

Project Name : Transnet Saldanha NMD
Upgrade - New Ystervark S/S

Project ID : 153272156

Job Name : Blouwater S/S - Ystervark
FDR Control Plant

Job ID : 153272156-00002

Final Design Package: Book 3

Prepared for
TRANSNET GROUP CAPITAL

Prepared by
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In association with
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2020-04-24

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Quality Information

Document Final Design Package: Blouwater S/S - Ystervark FDR Control Plant - Book 3


Ref Eskom Job Number: 153272156-00002 Date 2020-04-24

Prepared by Brian Homann Reviewed by Colin Pym


Document Number 1924701-2-300-E-RPT-0005


ISSUED FOR USE

Revision History

Revision	Revision Date	Details	Authorized Name/Position	Signature	Date
Rev 02	2020-04-24	Issued for Use	Colin Pym		29 April 2020

**Additional Signatories
for Transnet SOC Ltd**

Revision	Revision Date	Details	Authorized Name/Position	Signature	Date
Rev 02	2020-04-24	Issued for Use	Richard Shandu Senior Engineering Manager Richard Shandu (Transnet Group Capital)		22/04/2020

Revision	Revision Date	Details	Authorized Name/Position	Signature	Date
Rev 02	2020-04-24	Issued for Use	Tonny Mhondiwa (Transnet Port Terminals)		22/04/2020


Revision	Revision Date	Details	Authorized Name/Position	Signature	Date
Rev 02	2020-04-24	Issued for Use	Jabulani Nkanyani (Transnet National Ports Authority)		22/04/2020

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1. Volume 3 Documentation Checklist

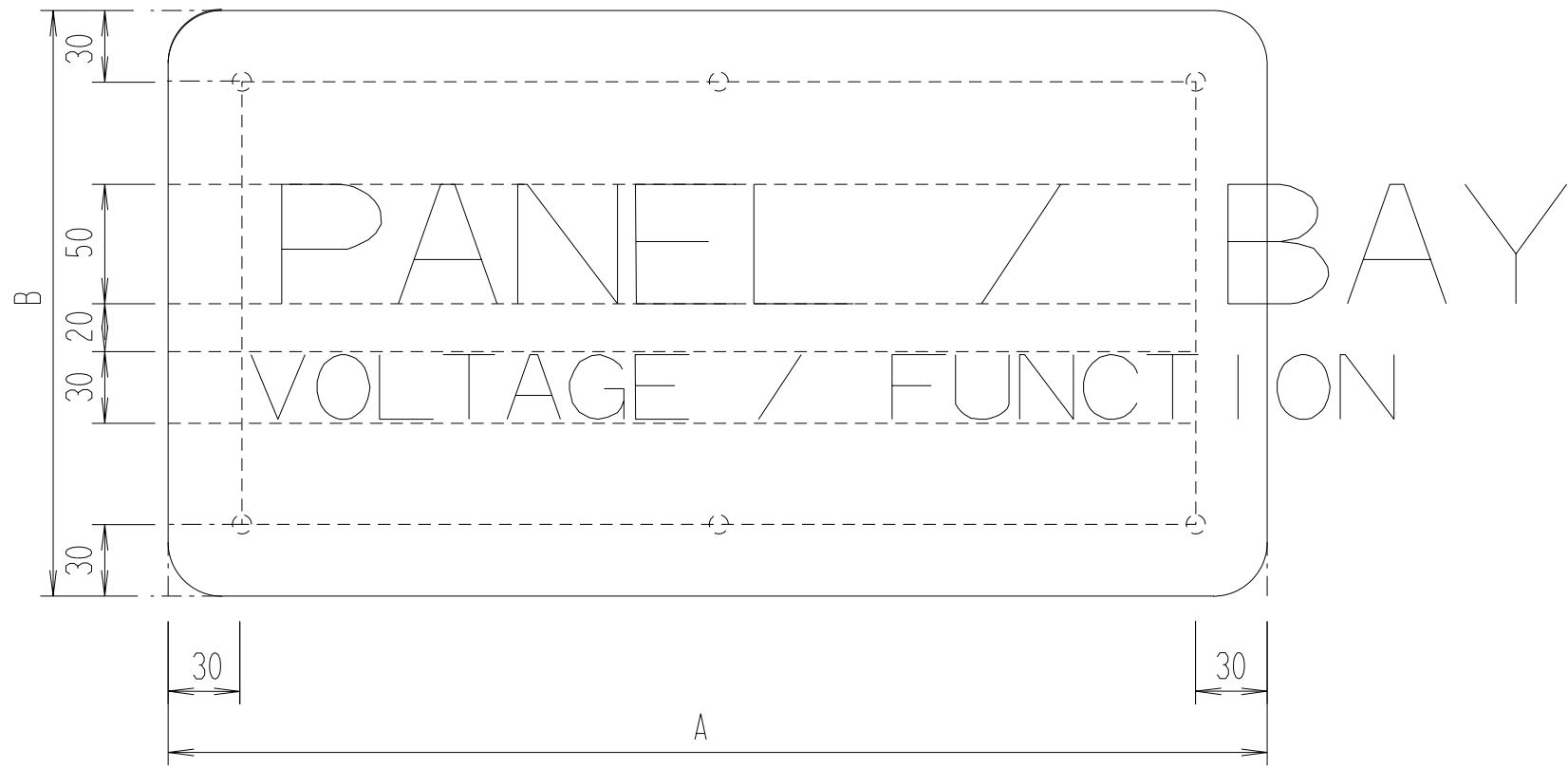
The Eskom standard Substation FDP template was used for the order creation of this document, with certain alterations made to the layout to suit the FDP application where applicable. The checklist below is the aforementioned template in order to confirm the information included, and those not included due to applicability.

BOOK 3

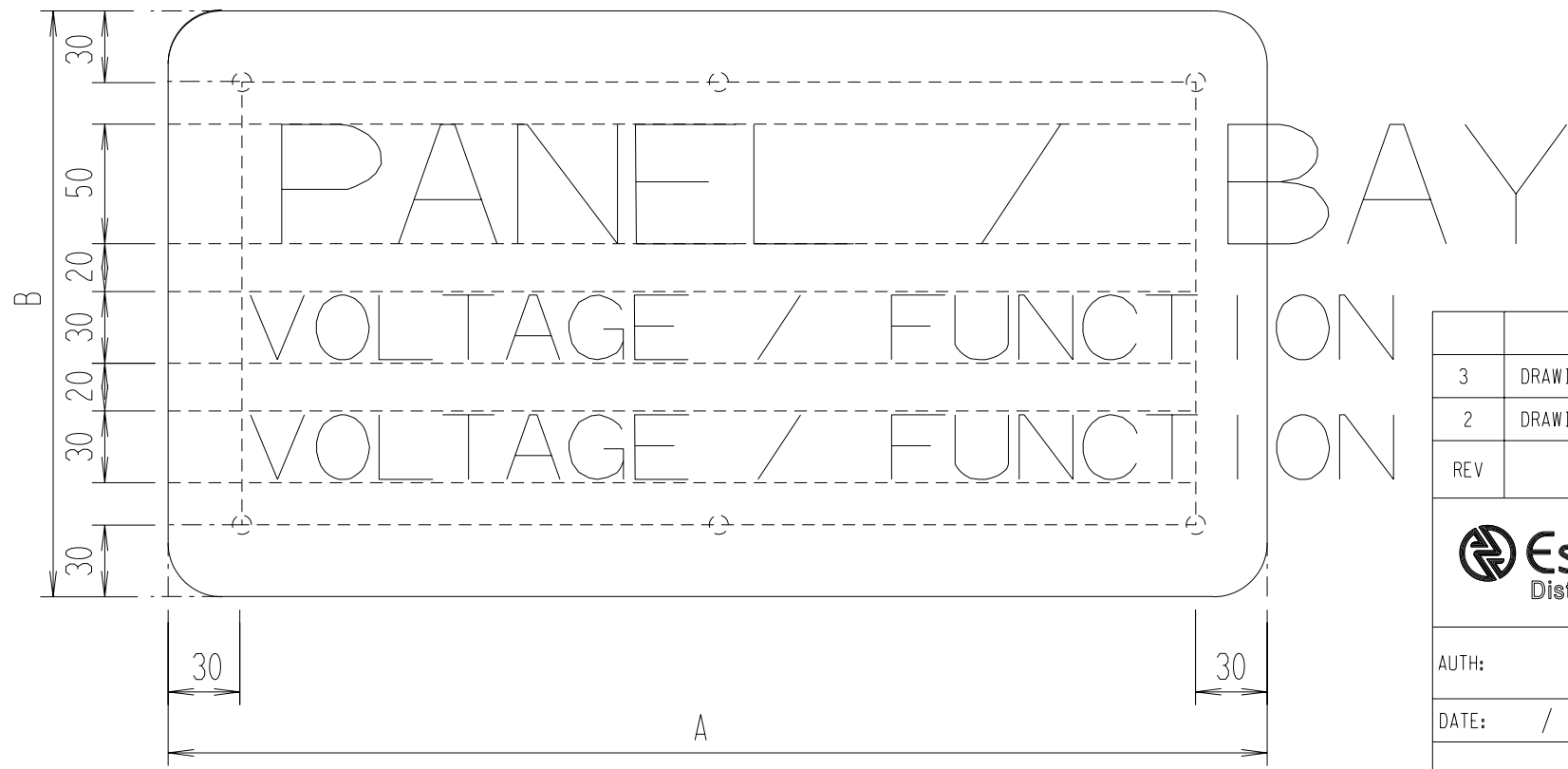
Item	Description	Applicable and Included	Not Applicable
1.	PDE Drawings/Specifications: <i>Power Plant</i>	✓	
2.	PDE Drawings/Specifications: <i>Control Plant</i>	✓	
3.	PDE Drawings/Specifications: <i>HV Lines</i>		✓

2. PDE Drawings/Specifications

2.1. Power Plant



2 LINE TEXT LAYOUT ON LABEL (N.T.S)



3 LINE TEXT LAYOUT ON LABEL (N.T.S)

LIST OF LABELS AND SIZES

LABEL TYPE	A	B	
		VE, CD	FG
LABEL 2	1000	245	250
LABEL 3	600	245	250
LABEL 4	450	245	250
LABEL 5	180	150	150

VE - VITREOUS ENAMEL
 CD - CHROMADEK
 FG - FIBREGLASS

NOTES:

- LEGEND TEXT TO BE CENTRE JUSTIFIED.
- MARGIN OF 30mm FROM THE LABEL EDGE TO BE MAINTAINED.

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.
3	DRAWING UPDATED. ORIGINAL SHEET 1 NOW SHEET 2	JJJ	JJJ	JJJ	09/03/2004	
2	DRAWING UPDATED	JJJ	JJJ		/ /	

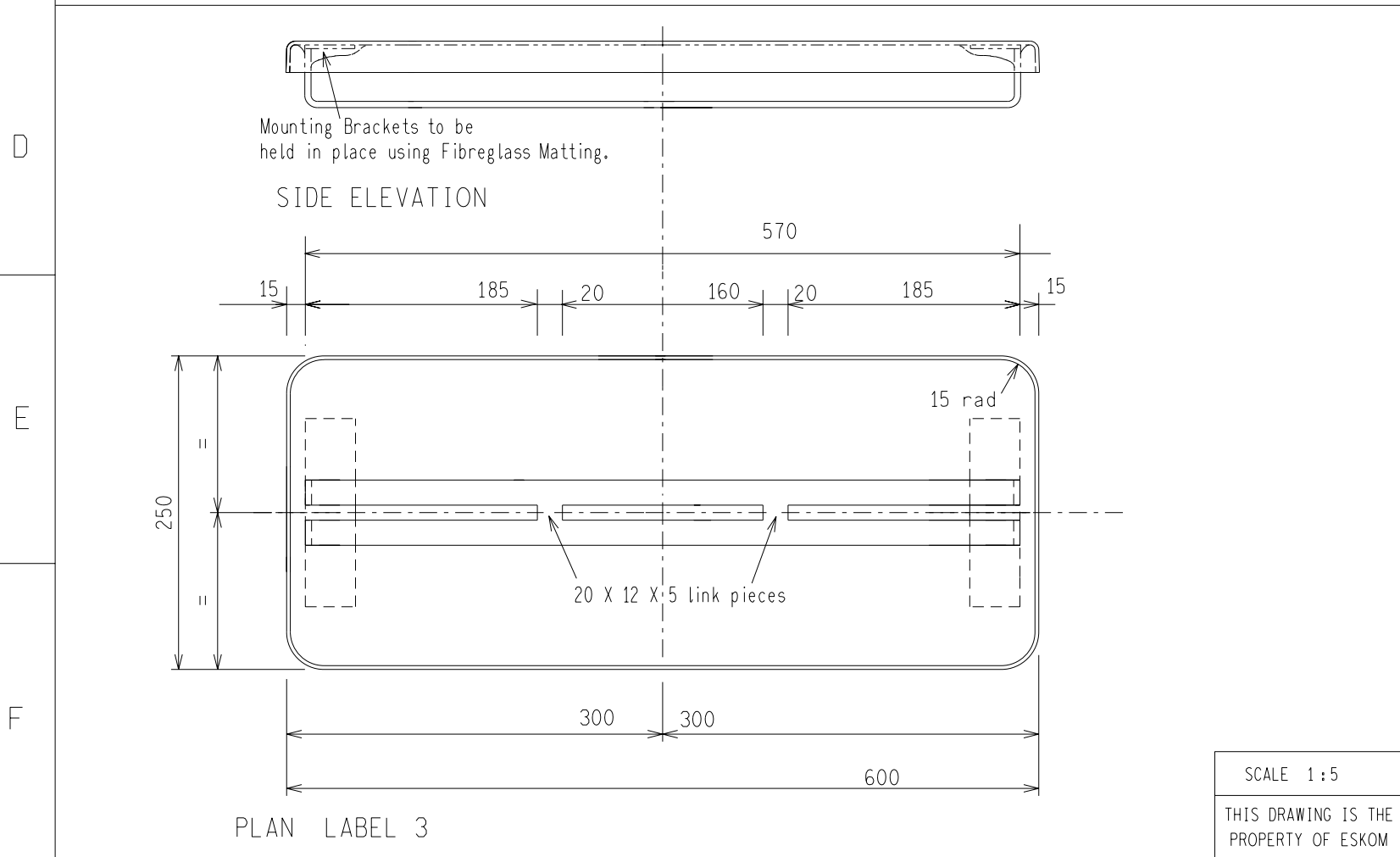
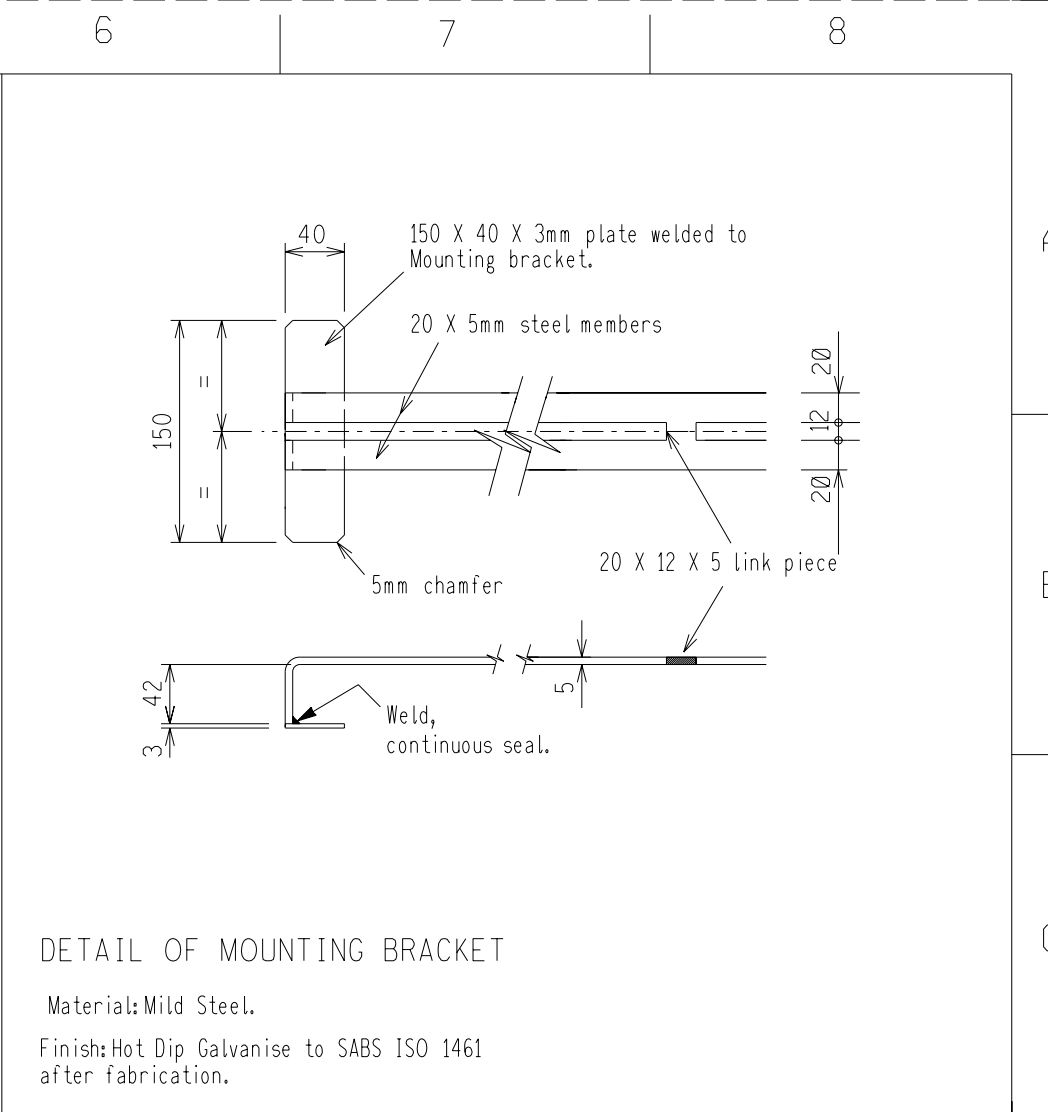
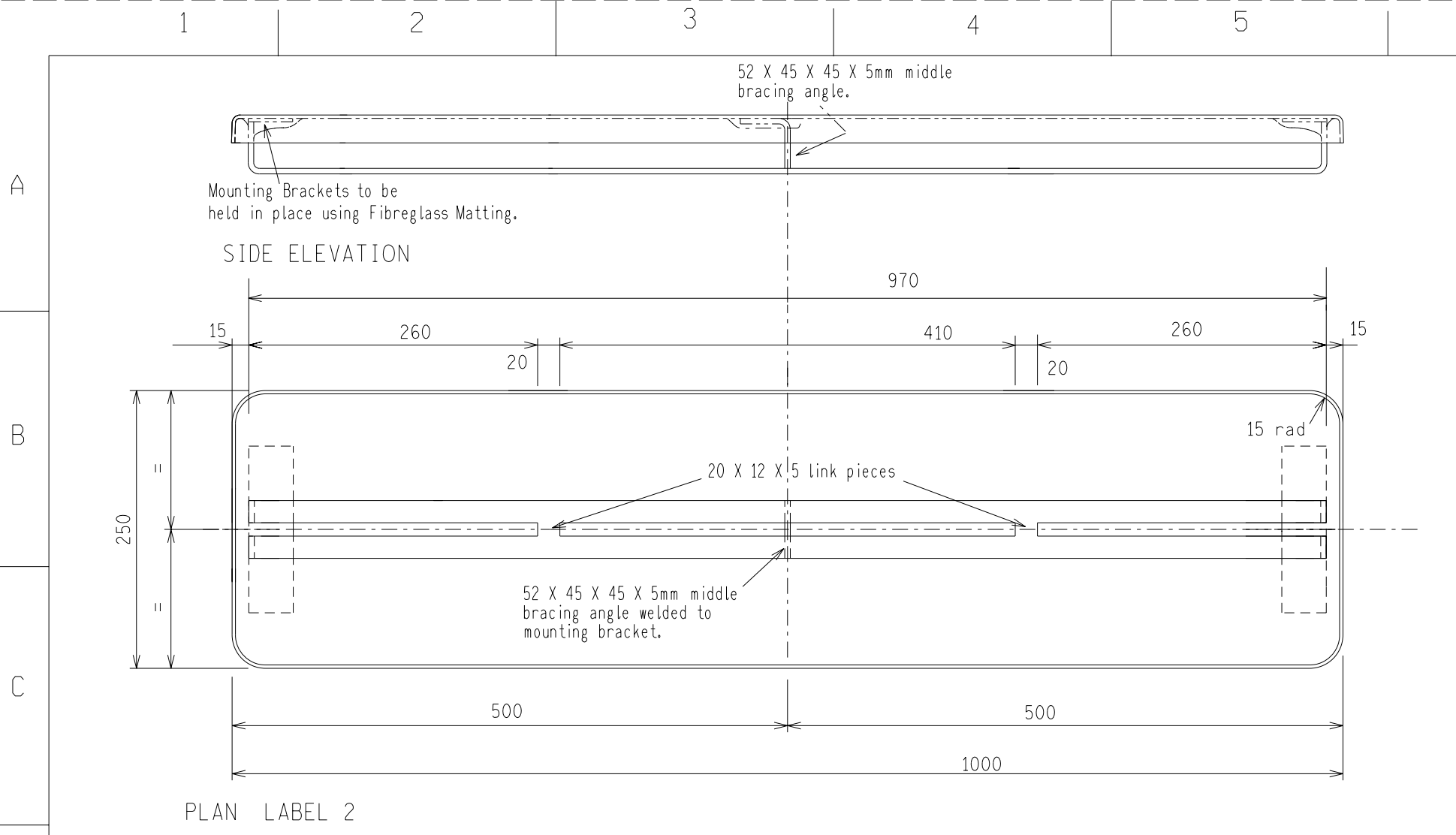


AUTH:
 DATE: / /
 CHKD:
 DATE: / /
 DRAWN: J LE ROUX
 DATE: 02/08/2000

ELECTRICAL EQUIPMENT LABELS
 SIZES AND LEGEND LAYOUT

D-DT-5047	SET	SHEET	REVISION
	5	2	3

NOT TO SCALE
 THIS DRAWING IS THE PROPERTY OF ESKOM



Notes:
 Materials: Mild Steel & Orange Coloured Fibreglass.
 Specs: Galvanising - SABS ISO 1461.
 Welding: SABS 0162-1980.

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.
3	MOUNTING BRACKET MODIFIED.	CG	JJJ	JJJ	30/05/2006	
2	NEW DRAWING SHEET ADDED. ORIGINAL SHEET 3 NOW SHEET 4.	JJJ	JJJ	JJJ	09/03/2004	

Eskom Distribution

AUTH:
 DATE:
 CHKD:
 DATE:
 DRAWN: C. GRAY
 DATE: 30/03/2005

**ELECTRICAL EQUIPMENT LABELS
 FIBREGLASS
 MANUFACTURING DETAILS**

SET	SHEET	REVISION
0	4	3

SCALE 1:5
 THIS DRAWING IS THE PROPERTY OF ESKOM

2.2. Control Plant


SPEC SHEET

SAP MATERIAL No.:	0248586
SHORT DESCRIPTION:	PSUPPLY TELEPROT 24-250/48VDC,PROT D9051
TECH. DESCRIPTION:	
DC/DC 24-250/48V CONVERTER REGULATED SUPPLY FOR EXTERNAL TELEPROTECTION * MATERIAL AND WIRING TO ESKOM MASTER DRAWINGS D-DT-15007/8 * CONVERTER ABB (1MRK 000 592-A) MAY BE USED FOR xFx39xx, xFZD39x0 SCHEMES * (REQUIRED IF NO 48V DC BATTERY BANK AVAILABLE AND USING EXTERNAL TELEPROTECTION) * ESKOM DRAWING No. D-DT-9051 *	

SAP MATERIAL No.:	0248587
SHORT DESCRIPTION:	THREE TERMINAL DIFF OPTION, PROT D9051
TECH. DESCRIPTION:	
THREE-TERMINAL DIFFERENTIAL PROTECTION OPTION FOR SCHEMES 3FZD3920/3FZD3940 * (MAY BE REQUIRED WHEN PROTECTING A THREE-TERMINAL CONFIGURATION WITH FIBRE LINKS) * INCLUDES : - AN ADDITIONAL FIBRE TELEPROTECTION AND COMMUNICATION CARD (LDCM2) * - PLACEMENT AND INITIALISING OF THE FIBRE CARD WITHIN THE RED670 RELAY * ESKOM DRAWING No. D-DT-9051 *	

SAP MATERIAL No.:	0248588
SHORT DESCRIPTION:	RELAY,VOLT SELECT BUS-BAR, PROT D9051
TECH. DESCRIPTION:	
BUSBAR VOLTAGE SELECTION RELAYS (RK 251 205-AN) FOR xFx39xx, xFZD39x0 SCHEMES * (REQUIRED FOR DOUBLE BUSBAR VT SELECTION) * INCLUDES : - 2x RXMVB 2 FOR 110V DC * SPECIFY : - 220V DC VERSION AVAILABLE IF REQUIRED – WHEN ORDERED WITH A SCHEME THE D.C. RATING SHALL BE MATCHED TO THE SCHEME RATING * ESKOM DRAWING No. D-DT-9051 *	

SAP MATERIAL No.:	0248589
SHORT DESCRIPTION:	SINGLE-PHASE CT&VT TRNSDCRS, PROT D9051
TECH. DESCRIPTION:	
SUPPLY OF SINGLE-PHASE CT AND VT TRANSducers OPTION * (AN ALTERNATIVE TO 3 PHASE TRANSducer FOR SUPPLY OF PANEL ANALOGUE METERS) * INCLUDES : - 2 x AC VOLTAGE CAMILLE BAUER SINEAX U 543 TRANSducers, ORDER: 137 142 * - WIRING OF TRANSducers INTO SCHEME CIRCUITS TO ESKOM MASTER DRAWINGS D-DT-15007/8 * ESKOM DRAWING No. D-DT-9051 *	

0	First issue	A.C.	S.v.Z	A.C	Mar 2010		
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	REF. DRAWINGS	
AUTH:	A.M.A. Craib	DATE:	1 March 2010	 D-DT-9051	SAP No:		
CHKD:	S.J. van Zyl	DATE:	3 March 2010		0248586	0248589	
DRAWN:	A.M.A. Craib	DATE:	1 March 2010		0248587	0248588	
					0248588	SET	SHEET
					29	14	REV
							0

2.3. HV Lines

Not Applicable

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