

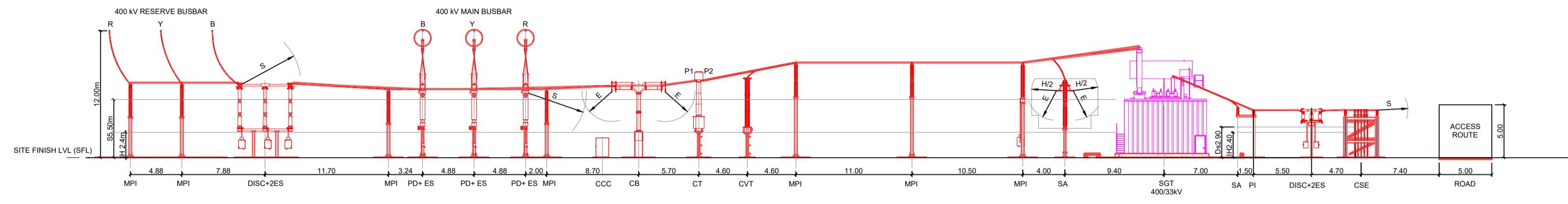
SUBSTATION MINIMUM ELECTRICAL CLEARANCES					
REQUIREMENTS TO BE IN ACCORDANCE WITH SSE SUBSTATION DESIGN SPECIFICATIONS DOC NO. SP-NET-SST-501					
REF	CLEARANCE (mm)	NOMINAL SYSTEM VOLTAGE			
		400kV	275kV	132kV	33kV
E	PHASE TO EARTH	2800	2100	1100	500
Ph	PHASE TO PHASE	3600	2400	1400	430
S	DESIGN CLEARANCE FOR SAFETY	5500	4800	3500	2900
SD	SAFETY DISTANCE	3100	2400	1400	800
Ds	WORKING & ACCESS CLEARANCE (VERTICAL)	5200	4500	3500	2900
Dsh	WORKING & ACCESS CLEARANCE (HORIZONTAL)	4600	3900	2900	2300
IH	INSULATION HEIGHT (PEDESTRIAN ACCESS)	2400	2400	2400	2400
S+2	MEWP DESIGN CLEARANCE FOR SAFETY	7500	6800	5500	4900
-	MEWP ACCESS CORRIDOR TO DEAD CIRCUIT	3000	3000	3000	3000

- NOTES:**
- THIS DRAWING IS FOR PLANNING PURPOSES ONLY SUBJECT TO DETAILED DESIGN.
  - DIMENSION IS IN METRES UNLESS STATED OTHERWISE.
  - THE FOLLOWING FENCING REQUIREMENTS HAVE BEEN ASSUMED:  
INTERNAL FENCE: 2.4m HIGH NON-ELECTRIC FENCE  
EXTERNAL FENCE: 2.4m HIGH PHYSICAL MESH / PALISADE BARRIER WITH ELECTRIC PULSE FENCE.
  - REQUIREMENT FOR NOISE ENCLOSURE ON STGS AND SHUNT REACTORS SHALL BE CONFIRMED.
  - OHL ARRANGEMENT TO BE CONFIRMED BY OHL CONTRACTOR. MAINTENANCE CLEARANCE CONSIDERED AS 25m RADIUS CIRCLE FROM TOWER CENTRE. CONSTRUCTION CLEARANCE CONSIDERED AS SQUARE WITH 70m SIDES CENTRED ON THE TERMINAL TOWER. REQUIREMENT TO BE CONFIRMED BY OHL CONTRACTOR.
  - THE 400kV CABLE ROUTE TO BE CONFIRMED BY CABLE CONTRACTOR.
  - SPACE REQUIREMENT FOR SYNCHRONOUS CONDENSER TAKEN FROM DRAWING LT486-XXXX-0802-003. NO REQUIREMENTS ARE AVAILABLE. FOOTPRINT TO BE REVIEWED ONCE INFORMATION IS MADE AVAILABLE.
  - FOR OIL COOLED EQUIPMENT RADIATOR POSITIONS SHOWN ARE INDICATIVE. IN THE FINAL DESIGN THEY BE LOCATED AWAY FROM THE SKID-WAY DEPENDING ON THE SELECTED TRANSFORMER.
  - GIS/AIR INTERFACE CONNECTION TO SYNCHRONOUS CONDENSER TO BE CONFIRMED BY THE SUPPLIER.
  - DENOTES PLANT EQUIPMENT TO BE FREE ISSUED AND INSTALLED BY SSEN.

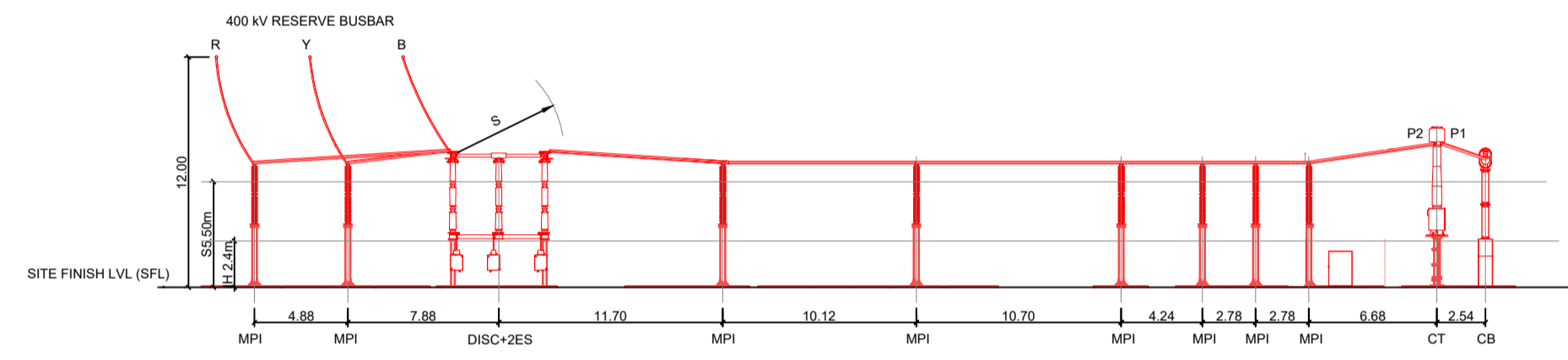
- KEY:**
- CSE - CABLE SEALING END
  - SA - SURGE ARRESTER
  - ES - EARTH SWITCH
  - PI - POST INSULATOR
  - MPI - MEDIUM LEVEL POST INSULATOR
  - HPI - HIGH LEVEL POST INSULATOR
  - CT - CURRENT TRANSFORMER
  - CVT - CAPACITIVE VOLTAGE TRANSFORMER
  - WVT - WOUND VOLTAGE TRANSFORMER
  - CB - CIRCUIT BREAKER
  - DISC.+2ES - DISCONNECTOR WITH TWO EARTH SWITCH
  - PD+ES - PANTOGRAPH WITH EARTH SWITCH
  - SHR - SHUNT REACTOR
  - PRR - PORTABLE RELAY ROOM
  - SGT - SUPERGRID TRANSFORMER
  - NER - NEUTRAL EARTHING RESISTOR
  - ET - EARTHING TRANSFORMER
  - AVR - AUTOMATIC VOLTAGE REGULATOR
  - MK - MARSHALLING KIOSK
  - CCC - CENTRAL CONTROL CUBICLE

- LEGEND:**
- EXISTING EQUIPMENT
  - PROPOSED EQUIPMENT
  - PROPOSED EQUIPMENT - SCOPE TBD
  - PROPOSED EQUIPMENT (BY OTHERS)

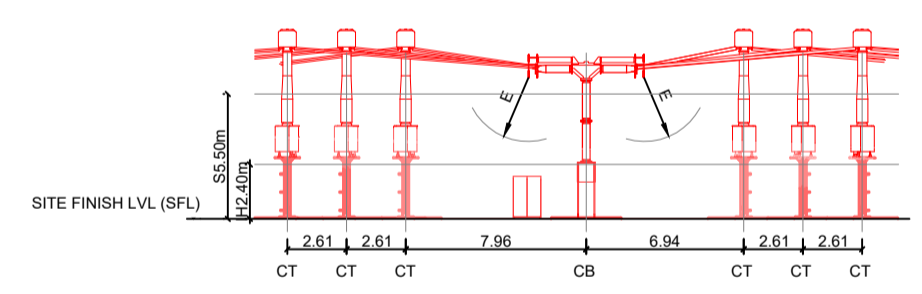
- REFERENCE DRAWINGS:**
- SINGLE LINE DIAGRAM - 116367-MMD-00-XX-DR-EE-0013
  - ELECTRICAL SITE LAYOUT - 162507-BMD-PL-HR-DEL-TP-0002 (PRIMARY)



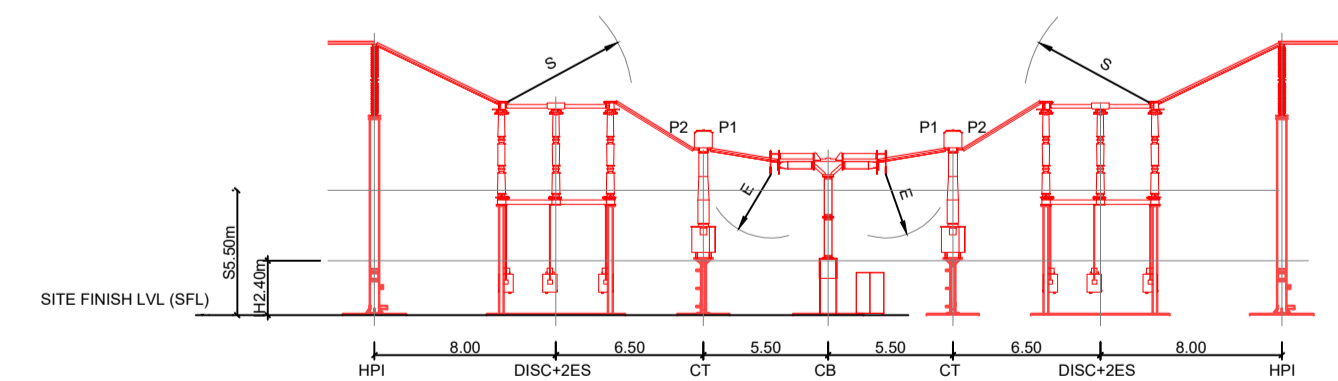
SECTION E  
1:200  
TP-0001



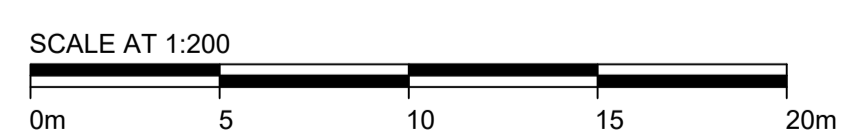
SECTION F  
1:200  
TP-0001



SECTION G  
1:200  
TP-0001



SECTION H  
1:200  
TP-0001



Issue / Revision:	01	Drawn By:	RB	Issue / Revision:	02	Drawn By:	RB
Investment No.:	N/A	Checked By:	JF	Investment No.:	N/A	Checked By:	JM
Date:	27/SEP/24	Approved By:	RC	Date:	05/DEC/24	Approved By:	RC
Description / Remarks				Description / Remarks			
ISSUED FOR PLANNING				ISSUED FOR PLANNING SCALING UPDATED			

**Drawing Status:** ISSUED FOR PLANNING

Software:	Status Code:	Scale:	Paper Size:
AUTOCAD	Not Used	1:200	A1
Drawn By:	Checked By:	Approved By:	Date:
RB	JF	RC	27/SEP/24

**Contractor:**  
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**Client:** Scottish & Southern Electricity Networks  
**Supplier / Subcontractor:**

**Drawing Title:** ELECTRICAL ELEVATIONS

**Project Name:** HURLIE 400kV SUBSTATION

**Site Name:** HURLIE 400kV SUBSTATION

**Contractor Drawing No.:** 162507-BMD-PL-HR-DEL-TP-0002

**Client Drawing No.:** 162507-BMD-PL-HR-DEL-TP-0002  
**Sheet:** 2 OF 2

**Supplier / Subcontractor Drawing No.:** XXX  
**Issue / Revision:** 01

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