

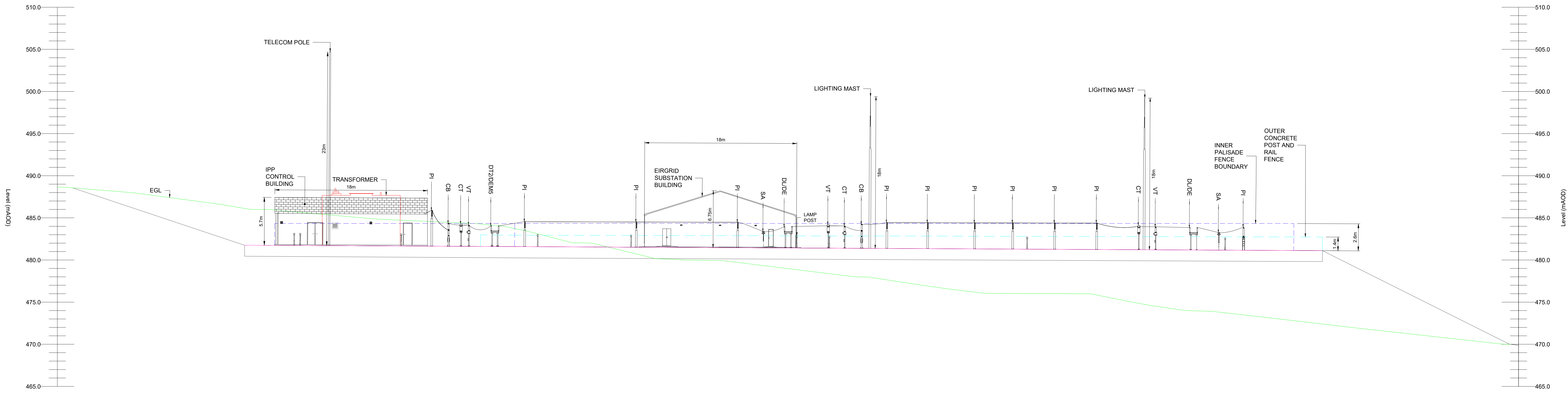
Cummeennabuddoge
Wind Farm



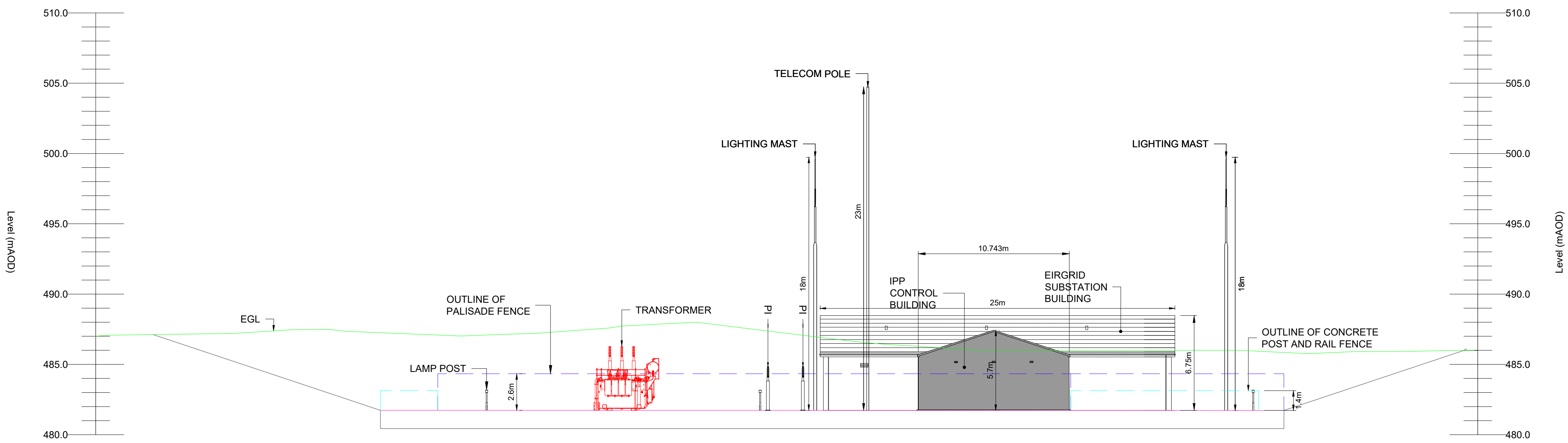
Figure 4-5
Substation Layout

NOTES

- DO NOT SCALE FROM THIS DRAWING UNLESS PRINTED AT A1. ALL DIMENSIONS AND LEVELS ARE IN METRES UNLESS STATED OTHERWISE.
- DRAWING FOR INFORMATION ONLY - **NOT FOR CONSTRUCTION**
- THIS DRAWING IS TO BE READ IN CONJUNCTION ALL RELEVANT DRAWINGS AND DOCUMENTS ASSOCIATED WITH THIS PROJECT.
- THIS IS A CONCEPTUAL DESIGN FOR GUIDANCE ONLY. ALL DIMENSIONS AND REFERENCES GIVEN ARE INDICATIVE ONLY. LAYOUT TO BE FURTHER OPTIMISED DURING DETAILED DESIGN PERIOD. SPECIFIC EQUIPMENT SUPPLIER AND SITE DETAILS, RELOCATION OR ADDITIONAL POST INSULATORS MAY BE REQUIRED. SUBJECT TO DETAILED DESIGN. NOT SHOWN FOR CLARITY.
- VEHICULAR ACCESS TO ALL HV PLANT SHALL BE PERMITTED WITHOUT THE NEED FOR UNNECESSARY PROXIMITY OUTAGES. CONSIDERATION OF LV CABLE TRENCH LAYOUTS AND TRAFFIC-BEARING TRENCH COVERS SHALL BE CONSIDERED DURING DETAILED DESIGN.
- LIGHTING MAST, LV TRENCH DUCT ROUTES, MARSHALLING/INTERFACE CABINETS AND LIGHTING FIXTURES SHALL BE CONSIDERED DURING DETAILED DESIGN.
- TWO PHASES OF THE LOW-LEVEL BAY CONDUCTORS ARE ARRANGED CLOSER TOGETHER TO AVOID UNNECESSARY PROXIMITY OUTAGES ON ADJACENT BAYS. TO BE REPEATED FOR ALL BAYS.
- INDEPENDENT SUPPORTED SPAN ON LOW-LEVEL BAY CONDUCTORS BETWEEN DA AND DB. THE CONNECTION AT THE PI SHOULD BE ABLE TO BE BROKEN TO ALLOW THE LINK BETWEEN DA AND DB TO BE DISCONNECTED. PI AND SPAN TO BE INSTALLED ON ALL FUTURE BAYS IN THE C-TYPE (PHASE 1) STATION.
- DISTANCE BETWEEN CT AND CB ON WING COUPLER TO BE A MINIMUM OF 650mm FROM THE BUSBAR SIDE OF THE OPEN DISCONNECT. DISTANCE BETWEEN DISCONNECT AND ADJACENT LOW-LEVEL BAY CONDUCTOR TO BE A MINIMUM OF 650mm.
- 650mm DISTANCE REQUIRED BETWEEN BUSBAR AND CB ON EACH BAY.
- DIESEL GENERATOR AND STATION RURAL FEEDING ARRANGEMENT SHALL BE IN LINE WITH EIRGRID STATION AUXILIARY POWER SUPPLIES SPECIFICATION.
- THIS LAYOUT RELATES PRIMARILY TO NE SUBSTATIONS (BROWN FIELD) SHALL MAKE ALL REASONABLE EFFORTS TO BRING THE ARRANGEMENT IN LINE WITH THIS STANDARD (INCREASED CLEARANCE, NEW WIRAP-AROUND COUPLER AND SECTIONALISER CONFIGURATION). THE DEVELOPMENT SHALL NOT WORSEN ANY EXISTING OAM CLEARANCES WHICH MAY NOT BE IN ACCORDANCE WITH THIS STANDARD LAYOUT.
- REQUIREMENT FOR SURGE ARRESTERS IN CUSTOMER COMPOUND TO BE DETERMINED BASED ON INSULATION CO-ORDINATION STUDY.
- MINIMUM ELECTRICAL CLEARANCES SHALL COMPLY AS OUTLINED IN EIRGRID GENERAL REQUIREMENTS SPECIFICATION XDS-GPS-00-001.
- BAY CONDUCTOR PHASING TO BE AGREED BASED ON PARTICULAR PROJECT REQUIREMENTS.
- A DETAILED ARRANGEMENT TO PREVENT PROPERTY BOUNDARY BEING USED AS A CLIMBING AID TO BE AGREED WITH EIRGRID.

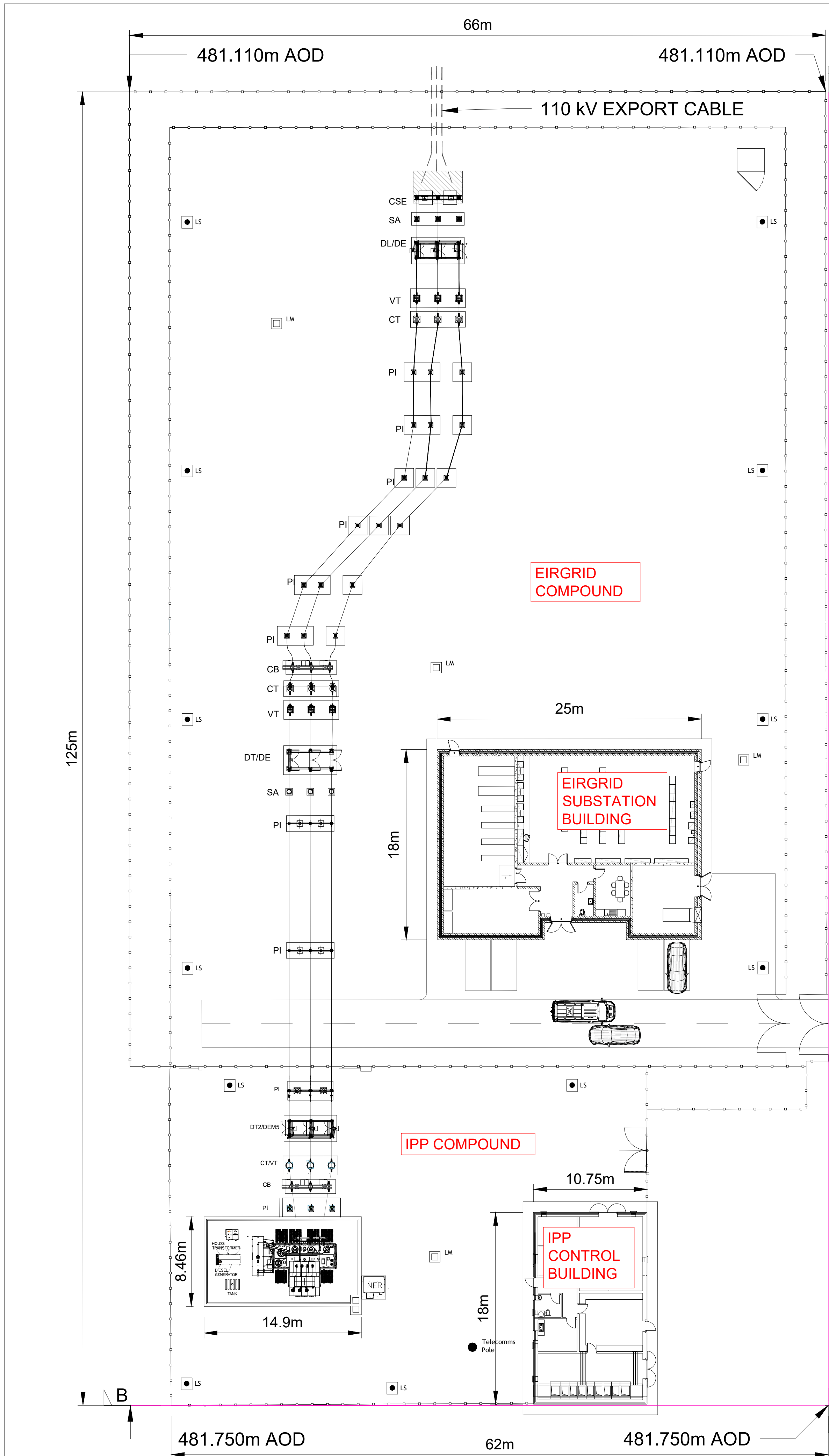


SUBSTATION CROSS SECTION A-A
SCALE 1:200

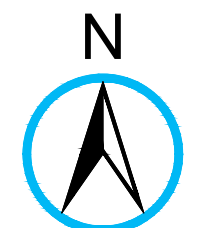
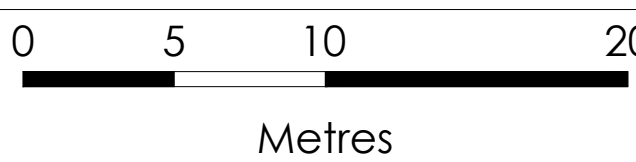


SUBSTATION CROSS SECTION B-B
SCALE 1:200

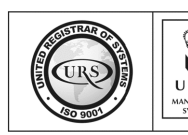
LEGEND	
SA	SURGE ARRESTER
VT	VOLTAGE TRANSFORMER
CT	CURRENT TRANSFORMER, SINGLE PHASE
PI	POST INSULATOR
DL/DE	LINE/EARTH DISCONNECT
DT/DEM4	TRAFO/EARTH DISCONNECT
CB	CIRCUIT BREAKER
CSE	CABLE SEALING END
LM	LIGHTNING MAST
LS	LIGHT STAND



SUBSTATION
PLAN
SCALE 1:500



Scale @ A1:
1:250



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