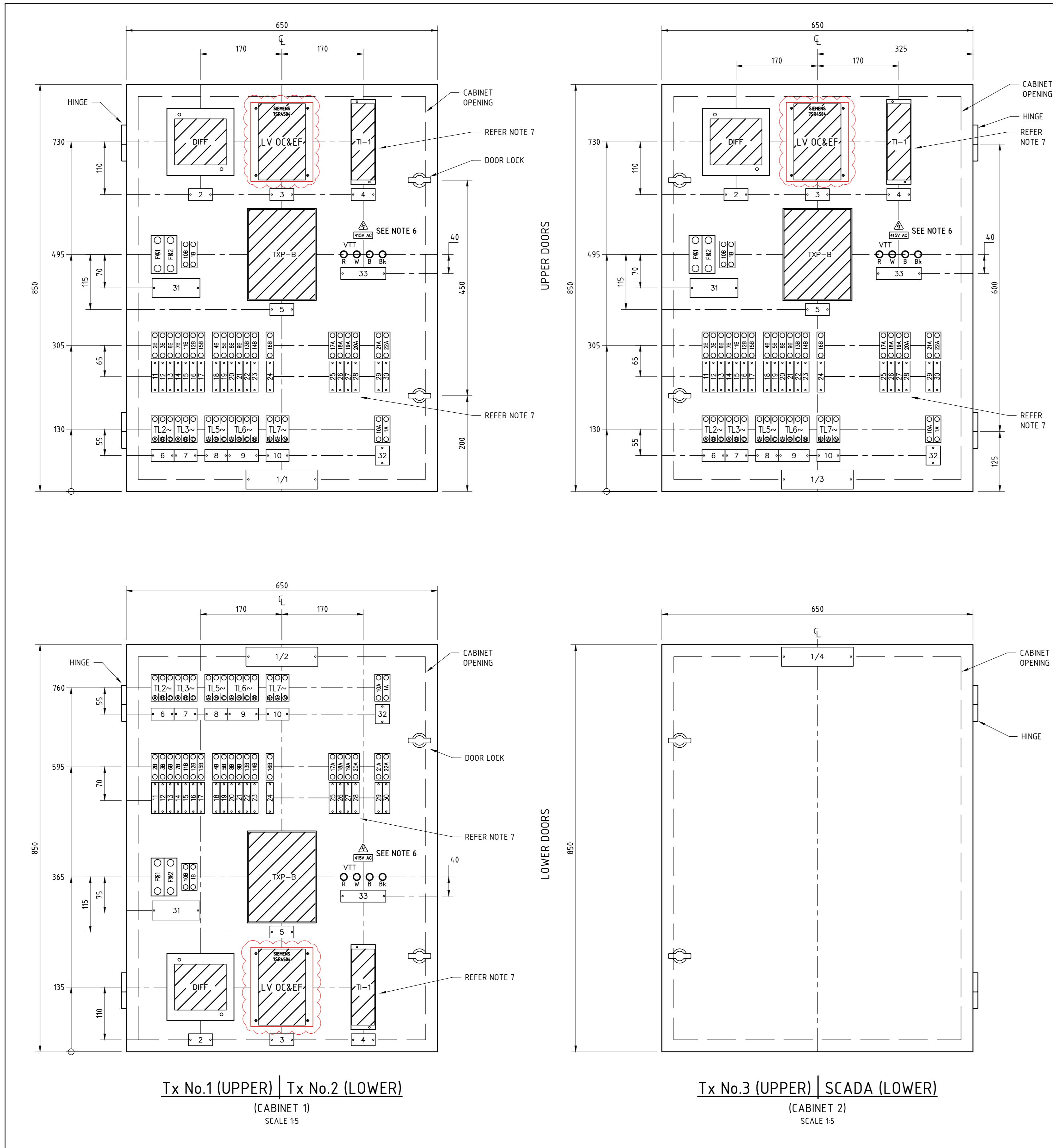


LABEL DETAILS						
LABEL	LABEL SIZE	COLOUR	TEXT LINE	TEXT HEIGHT	ENGRAVING	No OFF
1/1	C8	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	8 8	TRANSFORMER No.1 PROTECTION PANEL	1
1/2	C8	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	8 8	TRANSFORMER No.2 PROTECTION PANEL	1
1/3	C8	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	8 8	TRANSFORMER No.3 PROTECTION PANEL	1
1/4	C8	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	8 8	SCADA PANEL	1
2	C7	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER DIFFERENTIAL RELAY	3
3	C7	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	LV OC & EF RELAY	3
5	C7	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER & ARC FLASH RELAY	3
6	SC10	GRAVOPLY No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	A B C OVERCURRENT & EARTH FAULT RELAY CT TEST LINKS	3
7	SC10	GRAVOPLY No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	A B C OVERCURRENT & EARTH FAULT RELAY DELTA TEST LINKS	3
8	SC10	GRAVOPLY No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	A B C TRANSFORMER & ARC FLASH RELAY TEST LINKS	3
9	SC1	GRAVOPLY No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3	4.0 2.5 2.5	A B C N TRANSFORMER PROTECTION HV CT TEST LINKS	3
10	SC10	GRAVOPLY No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3	4.0 2.5 2.5	Nr A A N EARTH FAULT CT TEST LINKS	3
11	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TX No.1 ARC FLASH BATTERY LINK	3
12	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.1 ARC FLASH TRIP LINK	3
13	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TX No.2 ARC FLASH BATTERY LINK	3
14	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.2 ARC FLASH TRIP LINK	3
15	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TX No.3 ARC FLASH BATTERY LINK	3
16	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.3 ARC FLASH TRIP LINK	3
17	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2 LINE 3	2.5 2.5 2.5	ARC FLASH BYPASS BATTERY LINK NORMALLY OPEN	3
18	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.1 CURRENT CHECK LINK	3
19	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.1 CURRENT CHECK TRIP LINK	3
20	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.2 CURRENT CHECK LINK	3
21	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.2 CURRENT CHECK TRIP LINK	3
22	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.3 CURRENT CHECK LINK	3
23	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	TX No.3 CURRENT CHECK TRIP LINK	3
24	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER HV OC BATTERY LINK	3
25	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER LOAD RELIEF BATTERY LINK	3
26	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER DIFFERENTIAL BATTERY LINK	3
27	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER OC & EF BATTERY LINK	3
28	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1	2.5	NOT IN SERVICE	3
29	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	CUSTOMER OC No.1 TRIP LINK	3
30	SC2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2	2.5 2.5	CUSTOMER OC No.2 TRIP LINK	3
31	C12	TRAFFOLYTE RED/WHITE/RED	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	FS1 FS2 10B 1B 48V & 30V B MASTER BATT FUSES & LINKS	3
32	C3	TRAFFOLYTE RED/WHITE/RED	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	10A 1A 30V A MASTER BATT LINKS	3
33	C23	GRAVOPLY No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3	4.0 2.5 2.5	A B C N 415V AC VOLTAGE TEST TERMINALS	3



- NOTES:**
- THIS DRAWING SHOWS FREE STANDING TRANSFORMER PROTECTION PANELS & SCADA PANEL LAYOUTS TO BE USED AT RMIBS CHAMBER TYPE SUBSTATIONS WITH EXPOSED BUSBAR LV BOARDS & TX OAFD PROTECTION PANELS ARE REQUIRED TO BE READ IN CONJUNCTION WITH NETWORK STANDARDS & THE SUBSTATION DESIGN INFORMATION PACKAGE.
 - LABELS ARE TO BE MADE AS SHOWN ON DRAWING 192411. FOR 5mm LINK ASSEMBLY REFER DRAWING 501111-1 & FOR 5mm LABELS REFER TO DRAWINGS 50996-2, & 64825-2.
 - FOR PANEL SPECIFICATIONS REFER TO DRAWING 205952 Sheet 2.
 - ALL DIMENSIONS ARE IN MILLIMETRES.
 - LINKS SHOULD BE MOUNTED SO THAT THE MOVABLE LINK FALLS OPEN WHEN RELEASED.
 - TERMINALS AND RELAY CONNECTIONS ARE TO BE FITTED WITH CAUTION LABELS TO WARN OF THE 415V AC HAZARD, ANY EXPOSED TERMINALS ARE TO BE APPROPRIATELY COVERED. SELF ADHESIVE CAUTION LABELS ARE TO BE FIXED TO THE REAR OF THE PANEL DOOR. THESE LABELS ARE TO BE READ.
 - THE TRIP INDICATOR IS LOCATED ON THE TX PROTECTION PANEL & IS SUPPLIED BY AUSGRID. IT IS ONLY TO BE CUT OUT & INSTALLED ON THE TX PROTECTION PANELS WHEN:
 - A DRY TYPE TX HAS A THERMAL RELAY INSTALLED. BATTERY LINK BL-20A, THE THERMAL RELAY (11N) & A TRIP INDICATOR ARE TO BE CONNECTED. THE THERMAL RELAY IS LOCATED ON THE TX & SUPPLIED BY THE TX MANUFACTURER. REFER LABELS TABLE 1.
 - AN OIL TYPE TX HAS BUCHHOLZ RELAY PROTECTION INSTALLED. BATTERY LINK BL-20A, THE BUCHHOLZ RELAY (B2) & A TRIP INDICATOR ARE TO BE CONNECTED. REFER LABELS TABLE 2.
 - MODEM TO BE MOUNTED AS SHOWN ON DIN RAIL (T855).

LABELS TABLE 1 FOR DRY TYPE Tx's WITH THERMAL PROTECTION

LABEL	LABEL SIZE	COLOUR	TEXT LINE	TEXT HEIGHT	ENGRAVING	No OFF
4	C7	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER THERMAL TRIP INDICATOR	3
28	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER THERMAL BATTERY LINK	3

LABELS TABLE 2 FOR OIL TYPE Tx's WITH BUCHHOLZ PROTECTION

LABEL	LABEL SIZE	COLOUR	TEXT LINE	TEXT HEIGHT	ENGRAVING	No OFF
4	C7	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER BUCHHOLZ TRIP INDICATOR	3
28	SC2	GRAVOPLY No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER BUCHHOLZ BATTERY LINK	3

SCADA PANEL LEGEND

TAGNAME	MFG	CATNO	DESC	REF DWG
DC-DC	SNAPTECH	GB35-4812	DC/DC CONVERTER 48VDC TO 12VDC 30W	-
M	SERVA WIRELESS	RVS50X	4G MODEM	-
SCADA UNIT	SIEMENS	A8900	SICAM A8900 UNIT - SLOT 1 CP-8550 CPU MODULE, SLOT 2 PS-8620 POWER MODULE, SLOT 3 & 4 DI-8111 DIGITAL INPUT MODULES	118547
X1	UTILUX	3820	RAIL MOUNTED TERMINAL	118547
X2, X3	WEIDMULLER	SAKR	RAIL MOUNTED ISOLATING TERM CAT No.41226	-
X3, X51-8	WEIDMULLER	ASK1	RAIL MOUNTED FUSE CAT No. 37674	-
X51-8	WEIDMULLER	SAKR	RAIL MOUNTED ISOLATING TERM CAT No.41226	-
EB	-	EB	CABINET EARTH BAR	-

TX PROTECTION PANELS LEGEND

TAGNAME	MFG	CATNO	DESC	REF DWG
BL, LK, TL	EUGAGROUP	MOLDED TYPE MS	BATTERY/TEST LINK	501111
DIFF	-	K3M	DIFFERENTIAL FUSE RELAY	113243
EB	-	-	EARTH BAR	-
FS1, FS2	ALSTOM	RS20P Black	FUSE - 2 STUD BACK CONNECTED	-
LV OC&EF-A	SIEMENS	7SE6451-2ED01-1AA0	OVERCURRENT & EARTH FAULT RELAY	240111
TXP-B	SCHWEITZER	SEL-751A	TRANSFORMER PROTECTION RELAY	222614
Ti-1	RMS	3A32K37	TRIP INDICATOR Ti-3 (0.2 s) 24V	123999
VTT	MULTI CONNECT (RS COMPONENTS)	SLB4-G	INSULATED TEST PANEL SOCKETS 1 x RED 23 3020 21 (40A-24A) 1 x WHITE 23 3020 29 (40A-250) 1 x BLUE 23 3020 23 (40A-20A) 1 x BLACK 23 3020 21 (40A-200)	239226
X1, X2, X10	UTILUX	3820	RAIL MOUNTED TERMINAL	118547
X6, X7	UTILUX	3820	RAIL MOUNTED TERMINAL	118547
X8	UTILUX	H2238	RAIL MOUNTED TERMINAL - ORANGE	118547
X50, XT	UTILUX	3820	RAIL MOUNTED TERMINAL	118547
X5	WEIDMULLER	SAK 2.5	RAIL MOUNTED TERMINAL CAT No. 27966	-
X5	WEIDMULLER	SAKR	RAIL MOUNTED ISOLATING TERM CAT No.41226	-

AMENDMENTS

AMD	DATE	DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
1	08/06/2023	AMENDED SCADA LAYOUT FOR CHANGES TO ALL RELAYS. ADDED THIS DIN RAIL DC-DC CONVERTER TYPE NOW SPECIFIED IN LEGEND. MEDIA CONVERTER REMOVED FROM LAYOUT & LEGEND. AMENDED NOTE 8, DELETED 9.	L.M.	L.M.	M.B.	M.B.
2	22/05/2024	AMENDED LINK TYPE, WAS M6. AMENDED LAYOUT & LABELS FOR M5 LINKS.	L.M.	L.M.	M.B.	M.B.
3	20/09/2024	REPLACED SCHNEIDER P115 WITH SIEMENS 7SR4504 IN LEGEND & PANEL LAYOUT.	L.M.	L.M.	M.B.	M.B.



DISTRIBUTION SUBSTATIONS WITH RMIBS WITH EXPOSED BUSBAR LV BOARDS WITH FREE STANDING TX OAFD PROTECTION PANELS LAYOUT & LABEL DETAILS

SCALE	1:5
DESIGNED	L.MARTINUZZI
DRAWN	L.MARTINUZZI
CHECKED	M.BENNETT
APPROVED	M.BENNETT
DATE	29/01/2018
TRIM REF	D71/884167
PROJECT NUMBER	SM-14688
DRAWING No	245777
SHEET	1
AMD	3
SIZE	A0