

Project: Sample

Col. Mark	Memb. no.	Starting level (m)	Size Zm (mm)	Size Ym (mm)	fck (N/mm2)	fy (N/mm2)	Cover (mm)	%age Ast reqd.	Ast reqd. (cm2)	Links Dia. & Spa.	Gov. Load Case	
C1	59	4.500	300	450	20	415	40	1.48	20.02	8@190	25	
	30	1.500	300	450	20	415	40	1.45	19.57	8@190	25	
	1	0.000	300	450	20	415	40	0.80	10.80	8@190	25	
Max. 1.48%(20.02 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C2	60	4.500	300	450	20	415	40	1.15	15.46	8@255	25	
	31	1.500	300	450	20	415	40	1.31	17.65	8@190	25	
	2	0.000	300	450	20	415	40	0.80	10.80	8@190	25	
Max. 1.31%(17.65 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C3	61	4.500	300	450	20	415	40	1.15	15.46	8@255	25	
	32	1.500	300	450	20	415	40	1.31	17.65	8@190	25	
	3	0.000	300	450	20	415	40	0.80	10.80	8@190	25	
Max. 1.31%(17.65 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C4	62	4.500	300	450	20	415	40	1.48	20.02	8@190	25	
	33	1.500	300	450	20	415	40	1.45	19.57	8@190	25	
	4	0.000	300	450	20	415	40	0.80	10.80	8@190	25	
Max. 1.48%(20.02 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C5	63	4.500	300	450	20	415	40	1.60	21.59	8@190	26	
	34	1.500	300	450	20	415	40	1.46	19.69	8@190	26	
	5	0.000	300	450	20	415	40	0.80	10.80	8@190	24	
Max. 1.60%(21.59 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C6	64	4.500	300	450	20	415	40	1.05	14.18	8@255	30	
	35	1.500	300	450	20	415	40	1.67	22.54	8@190	26	
	6	0.000	300	450	20	415	40	1.35	18.19	8@190	26	
Max. 1.67%(22.54 Sq.cm), Min. 1.05%,(14.18 Sq.cm)												
C7	65	4.500	300	450	20	415	40	1.05	14.18	8@255	30	
	36	1.500	300	450	20	415	40	1.67	22.54	8@190	26	
	7	0.000	300	450	20	415	40	1.35	18.19	8@190	26	
Max. 1.67%(22.54 Sq.cm), Min. 1.05%,(14.18 Sq.cm)												
C8	66	4.500	300	450	20	415	40	1.60	21.59	8@190	26	
	37	1.500	300	450	20	415	40	1.46	19.69	8@190	26	
	8	0.000	300	450	20	415	40	0.80	10.80	8@190	23	
Max. 1.60%(21.59 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C9	67	4.500	300	450	20	415	40	1.48	20.02	8@190	26	
	38	1.500	300	450	20	415	40	1.45	19.57	8@190	26	
	9	0.000	300	450	20	415	40	0.80	10.80	8@190	26	
Max. 1.48%(20.02 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C10	68	4.500	300	450	20	415	40	1.15	15.46	8@255	26	
	39	1.500	300	450	20	415	40	1.31	17.65	8@190	26	
	10	0.000	300	450	20	415	40	0.80	10.80	8@190	26	
Max. 1.31%(17.65 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C11	69	4.500	300	450	20	415	40	1.15	15.46	8@255	26	
	40	1.500	300	450	20	415	40	1.31	17.65	8@190	26	
	11	0.000	300	450	20	415	40	0.80	10.80	8@190	26	
Max. 1.31%(17.65 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
C12	70	4.500	300	450	20	415	40	1.48	20.02	8@190	26	
	41	1.500	300	450	20	415	40	1.45	19.57	8@190	26	
	12	0.000	300	450	20	415	40	0.80	10.80	8@190	26	
Max. 1.48%(20.02 Sq.cm), Min. 0.80%,(10.80 Sq.cm)												
								Max.	1.67	22.54		
								Min.	0.80	10.80		

Project: Sample

fck = 20 N/mm² fy = 415 N/mm² Cover = 25 mm

Lvl. 1.500m	-----						-----						-----					
Member no.	13						14						15					
Size (mm)	300 x 450						300 x 450						300 x 450					
Top Ast(cm ²)	9.9	2.6	11.4	10.6	2.6	10.6	11.4	2.6	9.9	11.4	2.6	9.9	11.4	2.6	9.9	11.4	2.6	9.9
Bot.Ast(cm ²)	2.6	4.2	0.0	0.0	3.8	0.0	0.0	4.2	2.6	0.0	4.2	2.6	0.0	4.2	2.6	0.0	4.2	2.6
Stirrups	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150
	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L

Lvl. 1.500m	-----						-----						-----					
Member no.	16						17						18					
Size (mm)	300 x 450						300 x 450						300 x 450					
Top Ast(cm ²)	12.1	2.6	13.2	12.5	2.6	12.5	13.2	2.6	12.1	13.2	2.6	12.1	13.2	2.6	12.1	13.2	2.6	12.1
Bot.Ast(cm ²)	2.6	5.8	1.6	0.6	5.3	0.6	1.6	5.8	2.6	0.6	5.8	2.6	1.6	5.8	2.6	0.6	5.8	2.6
Stirrups	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300	8@300
	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L

Lvl. 1.500m	-----						-----						-----					
Member no.	19						20						21					
Size (mm)	300 x 450						300 x 450						300 x 450					
Top Ast(cm ²)	9.9	2.6	11.4	10.6	2.6	10.6	11.4	2.6	9.9	11.4	2.6	9.9	11.4	2.6	9.9	11.4	2.6	9.9
Bot.Ast(cm ²)	2.6	4.2	0.0	0.0	3.8	0.0	0.0	4.2	2.6	0.0	4.2	2.6	0.0	4.2	2.6	0.0	4.2	2.6
Stirrups	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150
	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L

Lvl. 1.500m	-----						-----						-----					
Member no.	22						23											
Size (mm)	300 x 450						300 x 450											
Top Ast(cm ²)	7.5	2.6	8.6	8.6	2.6	7.5	8.6	2.6	7.5	8.6	2.6	7.5						
Bot.Ast(cm ²)	2.7	3.5	2.6	2.6	3.5	2.7	2.6	3.5	2.7	2.6	3.5	2.7						
Stirrups	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150						
	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L						

Lvl. 1.500m	-----						-----						-----					
Member no.	24						25											
Size (mm)	300 x 450						300 x 450											
Top Ast(cm ²)	9.2	2.6	10.4	10.4	2.6	9.2	10.4	2.6	9.2	10.4	2.6	9.2						
Bot.Ast(cm ²)	3.5	4.1	2.6	2.6	4.1	3.5	2.6	4.1	3.5	2.6	4.1	3.5						
Stirrups	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150						
	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L						

Lvl. 1.500m	-----						-----						-----					
Member no.	26						27											
Size (mm)	300 x 450						300 x 450											
Top Ast(cm ²)	9.2	2.6	10.4	10.4	2.6	9.2	10.4	2.6	9.2	10.4	2.6	9.2						
Bot.Ast(cm ²)	3.5	4.1	2.6	2.6	4.1	3.5	2.6	4.1	3.5	2.6	4.1	3.5						
Stirrups	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150	8@150						
	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L						

Sample.Anl

J9



C9:300X450(3)
11,20,21
(21/11)

J10



C10:300X450(3)
11,18,16
(18/11)

J11



C11:300X450(3)
11,18,16
(18/11)

J12



C12:300X450(3)
11,20,21
(21/11)

J5



C5:300X450(3)
11,20,22
(22/11)

J6



C6:300X450(3)
19,23,15
(23/15)

J7



C7:300X450(3)
19,23,15
(23/15)

J8



C8:300X450(3)
11,20,22
(22/11)

J1



C1:300X450(3)
11,20,21
(21/11)

J2



C2:300X450(3)
11,18,16
(18/11)

J3



C3:300X450(3)
11,18,16
(18/11)

J4



C4:300X450(3)
11,20,21
(21/11)

PLAN SHOWING R/F OF ALL LEVELS

C INDICATES COLUMN GROUP & J INDICATES JOINT NO.
FIGURE IN BRACKETS AT THE END OF COLUMN SIZE INDICATE NO. OF LEVELS
FIGURES IN BRACKETS AT THE END OF AST INDICATE MAX. & MIN. AST
AST REQD. IN SQ.CM FROM BOTTOM TO TOP
SCALE 1:100

Sample.Anl

J9



C9:300X450(3)
0.8,1.45,1.48
(1.48/0.8)

J10



C10:300X450(3)
0.8,1.31,1.15
(1.31/0.8)

J11



C11:300X450(3)
0.8,1.31,1.15
(1.31/0.8)

J12



C12:300X450(3)
0.8,1.45,1.48
(1.48/0.8)

J5



C5:300X450(3)
0.8,1.46,1.6
(1.6/0.8)

J6



C6:300X450(3)
1.35,1.67,1.05
(1.67/1.05)

J7



C7:300X450(3)
1.35,1.67,1.05
(1.67/1.05)

J8



C8:300X450(3)
0.8,1.46,1.6
(1.6/0.8)

J1



C1:300X450(3)
0.8,1.45,1.48
(1.48/0.8)

J2



C2:300X450(3)
0.8,1.31,1.15
(1.31/0.8)

J3



C3:300X450(3)
0.8,1.31,1.15
(1.31/0.8)

J4



C4:300X450(3)
0.8,1.45,1.48
(1.48/0.8)

PLAN SHOWING %AGE R/F OF ALL LEVELS

C INDICATES COLUMN GROUP & J INDICATES JOINT NO.

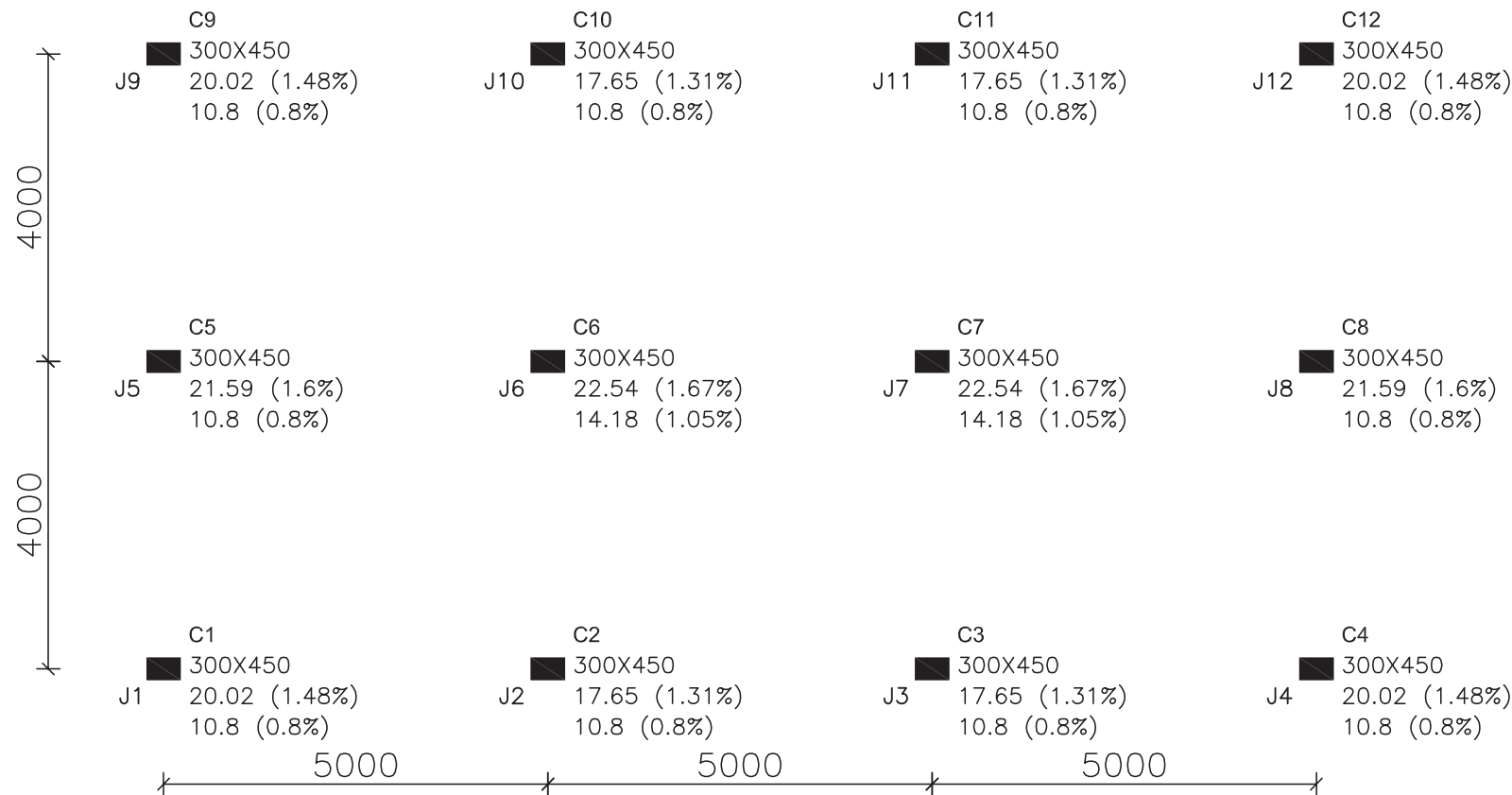
FIGURE IN BRACKETS AT THE END OF COLUMN SIZE INDICATE NO. OF LEVELS

FIGURES IN BRACKETS AT THE END OF %AGE AST INDICATE MAX. & MIN. %AGE AST

%AGE AST REQD. FROM BOTTOM TO TOP

SCALE 1:100

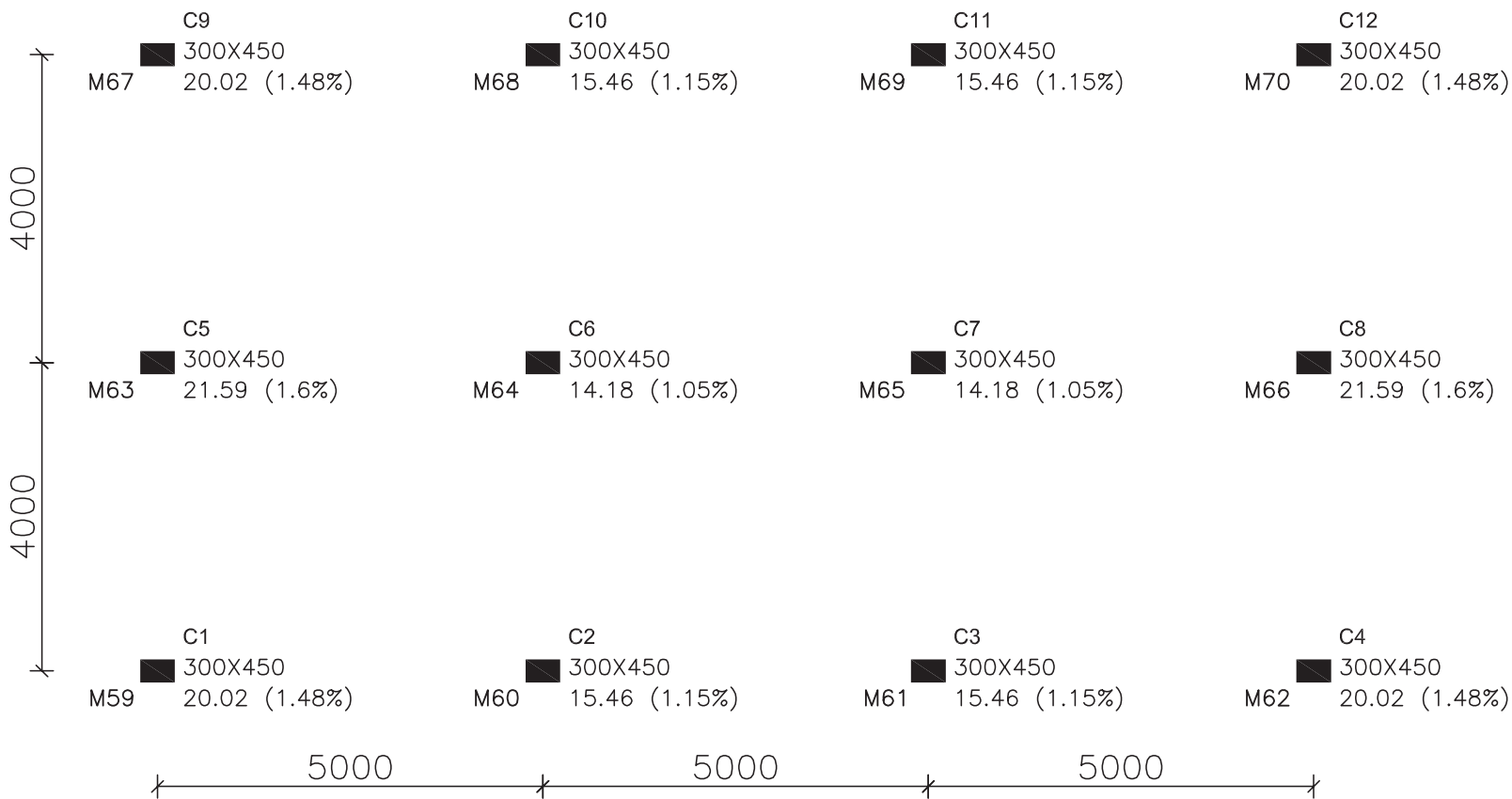
Sample.Anl



KEY PLAN SHOWING MAX. & MIN. R/F

C INDICATES COLUMN GROUP & J INDICATES JOINT NO.
MAX. & MIN. AST REQD. IN SQ.CM
SCALE 1:100

Sample.Anl



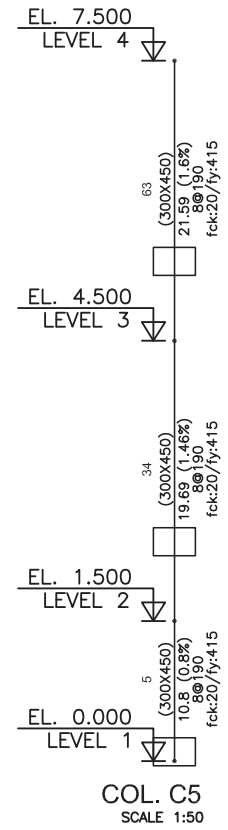
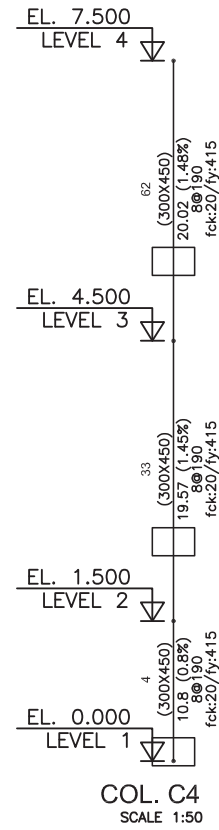
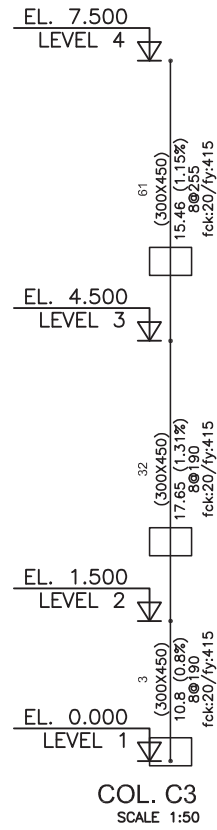
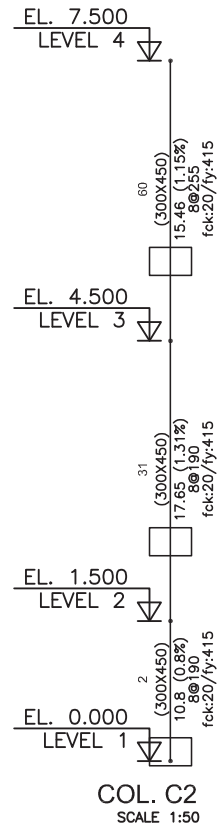
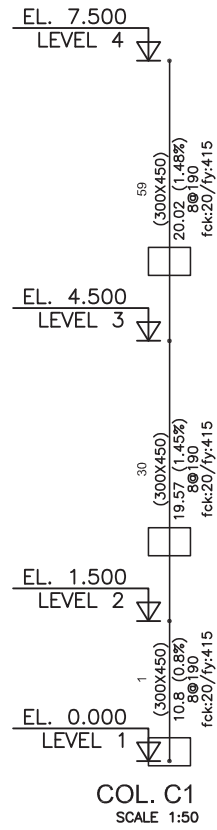
GF ROOF

PLAN SHOWING R/F @ EL. 4.500 M

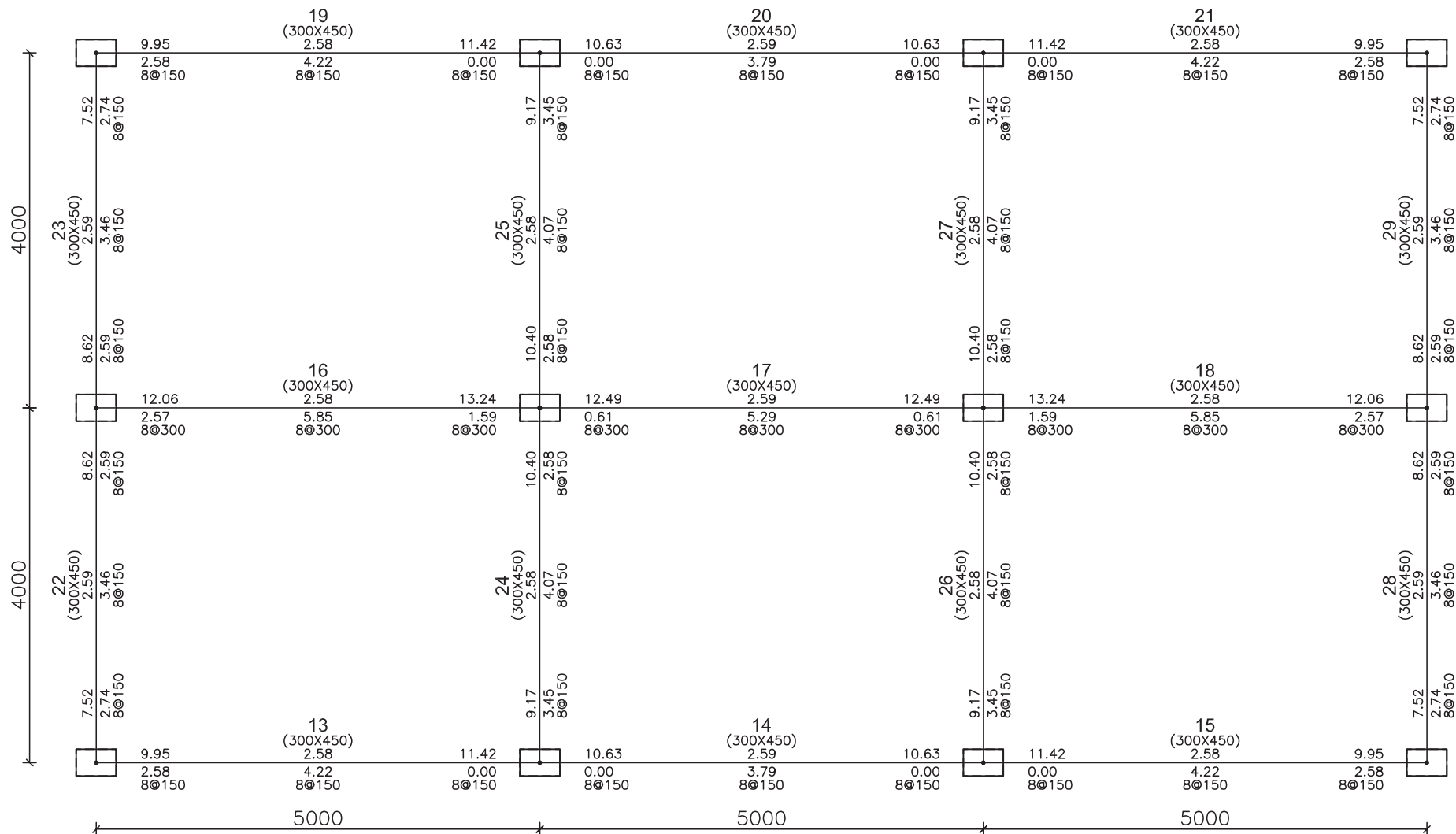
C INDICATES COLUMN GROUP & M INDICATES MEMBER NO.
AST REQD. IN SQ.CM
SCALE 1:100

COLUMN AST (SQ.CM):

LEVEL	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
4.500	20.02	15.46	15.46	20.02	21.59	14.18	14.18	21.59	20.02	15.46	15.46	20.02
1.500	19.57	17.65	17.65	19.57	19.69	22.54	22.54	19.69	19.57	17.65	17.65	19.57
0.000	10.80	10.80	10.80	10.80	10.80	18.19	18.19	10.80	10.80	10.80	10.80	10.80
LEVEL	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12



Sample.ANL



PLINTH BEAM LEVEL

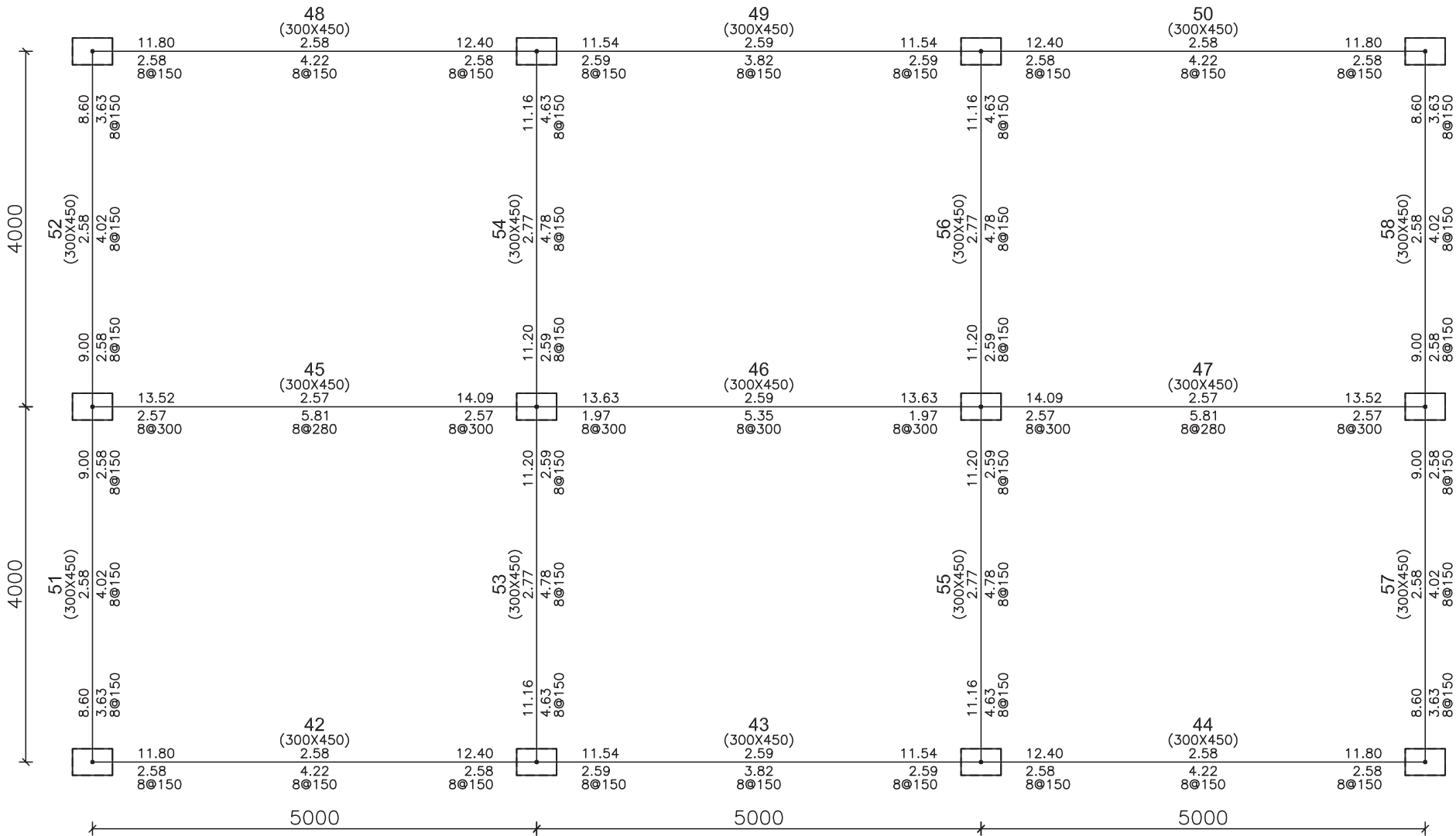
PLAN @ EL. 1.500

SHOWING Ast (SQ.CM) REQD. FOR BEAMS

fck:20, fy:415

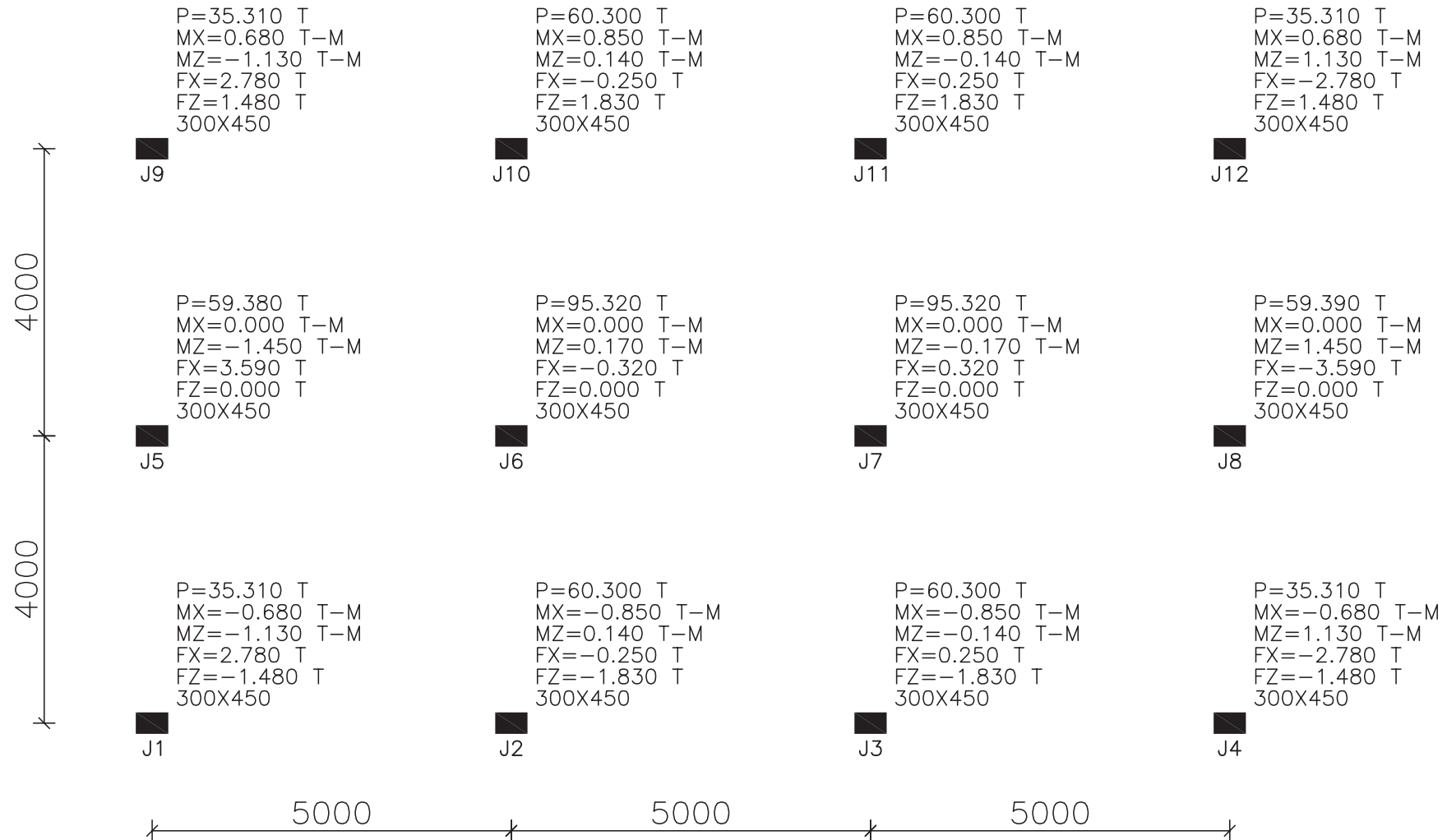
SCALE 1:50

Sample.ANL



GF ROOF
PLAN @ EL. 4.500
SHOWING Ast (SQ.CM) REQD. FOR BEAMS
fck:20, fy:415
SCALE 1:50

Sample.ANL

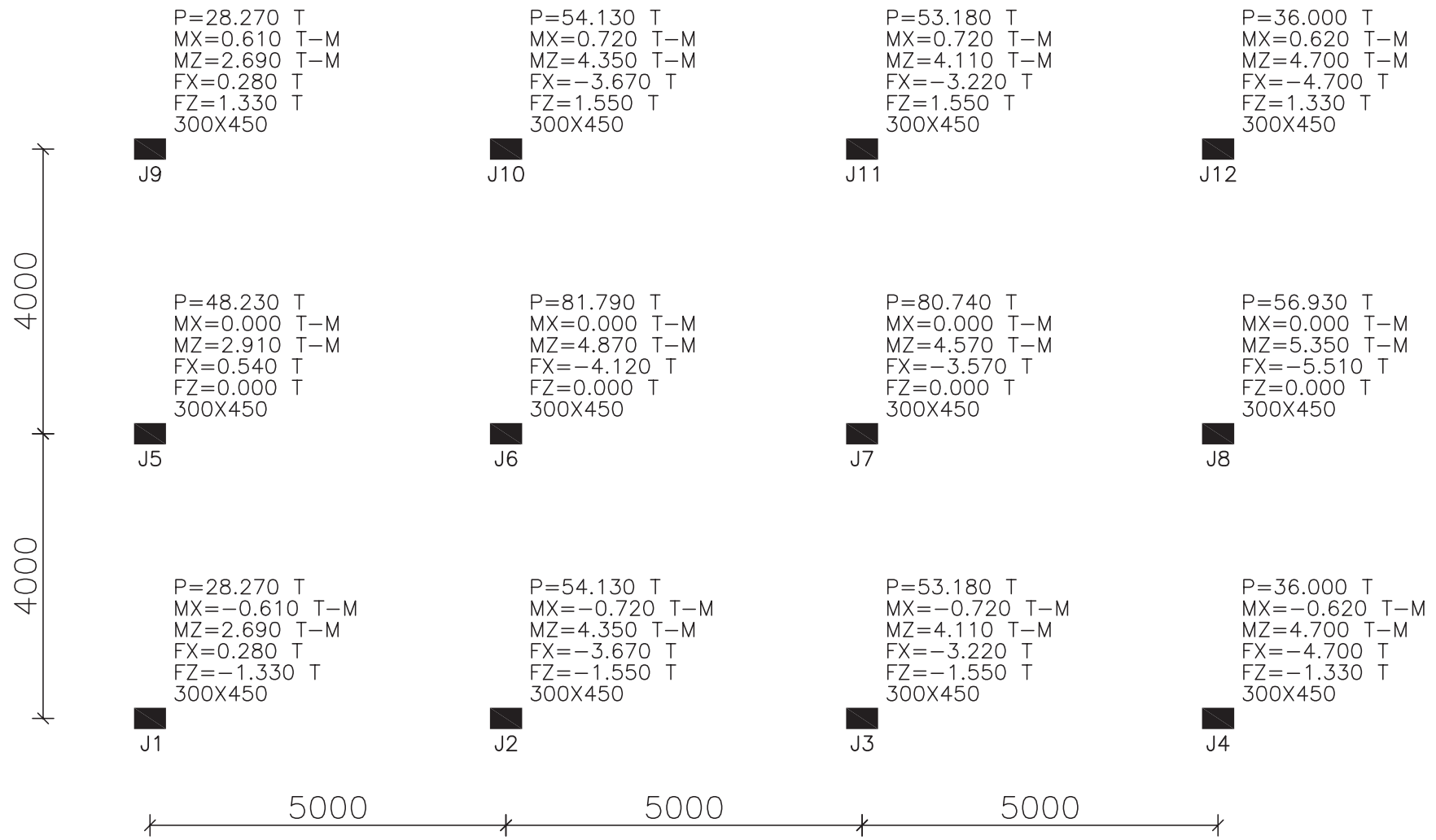


SUPPORT REACTIONS: LOAD CASE 5: DL+LL

(J INDICATES JOINT NO.)

SCALE 1:100

Sample.ANL



SUPPORT REACTIONS: LOAD CASE 6: DL+0.25LL+EQX

(J INDICATES JOINT NO.)
SCALE 1:100