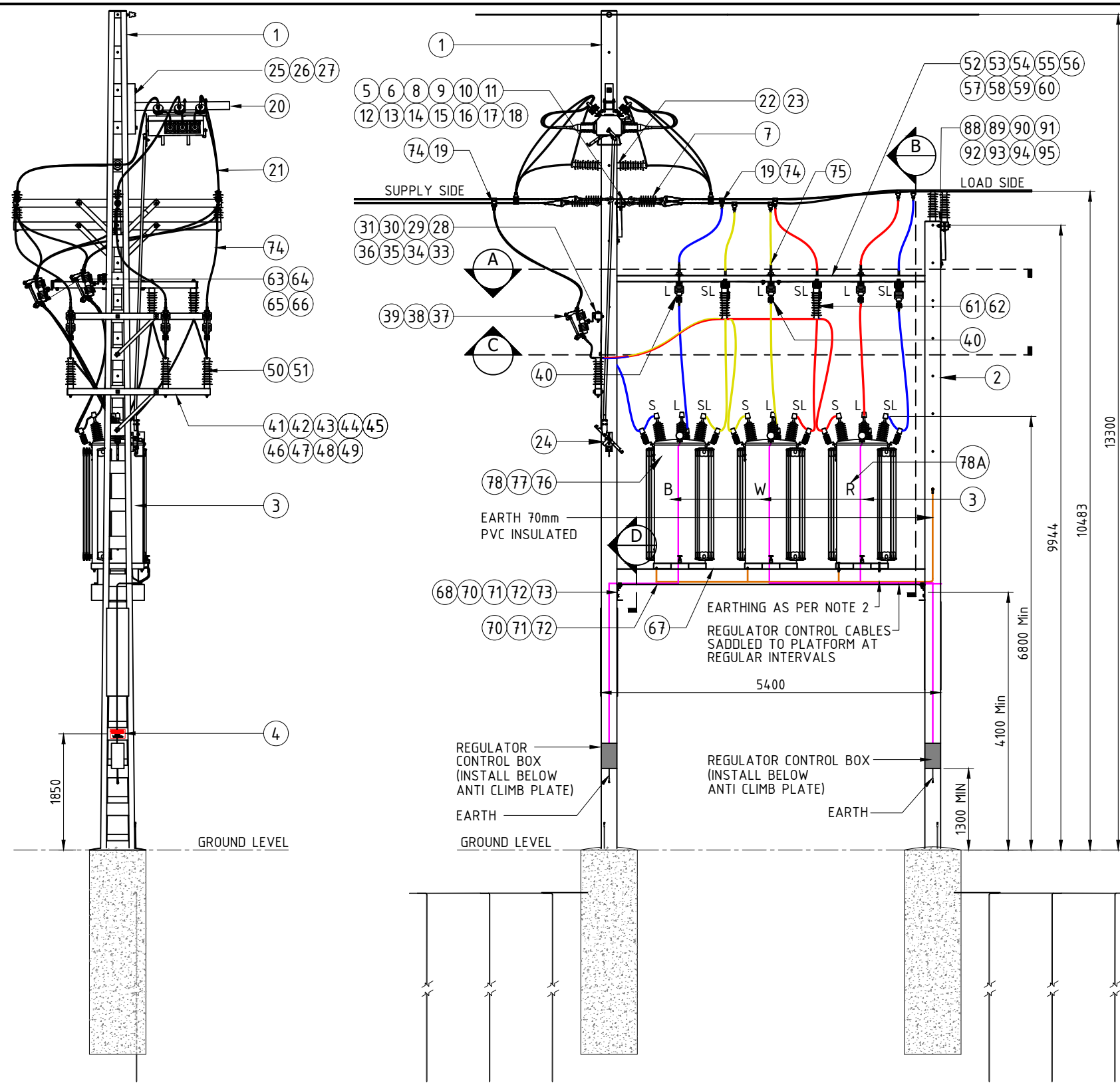
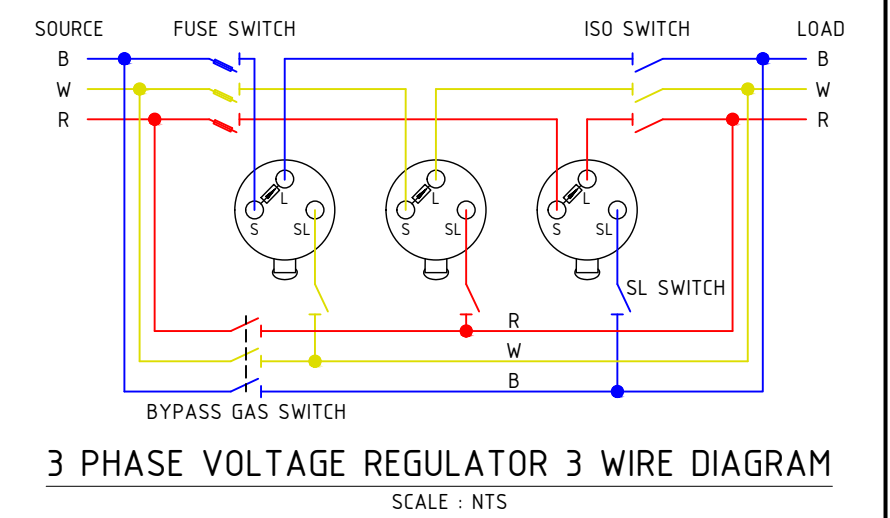
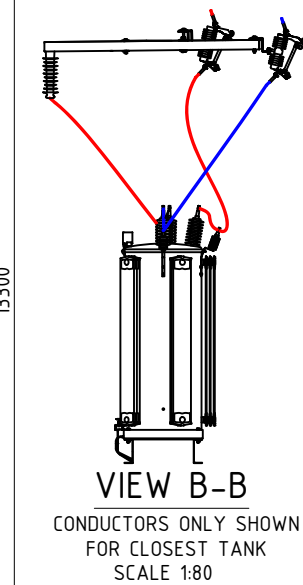
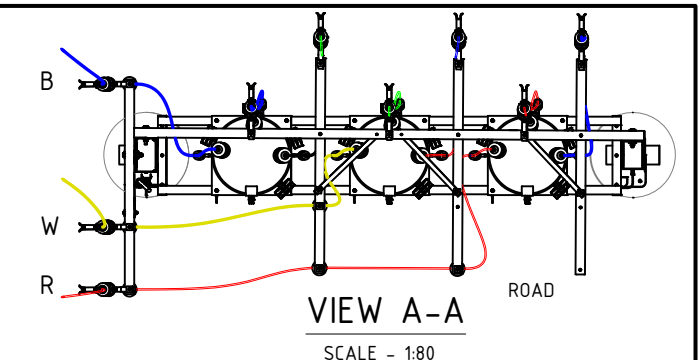
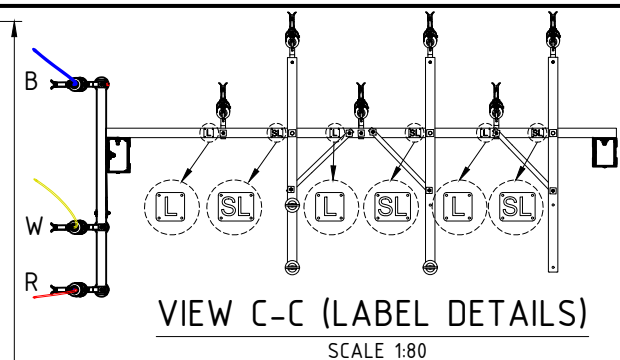




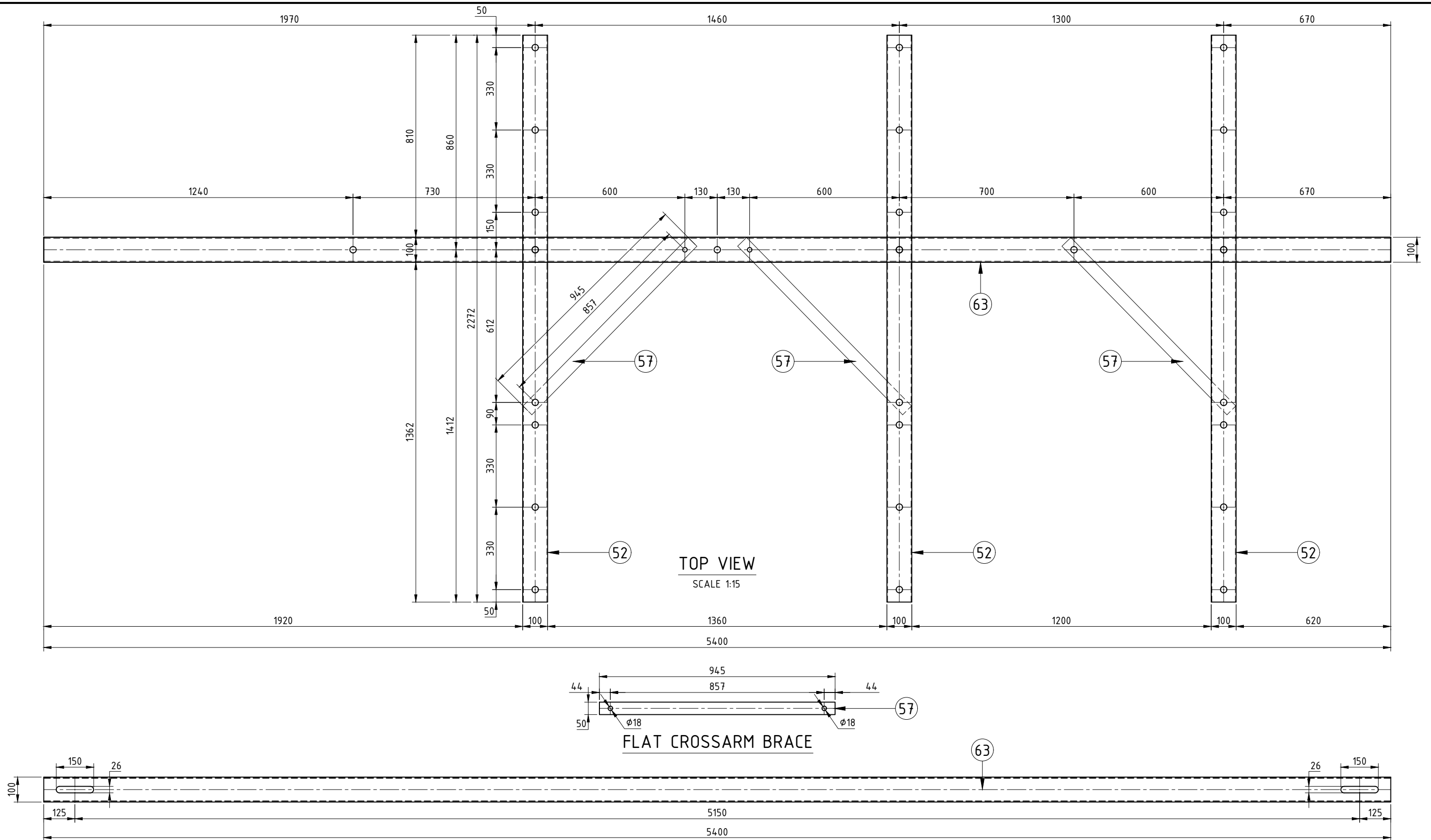
SUPPLY SIDE VIEW
ALL BRIDGING CONDUCTORS SHOWN
SCALE - 1:80

REGULATOR ARRANGEMENT
SCALE - 1:80



- NOTES:**
1. THE CORRECT OPERATION OF A VOLTAGE REGULATOR IS HIGHLY DEPENDENT ON THE PHASE SEQUENCE OF THE MAINS AT THE POINT OF INSTALLATION. BEFORE MAKING CONNECTIONS, THE PHASE SEQUENCE AT THE POINT OF INSTALLATION MUST BE VERIFIED BY DESIGNER
 - 1.1. THE PHASE SEQUENCE SHALL BE RED, WHITE, BLUE WHEN LOOKING AT THE VOLTAGE REGULATOR FROM SUPPLY TO LOAD
 - 1.2. CONSTRUCTORS AND DESIGNERS SHALL ROTATE THE PHASES ON ADJACENT POLES TO ACHIEVE CORRECT PHASING
 2. POLE EARTHING TO BE AS PER APPLICABLE DRAWING S01-02-03-11 OR S01-02-03-12 OR S01-02-03-13
 - 2.1. EARTH EACH CONTROL BOX TO BE BONDED VIA 70mm² INSULATED CONDUCTOR TO POLE (SHORTEST RUN POSSIBLE)
 - 2.2. VR CANS CAN BE EARTHED AT TOP OF POLE
 3. POLE OVERHEAD CONNECTION TO POLE AS PER S01-02-01-27 ASSEMBLIES EARTHING CMEN UNDERSLUNG EARTH FOR UNIVERSAL POLE CONSTRUCTION
 4. HV EARTH TO BE SADDLED AT MAXIMUM 300MM INTERVALS.
 5. UMBILICAL CABLES, WHERE FITTED, TO BE SADDLED AT MAXIMUM 300MM INTERVALS.
 6. PLATFORM MOUNTS SHALL BE ATTACHED TO POLE AS PER NOTES ON S01-02-06-19_04
 7. PWC TO FASTEN HV DANGER SIGNS TO POLES IN LINE WITH S02-01-08-01
 8. LIGHTNING ARRESTORS MOUNTED ON REGULATORS TO BE CONNECTED TO EARTH VIA 70mm² PVC INSULATED CONDUCTOR GREEN/GOLD
 9. GAS SWITCH TO BE INSTALLED AS A REGULATOR BYPASS SWITCH
 10. REFER TO DRAWING S01-02-07-11 FOR GBS PART LIST
 11. REFER TO DRAWING S01-01-02-13 FOR OVERHEAD EARTH
 12. REFER TO DRAWINGS S01-02-06-13 FOR POLE STRUCTURES DOUBLE POLE TWO SINGLE PHASE REGULATORS GENERAL ARRANGEMENT
 13. ALL MEASUREMENTS IN MM UNLESS OTHERWISE NOTED
 14. IF PHASE ROTATION DOESN'T MATCH THE SINGLE LINE DIAGRAM, IT IS ALSO ACCEPTABLE TO ENSURE EACH CAN 'S' AND 'L' IS WIRED TO THE SAME PHASE
 15. SL CAN BE ON ANY ALTERNATIVE PHASE AS LONG AS EACH CAN IS USING A DIFFERENT PHASE
 16. T&P TO ENSURE PHASE ANGLES ARE CORRECT BY CHECKING POWER FACTOR AND ADJUSTING ACCORDINGLY DURING COMMISSIONING

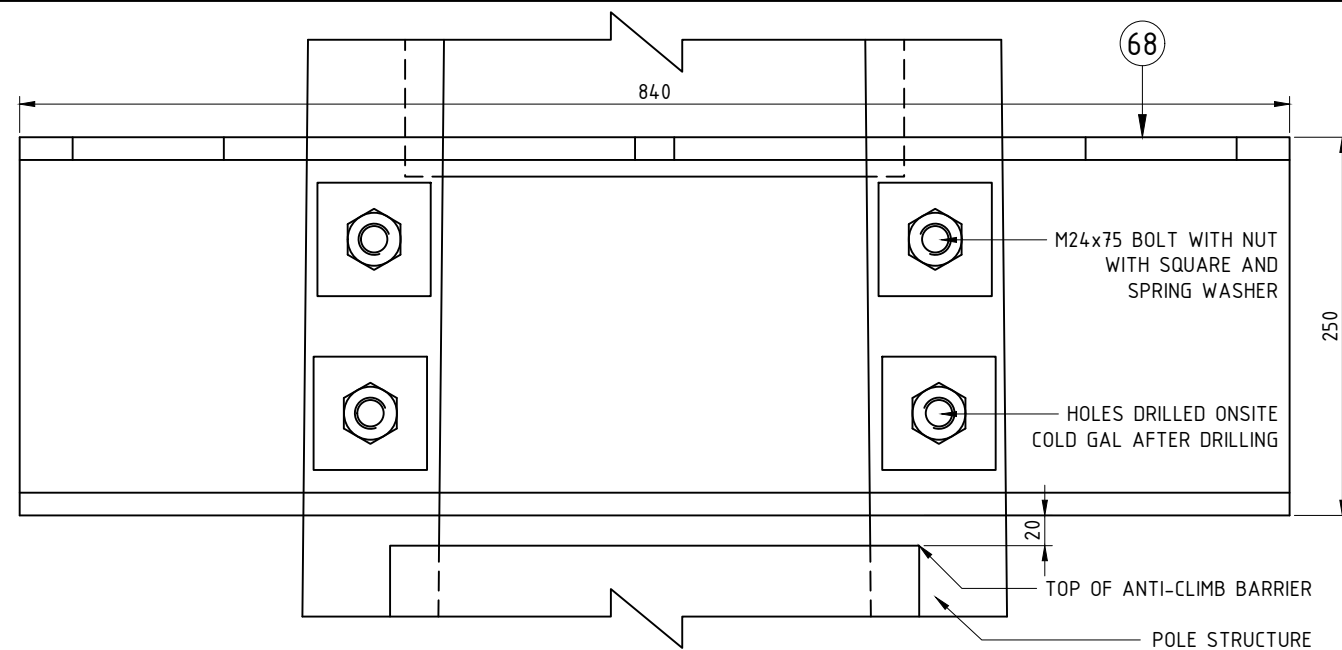
						 N O R T H E R N T E R R I T O R Y	DES	B.BAYRAM	POWER STANDARD DRAWING				
							DRN	P.GUNA	POLE STRUCTURES DOUBLE POLE				
							CKD	B.BAYRAM	CLOSE DELTA REGULATOR SYSTEM				
							APPD	B.VANDERSTELT	GENERAL ARRANGEMENT				
							SCALE	AS SHOWN	SHEET 1 OF 7				
							ISSUED	SEP'25	A3	DRAWING NUMBER	S01-02-06-19_01	0	
							ALL DIM. IN mm						
					</								



BRIDGING SUPPORT ARM FRONT VIEW
5400 LONG 100x100x4mm SHS 1 OFF
SCALE 1:15

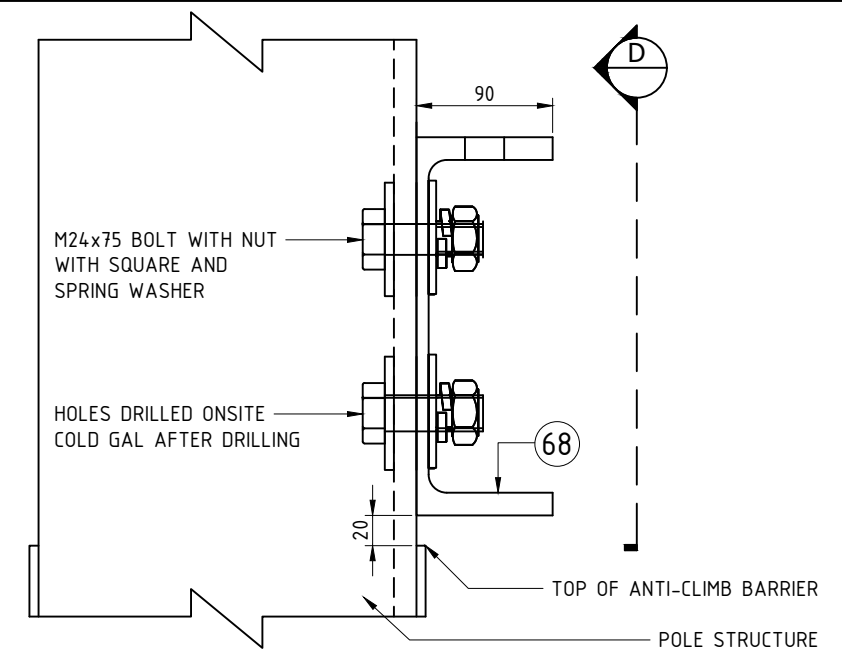
						 NORTHERN TERRITORY	DES	B.BAYRAM	POWER STANDARD DRAWING				
							DRN	P.GUNA	POLE STRUCTURES DOUBLE POLE				
							CKD	B.BAYRAM	CLOSE DELTA REGULATOR SYSTEM				
							APPD	B.VANDERSTELT	PLATFORM COMPONENTS				
							SCALE	AS SHOWN	SHEET 2 OF 7				
	0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.		B.V.	ISSUED	SEP'25	A3	DRAWING NUMBER	S01-02-06-19_02	0
	NO	DESCRIPTION	DRN	DATE	CKD		APPD	ALL DIM. IN mm					
	AMENDMENTS						DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY			AMDT	

						 N O R T H E R N T E R R I T O R Y	DES	B.BAYRAM	POWER STANDARD DRAWING			
							DRN	P.GUNA	POLE STRUCTURES DOUBLE POLE			
							CKD	B.BAYRAM	CLOSE DELTA REGULATOR SYSTEM			
							APPD	B.VANDERSTELT	PLATFORM COMPONENTS			
							SCALE	AS SHOWN	SHEET 3 OF 7			
							ISSUED	SEP'25	A3	DRAWING NUMBER	S01-02-06-19_03	0
							ALL DIM. IN mm					
AMENDMENTS						DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		AMDT		

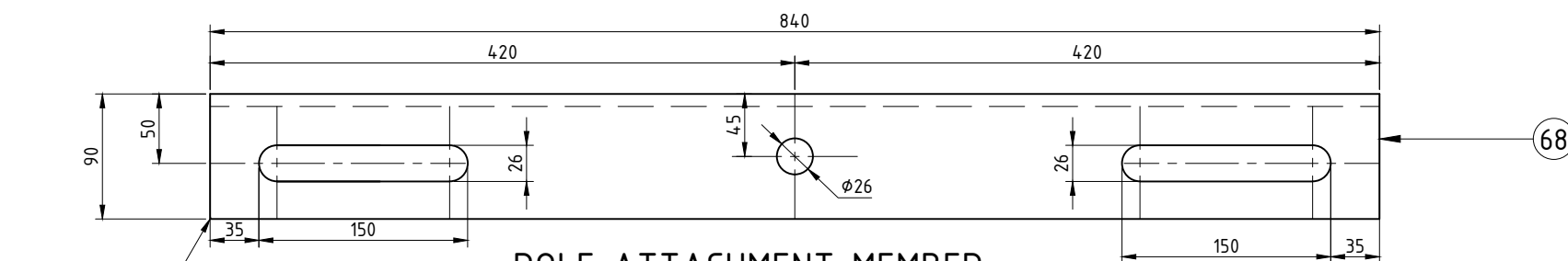


VIEW: D-D (LOOKING TOWARDS POLE)
REGULATOR PLATFORM ATTACHMENT DETAIL

SCALE 1:5



SIDE VIEW



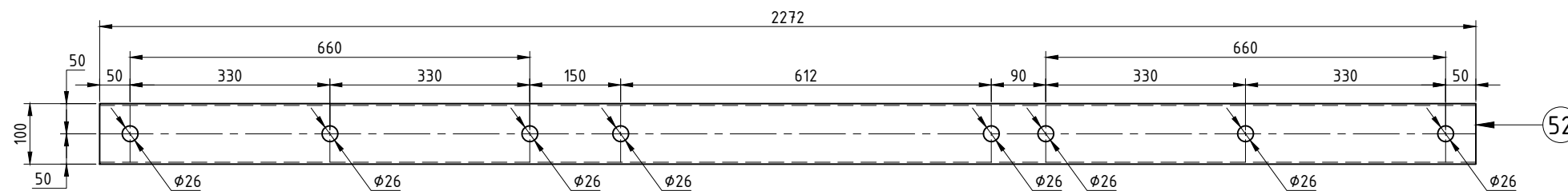
POLE ATTACHMENT MEMBER

840 LONG 250x90x PFC

2 OFF

SCALE 1:5

DRILLING ON
TOP FACE ONLY



BRIDGING SUPPORT ARM (52)

2272 LONG 100x100x3mm RHS

3 OFF

SCALE 1:10

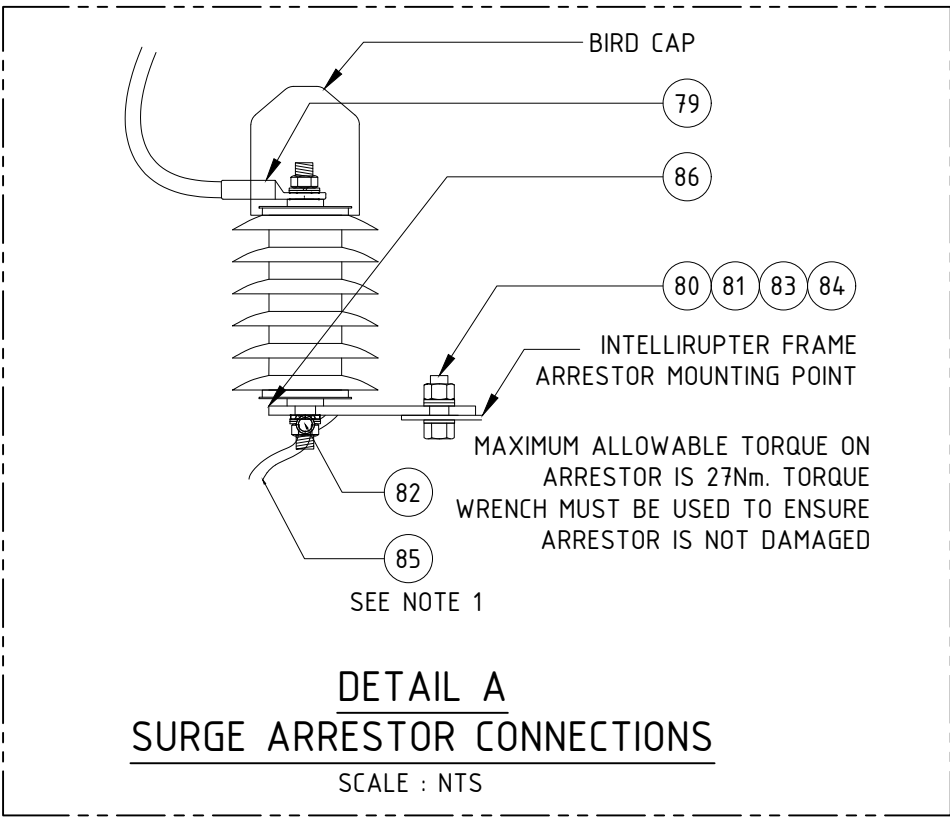
NOTES:
DRILL REGULATOR FIXING HOLES ONSITE TO SUIT UNIT.
COLD GAL AFTER DRILLING

PowerWater
NORTHERN TERRITORY

DES	B.BAYRAM	POWER STANDARD DRAWING	
DRN	P.GUNA	POLE STRUCTURES DOUBLE POLE	
CKD	B.BAYRAM	CLOSE DELTA REGULATOR SYSTEM	
APPD	B.VANDERSTELT	PLATFORM COMPONENTS	
SCALE	AS SHOWN	SHEET 4 OF 7	
ISSUED	SEP'25	A3	DRAWING NUMBER S01-02-06-19_04
ALL DIM. IN mm			
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY	

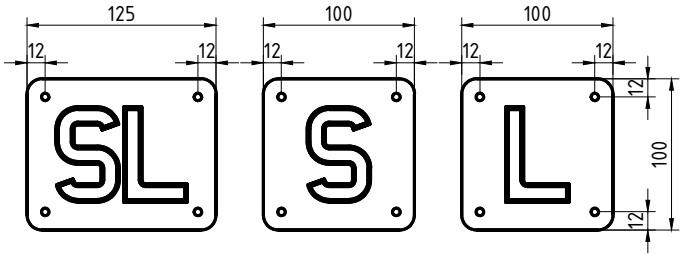
0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.	B.V.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					

0
AMDT



NOTE

1. HV SURGE ARRESTERS ARE TO BE EARTHED BY DAISY CHAINING AND ELECTRICALLY BONDING TO THE TOP EARTH BAR USING 70mm² PVC INSULATED CONDUCTOR.
2. INSTALL MEDIUM WALLED MASTIC LINED BLACK HEATSHRINK OVER THE BARE LUG BARREL AND CABLE INSULATION.

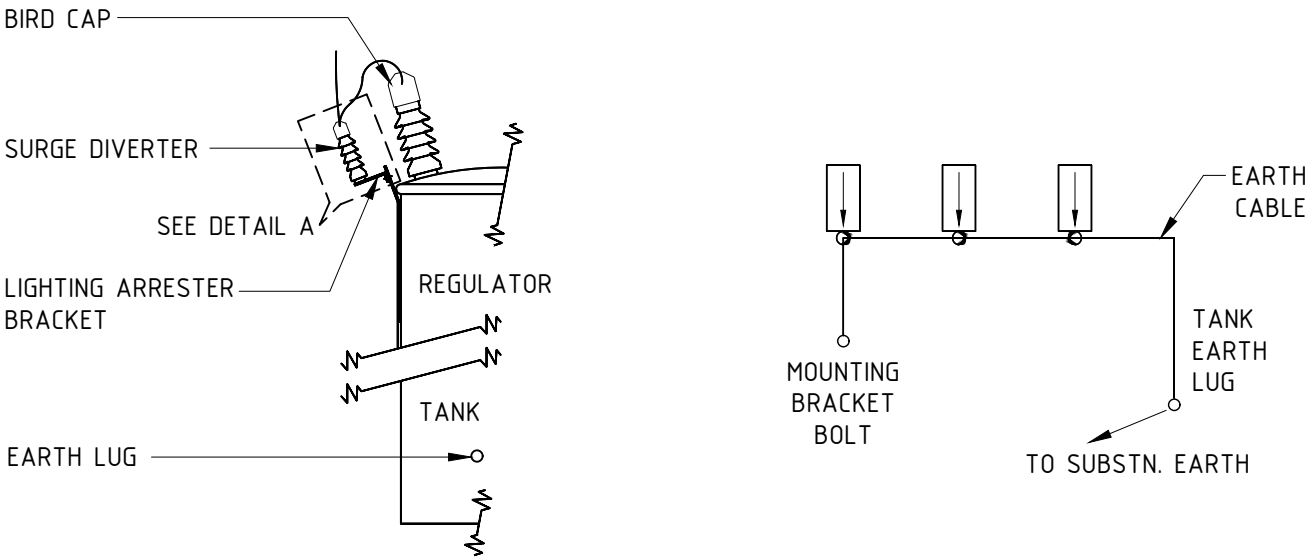


SWITCH LETTERS

BLACK ON YELLOW
SCALE 1:5

SINGLE SIGNS

- SL : 502100 x 4
S : 502098 x 2
L : 502099 x 4



SURGE DIVERTER EARTHING ARRANGEMENT

SCALE : NTS

							 N O R T H E R N T E R R I T O R Y	DES	B.BAYRAM	POWER STANDARD DRAWING				
								DRN	P.GUNA	POLE STRUCTURES DOUBLE POLE				
								CKD	B.BAYRAM	CLOSE DELTA REGULATOR SYSTEM				
								APPD	B.VANDERSTELT	MISCELLANEOUS				
								SCALE	AS SHOWN	SHEET 5 OF 7				
								ISSUED	SEP'25	A3	DRAWING NUMBER	S01-02-06-19_05	0	
								ALL DIM. IN mm						
								DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		AMDT		
	0	ISSUED FOR CONSTRUCTION				P.G.		SEP'25	B.B.	B.V.				
	NO	DESCRIPTION				DRN		DATE	CKD	APPD				
AMENDMENTS														

3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
1	1	LINE POLE 16.5D BOLTED CONNECTIONS	S01-01-01-14	298505
2	1	LINE POLE 12.0D BOLTED CONNECTIONS	S01-01-01-12	298489
3	3	SINGLE PHASE VOLTAGE REGULATOR 11/12.7/19.1/22KV	-	406799
4	4	SIGN - "DANGER HIGH VOLTAGE"	S02-01-08-01	6429
HV ARM COMPONENTS				
5	1	FIBREGLASS HV TERMINATION CROSSARM	S01-01-02-10	414398
6	2	FIBREGLASS CROSSARM SHACKLE PLATE	S01-01-04-37	406938
7	6	22kV STRAIN INSULATOR ASSEMBLY	S01-01-03-09	-
8	1	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
9	1	M24x50mm GALV. BOLT C/W UT	S01-01-04-43	114629
10	1	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
11	2	M24x180 GALV. BOLT C/W NUT	S01-01-04-43	400802
12	8	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
13	5	M24 GALV. SPRING WASHER	S01-01-04-43	114330
14	2	18kN M24 GALV. EYENUT	-	298711
15	2	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
16	4	M16 65x65 GALV. SQUARE WASHER	S01-01-04-43	298695
17	2	M16 GALV. SPRING WASHER	S01-01-04-43	114322
18	2	ANGLE CROSSARM BRACE -75x75x5mm DURAGAL ANGLE	S01-02-01-49	400815
MIDMOUNT GAS SWITCH				
19	6	LIVE LINE CLAMP - 460A	S01-01-04-17	2121
20	1	SIDE MOUNT HANGING ARM	S01-01-06-17	400813
21	1	MANUAL OPERATION STANDARD GBS	S01-01-06-17	400823
22	2	22kV CYCLOALTIPTHATIC POST INSULATOR	S01-01-03-10	300467
23	2	POLE MOUNTED INSULATOR STUDS	S01-01-04-44	300517
24	1	NGK GAS SWITCH DOWN ARM	S01-01-04-56	AR
25	2	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
26	8	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
27	4	M24 GALV. SPRING WASHER	S01-01-04-43	114330

3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
EDO ARM COMPONENTS - 1 OFF				
28	1	FIBERGLASS ARM	S01-01-02-10	298547
29	1	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
30	1	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
31	4	M24 65x65 GALV. SQUARE WASHER	S01-01-04-43	298828
32	2	M24 GALV. SPRING WASHER	S01-01-04-43	114330
33	1	FLAT CROSSARM BRACE 50x5 CF	S01-02-01-49	298687
34	1	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
35	1	M16 75x75 GALV. SQUARE WASHER	S01-01-04-43	298695
36	1	M16 GALV. SPRING WASHER	S01-01-04-43	114322
37	3	EDO FUSE ASSEMBLY	S01-01-06-06	3863
38	3	200A BARREL FOR EDO ASSEMBLY	S01-01-06-06	407372
39	3	100A K TYPE FUSE	S01-01-06-05	283226
POLE MOUNTED BRIDGING ARM - 1 OFF				
41	1	FIBREGLASS EDO FUSE ARM	S01-01-02-10	298547
42	1	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
43	1	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
44	4	M24 65x65 GALV. SQUARE WASHER	S01-01-04-43	298828
45	2	M24 GALV. SPRING WASHER	S01-01-04-43	114330
46	1	FLAT CROSSARM BRACE 50x5 CF	S01-02-01-49	298687
47	1	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
48	1	M16 75x75 GALV. SQUARE WASHER	S01-01-04-43	298695
49	1	M16 GALV. SPRING WASHER	S01-01-04-43	114322
50	3	22kV CYCLOALTI PHATIC POST INSULATOR	S01-01-03-10	300467
51	3	FIBREGLASS CROSSARM INSULATOR STUDS	S01-01-04-44	500500

							DES	B.BAYRAM	POWER STANDARD DRAWING			
							DRN	P.GUNA	POLE STRUCTURES DOUBLE POLE			
							CKD	B.BAYRAM	CLOSE DELTA REGULATOR SYSTEM			
							APPD	B.VANDERSTELT	MATERIAL LIST			
							SCALE	AS SHOWN	SHEET 6 OF 7			
							ISSUED	SEP'25	A3	DRAWING NUMBER	S01-02-06-19_06	
							ALL DIM. IN mm					
AMENDMENTS						DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		AMDT		

3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
SUPPORT MOUNTED BRIDGING ARM - 3 OFF				
40	2	ISOLATING SWITCH 630A	S01-01-06-07	2204
52	3	SUPPORT MOUNTED BRIDGING ARM	S01-02-06-19_04	-
53	2	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
54	2	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
55	8	M24 65x65 GALV. SQUARE WASHER	S01-01-04-43	298828
56	4	M24 GALV. SPRING WASHER	S01-01-04-43	114330
57	2	FLAT CROSSARM BRACE 50x5 CF	S01-02-01-49	298687
58	2	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
59	2	M16 75x75 GALV. SQUARE WASHER	S01-01-04-43	298695
60	2	M16 GALV. SPRING WASHER	S01-01-04-43	114322
61	3	22kV CYCLOALTI PHATIC POST INSULATOR	S01-01-03-10	300467
62	3	FIBREGLASS CROSSARM INSULATOR STUDS	S01-01-04-44	500500
BRIDGING SUPPORT ARM				
40	2	ISOLATING SWITCH 630A	S01-01-06-07	2204
63	1	BRIDGING SUPPORT ARM	S01-02-06-19_02	-
64	2	M24x180mm GALV. BOLT C/W NUT	S01-01-04-43	400802
65	8	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
66	4	M24 GALV. SPRING WASHER	S01-01-04-43	114330
REGULATOR PLATFORM				
67	2	250 PFC - 4900 LONG - 350 MPA - GALV.	S01-02-06-19_03	-
68	2	250PFC - 840 LONG - 350 MPA - GALV.	S01-02-06-19_04	-
70	20	M24 GALV. THREADED ROD - CUT TO SUIT	S01-01-04-43	401393
71	40	M24x75mm GALV. BOLT C/W NUT	S01-01-04-43	503757
72	40	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
73	40	M24 GALV. SPRING WASHER	S01-01-04-43	114330

3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
BRIDGING CONDUCTOR				
74	AR	0.6/1kV 150mm ² CU XLPE/PVC	S02-01-01-35	503088
75	30	M12 150mm ² LUG	S02-01-02-11	5561
76	4	'SL' SWITCHING LETTER (BLACK ON YELLOW)	S01-02-06-19_05	502100
77	2	'S' SWITCHING LETTER (BLACK ON YELLOW)	S01-02-06-19_05	502098
78	4	'L' SWITCHING LETTER (BLACK ON YELLOW)	S01-02-06-19_05	502099
78A	1	PHASE ID MARKERS R/W/B	S02-01-08-13	7591
SURGE ARRESTOR CONNECTIONS				
79	1	LUG - COMPRESSION, COPPER, Ø14mm HOLE (TO SUIT 35mm ² CABLE)	S02-01-02-11_02	156240
80	1	NUT- M12, HEX, STAINLESS STEEL	S01-01-04-43	504650
81	1	WASHER - SPRING, M12 STAINLESS STEEL	S01-01-04-43	407991
82	1	LUG - COMPRESSION, COPPER, Ø14mm HOLE (TO SUIT 70mm ² CABLE)	S02-01-02-11_02	406766
83	1	WASHER - FLAT, M12, STAINLESS STEEL	S01-01-04-43	407991
84	1	SCREW -SET, M12x 40mm, HEX, STAINLESS STEEL	S01-01-04-43	114066
85	1	CONDUCTOR - EARTH (70mm ²) COPPER, PVC COVERED, GREEN YELLOW	-	401059
86	1	PLATE - TINNED COPPER (33kV UGOH TERMINATION PLATE)	-	91132
HV 'A TOP' ARM COMPONENTS				
88	1	CROSSARM, FIBREGLASS, HV LINE	S01-01-02-10	298802
89	2	CROSSARM BRACE. 70X5 DURAGAL CF	S01-01-04-38	298687
90	3	22KV VERTICAL LINE POST INSULATOR	S01-02-01-49	300467
91	2	INSULATOR MOUNTING STUD, 140/30 M24	S01-01-04-44	300483
92	1	INSULATOR MOUNTING STUD, 40/30 M24	S01-01-04-44	298745
93	1	M24 GALV. STEEL SPRING WASHER	S01-01-04-43	114330
	2	M24 GALV. STEEL 75x75x5 FLAT WASHER	S01-01-04-43	298828
	1	M24x220 GALV. STEEL BOLT C/W NUT	S01-01-04-43	400803
94	1	M24 GALV. STEEL SPRING WASHER	S01-01-04-43	114330
	2	M24 GALV. STEEL 75x75x5 FLAT WASHER	S01-01-04-43	298828
	1	M24x65 GALV. STEEL BOLT C/W NUT	S01-01-04-43	400800
95	2	M16 GALV. STEEL SPRING WASHER	S01-01-04-43	114322
	4	M16 GALV. STEEL 65x65x5 FLAT WASHER	S01-01-04-43	298695
	2	M16x180 GALV. STEEL BOLT C/W NUT	S01-01-04-43	114561

						 N O R T H E R N T E R R I T O R Y	DES	B.BAYRAM	POWER STANDARD DRAWING			
							DRN	P.GUNA	POLE STRUCTURES DOUBLE POLE			
							CKD	B.BAYRAM	CLOSE DELTA REGULATOR SYSTEM			
							APPD	B.VANDERSTELT	MATERIAL LIST			
							SCALE	AS SHOWN	SHEET 7 OF 7			
							ISSUED	SEP'25	A3	DRAWING NUMBER	S01-02-06-19_07	0
							ALL DIM. IN mm					
						DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY			AMDT	
0	ISSUED FOR CONSTRUCTION					P.G.	SEP'25	B.B.	B.V.			
NO	DESCRIPTION					DRN	DATE	CKD	APPD			
AMENDMENTS												