

CABLE NAME	ORIGIN	DESTINATION	SIZE	CORE FERRULE	CORE NUMBER	CORE COLOUR	CORE FUNCTION	CABLE FUNCTION
1A	SERVICE BOARD FUSES	SERVICE BOARD	4 CABLES 1C x 16mm²	-	-	R W B Bk	A PHASE B PHASE C PHASE NEUTRAL	SERVICE BOARD SUPPLY
2A 3A 4A	TRANSFORMER ACB PANEL	SERVICE BOARD	3 CABLES 1C x 16mm²	-	-	W	B PHASE	SERVICE BOARD ALTERNATE SUPPLY
5A	SERVICE BOARD	30V 'A' BATTERY CHARGER	2C 7/0.67	A N	1 2	R Bk	ACTIVE NEUTRAL	30V 'A' BATTERY CHARGER AC SUPPLY
6A 7A	SERVICE BOARD	SUBSTATION LIGHTING CIRCUITS	2C 7/0.67	A N	1 2	R Bk	ACTIVE NEUTRAL	SUBSTATION LIGHTING
8A 9A 10A	SERVICE BOARD	TRANSFORMER	2C 7/0.67	A N	1 2	R Bk	ACTIVE NEUTRAL	DRY TYPE TRANSFORMER COOLING FAN SUPPLY
11A	SERVICE BOARD	CONTROL POINT SERVICE BOARD	SEE NOTE 10 DWG 227355Sh01	A N	1 2	R Bk	ACTIVE NEUTRAL	CONTROL POINT SUPPLY
12A	SERVICE BOARD	48V 'B' BATTERY CHARGER	2C 7/0.67	A N	1 2	R Bk	ACTIVE NEUTRAL	48V 'B' BATTERY CHARGER AC SUPPLY
13A	SERVICE BOARD	TRANSFORMER 1 PROTECTION PANEL	4C 7/0.67	L1 L2 L3 N	1 2 3 4	R W B Bk	A PHASE B PHASE C PHASE NEUTRAL	415V BUSBAR ENERGISED CHECK SUPPLY
14A	SERVICE BOARD	TRANSFORMER 2 PROTECTION PANEL	4C 7/0.67	L1 L2 L3 N	1 2 3 4	R W B Bk	A PHASE B PHASE C PHASE NEUTRAL	415V BUSBAR ENERGISED CHECK SUPPLY
15A	SERVICE BOARD	TRANSFORMER 3 PROTECTION PANEL	4C 7/0.67	L1 L2 L3 N	1 2 3 4	R W B Bk	A PHASE B PHASE C PHASE NEUTRAL	415V BUSBAR ENERGISED CHECK SUPPLY
1ACB 2ACB 3ACB	TRANSFORMER ACB PANEL	TRANSFORMER PROTECTION PANEL	4C 7/0.67	2BLV 1BLV 2ALV 1ALV	1 2 3 4	R W B Bk	'B' TRIP 'B' NEG 'A' TRIP 'A' NEG	TRANSFORMER ACB TRIP
1AD	30V 'A' BATTERY CHARGER	30V 'A' TRIPPING BATTERIES	2C 7/0.67	10Au 1Au	1 2	R Bk	'A' PROTIN +VE 'A' PROTIN -VE	30V 'A' DC PROTECTION SUPPLY
2AD	30V 'A' TRIPPING BATTERIES	TRANSFORMER 1 PROTECTION PANEL	2C 7/0.85	10Au 1Au	1 2	R Bk	'A' PROTIN +VE 'A' PROTIN -VE	30V 'A' DC PROTECTION SUPPLY
3AD	TRANSFORMER 1 PROTECTION PANEL	TRANSFORMER 2 PROTECTION PANEL	2C 7/0.85	10Au 1Au	1 2	R Bk	'A' PROTIN +VE 'A' PROTIN -VE	30V 'A' DC PROTECTION SUPPLY
4AD	TRANSFORMER 2 PROTECTION PANEL	TRANSFORMER 3 PROTECTION PANEL	2C 7/0.85	10Au 1Au	1 2	R Bk	'A' PROTIN +VE 'A' PROTIN -VE	30V 'A' DC PROTECTION SUPPLY
5AD	TRANSFORMER 3 PROTECTION PANEL	CUSTOMER OC 1 PROTECTION PANEL	2C 7/0.85	10Au 1Au	1 2	R Bk	'A' PROTIN +VE 'A' PROTIN -VE	30V 'A' DC PROTECTION SUPPLY
6AD	CUSTOMER OC 1 PROTECTION PANEL	CUSTOMER OC 2 PROTECTION PANEL	2C 7/0.85	10Au 1Au	1 2	R Bk	'A' PROTIN +VE 'A' PROTIN -VE	30V 'A' DC PROTECTION SUPPLY
7AD	CUSTOMER OC 2 PROTECTION PANEL	'A' BATTERY TEST BOX	2C 7/0.67	10Au 1Au	1 2	R Bk	'A' PROTIN +VE 'A' PROTIN -VE	30V 'A' DC PROTECTION SUPPLY
1BD	48V 'B' BATTERY CHARGER	'B' BATTERY TERMINATION BOX	4C 7/0.67	a10Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' DC 'B' PROTIN -VE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
1BD/1	48V RELAY SUPPLY & 30V (TAP) 'B' TRIPPING BATTERY	'B' BATTERY TERMINATION BOX	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
1BD/2	'B' BATTERY TEST POINT BOX	'B' BATTERY TERMINATION BOX	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
2BD	'B' BATTERY TERMINATION BOX	TRANSFORMER 1 PROTECTION PANEL	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
3BD	TRANSFORMER 1 PROTECTION PANEL	TRANSFORMER 2 PROTECTION PANEL	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
4BD	TRANSFORMER 2 PROTECTION PANEL	TRANSFORMER 3 PROTECTION PANEL	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
5BD	TRANSFORMER 3 PROTECTION PANEL	CUSTOMER OC 1 PROTECTION PANEL	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
6BD	CUSTOMER OC 1 PROTECTION PANEL	CUSTOMER OC 2 PROTECTION PANEL	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
7BD	CUSTOMER OC 2 PROTECTION PANEL	SCADA RTU AND SIGNAL MARSHALLING BOX	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
8BD	SCADA RTU AND SIGNAL MARSHALLING BOX	'B' BATTERY TERMINATION BOX	4C 7/0.67	a10Bu 10Bu 10Bu 1Bu SP	1 2 3 4	R W B Bk	48V SUPPLY +VE 30V 'B' PROTIN +VE 'B' PROTIN -VE SPARE	48V RELAY & 30V 'B' DC PROTECTION SUPPLY
1CS 2CS	CUSTOMER SUPPLY OVERCURRENT CTS	CUSTOMER OC PROTECTION PANELS	8C 7/0.67	21 22 23 24 25 26 SP SP	1 2 3 4 5 6 7 8	-	A PHASE B PHASE C PHASE A NON POL B NON POL C NON POL SPARE SPARE	CUSTOMER SUPPLY OVERCURRENT PROTECTION
1CT 2CT 3CT	HV DIFFERENTIAL CTS	TRANSFORMER PROTECTION PANEL	8C 7/0.67	31H 32H 33H 34H 35H 36H SP SP	1 2 3 4 5 6 7 8	-	A PHASE B PHASE C PHASE A NON POL B NON POL C NON POL SPARE SPARE	TRANSFORMER DIFFERENTIAL PROTECTION

4CT 5CT 6CT	LV DIFFERENTIAL / OVERCURRENT CTS	TRANSFORMER PROTECTION PANEL	8C 7/0.67	31 32 33 34 35 36 SP SP	1 2 3 4 5 6 7 8	-	A PHASE B PHASE C PHASE A NON POL B NON POL C NON POL SPARE SPARE	TRANSFORMER DIFFERENTIAL AND OVERCURRENT PROTECTION
1EF 2EF 3EF	TRANSFORMER	TRANSFORMER PROTECTION PANEL	2C 7/0.67	C1 C2	1 2	R Bk	PHASE NON POL	TRANSFORMER EARTH FAULT PROTECTION
EFI	EFI CT	EFI	CT LEADS	C1 C2	1 2	R Bk	PHASE NON POL	11kV FEEDER EARTH FAULT INDICATOR
1HV 2HV 3HV	TRANSFORMER PROTECTION PANEL	RMICB	4C 7/0.67	2B/HV 1B/HV 2A/HV 1A/HV	1 2 3 4	R W B Bk	'B' TRIP 'B' NEG 'A' TRIP 'A' NEG	RMICB TRIP
1M	TRANSFORMER 1 ACB PANEL	TRANSFORMER 2 ACB PANEL	2C 7/0.67	28 28n	1 2	R Bk	B PHASE B NON POL	MDI
2M	TRANSFORMER 2 ACB PANEL	TRANSFORMER 3 ACB PANEL	2C 7/0.67	28 28n	1 2	R Bk	B PHASE B NON POL	MDI
3M	TRANSFORMER 3 ACB PANEL	SUBSTATION MDI MOUNTED ON SERVICE BOARD	2C 7/0.67	28 28n	1 2	R Bk	B PHASE B NON POL	MDI
1S 2S 3S	TRANSFORMER PROTECTION PANEL	SCADA RTU AND SIGNAL MARSHALLING BOX	4 PAIR + SHIELD 7/0.30	a10Bl TB BD TA 3W VC SP SP	-	1W 1Bk 2W 2Bk 3W 3Bk 4W 4Bk	ALARM +VE 'B' TRIP 'B' RELAY DEFECT 'A' TRIP 'A' RELAY DEFECT VOLTS CHECK SPARE SPARE	TRANSFORMER PROTECTION ALARMS AND SIGNALS
4S 5S	CUSTOMER OC PROTECTION PANEL	SCADA RTU AND SIGNAL MARSHALLING BOX	2 PAIR + SHIELD 7/0.30	a10Bl COC/D SP SP	-	1W 1Bk 2W 2Bk	ALARM +VE RELAY DEFECT SPARE SPARE	CUSTOMER OC PROTECTION ALARMS AND SIGNALS
6S	48V 'B' BATTERY CHARGER	SCADA RTU AND SIGNAL MARSHALLING BOX	2 PAIR + SHIELD 7/0.30	Vcb OF SP SP	-	1W 1Bk 2W 2Bk	CHECKED +VE DEFECT SPARE SPARE	48V 'B' BATTERY CHARGER DEFECT
7S	SCADA RTU AND SIGNAL MARSHALLING BOX	ARC FLASH DETECTION INDICATION PANEL	2 PAIR + SHIELD 7/0.30	AFT1 AFT2 AFT3 1B	-	1W 1Bk 2W 2Bk	AF TX 1 HEALTHY AF TX 2 HEALTHY AF TX 3 HEALTHY 'B' -VE	ARC FLASH STATUS INDICATION
10S 11S 12S	TRANSFORMER	SCADA RTU AND SIGNAL MARSHALLING BOX	2 PAIR + SHIELD 7/0.30	a10Bl a/Th SP SP	-	1W 1Bk 2W 2Bk	ALARM +VE TEMP HIGH SPARE SPARE	DRY TYPE TRANSFORMER THERMAL ALARM
13S 14S 15S	TRANSFORMER ACB PANEL	SCADA RTU AND SIGNAL MARSHALLING BOX	2 PAIR + SHIELD 7/0.30	a10Bl 6 SP SP	-	1W 1Bk 2W 2Bk	ALARM +VE ACB CLOSED SPARE SPARE	TRANSFORMER ACB SIGNAL
16S	FIRST RMICB INCOMING FEEDER LEFT HAND SIDE SWITCH	SCADA RTU AND SIGNAL MARSHALLING BOX	2 PAIR + SHIELD 7/0.30	a10Bl 6 7 6ES	-	1W 1Bk 2W 2Bk	ALARM +VE SWITCH CLOSED SWITCH OPEN SWITCH EARTHED	RMICB FEEDER SWITCH SIGNAL
17S	LAST RMICB OUTGOING FEEDER RIGHT HAND SIDE SWITCH	SCADA RTU AND SIGNAL MARSHALLING BOX	2 PAIR + SHIELD 7/0.30	a10Bl 6 7 6ES	-	1W 1Bk 2W 2Bk	ALARM +VE SWITCH CLOSED SWITCH OPEN SWITCH EARTHED	RMICB FEEDER SWITCH SIGNAL
1T 2T 3T	TRANSFORMER PROTECTION PANEL	TRANSFORMER	2C 7/0.67	10A/20 2A/Th	1 2	R Bk	'A' PROTIN +VE THERMAL TRIP	DRY TYPE TRANSFORMER THERMAL TRIP
21T	TRANSFORMER 1 PROTECTION PANEL	TRANSFORMER 2 PROTECTION PANEL	4C 7/0.67	10B/6T1 2B/6T1 2B/8T1 2B/8cT1	1 2 3 4	R W B Bk	'B' PROTIN +VE AF TRIP CURRENT CHECK CC TRIP	TRANSFORMER PROTECTION PANELS INTERCONNECTIONS
31T	TRANSFORMER 1 PROTECTION PANEL	TRANSFORMER 3 PROTECTION PANEL	4C 7/0.67	10B/11T1 2B/11bT1 2B/13T1 2B/13cT1	1 2 3 4	R W B Bk	'B' PROTIN +VE AF TRIP CURRENT CHECK CC TRIP	TRANSFORMER PROTECTION PANELS INTERCONNECTIONS
12T	TRANSFORMER 2 PROTECTION PANEL	TRANSFORMER 1 PROTECTION PANEL	4C 7/0.67	10B/2T2 2B/2bT2 2B/4T2 2B/4cT2	1 2 3 4	R W B Bk	'B' PROTIN +VE AF TRIP CURRENT CHECK CC TRIP	TRANSFORMER PROTECTION PANELS INTERCONNECTIONS
32T	TRANSFORMER 2 PROTECTION PANEL	TRANSFORMER 3 PROTECTION PANEL	4C 7/0.67	10B/11T2 2B/11bT2 2B/13T2 2B/13cT2	1 2 3 4	R W B Bk	'B' PROTIN +VE AF TRIP CURRENT CHECK CC TRIP	TRANSFORMER PROTECTION PANELS INTERCONNECTIONS
13T	TRANSFORMER 3 PROTECTION PANEL	TRANSFORMER 1 PROTECTION PANEL	4C 7/0.67	10B/2T3 2B/2bT3 2B/4T3 2B/4cT3	1 2 3 4	R W B Bk	'B' PROTIN +VE AF TRIP CURRENT CHECK CC TRIP	TRANSFORMER PROTECTION PANELS INTERCONNECTIONS
23T	TRANSFORMER 3 PROTECTION PANEL	TRANSFORMER 2 PROTECTION PANEL	4C 7/0.67	10B/6T3 2B/6bT3 2B/8T3 2B/8cT3	1 2 3 4	R W B Bk	'B' PROTIN +VE AF TRIP CURRENT CHECK CC TRIP	TRANSFORMER PROTECTION PANELS INTERCONNECTIONS
44T 54T	CUSTOMER OC PROTECTION PANEL	TRANSFORMER 1 PROTECTION PANEL	2C 7/0.67	2A/T1 SP	1 2	R Bk	'A' TRIP SPARE	CUSTOMER OC TRIP
45T 55T	CUSTOMER OC PROTECTION PANEL	TRANSFORMER 2 PROTECTION PANEL	2C 7/0.67	2A/T2 SP	1 2	R Bk	'A' TRIP SPARE	CUSTOMER OC TRIP
46T 56T	CUSTOMER OC PROTECTION PANEL	TRANSFORMER 3 PROTECTION PANEL	2C 7/0.67	2A/T3 SP	1 2	R Bk	'A' TRIP SPARE	CUSTOMER OC TRIP

CAD DRAWING  
DO NOT MANUALLY AMEND  
AMENDMENTS  
1. CABLE SIZES FOR CABLES '1S'-'1T5'  
WERE 7/0.03" CABLE SIZES  
UPDATED ON EXCEL DATA LINK SHEET  
AS WELL.  
HOKA  
23-08-2012  
CHECKED: MBENNETT  
APPROVED: MBENNETT  
PN: SM-6711-1-2

2. REF D3 TO E3:  
ADDED CABLES '1BD/1' & '1BD/2' TO  
MATCH AMENDMENTS TO CABLING  
DIAGRAM DRAWING. AMENDED  
DESTINATIONS OF CABLES '1BD', '2BD'  
AND '1BD'.  
REF CL TO E3:  
DC CABLE SIZE AMENDED TO MATCH  
CABLE SIZE FOR CABLES '1BD/1' & '1BD/2'.  
CABLES '1A' TO '1AD'.  
WERE '2C 7/0.85'.  
NOW '2C 7/0.67'.  
AND CABLES '1BD' TO '1BD/2'.  
WERE '4C 7/0.85'.  
NOW '4C 7/0.67'.

28/05/2013  
L.MARTINUZZI  
CHECKED:  
APPROVED:  
MBENNETT  
3. AMENDED CABLE SIZE WAS 7/0.67  
NOW 7/0.85 FOR CABLES 2AD TO 6AD.  
L.MARTINUZZI  
25/07/2018  
CHECKED:  
APPROVED:  
MBENNETT

4. BORDER & TITLE BLOCK UPDATED.  
L.MARTINUZZI  
18/09/2024  
CHECKED:  
APPROVED:  
MBENNETT

TO BE READ WITH  
DRAWING 227355Sh01



24 Campbell Street  
SYDNEY NSW 2000  
P: 9272 3805

ISSUED FOR  
CONSTRUCTION

SCALE	NTS
DESIGNED	-
DRAWN	L.MARTINUZZI
CHECKED	W.BYRNE
APPROVED	M.BENNETT
DATE	15/06/2012
TRIM REF	-
PROJECT NUMBER	SM-06717

RMICB SUBSTATIONS  
WITH E TYPE LV BOARD  
AND OPTICAL ARC FLASH DETECTION  
CABLE SCHEDULE

DRAWING No **227355** SHEET 2 AMD 4 SIZE A1