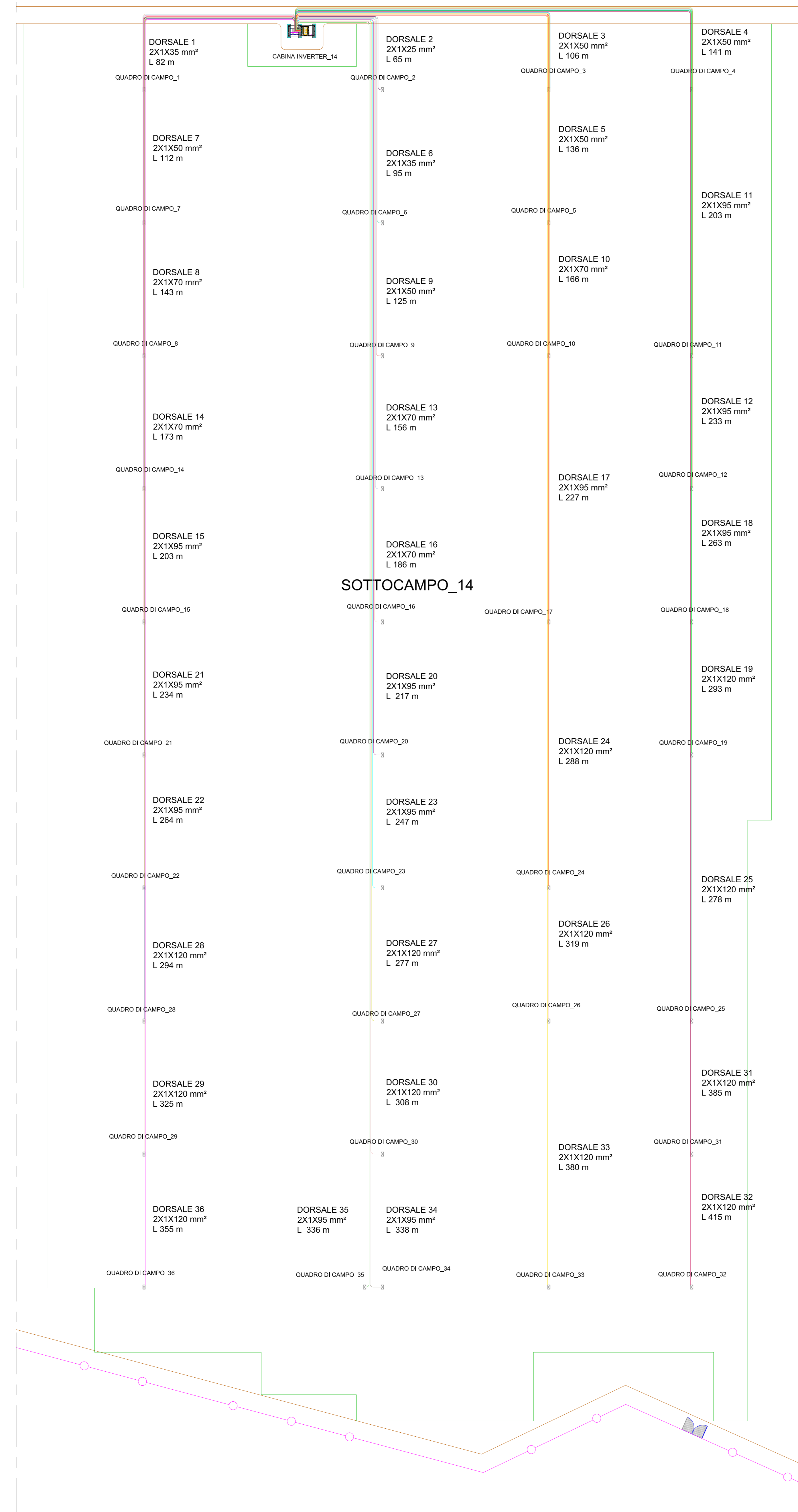


1. LEGENDA

- AREA 01
- AREA 02
- AREA 03
- AREA 04
- AREA 05
- AREA 06
- AREA 07
- AREA 08
- AREA 09
- AREA 10
- AREA 11
- AREA 12
- AREA 13
- AREA 14
- AREA 15
- AREA 16
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- AREA 19
- AREA 20
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- AREA 27
- AREA 28
- AREA 29
- AREA 30
- AREA 31
- AREA 32
- AREA 33
- AREA 34
- AREA 35
- AREA 36



**CABLING CALCULATION: "Cerrignola"**

MODULE DATA SHEET		SP - Inverter Electrical Characteristics		Voltage drop from Strings to QPS	
Module Type	REC Star / REC4PPE ELK	DC IN	1161.42 V	Modules for each strings	26.00
Peak Power (Pmpp)	(Wp)	Vc-OUT	126.20 V	Loss per GP	10
Open Circuit Voltage (Voc)	(V)	Vc-OUT	126.80 A	Strings per GP	10.00
Optimum Operating Voltage (Vmp)	(V)			Medium Length	1.45 m
Current (Imp)	(A)			Medium Resistance	0.1719 Ω
Temperature Co-efficient Voltage (β)				Section Line	10 mmq
Temperature Co-efficient Current (α)	0.048 A%/C			Voltage Drop at STC	0.19 %
				Voltage Drop at 60°C	0.17 %
				Voltage Drop at -10°C	0.17 %

CHARACTERISTICS FOR ONE STRING	
Modules for each 1	N° 26.00
Voltage	Vmppt 1161.42
Current	A 12.88
Peak Power (Pmp)	KWp 14.85

FINAL DATA	
String to Inv	N° 312
Power of all Strings	(Pmax) 4664.40 KWp
Total Modules	N° 8112

QPS = Central String Box

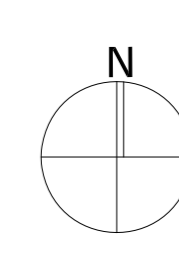
VALUES VERIFICATION FOR ONE QPS TO INVERTER		SMA - Sunny Central 4000-EV	
Estimation of the minimum voltage Vmppt. For a temperature of the modules that are 65°C	1291.50V	MIN MPPT VOLTAGE	849 V
Estimation of the maximum current Imppt. For a temperature of the modules that are 65°C	131.27 A		
Estimation of the maximum input voltage Voc. For a temperature of the modules that are STC	1161.42V	MAX MPPT VOLTAGE	1325 Vdc
Estimation of the minimum current Imppt. For a temperature of the modules that are -10°C	126.84 A		
Estimation of the maximum voltage Voc. For a temperature of the modules that are -10°C	1247.65V	MAXIMUM VOLTAGE	1500 Vdc

CALCULATION OF THE VOLTAGE DROP ON THE CABLES STC							
CODICE	N° OF STRINGS TO QPS	AREAS	MAXIMUM LENGTH	LINE SECTION	VOLTAGE DROP FROM QPS TO INVERTER		NUMBER OF AREAS IN THE PV PLANT
					m	%	
SC-01	9	A-01	82.00	35	0.83	1.00	1
SC-02	9	A-02	85.00	25	0.83	1.10	2
SC-03	9	A-03	106.00	50	0.75	0.90	3
SC-04	9	A-04	141.00	50	0.90	1.20	4
SC-05	9	A-05	136.00	50	0.97	1.20	5
SC-06	9	A-06	95.00	35	0.97	1.20	6
SC-07	9	A-07	112.00	50	0.95	1.00	7
SC-08	9	A-08	145.00	70	0.73	0.90	8
SC-09	9	A-09	125.00	50	0.95	1.10	9
SC-10	9	A-10	166.00	70	0.84	1.00	10
SC-11	9	A-11	203.00	95	0.75	1.00	11
SC-12	9	A-12	233.00	95	0.87	1.10	12
SC-13	9	A-13	156.00	70	0.79	1.00	13
SC-14	9	A-14	173.00	70	0.86	1.10	14
SC-15	9	A-15	203.00	95	0.75	1.00	15
SC-16	9	A-16	190.00	70	0.95	1.10	16
SC-17	9	A-17	227.00	95	0.85	1.00	17
SC-18	9	A-18	283.00	95	0.89	1.20	18
SC-19	9	A-19	293.00	120	0.87	1.10	19
SC-20	9	A-20	217.00	95	0.81	1.00	20
SC-21	9	A-21	234.00	95	0.85	1.10	21
SC-22	9	A-22	294.00	95	0.90	1.20	22
SC-23	9	A-23	247.00	95	0.83	1.10	23
SC-24	9	A-24	289.00	120	0.85	1.00	24
SC-25	9	A-25	278.00	120	0.82	1.00	24
SC-26	9	A-26	319.00	120	0.95	1.10	24
SC-27	9	A-27	277.00	120	0.82	1.00	24
SC-28	9	A-28	294.00	120	0.87	1.10	25
SC-29	9	A-29	335.00	120	0.95	1.20	25
SC-30	9	A-30	308.00	120	0.91	1.10	27
SC-31	7	A-31	365.00	120	0.99	1.10	28
SC-32	7	A-32	415.00	120	0.98	1.20	29
SC-33	7	A-33	380.00	120	0.88	1.10	30
SC-34	7	A-34	338.00	95	0.99	1.20	31
SC-35	7	A-35	338.00	95	0.98	1.20	32
SC-36	7	A-36	390.00	120	0.82	1.00	33

MEDIUM VALOR	1.813 %
MINIMUM VALOR	0.800 %
MAXIMUM VALOR	1.200 %



CERIGNOLA REGIONE PUGLIA PROVINCIA DI FOGGIA

**IMPIANTO AGRIVOLTAICO E RELATIVE OPERE ED INFRASTRUTTURE CONNESSE DELLA POTENZA ELETTRICA DI 140,66 MW (ex 120MW) SITO NEL COMUNE DI CERIGNOLA**

**Layout Campo "A1" - Sottocampo 14 - Dimensionamento delle dorsali-Tabella calcolo dorsali**

Proponente: **CERIGNOLA SOLAR 2 S.R.L.**  
Via Antonio Locatelli n.1  
37122 Verona  
P.IVA 04741630232  
cerignolasolar2@pec.it

Progettazione: **WH Group s.r.l.**  
Via A. Locatelli n. 1 - 37122 Verona (VR)  
P.IVA 12336131003  
ingegneria@enitgroup.eu



Spazio riservato agli Enti:

Fid: PE17Q0_ElboratoGrafico_4.2.9_2.99		Cod: PE17Q0	Scal: 1:500	
Rev.	Data	Descrizione	Redatto	Approvato
00	08/03/2022	V.I.A. Minorile	A. Tartaglia	S.M. Caputo
<b>4.2.9_2.99</b>				
CERIGNOLA SOLAR 2 S.R.L.   Via Antonio Locatelli n.1 37122 Verona   cerignolasolar2@pec.it				