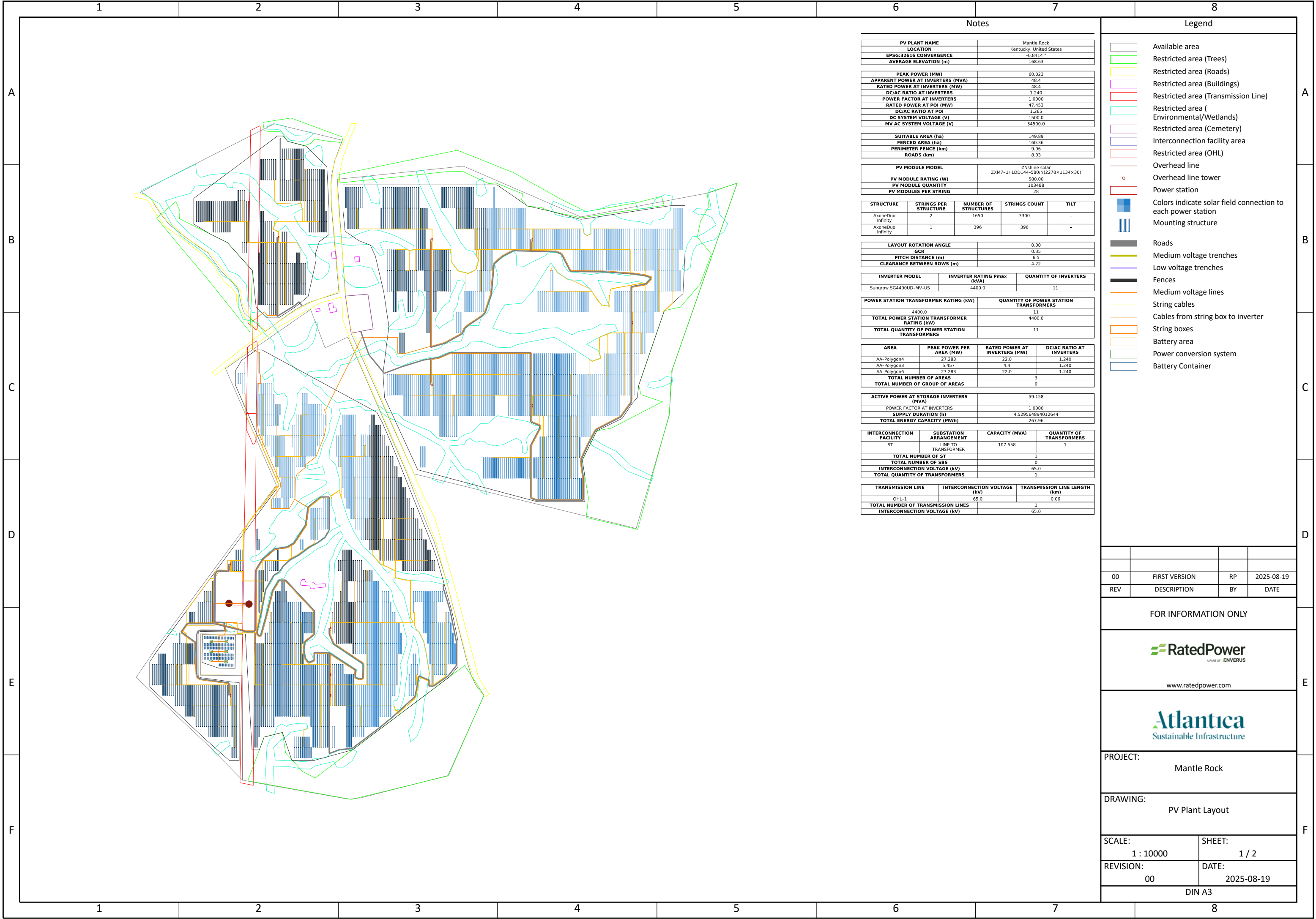


Appendix B

PRELIMINARY SITE LAYOUT

Mantle Rock Solar LLC



Livingston County, Kentucky

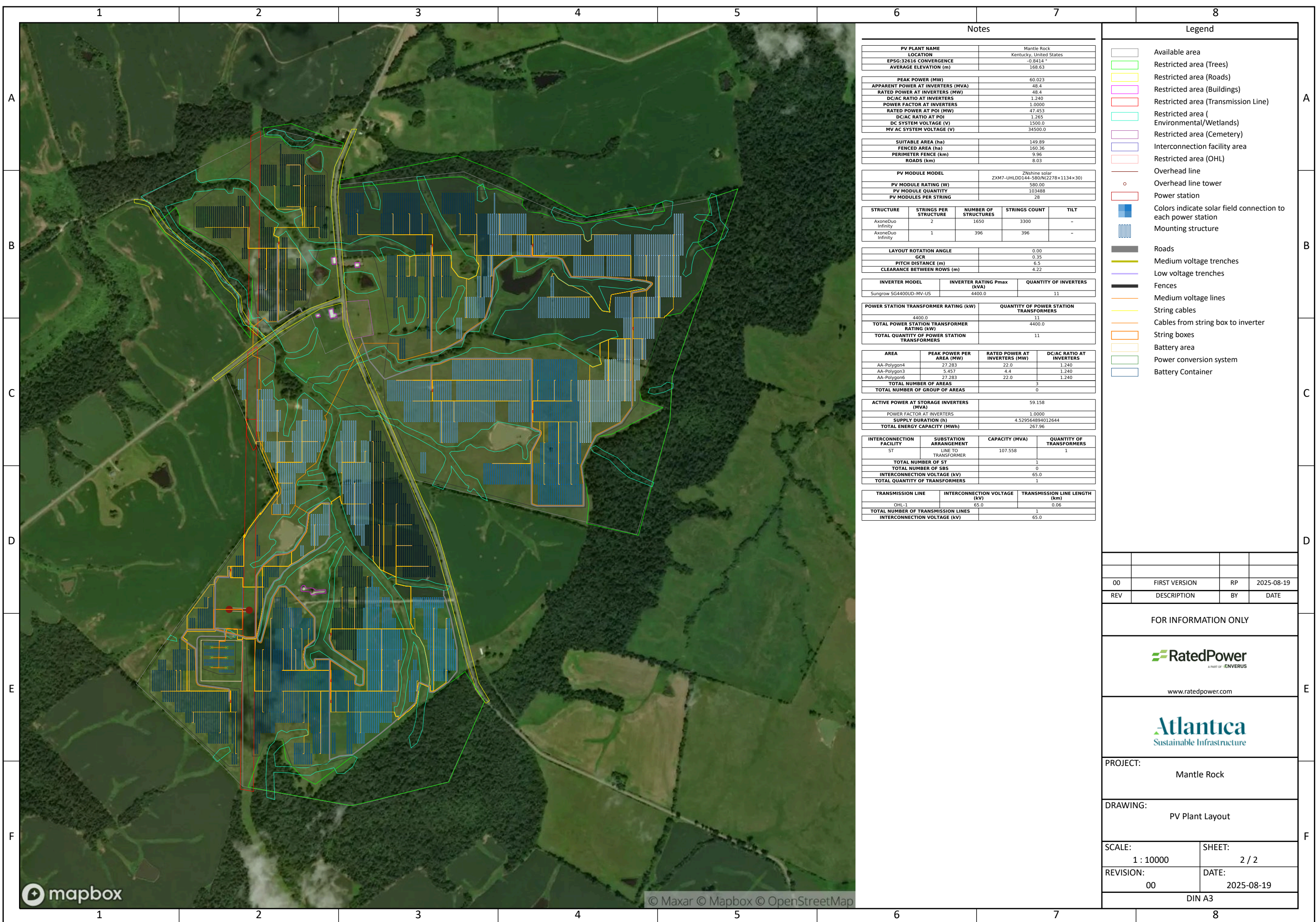


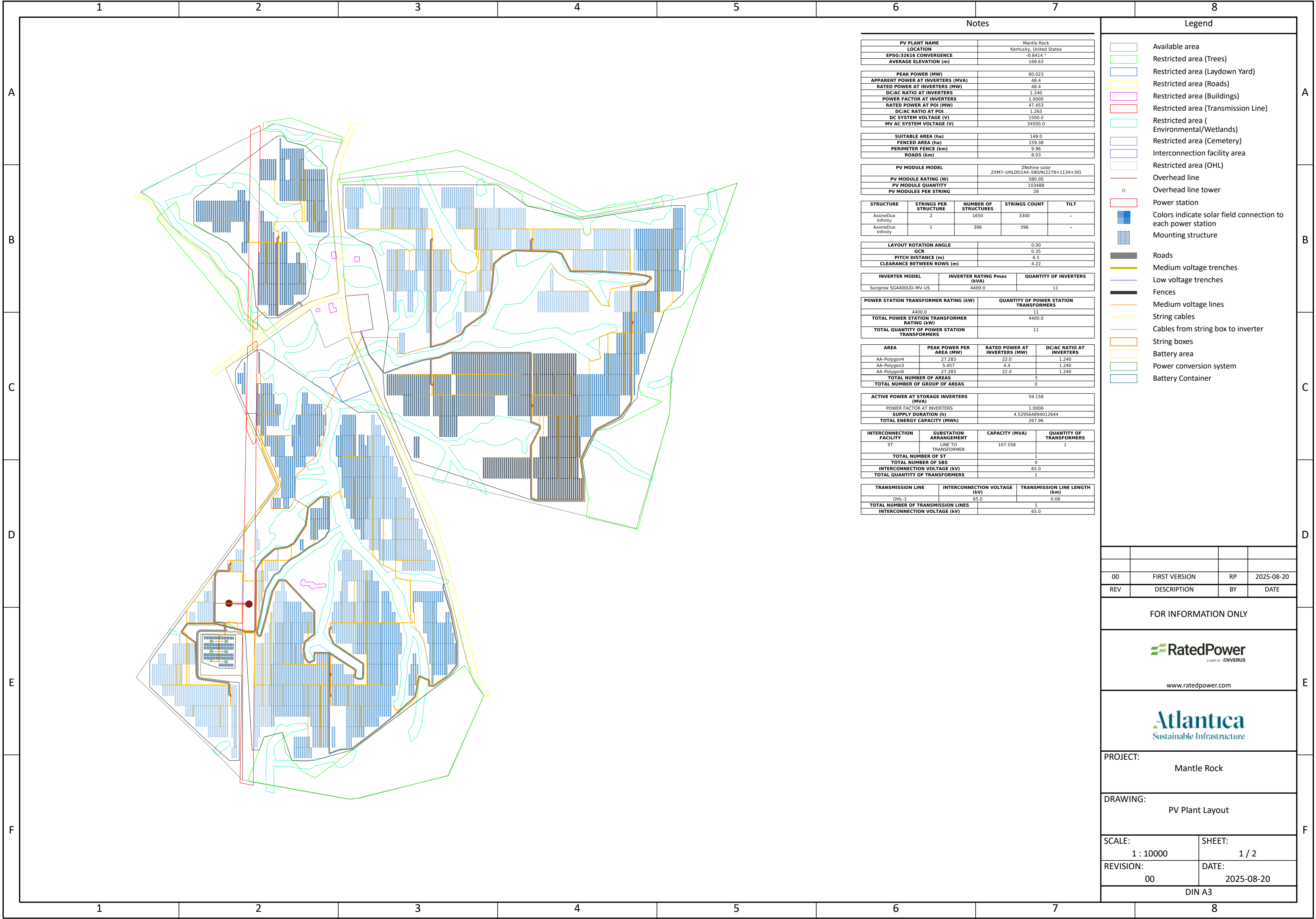
Notes				
PV PLANT NAME		Mantle Rock		
LOCATION		Kentucky, United States		
EPSG:32616 CONVERGENCE		-0.8414 "		
AVERAGE ELEVATION (m)		168.63		
PEAK POWER (MW)		60.023		
APPARENT POWER AT INVERTERS (MVA)		48.4		
RATED POWER AT INVERTERS (MW)		48.4		
DC/AC RATIO AT INVERTERS		1.240		
POWER FACTOR AT INVERTERS		1.0000		
RATED POWER AT POI (MW)		47.453		
DC/AC RATIO AT POI		1.265		
DC SYSTEM VOLTAGE (V)		1500.0		
MV AC SYSTEM VOLTAGE (V)		34500.0		
SUITABLE AREA (ha)		149.89		
FENCED AREA (ha)		160.36		
PERIMETER FENCE (km)		9.96		
ROADS (km)		8.03		
PV MODULE MODEL		Znshine solar ZXM7-UHLLD144-580/N(2278x1134x30)		
PV MODULE RATING (W)		580.00		
PV MODULE QUANTITY		103488		
PV MODULES PER STRING		28		
STRUCTURE	STRINGS PER STRUCTURE	NUMBER OF STRUCTURES	STRINGS COUNT	TILT
AxoneDuo Infinity	2	1650	3300	-
AxoneDuo Infinity	1	396	396	-
LAYOUT ROTATION ANGLE		0.00		
GCR		0.35		
PITCH DISTANCE (m)		6.5		
CLEARANCE BETWEEN ROWS (m)		4.22		
INVERTER MODEL		INVERTER RATING Pmax (kVA)	QUANTITY OF INVERTERS	
Sungrow SG4400UD-MV-US		4400.0	11	
POWER STATION TRANSFORMER RATING (kW)		QUANTITY OF POWER STATION TRANSFORMERS		
4400.0		11		
TOTAL POWER STATION TRANSFORMER RATING (kW)		4400.0		
TOTAL QUANTITY OF POWER STATION TRANSFORMERS		11		
AREA	PEAK POWER PER AREA (MW)	RATED POWER AT INVERTERS (MW)	DC/AC RATIO AT INVERTERS	
AA-Polygon4	27.283	22.0	1.240	
AA-Polygon3	5.457	4.4	1.240	
AA-Polygon6	27.283	22.0	1.240	
TOTAL NUMBER OF AREAS		3		
TOTAL NUMBER OF GROUP OF AREAS		0		
ACTIVE POWER AT STORAGE INVERTERS (MVA)		59.158		
POWER FACTOR AT INVERTERS		1.0000		
SUPPLY DURATION (h)		4.529564894012644		
TOTAL ENERGY CAPACITY (MWh)		267.96		
INTERCONNECTION FACILITY	SUBSTATION ARRANGEMENT	CAPACITY (MVA)	QUANTITY OF TRANSFORMERS	
ST	LINE TO TRANSFORMER	107.558	1	
TOTAL NUMBER OF ST		1		
TOTAL NUMBER OF SBS		0		
INTERCONNECTION VOLTAGE (kV)		65.0		
TOTAL QUANTITY OF TRANSFORMERS		1		
TRANSMISSION LINE	INTERCONNECTION VOLTAGE (kV)	TRANSMISSION LINE LENGTH (km)		
OHL-1	65.0	0.06		
TOTAL NUMBER OF TRANSMISSION LINES		1		
INTERCONNECTION VOLTAGE (kV)		65.0		

Legend	
	Available area
	Restricted area (Trees)
	Restricted area (Roads)
	Restricted area (Buildings)
	Restricted area (Transmission Line)
	Restricted area (Environmental/Wetlands)
	Restricted area (Cemetery)
	Interconnection facility area
	Restricted area (OHL)
	Overhead line
	Overhead line tower
	Power station
	Colors indicate solar field connection to each power station
	Mounting structure
	Roads
	Medium voltage trenches
	Low voltage trenches
	Fences
	Medium voltage lines
	String cables
	Cables from string box to inverter
	String boxes
	Battery area
	Power conversion system
	Battery Container

00	FIRST VERSION	RP	2025-08-19
REV	DESCRIPTION	BY	DATE

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PROJECT: <div>Mantle Rock</div>	
DRAWING: <div>PV Plant Layout</div>	
SCALE: <div>1 : 10000</div>	SHEET: <div>1 / 2</div>
REVISION: <div>00</div>	DATE: <div>2025-08-19</div>
DIN A3	





Notes				
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	Restricted area (OHL)		
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	Overhead line tower		
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	Low voltage trenches		
	Fences		
	Medium voltage lines		
	String cables		
	Cables from string box to inverter		
	String boxes		
	Battery area		
	Power conversion system		
	Battery Container		

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