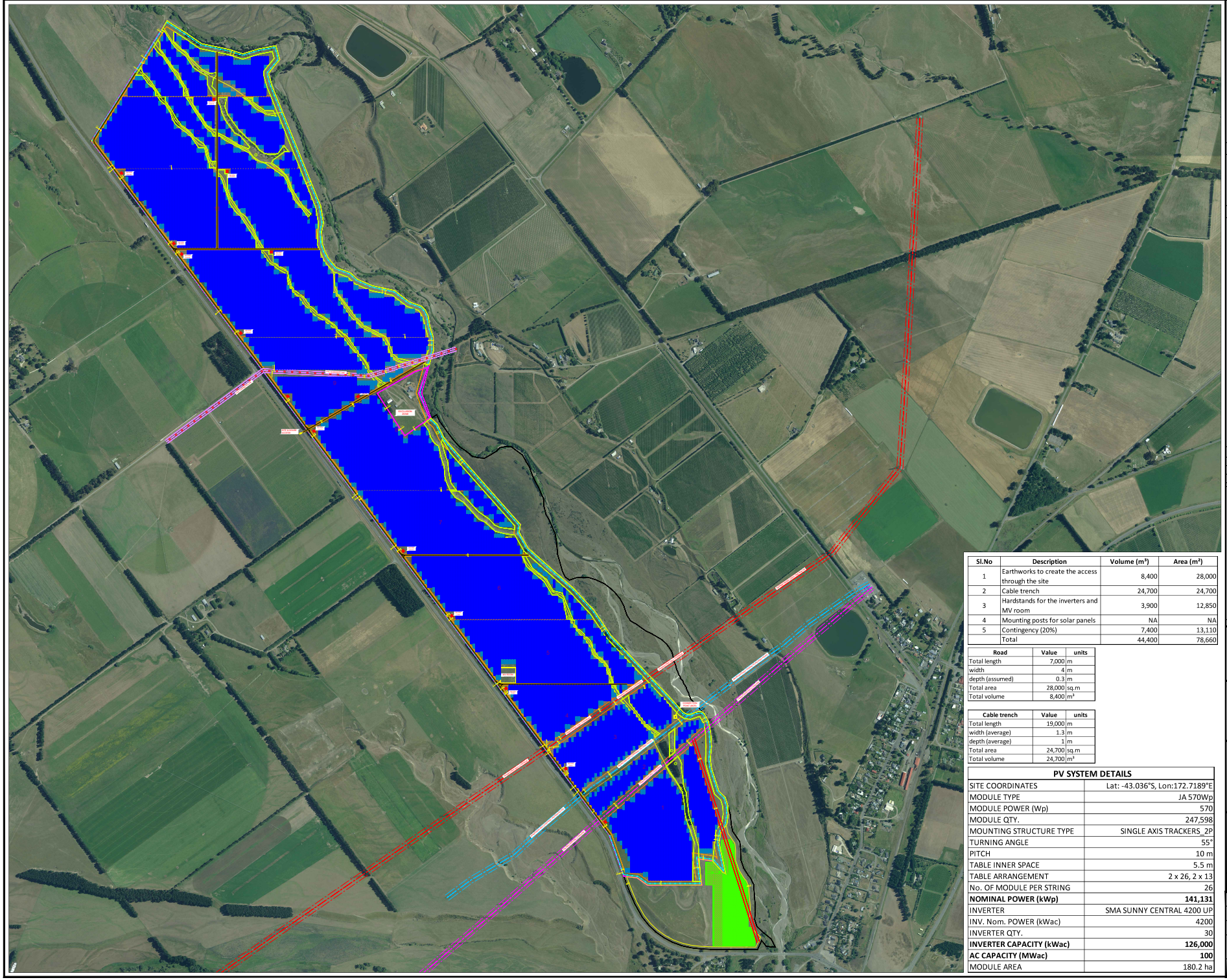
Appendix E: Updated Site Layout Plan



Sl.No	Description	Volume (m^3)	Area (m^2)
1	Earthworks to create the access through the site	8,400	28,000
2	Cable trench	24,700	24,700
3	Hardstands for the inverters and MV room	3,900	12,850
4	Mounting posts for solar panels	NA	NA
5	Contingency (20%)	7,400	13,110
	Total	44,400	78,660

Road	Value	units
Total length	7,000	m
width	4	m
depth (assumed)	0.3	m
Total area	28,000	sq.m
Total volume	8,400	m^3

Cable trench	Value	units
Total length	19,000	m
width (average)	1.3	m
depth (average)	1	m
Total area	24,700	sq.m
Total volume	24,700	m^3

PV SYSTEM DETAILS	
SITE COORDINATES	Lat: -43.036°S, Lon:172.7189°E
MODULE TYPE	JA 570Wp
MODULE POWER (Wp)	570
MODULE QTY.	247,598
MOUNTING STRUCTURE TYPE	SINGLE AXIS TRACKERS_2P
TURNING ANGLE	55°
PITCH	10 m
TABLE INNER SPACE	5.5 m
TABLE ARRANGEMENT	2 x 26, 2 x 13
No. OF MODULE PER STRING	26
NOMINAL POWER (kWp)	**141,131**
INVERTER	SMA SUNNY CENTRAL 4200 UP
INV. Nom. POWER (kWac)	4200
INVERTER QTY.	30
INVERTER CAPACITY (kWac)	**126,000**
AC CAPACITY (MWac)	**100**
MODULE AREA	180.2 ha

PRELIMINARY DESIGN

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GENERAL NOTES

1. ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED.
2. FINAL LAYOUT WILL BE DETERMINED AFTER SITE SURVEY.

2P TRACKER OPTION

LEGEND

- PV MODULE BOUNDARY LINE
- 2 x 26 PV TRACKER MODULE (JA 570Wp)
- 2 x 13 PV TRACKER MODULE (JA 570Wp)
- WINE TREES (15,000 Nos.)
- TRANSPOWER 220kV OVERHEAD LINE
- MAINPOWER 66kV OVERHEAD (WOODEN POLE)
- TRANSPOWER 66kV OVERHEAD LINE
- 11kV OVERHEAD LINE
- FENCE LINE
- PLANT INTERNAL ROAD (4m WIDTH)
- INVERTER STATION
- SLOPES LINE
- GRAPE TREES FOR WINERY

REFERENCE DRAWINGS		
No.	DRAWING TITLE	DRAWING No.

R	DATE	DESCRIPTION OF REVISION	REMARKS
K	20-05-2024	PROVIDE 7.5m GAP @ 11kV LINE, 10m GAP AT NEAR 66kV	
J	29-04-2024	DRAFT- ADDED 11kV OVERHEAD LINE	
I	11-03-2024	DRAFT- REMOVED SITE ACCESS #1	
H	28-02-2024	DRAFT- SETBACK 12m @ TRANSMISSION LINE	
G	19-09-2023	DRAFT-UPDATED WITH TOPO, LAND PARCEL & TREES.	
F	15-09-2023	DRAFT-UPDATED WITH TOPO & LAND PARCEL.	
E	24-08-2023	DRAFT-WINE TREE ADDED.	
D	03-07-2023	DRAFT-REMOVED PANELS AT EXTENDED LAND AREA.	
C	24-05-2023	DRAFT-UPDATED 1P TRACKER WITH 135MWp.	
B	30-03-2023	DRAFT-UPDATED 1P TRACKER & EXTEND LAND	
A	23-02-2023	DRAFT	

PROJECT NAME :

WAIPARA 141.13MWp
NEW ZEALAND

OWNER'S ENGINEER :

GENERAL CONTRACTOR :

AQUILA CAPITAL — GENERATING ESSENTIAL INVESTMENTS

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		SIGN
DRAWN BY	: HARI	H.S
DATE	: 20-05-2024	
CHECKED BY	: ARUL	A.M
DATE	: 20-05-2024	
APPROVED BY	: RON	R.K
DATE	: 20-05-2024	

TITLE : **MODULE GENERAL ARRANGEMENT LAYOUT**

DRAWING No. **ACRA-NZD-WP-001**

SHEET SIZE	SHEET	SCALE	REV
A1	1 OF 1	1:6800	K