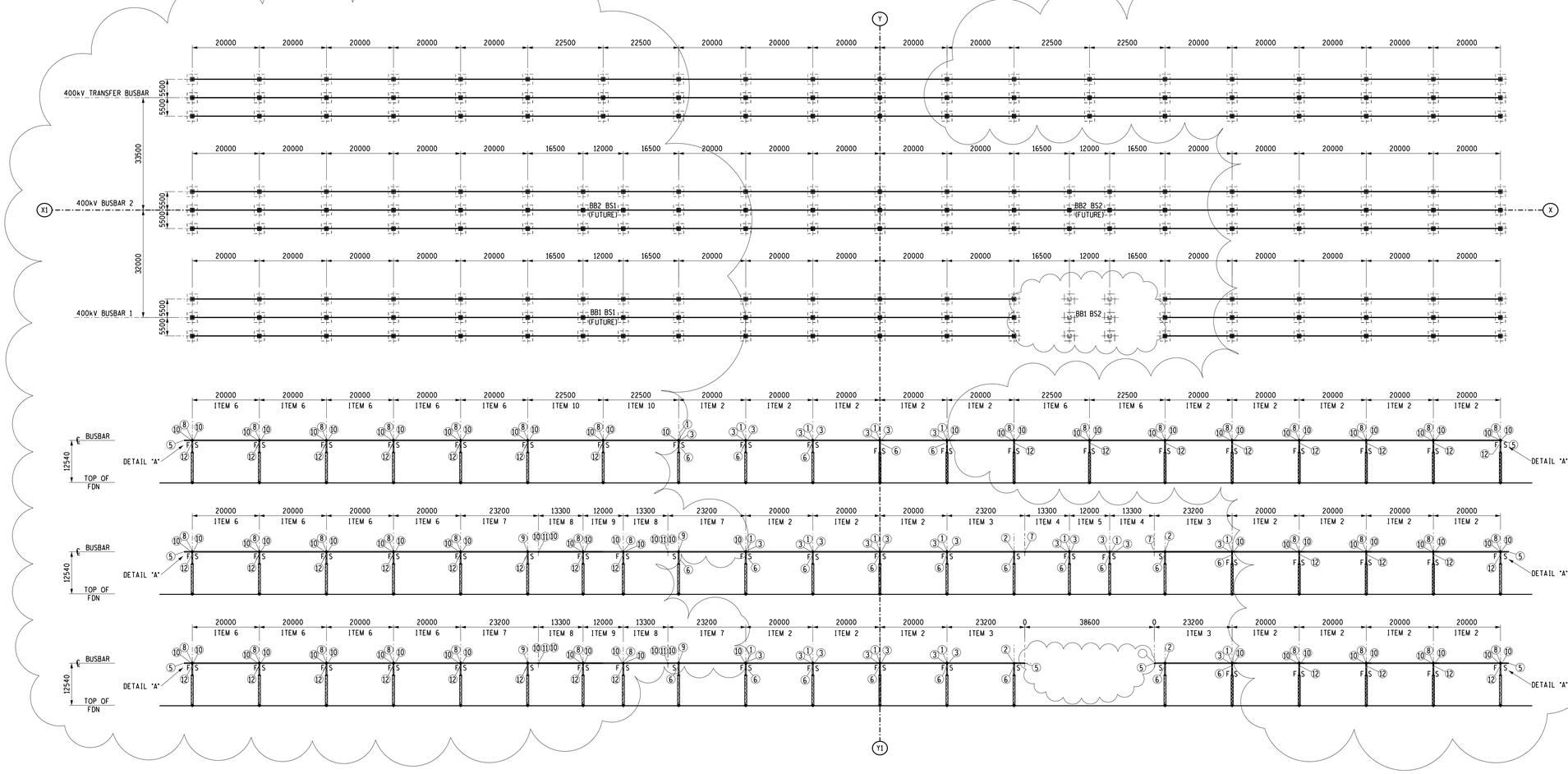
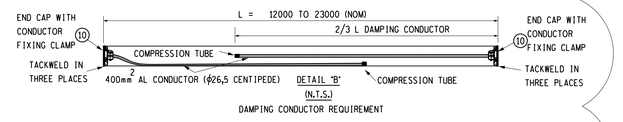
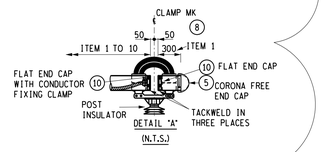




DAMPING CONDUCTOR REQUIREMENT



NOTES

1. ALL TUBES 200 DIA x 6 WT ALUMINIUM ALLOY - TYPE 6061-T6. FOR FURTHER INFORMATION SEE 240-17100067.
2. TUBE LENGTHS GIVEN ARE NOMINAL BEFORE TRIMMING TO FINAL MEASURED REQUIREMENTS AND THE ITEM NUMBERS CORRESPOND TO THOSE ITEMS OF TUBE LISTED IN SCHEDULES A,B AND C OF 'SPECIFICATION FOR SUPPLY AND INSTALLATION OF TUBULAR Al CONDUCTORS AT MOOKODI SUBSTATION-400kV YARD.
3. ■ - INDICATES END CAPS WHICH ARE TO BE COLOUR CODED AS FOLLOWS: 8 RED, 8 BLUE, 8 WHITE
4. BUSBAR SUPPORTS, SUPPORT CAPS AND LABEL SUPPORT FRAME BRACKETS - ARE CAPTURED IN STEELWORK MARKING PLAN M0021P05-SE-E10.

SCHEDULE 'C' DAMPING CONDUCTOR

DESCRIPTION	QUANTITY
	A
CENTIPEDE (400mm²)	1670m
DAMPING CONDUCTOR SLEEVE	168

SCHEDULE 'D' DAMPING CONDUCTOR

DESCRIPTION		QUANTITY (DETAIL B)	
		REUSE (ITEM 6, 8 & 9)	NEW
CENTIPEDE (400mm²)	FOR ITEMS 6 TO 10 QUANTITY IN SCHEDULE F	314,4m	2885,6m
FERRULE LENGTH 50 mm		30	216

SCHEDULE 'A' OF BUSBAR CLAMPS

MK	DESCRIPTION	ITEM	QUANTITY A	B	C	D
1	250 - 250 TUBE EXPANSION CLAMP FIXED/SLIDER 225mm PCD	TBFX-250/225/FS	63 - 6			
2	250 BUS SUPPORT SLIDING CLAMP 225mm PCD	TBSC-250/225	12			
3	TUBULAR BUSBAR FLAT END CAP WITH CONDUCTOR FIXING CLAMP - 250 O.D. x 238 I.D.	TBEC/C-250	126- 12			
4	250 - 250 TUBE EXPANSION CLAMP FIXED/SLIDER 225 PCD 90°	TBFX/9-250/127/FS90	-			
5	CORONA FREE END CAP.	TBEC/CR-250	18 - 18			
6	400kV POST INSULATOR (10kN)		75 - 6			
7	ϕ250 TO ϕ250 TUBE COUPLER CLAMP	TBC-250/250	12 - 6			

SCHEDULE 'B' OF ϕ250 X 6WT BUSBAR TUBES

ITEM No	LENGTH (mm)	REMARKS				
1	5400	TO BE CUT INTO 18 LENGTHS OF 300mm EACH - FOR USE AT BUSBAR ENDS.	1			
2	20000	NOTE 2	36 - 6			
3	23200		12			
4	13300		12 - 6			
5	12000		6 - 3			

SCHEDULE E - TUBULAR BUSBAR CLAMPS (STAGE 1)

MK	DESCRIPTION	TYPE	QTY
5	CORONA FREE END CAP.(REUSE EXISTING)	ETEC-CF-G	18* + 6
8	ϕ250 - ϕ250 TUBE EXPANSION CLAMP FIXED/SLIDE 225mm PCD	EEC-PI-FS-R	111
9	250 BUS SUPPORT SLIDING CLAMP	ECC-PI-S-K	12
10	TUBULAR BUSBAR FLAT END CAP WITH CONDUCTOR FIXING CLAMP - ϕ250 O.D. x 238 I.D.	ETEC-DC-H	264
11	250 - 250 TUBE COUPLER CLAMP	ECC-TT-G	12
12	400kV POST INSULATOR (10kN)		117

SCHEDULE F - ϕ250 x 6WT BUSBAR TUBES

ITEM No	LENGTH (mm)	QUANTITY	REMARKS	
1	300	18	REUSE THE EXISTING 18 LENGTHS OF 300mm AT NEW BASBUR END's, SEE SCHEDULE B ITEM 1.	
6	20000	81	REUSE THE EXISTING 6 LENGTHS OF 20000mm, SEE SCHEDULE B ITEM 2.	
7	23200	12		
8	13300	12	REUSE THE EXISTING 6 LENGTHS OF 13200mm, SEE SCHEDULE B ITEM 4.	SEE NOTE 2
9	12000	6	REUSE THE EXISTING 3 LENGTHS OF 12000mm, SEE SCHEDULE B ITEM 5.	
10	22500	12		

FINAL DESIGN FOR CONSTRUCTION

ORIGINAL DWG #: N/A
CONCEPT DWG #: N/A
DETAIL DWG #: M0021P05-SE-D12-2 REV 0

REV	REVISION DESCRIPTION	DRAWN	CHKD	AUTH	DATE
0	400kV BUSBAR EXTENDED ON BOTH ENDS. SCHEDULES D, E & F ADDED. 400kV BB1 BS1 INSTALLED. EXISTING BB1 E/SWITCH DECOMMISSIONED.				

E4	KEY PLAN
E3	STATION ELECTRIC
Mo021P05-SE-	REFERENCE DRAWINGS

APPROVED BY: R Ramnarain — DATE: 15/08/2025
CHECKED BY — DATE: 15/08/2025
DRAWN BY — DATE: 15/08/2025

Eskom

Eskom Holdings SOC Ltd
Reg No 2002/015527/30

MOOKODI

400kV YARD TUBULAR BUSBAR LAYOUT

©

SCALE 1:750

Mo021P05-SE-E9

SHEET NUMBER: 2 OF 2
REVISION: 0

SIZE GROOTTE A1L