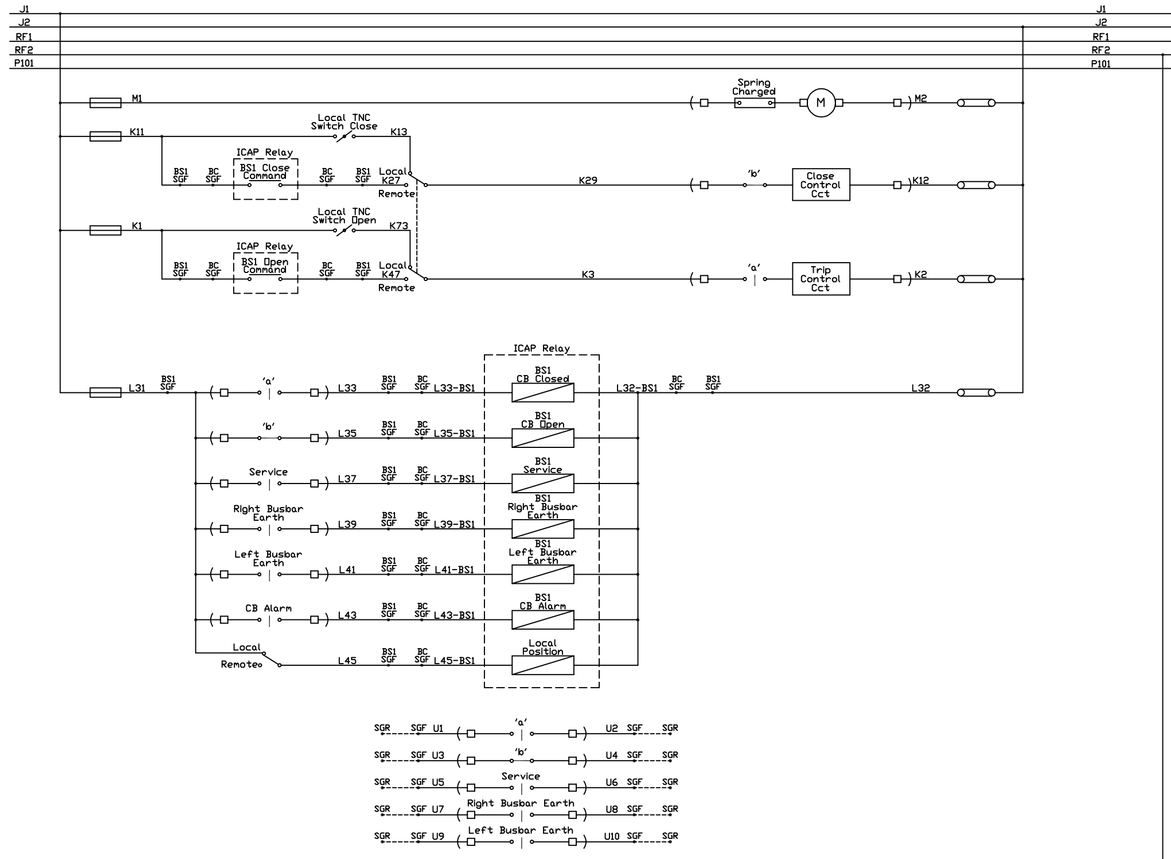
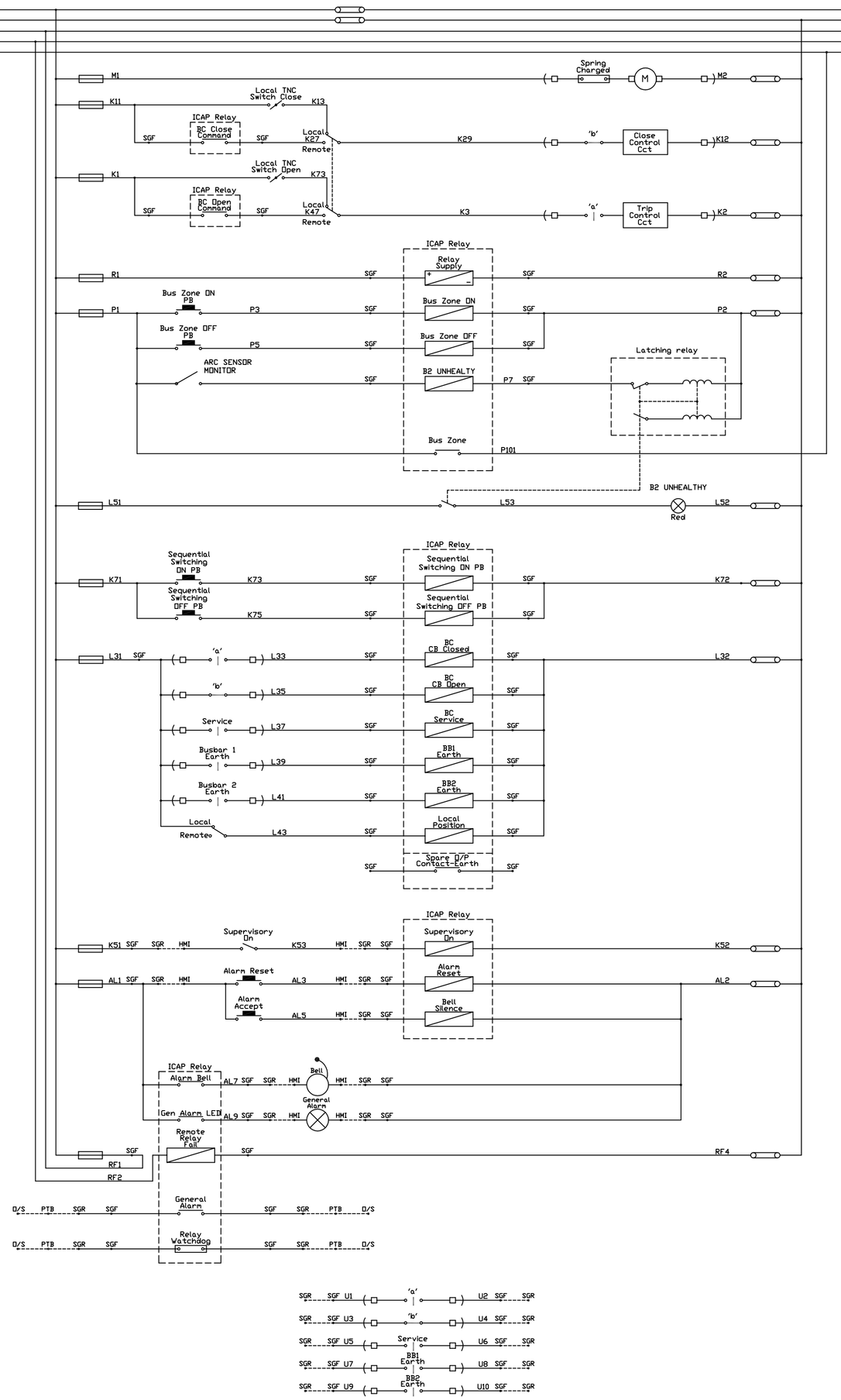
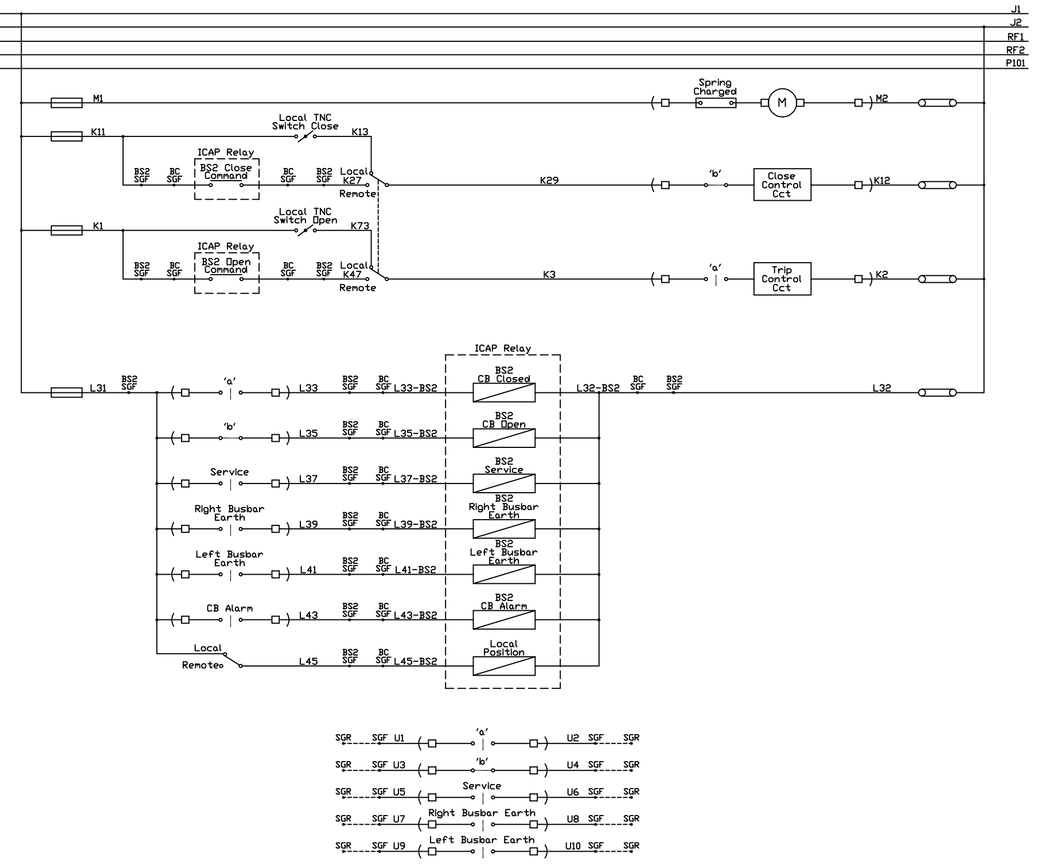
Bus Section 1
DC Schematic



Bus Coupler
DC Schematic



Bus Section 2
DC Schematic



LEGEND

ICAP	Intergrated Control & protection
SGF	Terminal in Switchgear Front Relay Panel
SGR	Terminal in Switchgear Rear Secondary Cable Box
CB	Circuit Breaker
BB1	Busbar 1
BB2	Busbar 2
ARC	Auto Reclose
FE	Feeder Earth
TCS	Trip Circuit Supervision
PB	Push Button
PTB	Pilot Board
D/S	Outstation Panel
J1	DC +ve Buswire
J2	DC -ve Buswire
RF1 & RF2	Relay Fail Buswires
BS1	Bus Section 1
BS2	Bus Section 2
'a'	Contact which is 'Closed' when Contact is 'Closed'
'b'	Contact which is 'Closed' when Contact is 'Open'
	Fuse
	Link
	Control Switch
	Push Button
	Relay Digital Input
	Relay Analog Input
	Normally Open Contact
	Normally Closed Contact
	Current Transformer

NOTES:

1. The purpose of this drawing is to clarify the requirements of the associated contract/enquiry specification. The issue of this with the specification does not absolve the successful contractor from his normal responsibility to provide a satisfactory scheme nor to submit drawings of systems proposed for approval by the engineer.

2. The DC bus wiring on the switchboard is to be fed from the battery bank via the incomer panels and removable links are to be provided at the bus coupler panel.

3. All relays have been shown de-energised with switches open.

4. This drawing will enable the different contractors to co-ordinate their respective systems with associated equipment. For this reason ferrule numbers of interconnecting points must be strictly adhered to. Where absolutely necessary ferrule numbers of connectors not associated with equipment on other contract may be added or altered.

5. Test blocks have been shown schematically. The actual wiring must be such as to be, from the left, "RED" "WHITE" and "BLUE" as viewed from the front of the test block.

DRAWN	A.J.R.W.				
DATE	27/05/2004				
TRACED		REFERENCE DRAWINGS:	REVISIONS:	BY:	DATE:
CHIEF DRAUGHTSMAN					
PLANNING OFFICER					
PROTECTION ENGINEER					
PLAN/PROJ. ENGINEER					
PLAN/PROJ. MANAGER					
APPROVED A.J. SOLO DIRECTOR TRANSMISSION					

ETHEKWINI ELECTRICITY

DC SCHEMATIC OF FIXED PATTERN BUS COUPLER AND BUS SECTION WITH PROTECTION AND REMOTE CONTROL TO BE SUPPLIED BY OTHERS

SCALE: N.T.S.

DRAWING NUMBER: TD 9.1

REV: