

- NOTES:**
- THIS DRAWING SHOWS ADDITIONAL CABLING & THE SCADA SCHEMATIC TO BE USED AT RMIB 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.
 - CABLE NAMING TO FOLLOW THIS DRAWING. THE CABLING ON THIS DRAWING IS FOR A 3 TRANSFORMER SUBSTATION WITH 2 CUSTOMER DC PANELS. FOR VARIATIONS OF SUBSTATION CONFIGURATION, DELETE EQUIPMENT NOT REQUIRED.
 - A SEPARATE PROTECTION PANEL FOR EACH CUSTOMER SUPPLY IS USUALLY INSTALLED. THE DUAL VERSION OF THE CUSTOMER SUPPLY PROTECTION PANEL MAY ONLY BE USED WHEN THERE IS INSUFFICIENT WALL SPACE IN THE SUBSTATION TO ACCOMMODATE SEPARATE PANELS. IF A COMBINED PANEL IS USED, THE TOP HALF OF THE PANEL WILL BE CUSTOMER OVERCURRENT No.1 PROTECTION (PC1) & THE BOTTOM HALF OF THE PANEL WILL BE CUSTOMER OVERCURRENT No.2 PROTECTION (PC2).
 - SCADA PANEL (ZM) REQUIRES SOME EXTRA EQUIPMENT NOT SHOWN.
 - a. NETWORK CONNECTION BETWEEN MODEM & SCADA CPU SLOT 1.
 - b. ANTENNA FOR MODEM.
 - c. TERMINATIONS TO SCADA DI SLOTS 3 & 4.
 REFER TO WIRING DIAGRAM 245779-1 & CURRENT CONTRACT MANUFACTURER'S DRAWINGS.
 - IDEAL CONFIGURATION SHOWN. RMIS MOUNTED LEFT TO RIGHT & INCOMING FEEDER TERMINATED TO THE LEFT HAND SWITCH OF THE FIRST RMI SWITCH 1 IS THE LEFT HAND SWITCH & SWITCH 2 IS THE RIGHT HAND SWITCH OF THE ASSOCIATED RMI. IF IT OCCURS THAT THE INCOMING FEEDER IS TERMINATED TO THE RIGHT HAND SWITCH (SWITCH 2) OF IT'S ASSOCIATED RMI, THEN THE TERMINAL NUMBERING FOR IT'S PALLET SWITCHES WILL ALTER ACCORDINGLY.
 - 'B' BATTERY TEST POINT BOX (BTP) ONLY REQUIRED WHERE THE 'A' BATTERY VOLTMETER/TEST POINT & OR THE ARC FLASH DETECTION INDICATION PANEL HAVE BEEN MOUNTED EXTERNALLY TO THE MAIN SUBSTATION CHAMBER.
 - THE MODEM REQUIRES A DC-DC CONVERTER. THE MODEM COMES WITH A CABLE TO BE CONNECTED TO THE DC-DC CONVERTER AS SHOWN.
 - PANELS PC1 & PC2 FOR TERMINAL RAIL XS, IT, 2T & 3T ARE A SINGLE TERMINAL WITH THE BAR LINK REMOVED & A DIODE MOUNTED BETWEEN STUDS WITH DIODE POLARITY AS SHOWN ON THE DC SCHEMATIC 245776-3.

ABBREVIATION	DESCRIPTION
A	30V DC 'A' BATTERY
AFI	ARC FLASH DETECTION INDICATION PANEL
B	48V-30V(TAPPED) DC 'B' BATTERY
BCA	BATTERY CHARGER A
BCB	BATTERY CHARGER B
BTB	'B' BATTERY TERMINATION BOX (LOCATED NEAR 'B' BATTERY)
BTP	'B' BATTERY TEST POINT (LOCATED NEAR AFI PANEL)
PC1	CUSTOMER OVERCURRENT No.1 PROTECTION PANEL
PC2	CUSTOMER OVERCURRENT No.2 PROTECTION PANEL
P1	TRANSFORMER No.1 PROTECTION PANEL
P2	TRANSFORMER No.2 PROTECTION PANEL
P3	TRANSFORMER No.3 PROTECTION PANEL
SB	475V LV SERVICE BOARD OR LV SERVICE BOARD EXTENSION
VTP	VOLTMETER TEST POINT FOR 30V DC 'A' BATTERY
ZM	SCADA PANEL

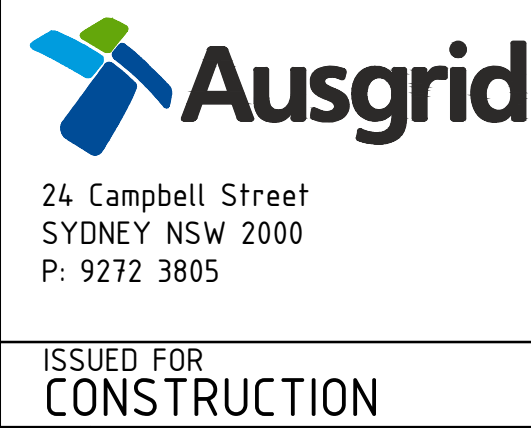
CAD DRAWING
DO NOT MANUALLY AMEND

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	21-02-2018	M.BENNETT	REVISED MEDIA CONVERTER & RELAY
2	03/06/2023	M.BENNETT	REVISED MEDIA CONVERTER & RELAY

APPROVED: M.BENNETT

TAGNAME	MFG	CATNO.	DESC	REF DWG.
DC-DC	SNAPTCH	GB30-4812	DC/DC CONVERTER 48VDC TO 12VDC 30W	-
M	SIERRA WIRELESS	RV50X	4G MODEM	-
ZPM	SIEMENS	PS-8620	POWER MODULE FOR SICAM A8000 UNIT	-
X1	UTILUX	3820	RAIL MOUNTED TERMINAL	118547
X2, X3	WEIDMULLER	SAKR	RAIL MOUNTED ISOLATING TERM CAT No.41226	-
XS1 - 8	WEIDMULLER	ASK1	RAIL MOUNTED FUSE CAT No. 37676	-
XS1 - 8	WEIDMULLER	SAKR	RAIL MOUNTED ISOLATING TERM CAT No.41226	-
EB	-	-	CABINET EARTH BAR	-



SCALE	NTS
DESIGNED	L.MARTINUZZI
DRAWN	L.MARTINUZZI
CHECKED	J.PAYNE
APPROVED	M.BENNETT
DATE	24/01/2018
TRIM REF	D17/884.167
PROJECT NUMBER	SM 14688

DISTRIBUTION SUBSTATIONS WITH RMIBS WITH EXPOSED BUSBAR LV BOARDS WITH INDIVIDUAL TX OAFD PROTECTION SUPPLY CABLING AND SCADA SCHEMATIC

ISSUED FOR CONSTRUCTION

DRAWING No **245776** SHEET 4 AMD 2 SIZE B1