

REFERENCE DRAWINGS		
RMICB SUBSTATIONS WITH E TYPE LV BOARDS CABLING DIAGRAM & SCHEDULE	178231-1	
RMICB SUBSTATIONS WITH E TYPE LV BOARDS AC & DC SCHEMATICS	178232-1	
DISTRIBUTION SUBSTATIONS LABELS & MOULDED LINK DETAILS	178241-1	
DISTRIBUTION SUBSTATIONS PROTECTION RELAY DRILLING DETAILS	191086-1	
LOOM METHOD OF PANEL WIRING	52474-1	
WALL MOUNTED RELAY PANEL STEELWORK	28632-1	
UTILUX H3820 RAIL MOUNTED TERMINALS	118547-1	

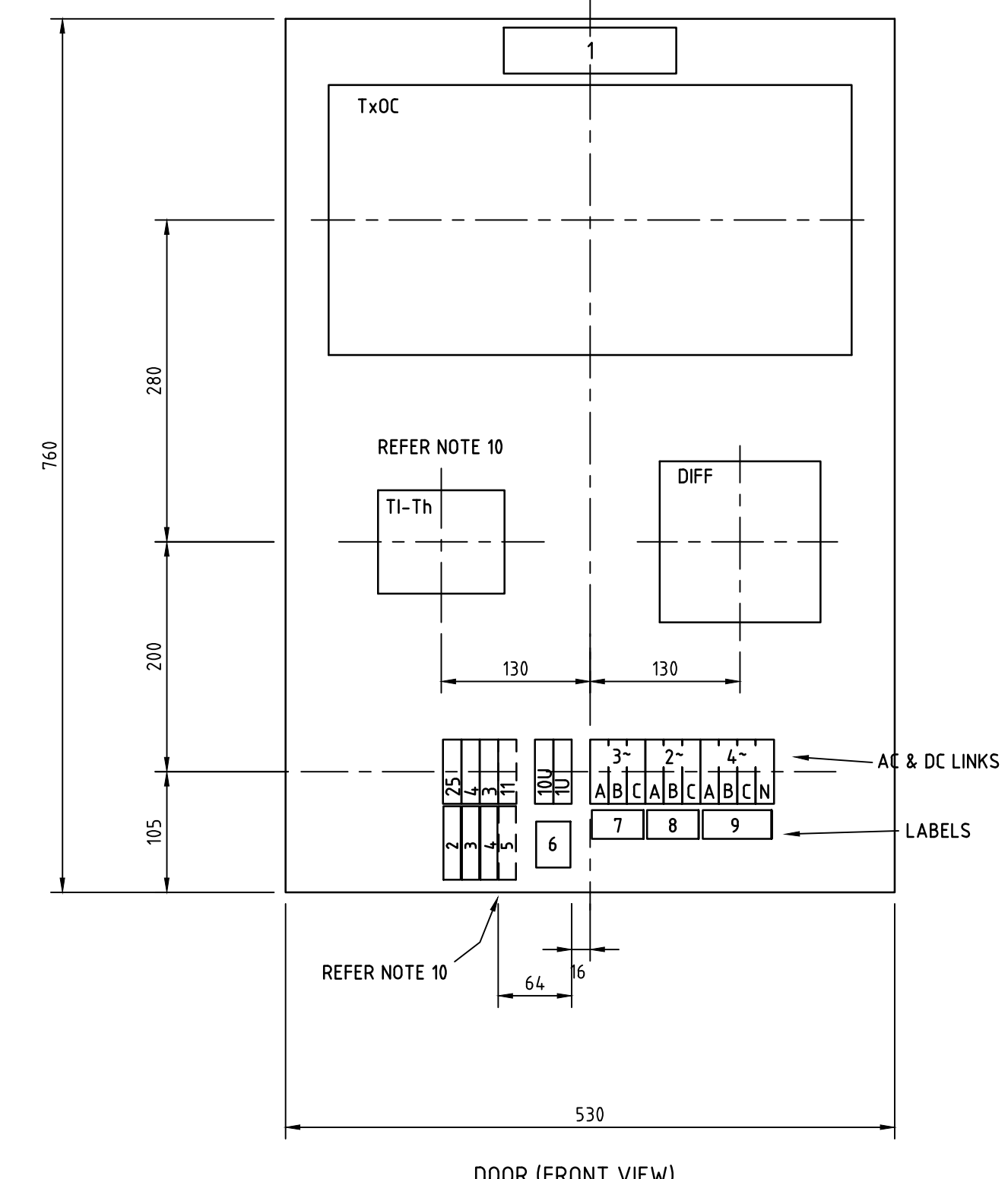
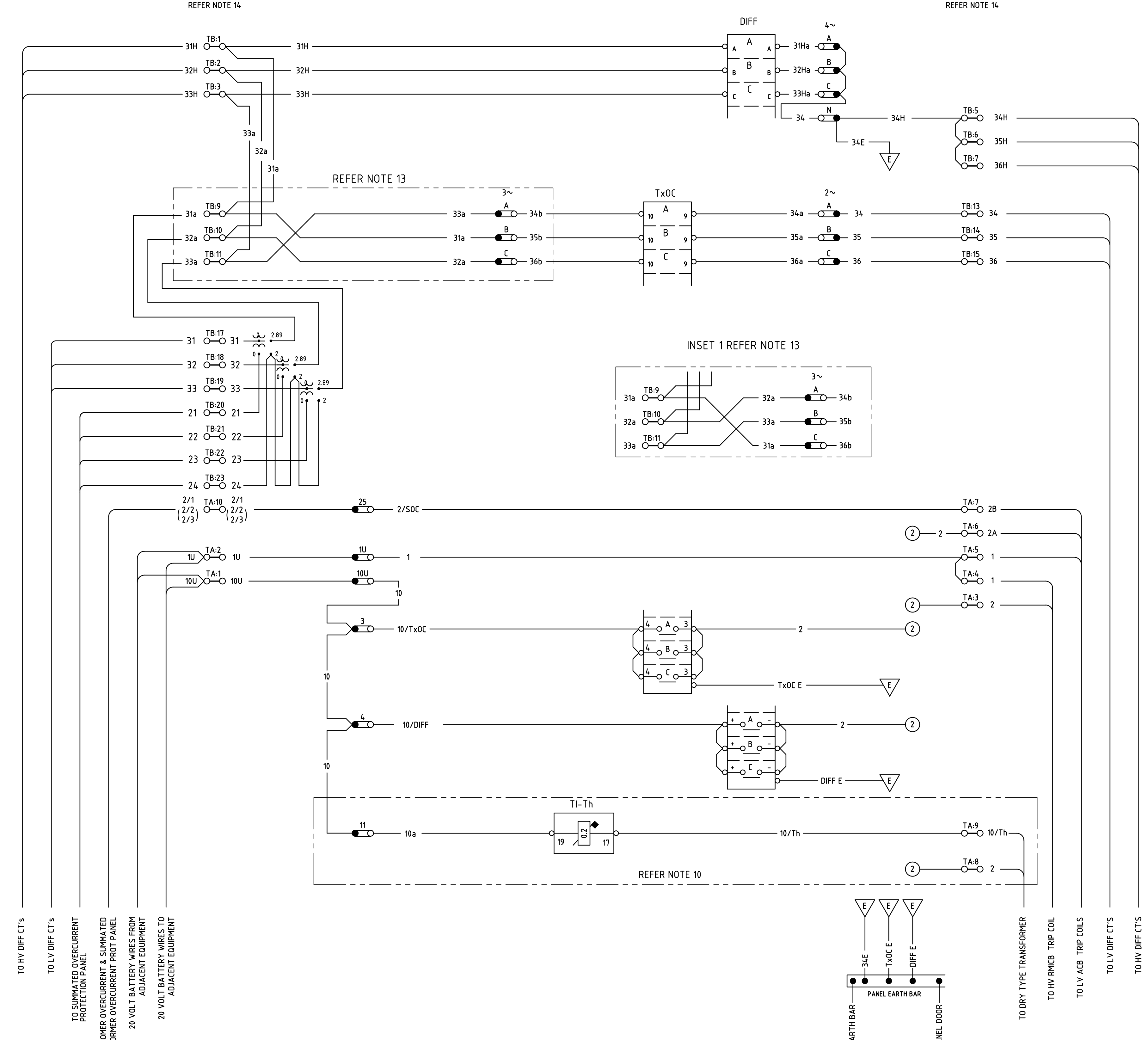
LEGEND		
SYMBOL	DESCRIPTION	TYPE
DIFF	DIFFERENTIAL RELAY	K3M
TxOC	TRANSFORMER OVERCURRENT RELAY	CDG 33
Ti-Th	THERMAL TRIP INDICATOR (DRY TYPE TRANSFORMERS)	T13
	TERMINALS TYPE UTILUX TYPE H3820 WITH UTILUX H2233 MOUNTING CHANNEL	

REFER NOTE 10

NOTES

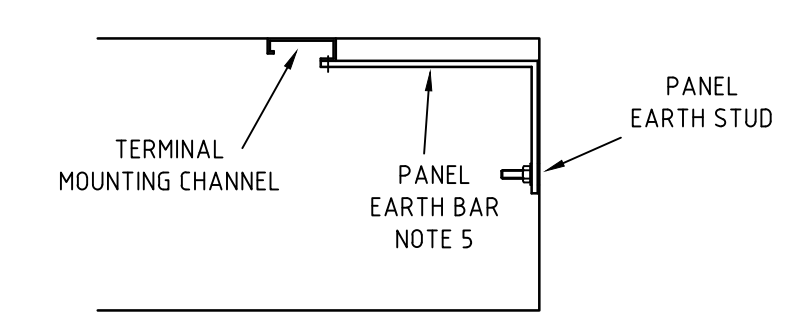
- THIS DRAWING SHOWS THE TRANSFORMER PROTECTION PANEL & WIRING TO BE USED WITH RMICB CHAMBER TYPE SUBSTATIONS AND SHOULD BE READ IN CONJUNCTION WITH NETWORK STANDARDS AND THE SUBSTATION DESIGN INFORMATION PACKAGE.
- ALL PANEL WIRING IS TO BE 7/0.67, 0.6kV V75 GRADE WITH PVC INSULATION. ALL INSULATION IS TO BE GREY COLOURED EXCEPT FOR EARTH WIRES WHICH ARE TO BE GREEN/YELLOW.
- A DOT ON A LINK () INDICATES BOTTOM TERMINAL.
- THE COMMON CONNECTION BETWEEN POINTS DESIGNATED BY ② ARE TO BE DETERMINED ON SITE AND SHOULD BE ACHIEVED BY THE SHORTEST POSSIBLE ROUTE. HOWEVER IN ALL CASES NO MORE THAN TWO WIRES SHOULD BE TERMINATED AT ANY LINK OR RELAY TERMINAL.
- A 25mm x 4mm HDHC COPPER EARTH BAR IS TO BE MADE AND BOLTED TO THE CABINET EARTH STUD AND THE TERMINAL ROW B MOUNTING CHANNEL AS SHOWN IN DETAIL 1. THE EARTH BAR IS TO BE DRILLED TO ACCOMMODATE INDIVIDUAL CONNECTIONS FROM THE PANEL DOOR, LINKS, RELAY CASES AND THE 6mm CABLE FROM THE SUBSTATION EARTH BAR. CONNECTIONS ARE TO BE EVENLY SPACED ALONG LENGTH OF EARTH BAR.
- EARTH CONNECTIONS DESIGNATED ARE TO BE CONNECTED INDIVIDUALLY TO THE EARTH BAR.
- FOR LOOM METHOD OF WIRING REFER TO DRAWING 52474-1.
- THE SATURATING INTERPOSING CT'S ARE TO BE MOUNTED ON THE SIDE OF THE CABINET INTERIOR IN THE POSITIONS SHOWN. THE MOUNTING IS TO BE UNDERTAKEN SUCH THAT THERE IS SUFFICIENT CLEARANCE TO RELAY TERMINALS WHEN THE DOOR IS CLOSED. TERMINAL ROW A IS TO BE POSITIONED ON THE LOWER PORTION OF THE MOUNTING CHANNEL.
- THIS WALL MOUNTED PANEL IS TO BE CONSTRUCTED IN ACCORDANCE WITH MARK 1 OF DWG A2-28630.
- WHEN A DRY TYPE TRANSFORMER IS USED, THE THERMAL RELAY (TH) AND A TRIP INDICATOR ARE TO BE CONNECTED. THE THERMAL RELAY IS LOCATED AND SUPPLIED ON THE TRANSFORMER BY THE TRANSFORMER MANUFACTURER. THE TRIP INDICATOR IS LOCATED ON THE TRANSFORMER PROTECTION PANEL AND IS SUPPLIED BY AUSGRID.
- LABELS ARE TO BE MADE AND POSITIONED AS SHOWN ON DRAWING B1-178241. DRILLING FOR RELAYS AND LINKS ARE SHOWN ON DRAWINGS B1-178241 AND A2-191086.
- THE TRANSFORMER NUMBER FOR THE RELEVANT SUBSTATION IS TO BE ENGRAVED LABEL 1 WHERE # IS SHOWN.
- WIRING SHOWN IS FOR THE STANDARD AUSGRID DY1 TRANSFORMER CONNECTED IN A DY1 ARRANGEMENT. FOR A DY11 TRANSFORMER CONNECTED IN A DY11 ARRANGEMENT, USE INSET 1.
- ON THE WIRING DIAGRAM TERMINALS ARE NOMINATED AS TERMINAL ROW-TERMINAL NUMBER, eg TB.4 MEANS THE 4th TERMINAL ON TERMINAL ROW B.

CABLE CONNECTIONS	TERMINALS	SATURATING INTERPOSING CT'S	DC LINKS	LOOPING	AC LINKS	TRIP INDICATOR	TRANSFORMER OVERCURRENT RELAY	DIFFERENTIAL RELAY	AC LINKS	LOOPING	TERMINALS	CABLE CONNECTIONS
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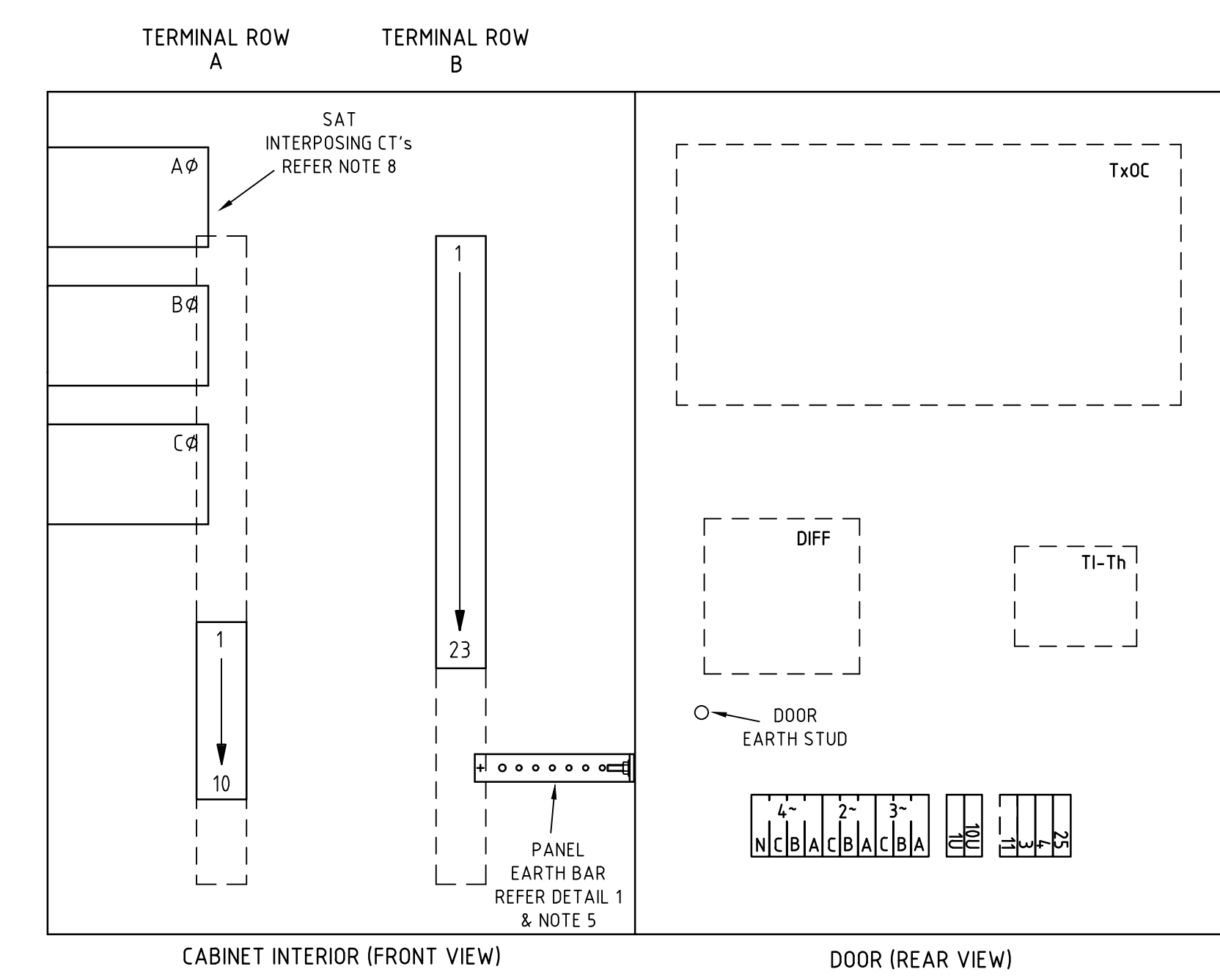
PANEL LAYOUT

REFER NOTE 9
SCALE 1:5



DETAIL 1

CABINET INTERIOR (PLAN VIEW)
EARTH BAR LOCATION
SCALE 1:5



REFER NOTE 12

LABEL DETAILS						
LABEL	LABEL SIZE	COLOUR	TEXT LINE	TEXT HEIGHT	ENGRAVING	No OFF
1	C8	GRAVOPLY No.200 WHITE/BLACK	LINE 1 LINE 2	8 8	TRANSFORMER #	1
2	5C2	TRAFFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2 LINE 3	2.5 2.5 2.5	CUSTOMER & SUMMATED TRANSFORMER OVERCURRENT TRIP LINK	1
3	5C2	GRAVOPLY No.200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	DIFFERENTIAL BATTERY LINK	1
4	5C2	GRAVOPLY No.200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER OVERCURRENT BATTERY LINK	1
5	5C2	GRAVOPLY No.200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	THERMAL RELAY BATTERY LINK	1
6	5C3	TRAFFOLYTE RED/WHITE/RED	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	10 1 20V DC BUS MASTER BATTERY LINKS	1
7	5C10	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 OVERCURRENT RELAY DELTA TEST LINK	1
8	5C10	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 OVERCURRENT RELAY TEST LINK	1
9	5C1	GRAVOPLY No.259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3	4.0 2.5 2.5	A B C N DIFFERENTIAL RELAY TEST LINKS	1

WIRING DIAGRAM

CAD DRAWING
DO NOT MANUALLY AMEND
AMENDMENTS

10/06/2008
P. JARVIS
DESIGNED
10/06/2008
P. JARVIS
CHECKED
10/06/2008
P. JARVIS
APPROVED

30/09/2013
R. LAALAA
APPROVED

25/10/2024
M. BERNETT
CHECKED
25/10/2024
M. BERNETT
APPROVED

1. TERMINAL DESIGNATION UPDATED. REF DWGS DELETED FROM LEGEND. NOTES 4 & 11 ALERED.

2. CABLE CONNECTIONS TO BATTERY FROM CUSTOMER OVERCURRENT & SUMMATED TRANSFORMER OVERCURRENT PROT PANEL. 20 VOLT BATTERY WIRES FROM ADJACENT EQUIPMENT. 20 VOLT BATTERY WIRES TO ADJACENT EQUIPMENT.

3. NEW AUSGRID BORDER & LOGO ADDED.

30/09/2013
T. LAMPARD
APPROVED

25/10/2024
M. BERNETT
CHECKED
25/10/2024
M. BERNETT
APPROVED



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SYDNEY NSW 2000
P. 9272 3805

SCALE	AS SHOWN
DESIGNED	-
DRAWN	P. JARVIS
CHECKED	P. EASTON
APPROVED	M. THOMPSON
DATE	14/04/2008
TRIM REF	-
PROJECT NUMBER	ES 208-9-4

RMICB SUBSTATIONS WITH E TYPE LV BOARD WALL MOUNTED TRANSFORMER PROTECTION PANEL DRILLING & WIRING			
ISSUED FOR CONSTRUCTION	PROJECT NUMBER	DRAWING No	187815
		SHEET	1
		AMD	4
		SIZE	B1