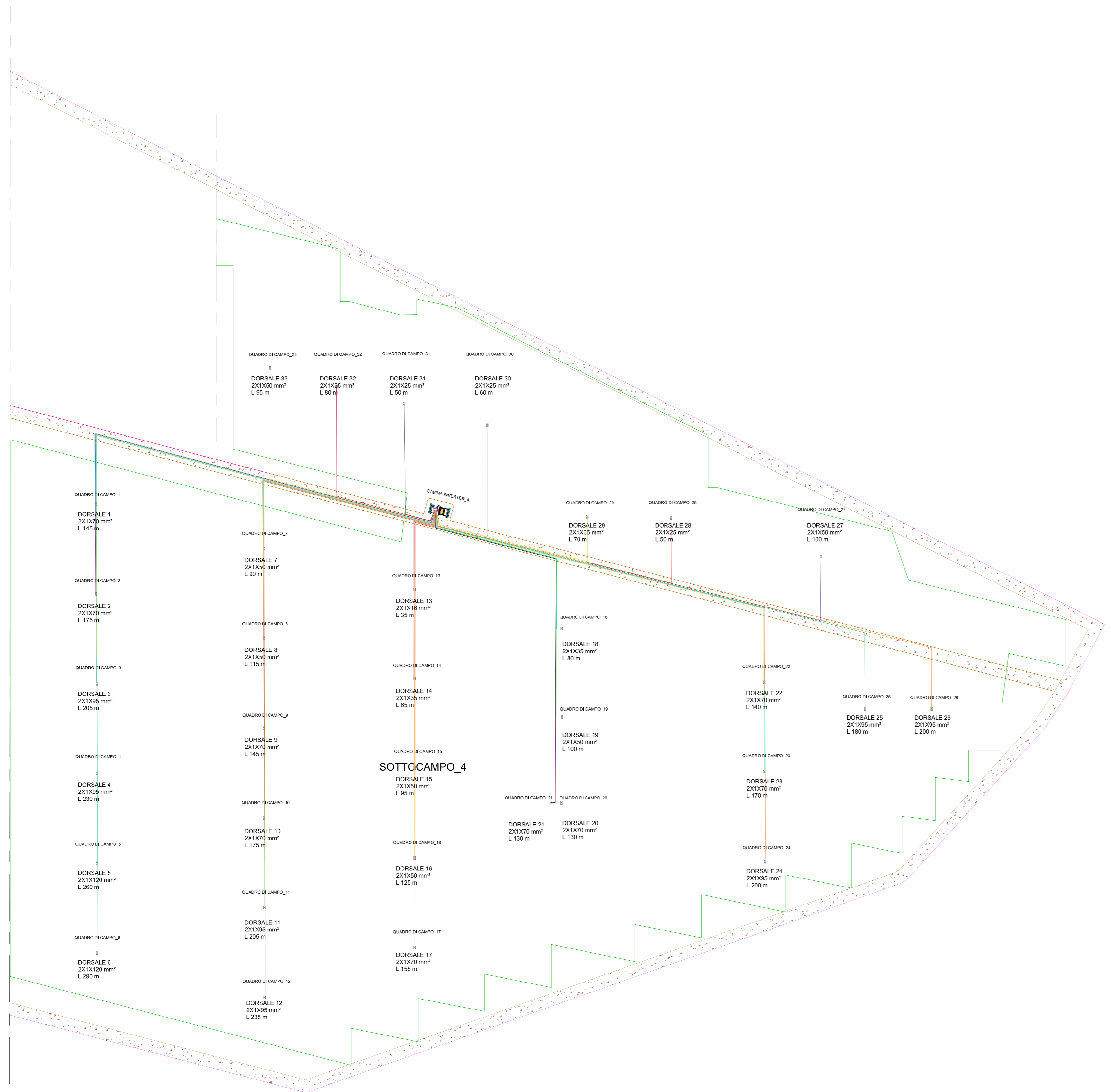


1. LEGENDA

- DORSALE QUADRO\_01
- DORSALE QUADRO\_02
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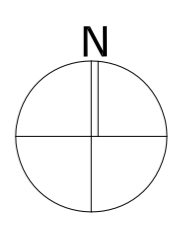
**CABLING CALCULATION: "Cerignola"**

MODULE DATA SHEET		QP - Inverter Electrical Characteristics		Voltage drop from Strings to QPS		
MODULE TYPE	REC Solar / REC24PPE BLK	LI-CUT	1161.42 V	Modules for each string	28.00	
Peak Power (Pm)	(Wp)	575.00	1383.20 V	Line per QP	10	
Open Circuit Voltage (Voc)	(V)	53.20	I	128.80 A	Strings per QP	10.00
Optimum Operating Voltage (Vmp)	(V)	44.67			Medium Length	2.45 m
Current (Imp)	(A)	12.88			Medium Resistance	0.1719 Ω
Temperature Co-efficients Voltage (β)		-0.280 V/°C			Section Line	10 mmq
Temperature Co-efficients Current(α)		0.048 A/°C			Voltage Drop at STC	0.19 %
<b>CHARACTERISTICS FOR ONE STRING</b>						
Modules for each 1	N°	26.00			Voltage Drop at 65°C	0.17 %
Voltage	Vmp	1161.42			Voltage Drop at -10°C	0.17 %
Current	A	12.88				
Peak Power (Pm)	kWp	14.95				
<b>FINAL DATA</b>						
String to In	N°	530				
Power of all Strings	(Peak)	4833.50 kWp				
Total Modules	N°	8580				
QPS = Smart String Box						
<b>VALUES VERIFICATION FOR ONE QPS TO INVERTER</b>			SMA - Sunny Central 4200-EV			
Estimation of the minimum voltage Vmp	1291.50V	MIN MPPT VOLTAGE	849 V			
Estimation of the maximum current Imp	131.27 A					
Estimation of the maximum mppt voltage Voc	1161.42V	MAX MPPT VOLTAGE	1325 Vdc			
Estimation of the minimum current Imp	126.64 A					
Estimation of the maximum voltage Voc	1247.65V	MAXIMUM VOLTAGE	1500 Vdc			

**CALCULATION OF THE VOLTAGE DROP ON THE CABLES STC**

CODE	N° OF STRINGS TO QPS	AREAS	MAXIMUM LENGHT	LINE SECTION	VOLTAGE DROP FROM QP TO INVERTER	TOTAL VOLTAGE DROP	NUMBER OF AREAS IN THE PV PLANT
			m	mm²	%	%	
SC 01	10	A.01	170.00	70	0.82	1.00	1
SC 02	10	A.02	200.00	70	0.99	1.20	2
SC 03	10	A.03	230.00	95	0.85	1.00	3
SC 04	10	A.04	255.00	95	0.98	1.20	4
SC 05	10	A.05	285.00	120	0.68	1.10	5
SC 06	10	A.06	315.00	120	0.58	1.20	6
SC 07	10	A.07	115.00	50	0.71	0.90	7
SC 08	10	A.08	140.00	50	0.91	1.10	8
SC 09	10	A.09	170.00	70	0.82	1.00	9
SC 10	10	A.10	200.00	70	0.99	1.20	10
SC 11	10	A.11	230.00	95	0.85	1.00	11
SC 12	10	A.12	260.00	95	0.98	1.20	12
SC 13	10	A.13	290.00	120	0.67	1.10	13
SC 14	10	A.14	320.00	120	0.58	1.20	14
SC 15	10	A.15	120.00	50	0.75	0.90	15
SC 16	10	A.16	150.00	50	0.99	1.20	16
SC 17	10	A.17	180.00	70	0.88	1.10	17
SC 18	10	A.18	105.00	35	0.50	1.10	18
SC 19	10	A.19	125.00	50	0.79	1.00	19
SC 20	10	A.20	155.00	70	0.73	0.90	20
SC 21	10	A.21	185.00	70	0.73	0.90	21
SC 22	10	A.22	165.00	70	0.79	1.00	22
SC 23	10	A.23	195.00	70	0.98	1.20	23
SC 24	10	A.24	225.00	95	0.83	1.00	24
SC 25	10	A.25	255.00	95	0.75	0.90	25
SC 26	10	A.26	225.00	95	0.83	1.00	26
SC 27	10	A.27	125.00	50	0.79	1.00	27
SC 28	10	A.28	75.00	25	0.79	1.00	28
SC 29	10	A.29	95.00	35	0.79	1.00	29
SC 30	10	A.30	85.00	25	0.95	1.10	30
SC 31	10	A.31	75.00	25	0.79	1.00	31
SC 32	10	A.32	105.00	35	0.90	1.10	32
SC 33	10	A.33	150.00	50	0.75	0.90	33

MEDIUM VALOR	1,887 %
MINIMUM VALOR	0,900 %
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**

PROGETTO DEFINITIVO

**Layout Campo "A2" - Sottocampo 4 - Dimensionamento delle dorsali - Tabella calcolo di 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)  
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ingegneri@entgroup.eu



Spazio riservato agli Enti:

File: PE17Q0\_EditorioGrafico\_4.2.9\_3.29 Cod: PE17Q0 Scala: 1:800

Rev.	Data	Descrizione	Redatto	Approvato
00	08/03/2022	V.I.A. Missivale	A. Tartaglia	S.M. Caputo

**4.2.9\_3.29**

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