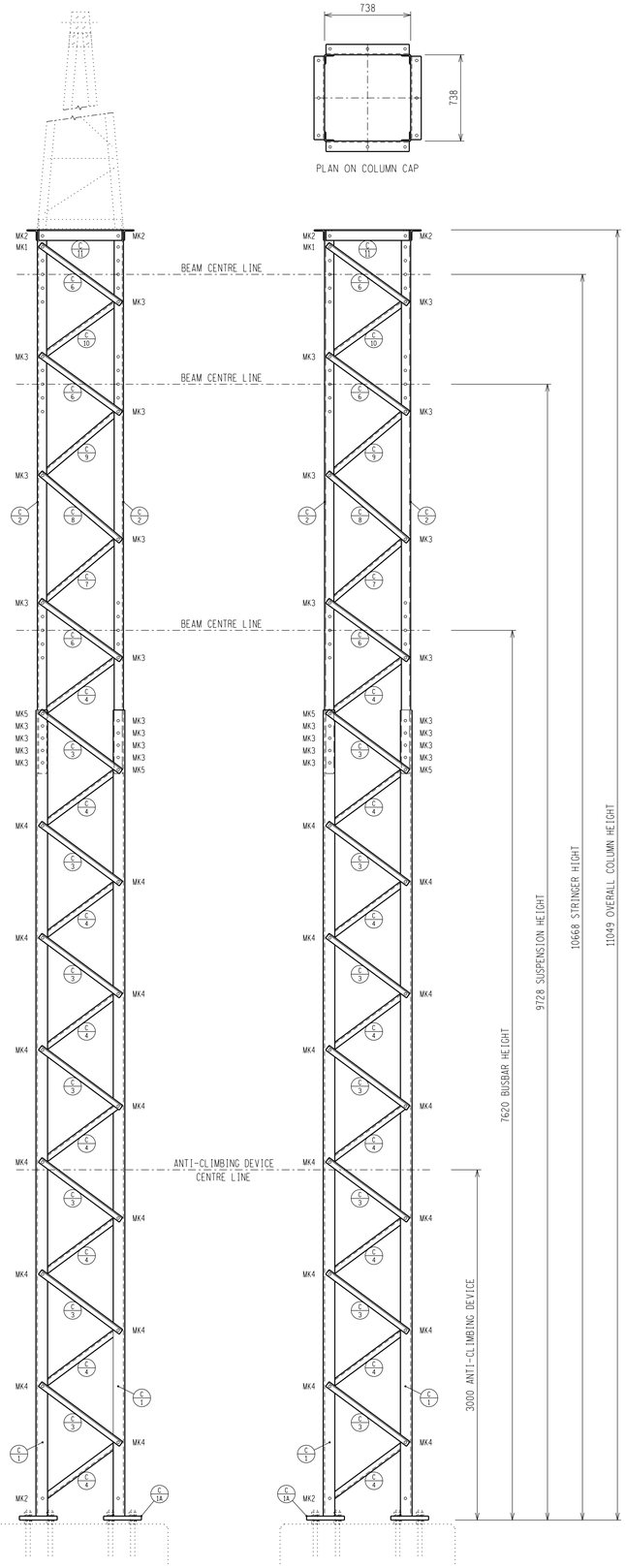
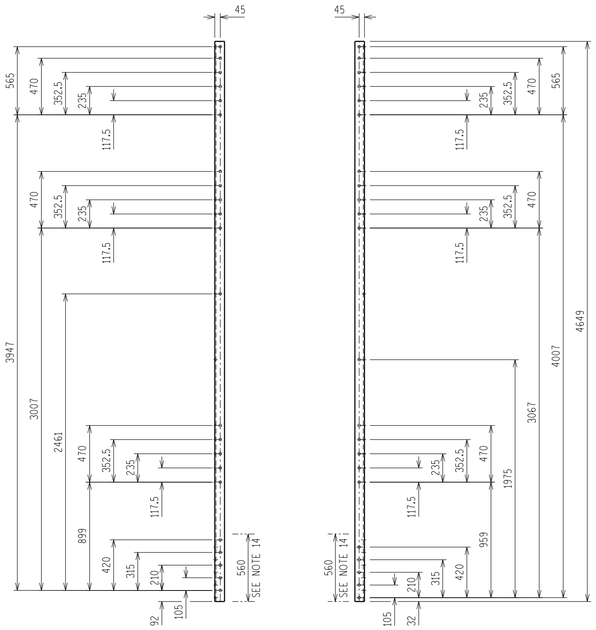
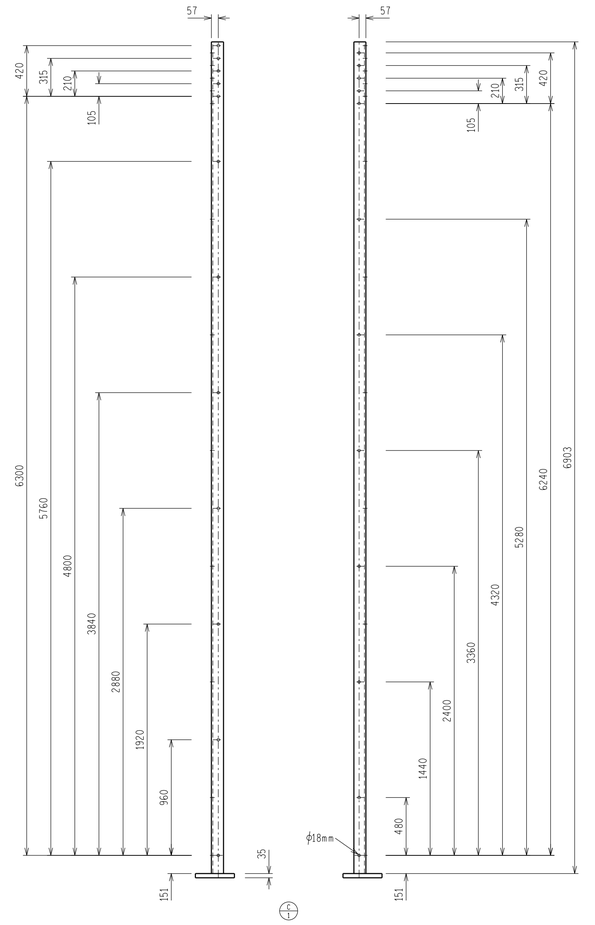
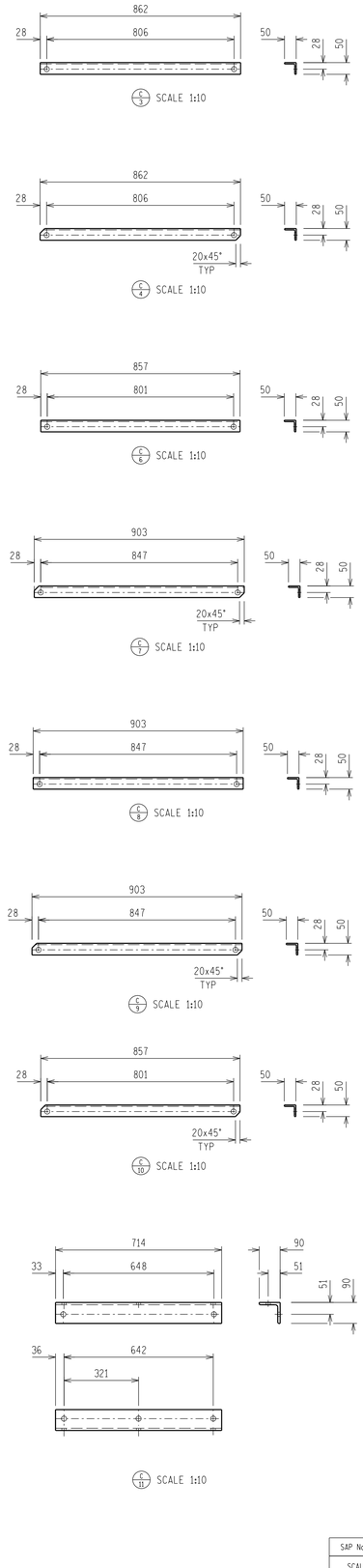








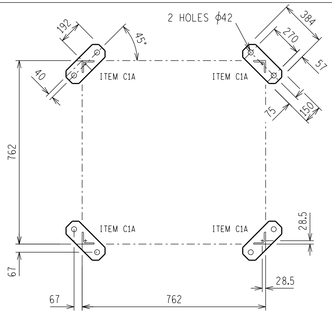
NOTES:

1 ALL WELDING AND WELDING SYMBOLS SHALL CONFORM TO SANS 10044 PART 1 TO 5.
2 ALL STRUCTURAL USE OF STEEL TO CONFORM TO SANS 10162.
3 ALL STEEL TO BE GRADE S355JR/350WA (EXCEPT ANGLES ≤ 45mm TO BE MILD STEEL).
4 ALL WELDS TO BE SEALED WELDED.
5 STEELWORK TO BE HOT DIP GALVANIZED TO SANS 121.
6 STEELWORK TO BE CHECKED AND STRAIGHTENED AFTER GALVANIZING.
7 BOLTS, NUTS & WASHERS TO BE IN ACCORDANCE WITH SANS 1700.
8 ALL MARKINGS TO BE STAMPED ONTO STEELWORK AND SHALL BE CLEARLY LEGIBLE AFTER GALVANIZING.
9 NO STEEL EXTENSIONS WILL BE ALLOWED ON ANY STEELWORK.
10 NO SECTIONS TO BE BUTT WELDED.
11 ALL STEELWORK TO BE FABRICATED, ERECTED AND LEVELLED TO A TOLERANCE OF + - 1.5mm.
12 ALL HOLES TO BE 22mm DIA UNLESS OTHERWISE STATED.
13 WHERE BEAM IS CONNECTED TO COLUMN, MEMBER C6 IS TO BE REMOVED AND BOLT TO BE REPLACED WITH LONGER BOLT (MK4 ADDITIONAL).
14 GRIND HEEL TO FIT INSIDE 100x100x12 ANGLE.

MAXIMUM DESIGNED BENDING MOMENT				
ITEM	ANGLE OF PULL	MAXIMUM BENDING MOMENT (kNm)	FOUNDATION (mm)	COLUMN SECTION (mm)
132/C	STRAIGHT LINE PULL 15 DEGREE ANGLE PULL 30 DEGREE ANGLE PULL	208 168 150	LENGTH : 1500 BREATH : 1500 HEIGHT : 2450	865 385 OVER LACING

BOLT SCHEDULE									
MARK	BOLT SIZE mm	MILD STEEL GRADE	PITCH mm	LENGTH mm	NO OFF BOLTS	NO OFF NUTS	NO OFF WASHERS	TORQUE Nm	TOTAL MASS kg
1	M20	4.8	2.5	45	4	4	8	225	1.26
2	M20	4.8	2.5	45	12	12	12	225	3.58
3	M20	4.8	2.5	50	60	60	60	225	18.36
4	M20	4.8	2.5	55	48	48	96	225	16.13
5	M20	4.8	2.5	60	8	8	8	225	2.66
MASS OF BOLTS, WASHERS AND NUTS									41.99

STEEL SCHEDULE AND MASS					
ITEM	QTY	DESCRIPTION	CUTTING LENGTH (mm)	TOTAL LENGTH (m)	TOTAL MASS (kg)
C/1	4	MILD STEEL ANGLE 100 x 100 x 12	6903	27.61	491.49
C/1A	4	MILD STEEL PLATE 150 x 35	384	1.54	57.86
C/2	4	MILD STEEL ANGLE 80 x 80 x 10	4649	18.60	221.29
C/3	28	MILD STEEL ANGLE 50 x 50 x 6	862	24.14	107.88
C/4	32	MILD STEEL ANGLE 50 x 50 x 6	862	27.58	123.30
C/6	12	MILD STEEL ANGLE 50 x 50 x 6	857	10.28	45.96
C/7	4	MILD STEEL ANGLE 50 x 50 x 6	903	3.61	16.15
C/8	4	MILD STEEL ANGLE 50 x 50 x 6	903	3.61	16.15
C/9	4	MILD STEEL ANGLE 50 x 50 x 6	903	3.61	16.15
C/10	4	MILD STEEL ANGLE 50 x 50 x 6	857	3.43	15.32
C/11	4	MILD STEEL ANGLE 90 x 90 x 10	714	2.86	38.27
TOTAL MASS =					1149.82



PLAN ON COLUMN BASE
SCALE 1:10

D-DT-5252	SHEET 1C	SUPPORT FOUNDATION ROCK PILED
D-DT-5252	SHEET 1B	SUPPORT FOUNDATION ROCK PINNED
D-DT-5252	SHEET 1A	SUPPORT.FDN SOIL TYPE 1 & 2
DRG NO.	SHEET NO.	REFERENCE DRAWINGS

THIS DRAWING IS THE NEW OFFICIAL REVISION AND IT SUPERSEDES ALL OTHER PUBLISHED DRAWINGS						
3	ADDED A HOLE ON ITEM C/2 & UPDATED DRAWING NOTES	BMH	NSH	NMW	23/11/2015	
2	C1 BALLOON ADDED	MEB	GJB	NMW	19/03/2013	
1	MARK 3 & 4 REPOSITIONED ON COLUMN SECTION	MEB	GJB	NMW	22/01/2013	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

Eskom

AUTH:	B HILL
DATE:	03/11/2011
CHKD:	N WEBBER
DATE:	29/10/2011
DRAWN:	G BEETGE
DATE:	28/10/2011

COLUMN - 132/C
LATTICE STEEL
STEELWORK MANUFACTURING
DETAILS AND ASSEMBLY

SAP No. 0559307
SCALE 1:25
THIS DRAWING IS THE PROPERTY OF ESKOM

SET	SHEET	REVISION
D-DT-5252	2A	3

A1L