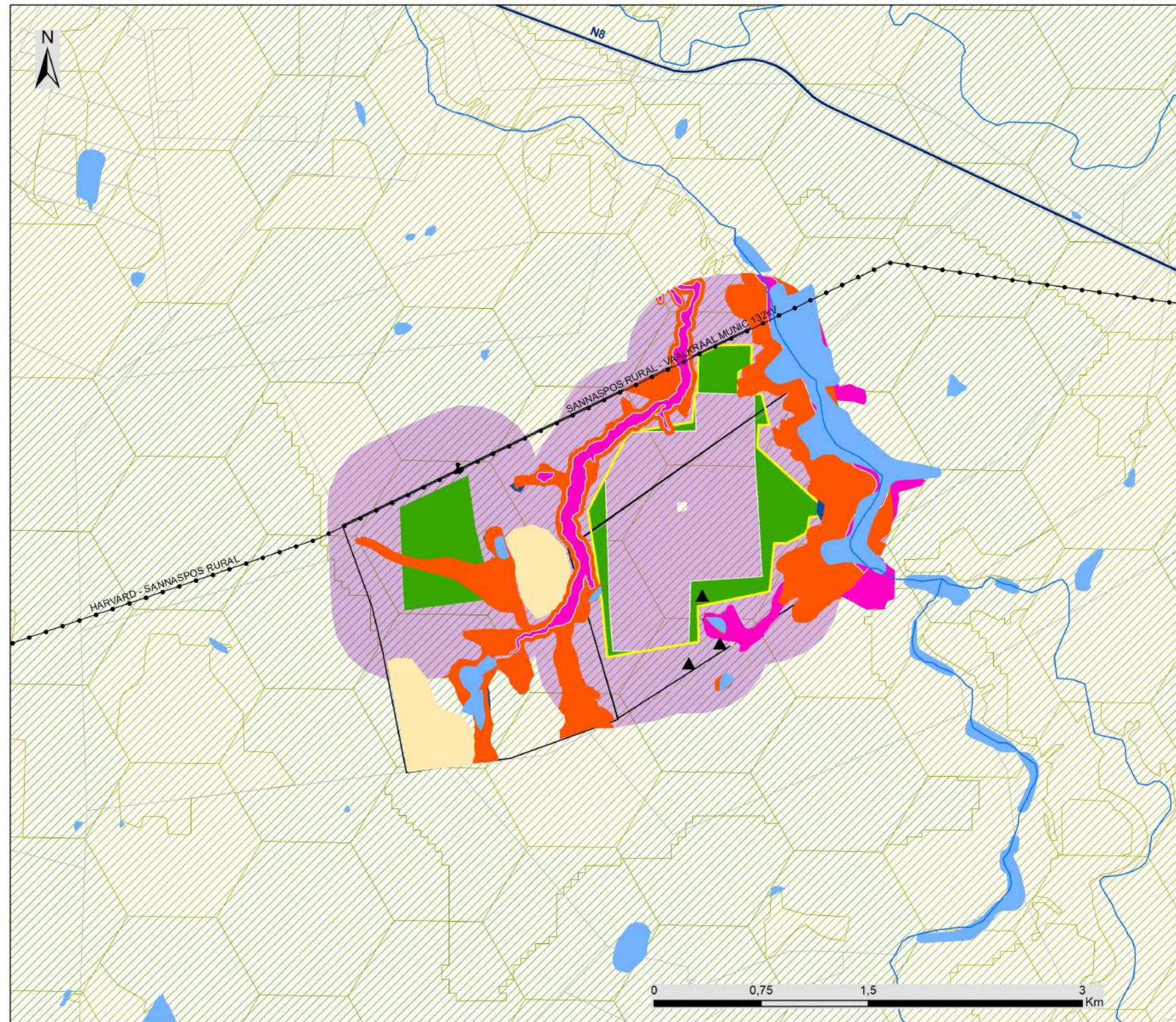
-  Rivers
-  Existing Power Line
-  National Route
-  Proposed Development Area

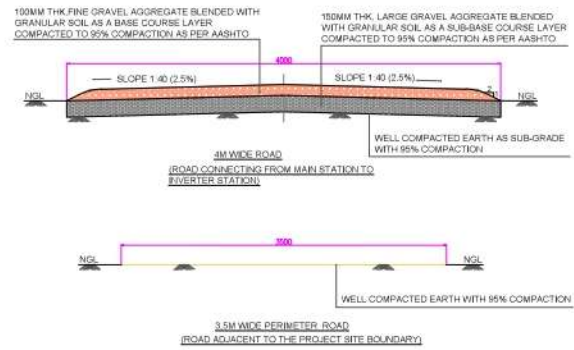
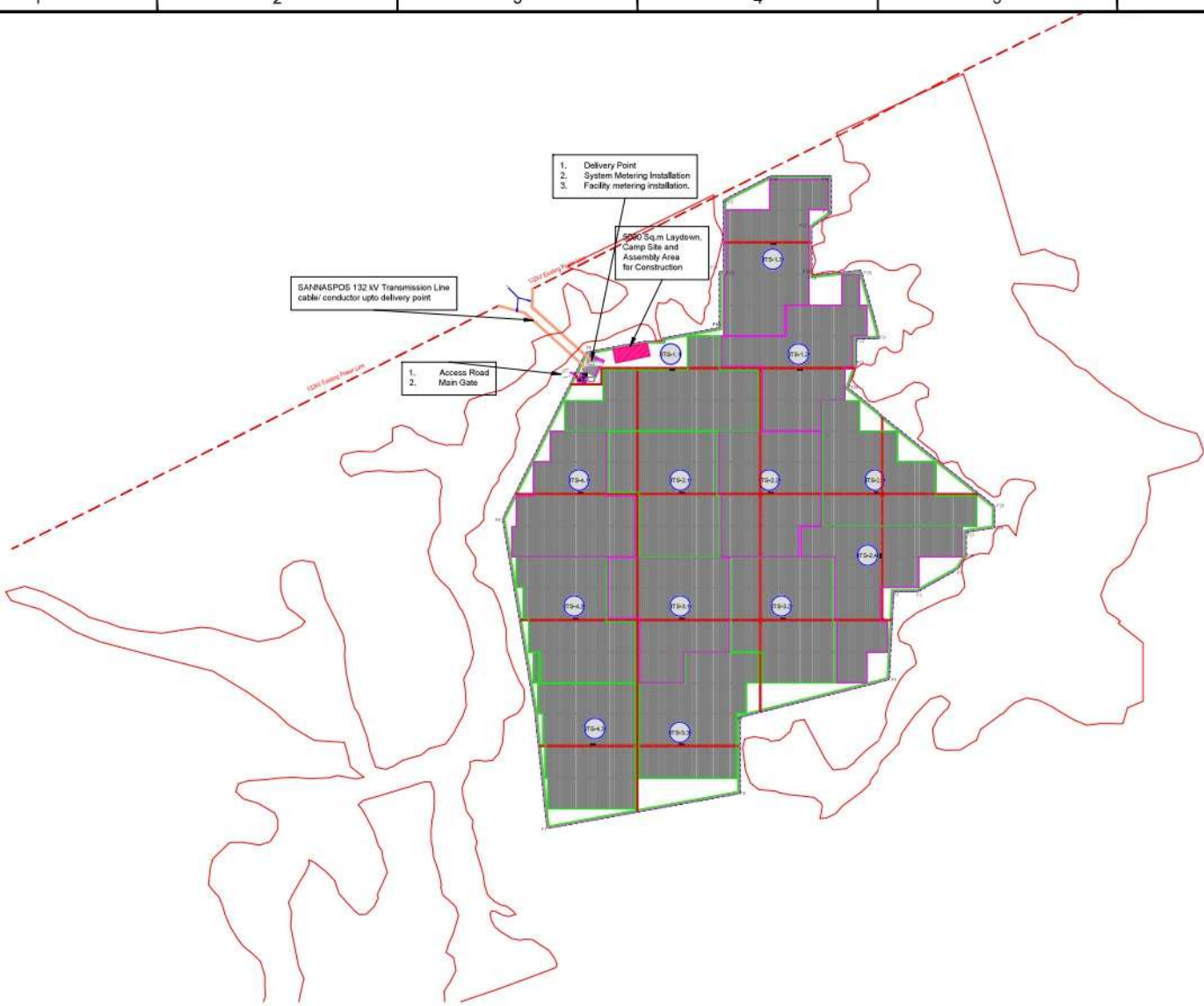
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-  ESA1
-  ESA2

Scale: 1: 25 000
Projection: LO25
Map Reference: Engie Sannaspos development envelope

savannah
environmental





Setting Out Data of Solar Panel Parking Coordinate

	EASTING	NORTHING	LATITUDE	LONGITUDE
F1	481311.68 m E	8779288.65 m N	28°11'58.49" S	28°35'26.9" E
F2	481772.06 m E	8779284.65 m N	28°11'58.49" S	28°35'25.20" E
F3	482232.44 m E	8779280.65 m N	28°11'58.49" S	28°35'23.50" E
F4	482692.82 m E	8779276.65 m N	28°11'58.49" S	28°35'21.80" E
F5	483153.20 m E	8779272.65 m N	28°11'58.49" S	28°35'20.10" E
F6	483613.58 m E	8779268.65 m N	28°11'58.49" S	28°35'18.40" E
F7	484073.96 m E	8779264.65 m N	28°11'58.49" S	28°35'16.70" E
F8	484534.34 m E	8779260.65 m N	28°11'58.49" S	28°35'15.00" E
F9	484994.72 m E	8779256.65 m N	28°11'58.49" S	28°35'13.30" E
F10	485455.10 m E	8779252.65 m N	28°11'58.49" S	28°35'11.60" E
F11	485915.48 m E	8779248.65 m N	28°11'58.49" S	28°35'10.00" E
F12	486375.86 m E	8779244.65 m N	28°11'58.49" S	28°35'08.30" E
F13	486836.24 m E	8779240.65 m N	28°11'58.49" S	28°35'06.60" E
F14	487296.62 m E	8779236.65 m N	28°11'58.49" S	28°35'05.00" E
F15	487757.00 m E	8779232.65 m N	28°11'58.49" S	28°35'03.30" E
F16	488217.38 m E	8779228.65 m N	28°11'58.49" S	28°35'01.60" E
F17	488677.76 m E	8779224.65 m N	28°11'58.49" S	28°34'59.90" E
F18	489138.14 m E	8779220.65 m N	28°11'58.49" S	28°34'58.20" E
F19	489598.52 m E	8779216.65 m N	28°11'58.49" S	28°34'56.50" E
F20	490058.90 m E	8779212.65 m N	28°11'58.49" S	28°34'54.80" E
F21	490519.28 m E	8779208.65 m N	28°11'58.49" S	28°34'53.10" E
F22	490979.66 m E	8779204.65 m N	28°11'58.49" S	28°34'51.40" E
F23	491440.04 m E	8779200.65 m N	28°11'58.49" S	28°34'49.70" E
F24	491900.42 m E	8779196.65 m N	28°11'58.49" S	28°34'48.00" E
F25	492360.80 m E	8779192.65 m N	28°11'58.49" S	28°34'46.30" E
F26	492821.18 m E	8779188.65 m N	28°11'58.49" S	28°34'44.60" E
F27	493281.56 m E	8779184.65 m N	28°11'58.49" S	28°34'42.90" E
F28	493741.94 m E	8779180.65 m N	28°11'58.49" S	28°34'41.20" E
F29	494202.32 m E	8779176.65 m N	28°11'58.49" S	28°34'39.50" E
F30	494662.70 m E	8779172.65 m N	28°11'58.49" S	28°34'37.80" E
F31	495123.08 m E	8779168.65 m N	28°11'58.49" S	28°34'36.10" E
F32	495583.46 m E	8779164.65 m N	28°11'58.49" S	28°34'34.40" E
F33	496043.84 m E	8779160.65 m N	28°11'58.49" S	28°34'32.70" E
F34	496504.22 m E	8779156.65 m N	28°11'58.49" S	28°34'31.00" E
F35	496964.60 m E	8779152.65 m N	28°11'58.49" S	28°34'29.30" E
F36	497424.98 m E	8779148.65 m N	28°11'58.49" S	28°34'27.60" E
F37	497885.36 m E	8779144.65 m N	28°11'58.49" S	28°34'25.90" E
F38	498345.74 m E	8779140.65 m N	28°11'58.49" S	28°34'24.20" E
F39	498806.12 m E	8779136.65 m N	28°11'58.49" S	28°34'22.50" E
F40	499266.50 m E	8779132.65 m N	28°11'58.49" S	28°34'20.80" E

Portion of the Farm Lease No. 2562, Borefontein DC, Free State Province
 Portion of the Farm Borefontein No. 1808, Borefontein DC, Free State Province



PROJECT DETAILS

Module Make	LONGI
Module Type & Rating	Bifacial, 166-172-BC 540W
Pitch	8.0 meters
No. of Modules	172002
Modules per String	38
No. of Strings	6144 nos.
Tracker Configuration	1V/64
Tracker Type	Single Axis Tracker
No. of Trackers	2048 nos.
Inverter Make	Sungrow
Inverter Type & Rating	Central 3437 kW/40 deg
No. of Inverters	28 nos.
No. of FTB	13 nos.
Busbar 13.2kV SW/MTB	2 nos.
No. of 3.3 MVA GCB	28 nos.
Normal AC Capacity (Inverter)	65.36 MW
AC Capacity (POC)	75MW
DC Capacity	93.75 MWp
DC AC Ratio at POC	1.25
Area	187 Ha
System Max. DC Voltage	1500V

LEGEND

Internal Road (4m)		6387 meters
Perimeter Road (3.5m)		7122 meters
Access Road		---
String (DC) Cable		999206 meters
DC Power Cable		138052 meters
MV Cable- ITS to ITS		---
FD Cable		8285 meters
String Combiner Box		416 nos.
Earthing Strip		63744 meters
ITS		13 nos.
132kV Existing Transmission Line		---

ACROSYM
 MCR- MASTER CONTROL ROOM
 ITS- INVERTER TRANSFORMER STATION
 MV- MEDIUM VOLTAGE
 LV- LOW VOLTAGE

05	SCENARIO A5	SP	2021-08-08
04	CLARIFICATION UPDATE	SP	2021-08-13
03	CLARIFICATION UPDATE	SP	2021-08-02
02	CLARIFICATION UPDATE	SP	2021-07-28
01	UPDATE WITH A NEW SCENARIO 15	SP	2021-07-23
00	FIRST VERSION	SP	2021-07-23
REV	DESCRIPTION	BY	DATE

FOR INFORMATION ONLY



CLIENT:

PROJECT: SPV- SITE 3 SANNASPOS
 75 MW_{DC}/89.36MW_{AC} (Inverter Injection Point)
 SCENARIO A5

DRAWING:
 GENERAL ARRANGEMENT LAYOUT

SCALE: 1:16/ 6.25% SHEET: 1 / 1

REVISION: 05 DATE: 2021-09-08

DIN A3