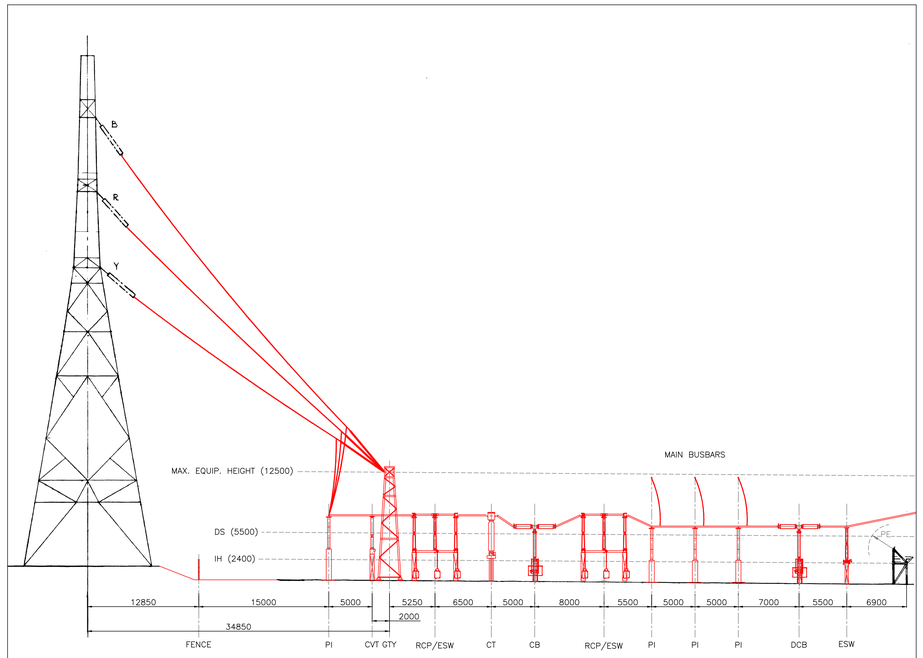
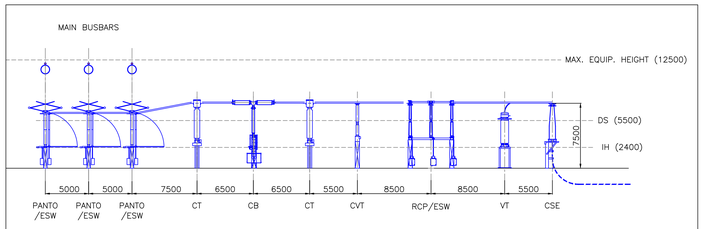
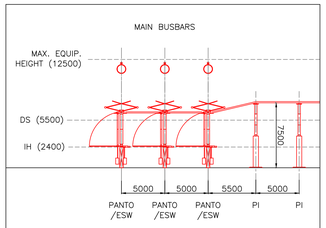


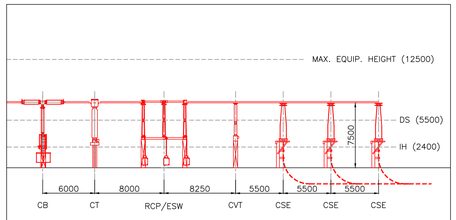
SECTION A–A
COWLEY–DIDCOT 1 & SGT5 HV BAY



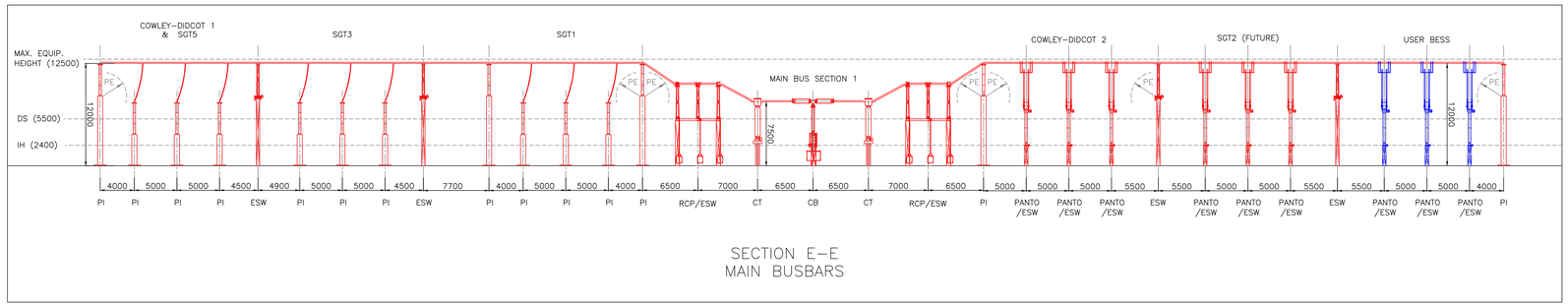
SECTION B–B
USER BESS



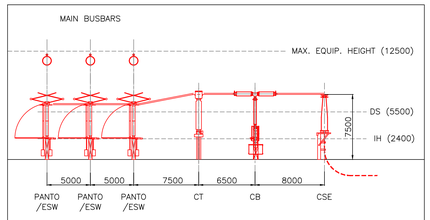
SECTION C–C
COWLEY–DIDCOT 2 (1 OF 2)



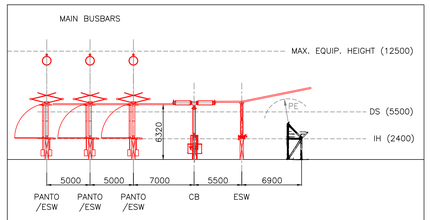
SECTION D–D
COWLEY–DIDCOT 2 (2 OF 2)



SECTION E–E
MAIN BUSBARS



SECTION F–F
SGT2 (FUTURE)



SECTION G–G
SGT1 & SGT3

SUBSTATION MINIMUM ELECTRICAL CLEARANCES IN ACCORDANCE WITH TS 2.1 AND TGN(E) 186		
REF	NOMINAL SYSTEM VOLTAGE (rms)	400kV
1	PHASE TO EARTH CLEARANCE	2.8m
2	PHASE TO PHASE CLEARANCE	3.6m
3	SAFETY DISTANCE (FROM NGC SAFETY RULES)	3.1m
4	DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSH1	4.6m
5	DESIGN CLEARANCE FOR SAFETY (VERTICAL) DS1	5.5m
6	INSULATION HEIGHT (PEDESTRIAN ACCESS)	2.4m
7	MEWP DESIGN CLEARANCE FOR SAFETY (HORIZONTAL) DSH2	6.6m
8	MEWP ACCESS CORRIDOR TO DEAD CIRCUIT	3m
9	CRANE ALLOWANCE	7.5m

TABLE OF PLANT ABBREVIATIONS	
DCB	DISCONNECTING CIRCUIT BREAKER
RCP	ROTATING CENTRE POST DISCONNECTOR
ESW	EARTH SWITCH
CB	CIRCUIT BREAKER
CVT	CAPACITIVE VOLTAGE TRANSFORMER
CT	CURRENT TRANSFORMER
PANTO	PANTOGRAPH DISCONNECTOR
CSE	CABLE SEALING END
PI	POST INSULATOR
VT	VOLTAGE TRANSFORMER
GTY	GANTRY

NOTES:

1. FOR LAYOUT, SEE PDD–101839–LAY–005.
2. SAG PROFILE OF TOWER DOWNLEADS/DROPPERS IS PURELY ILLUSTRATIVE, REUSE OF TOWER STRAIN INSULATORS TBC.

REFERENCE DRAWINGS:

21/22775 – LAYOUT AND SECTIONS OF 400kV SUBSTATION

LEGEND:

- NEW NATIONAL GRID PLANT
- NEW USER PLANT
- EXISTING PLANT

5 0 5 10 15 20 25m
ORIGINAL SCALE 1:250

Rev	Description	Chk'd	Chk'd	App'd	Date
P1	UPDATED FOLLOWING 4.3 KICK OFF MEETING	JD	AT	FM	11.04.24
P0	FIRST ISSUE	JD	TF	CN	15.11.23

nationalgrid

Master Scheme No: 101839
Sub-Scheme No: *********
Site: CULHAM JET 400kV SUBSTATION
Scheme Name: CULHAM JET 400kV SUBSTATION
Document Title: PROPOSED ELEVATIONS OPTION D

Created by:	Date:	Checked by:	Date:	Approved by:	Date:
JD	15/11/23	TF	15/11/23	CN	15/11/23

Development Eng:	Document Type:	Scale:	Format:	Sheet(s):	Rev:
M. HALES	ELE	1:250	A0	1 OF 1	P1

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FEED Document Number: *********