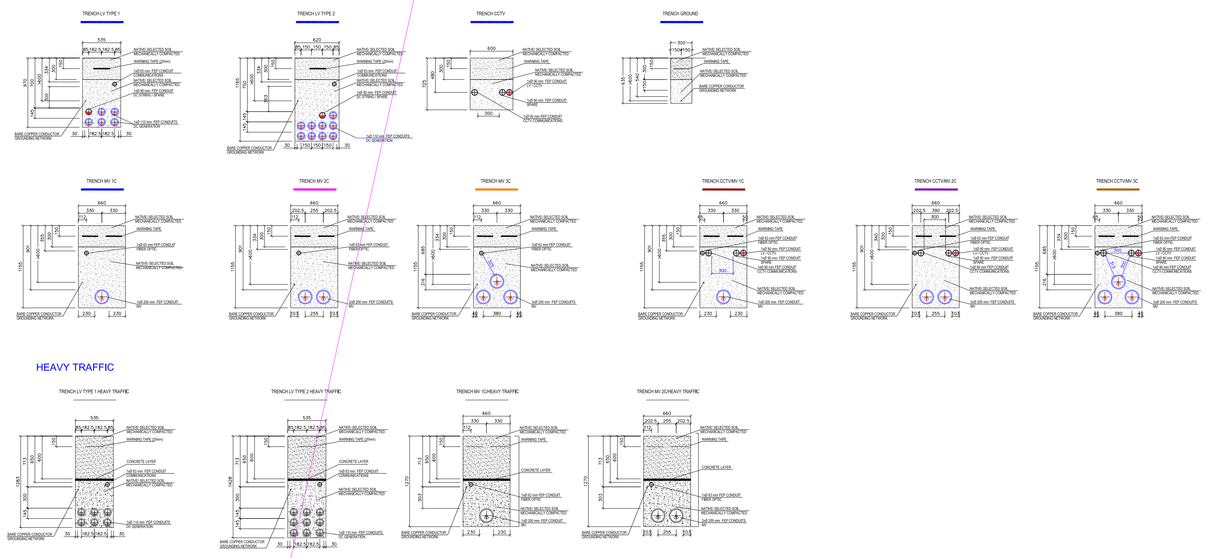
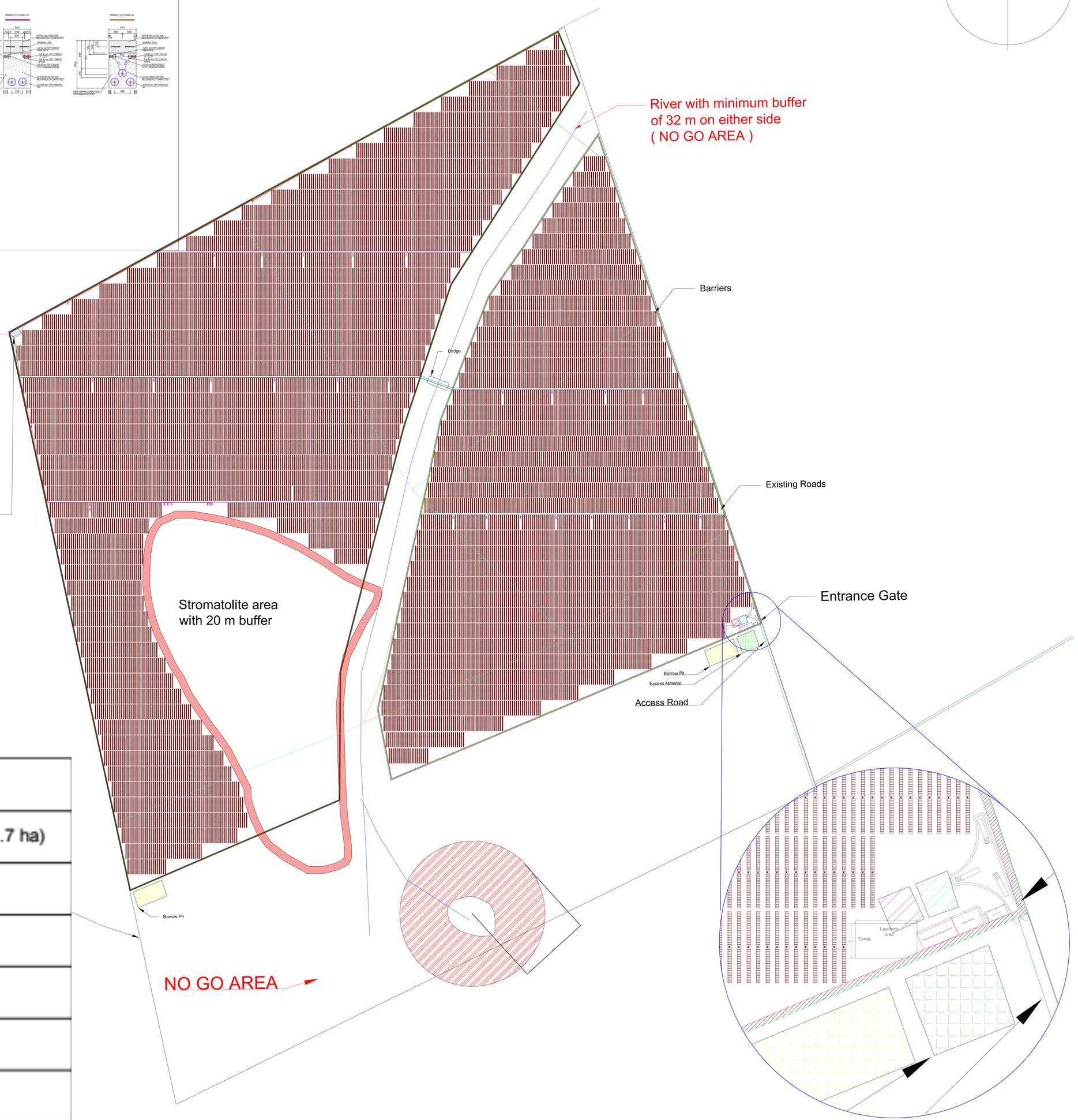


TRENCH DETAILS (Illustrative Purpose)

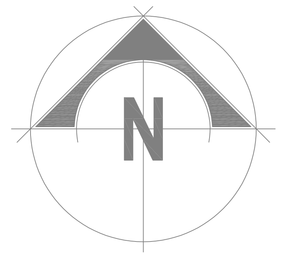
Note: The trench details are for illustrative purpose only. Actual parameters may change during detailed engineering.

Note: The MV cable route is subject to change if needed during detailed engineering

Note: Total Earth Works (preliminary rough estimation) = 40,000 m3
This may change during detailed engineering as the project proceeds.



Foot Print	
Site	278.9 ha (176.9 ha + 102.7 ha)
Substation	350 m^2
Office Room	157.6 m^2
Security Room	66.7408 m^2
Staff changing & Locker room	213.745 m^2
Temp. Laydown Area	713.11 m^2



General Notes

SCENARIO "A" (With 250 Wp module)

Area "A"
* 54.26 MWp, 47.6 MW AC
* 217,040 Modules of 250 Wp
* 17 Inverter Transformer Stations of 2.8 MW (1.4 MW x 2)
* 5,426 PV Structures of 40 * 1 Portrait Type

Total DC =96.01 MWp
Total AC =84 MW
Total Inverter transformer stations =30
Total PV structures =5401

Area "B"
* 40.35 MWp, 36.4 MW AC
* 161,400 Modules of 250 Wp
* 13 Inverter Transformer Stations of 2.8 MW (1.4 MW x 2)
* 4,035 PV Structures of 40 * 1 Portrait Type

SCENARIO "B" (With 350 Wp module)

Area "A"
* 75.964 MWp, 63.8 MW AC
* 217,040 Modules of 350 Wp
* 22 Inverter Transformer Stations of 2.8 MW (1.4 MW x 2)
* 1 Inverter transformer station of 2 MW
* 5,426 PV Structures of 40 * 1 Portrait Type

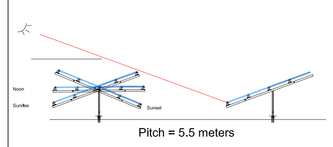
Total DC =112.454 MWp
Total AC = 100 MW
Total Inverter transformer stations =36
Total PV structures =5401

Area "B"
* 56.49 MWp, 36.4 MW AC
* 161,400 Modules of 350 Wp
* 13 Inverter Transformer Stations of 2.8 MW (1.4 MW x 2)
* 4,035 PV Structures of 40 * 1 Portrait Type

Legends

* PV Structures of 40 * 1 Portrait Type
* Scenario "A" Inverter Stations
* 2,8 MW AC (1,4MW x 2)
* Additional Inverter Station Required for Scenario "B"
* 2,8 MW AC (1,4MW x 2)
* Additional Inverter Station Required for Scenario "B"
* 2 MW AC (1MW x 2)
* Site Boundary
* Construction Limiting Boundary
* Internal Roads 5 meters wide
* 132 KV Line
* Perimeter Roads 5 meters wide
* Existing Farm Access Roads
* Farm Barriers
* 132 kV Mookodi-Magopela Line
* MV Cable route (subject to be revised during detailed engineering)
* Borrow Pits
* Excess Material
* Subsoil
* Top Soil
* Security Room (11,8 x 5,6 meters)
* Temp Laydown Area (35,45 x 20,12 meters)
* 132 KV Substation (25 x 14 meters)
* Office Room (16,06 x 9,85 meters)
* Staff Locker and Changing Room (21,75 x 9,85 meters)

* Total length of internal roads = ~ 15 km



Note: With scenario "B" less area will be required compared to scenario "A";

No.	Revision/Issue	Date

Firm Name and Address

Subsolar Energy

2nd Floor, West Tower
Maude Street, Nelson Mandela Square
Sandton 2196, South Africa

Project Name and Address

Khubu Solar Power Plant

Project	Sheet
Date: 31.05.2016	
Scale:	