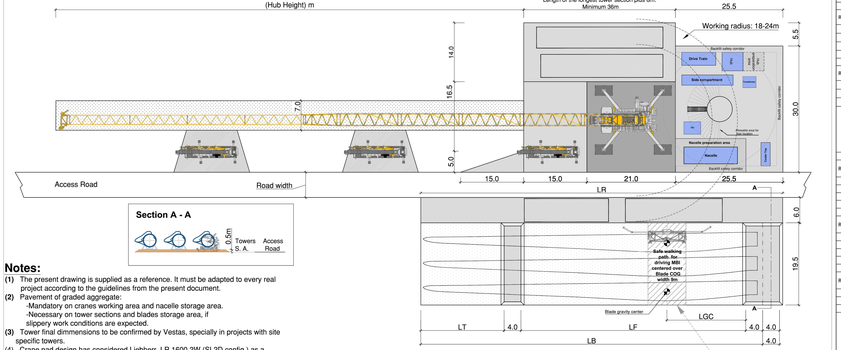
SPECIFICHE DELLE PIAZZOLE

Storage area for 4 tower sections.
Applicable for the following tower configurations:
- 4 Sections tower.
- 5 Sections tower with T1 erected in advance.
- 6 Sections tower with T1 and T2 erected in advance.



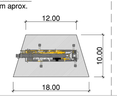
Notes:

(1) The present drawing is supplied as a reference. It must be adapted to every real project according to the guidelines from the present document.
(2) Pavement of graded aggregate:
-Mandatory on cranes working area and nacelle storage area.
-Necessary on tower sections and blades storage area, if slippery work conditions are expected.
(3) Tower final dimmensions to be confirmed by Vestas, specially in projects with site specific towers.
(4) Crane pad design has considered Liebherr LR 1600 2W (SL2D config.) as a reference for main crane.
(5) All units are in meters.
(6) Side compartment not applicable if Mk0 A/B/C

Legend:

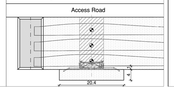
- Bearing capacity: Crane pressure + safety factor
- Bearing capacity: Auxiliary Crane pressure + safety factor (Min.2 Kg/cm²)
- Bearing capacity: 2 Kg/cm²
- Area free of obstacles.

Auxiliary pad detail:
-Every 40m aprox.



Blade storage area dimensions					
Rotor Ø	LB	LF	LCG	LT	LR
V150	75.95 m	48.65 m	17.27 m	19.30 m	79.95 m
V162	81.60 m	53.35 m	21.63 m	20.25 m	85.60 m
V172	86.60 m	53.28 m	21.80 m	25.32 m	90.60 m

If the blades are storaged this way, the space foreseen for the MBI must be according to the following sketch.



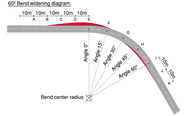
SPECIFICHE RAGGI DI CURVATURA

60º BEND WIDENING - 5 METERS WIDE ROAD											
Radius	External							Internal			
	A	B	C	D	E	F	G	H	I	J	K
70m	-	0.2	1.2	1.6	1.2	0.1	-	-	1.3	1.1	0.4
75m	-	-	0.8	1.4	0.8	-	-	-	1.0	0.8	0.3
80m	-	-	0.8	1.1	0.7	-	-	-	1.0	0.7	0.3

60º BEND WIDENING - 6 METERS WIDE ROAD											
Radius	External							Internal			
	A	B	C	D	E	F	G	H	I	J	K
70m	-	-	0.4	0.8	0.4	-	-	-	0.2	0.2	-
75m	-	-	0.2	0.6	0.2	-	-	-	0.2	-	-
80m	-	-	-	0.2	-	-	-	-	0.2	-	-

60º BEND WIDENING - 6.5 METERS WIDE ROAD											
Radius	External							Internal			
	A	B	C	D	E	F	G	H	I	J	K
70m	-	-	-	0.4	-	-	-	-	-	-	-
75m	-	-	-	0.2	-	-	-	-	-	-	-
80m	-	-	-	-	-	-	-	-	-	-	-

60º Bend widening diagram:

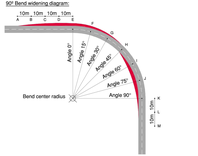


90º BEND WIDENING - 5 METERS WIDE ROAD													
Radius	External							Internal					
	A	B	C	D	E	F	G	H	I	J	K	L	M
70m	-	0.7	1.5	1.7	1.3	0.2	-	-	-	1.2	1.7	1.1	0.4
75m	-	0.5	1.2	1.4	1.0	-	-	-	-	1.0	1.4	0.8	0.2
80m	-	0.2	1.0	1.3	0.9	-	-	-	-	0.6	0.9	0.6	0.2

90º BEND WIDENING - 6 METERS WIDE ROAD												
Radius	External							Internal				
	A	B	C	D	E	F	G	H	I	J	K	L	M
70m	-	-	0.5	0.6	0.2	-	-	-	-	0.6	0.1	-	-
75m	-	-	0.4	0.6	-	-	-	-	-	0.4	-	-	-
80m	-	-	0.3	0.6	-	-	-	-	-	-	-	-	-

90º BEND WIDENING - 6.5 METERS WIDE ROAD												
Radius	External							Internal				
	A	B	C	D	E	F	G	H	I	J	K	L	M
70m	-	-	0.2	0.4	-	-	-	-	-	-	-	-	-
75m	-	-	-	0.4	-	-	-	-	-	-	-	-	-
80m	-	-	-	-	-	-	-	-	-	-	-	-	-

90º Bend widening diagram:

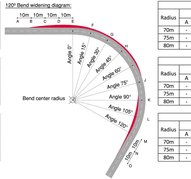


120º BEND WIDENING - 5 METERS WIDE ROAD													
Radius	External							Internal					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
70m	-	0.9	1.8	2.0	1.2	0.1	-	-	-	0.7	1.6	0.9	0.2	-
75m	-	0.6	1.5	1.6	1.0	-	-	-	-	0.5	1.2	0.8	0.2	-
80m	-	0.3	1.1	1.4	1.0	-	-	-	-	-	0.9	0.7	0.2	-

120º BEND WIDENING - 6 METERS WIDE ROAD													
Radius	External							Internal					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
70m	-	-	0.6	0.8	0.2	-	-	-	-	-	-	-	-	-	-
75m	-	-	0.4	0.5	-	-	-	-	-	-	0.4	0.2	-	-	-
80m	-	-	0.2	0.3	-	-	-	-	-	-	-	-	-	-	-

120º BEND WIDENING - 6.5 METERS WIDE ROAD													
Radius	External							Internal					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
70m	-	0.2	0.4	-	-	-	-	-	-	-	-	-	-	-	-
75m	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-
80m	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

120º Bend widening diagram:

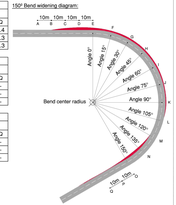


150º BEND WIDENING - 5 METERS WIDE ROAD															
Radius	External							Internal							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
70m	-	0.7	1.7	2.0	1.4	-	-	-	-	-	-	0.3	1.3	1.1	0.8	0.4	-
75m	-	0.5	1.4	1.6	1.2	-	-	-	-	-	-	0.2	1.0	0.8	0.6	0.3	
80m	-	0.2	1.1	1.3	0.9	-	-	-	-	-	-	-	0.6	0.7	0.5	0.3	

150º BEND WIDENING - 6 METERS WIDE ROAD															
Radius	External							Internal							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
70m	-	-	0.8	1.0	0.4	-	-	-	-	-	-	-	0.4	-	-	-	-
75m	-	-	-	0.4	0.7	0.2	-	-	-	-	-	-	0.2	-	-	-	-
80m	-	-	-	0.2	0.3	0.2	-	-	-	-	-	-	-	-	-	-	-

150º BEND WIDENING - 6.5 METERS WIDE ROAD															
Radius	External							Internal							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
70m	-	0.4	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75m	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
80m	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

150º Bend widening diagram:



Design has been defined considering the following truck dimensions:

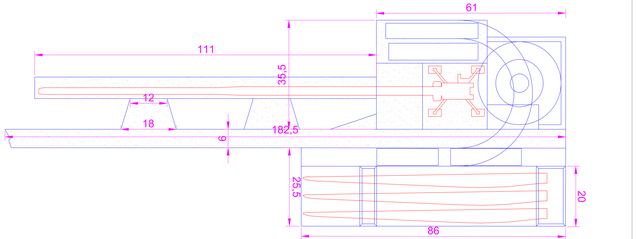
*The blade overhang requires an aditional area to be cleared and free of obstacles outside the bend.
The width of this additional area will be equal to the blade overhang.
This additional area will be paralel to the road extra-widening.

**The distance between the axels requires an aditional area to be cleared and free of obstacles inside the bend.
This additional area will change depending of the truck and the bending radius and should be checked case-by-case.

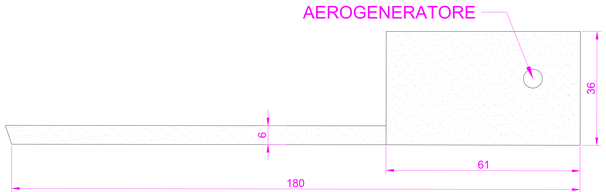
-Different dimensions will lead to substantially different results.
-All units provided are in meters.

DESIGN REQUIREMENTS	
Minimum vertical curve paramether	$K=L/\lvert i_1-i_2 \rvert=500$
Maximum slope on gravel road	9%
Maximum slope on concrete road	14%
Minimum radius	70m
Min. straight length betbreakfter the bend *	160m
* Additional bend wides provided in this drawing, will not be valid if this minimum straight length are not respected.	

LAYOUT PIAZZOLA DI CANTIERE 1:500



LAYOUT PIAZZOLA DEFINITIVA 1:500



Firmato digitalmente da
GIULIO DE SIMONE
O=ENEL
Data e ora della firma: 05/10/2022 10:04:28

Regione Campania
Provincia di Avellino
Comune di Ariano Irpino

Titolo del progetto

PROGETTO PER LA COSTRUZIONE ED ESERCIZIO DI UN IMPIANTO EOLICO DENOMINATO "ARIANO" DELLA POTENZA COMPLESSIVA DI 100,8 MW E DELLE RELATIVE OPERE CONNESSE, DA REALIZZARSI NEL COMUNE DI ARIANO IRPINO (AV)

Timbro e firma del progettista

Titolo elaborato
LAYOUT PIAZZOLA DI CANTIERE - PIAZZOLA DEFINITIVA - SPECIFICHE RAGGI DI CURVATURA

Codice elaborato
WIND055-EL8084

Stato del progetto
DEFINITIVO

Scala del disegno
1:500

Ingegneria
VALLEVERDE

Proponente
econergy
Powering renewables.
ECONERGY S.r.l. Via Alessandro Manzoni 38 - 20121 Milano (MI) P. IVA 12928050960

Rev.	Descrizione	Data	Redatto	Verificato	Approvato
0	Emissione	19/10/2023	A.Sorrello	A.Zanini	G.De Simone