

BAB VI

KESIMPULAN DAN SARAN

6.1. Kesimpulan

Setelah melakukan analisis dan perancangan pada struktur Gedung KPBD di Semarang, untuk struktur dengan kuda-kuda baja dan struktur dengan kuda-kuda beton, maka dapat diambil kesimpulan sebagai berikut:

1. Kuda-kuda baja *monoframe* menggunakan profil WF350 dan kuda-kuda beton *monoframe* menggunakan balok ukuran 400/650 dengan penulangan longitudinal 5D25 untuk masing-masing tulangan atas dan bawah, penulangan geser menggunakan 2P10-150. Dimensi balok dan kolom untuk struktur dengan kuda-kuda baja dan struktur dengan kuda-kuda beton, digunakan dimensi yang sama. Untuk perbandingan, balok yang ditinjau adalah balok F73-75 dengan dimensi 400/800 mm dan bentang 8 m. Didapat hasil untuk struktur dengan atap baja, tulangan atas 7D25, tulangan kanan/kiri 2D25, tulangan bawah 5D25 dan tulangan geser 4P10-60 untuk daerah sendi plastis, 4P10-100 untuk daerah di luar sendi plastis. Sedangkan untuk struktur dengan atap beton, tulangan atas 8D25, tulangan kanan/kiri 2D25, tulangan bawah 5D25 dan tulangan geser 4P10-50 untuk daerah sendi plastis, 4P10-90 untuk daerah di luar sendi plastis. Penulangan tidak terlalu berbeda dikarenakan gaya-gaya dan momen-momen yang terjadi untuk kedua struktur hampir sama. Untuk perbandingan, kolom yang ditinjau adalah kolom lingkaran F150 dengan

dimensi diameter 800 mm dan tinggi 4 m. Didapat hasil penulangan yang sama untuk kedua struktur yaitu penulangan longitudinal 12D25, penulangan geser 2P10-50 untuk daerah λ_0 dan 2P10-150 untuk daerah luar sendi plastis. Didapat penulangan yang sama karena gaya-gaya dan momen-momen yang terjadi untuk kedua struktur hampir sama.

2. Harga untuk kuda-kuda baja Rp. 42.432.000,- dan untuk kuda-kuda beton Rp. 22.403.079,-. Struktur dengan kuda-kuda beton ternyata lebih ekonomis daripada struktur dengan kuda-kuda baja.

6.2. Saran

1. Pemilihan material untuk kuda-kuda hendaknya tidak diperhitungkan dari segi ekonomis saja tetapi juga terhadap prosedur pengerjaan, pemasangan dan waktu yang dibutuhkan.
2. Perancangan struktur dalam tugas akhir ini masih mungkin dicari solusi perencanaan lain yang lebih hemat.

DAFTAR PUSTAKA

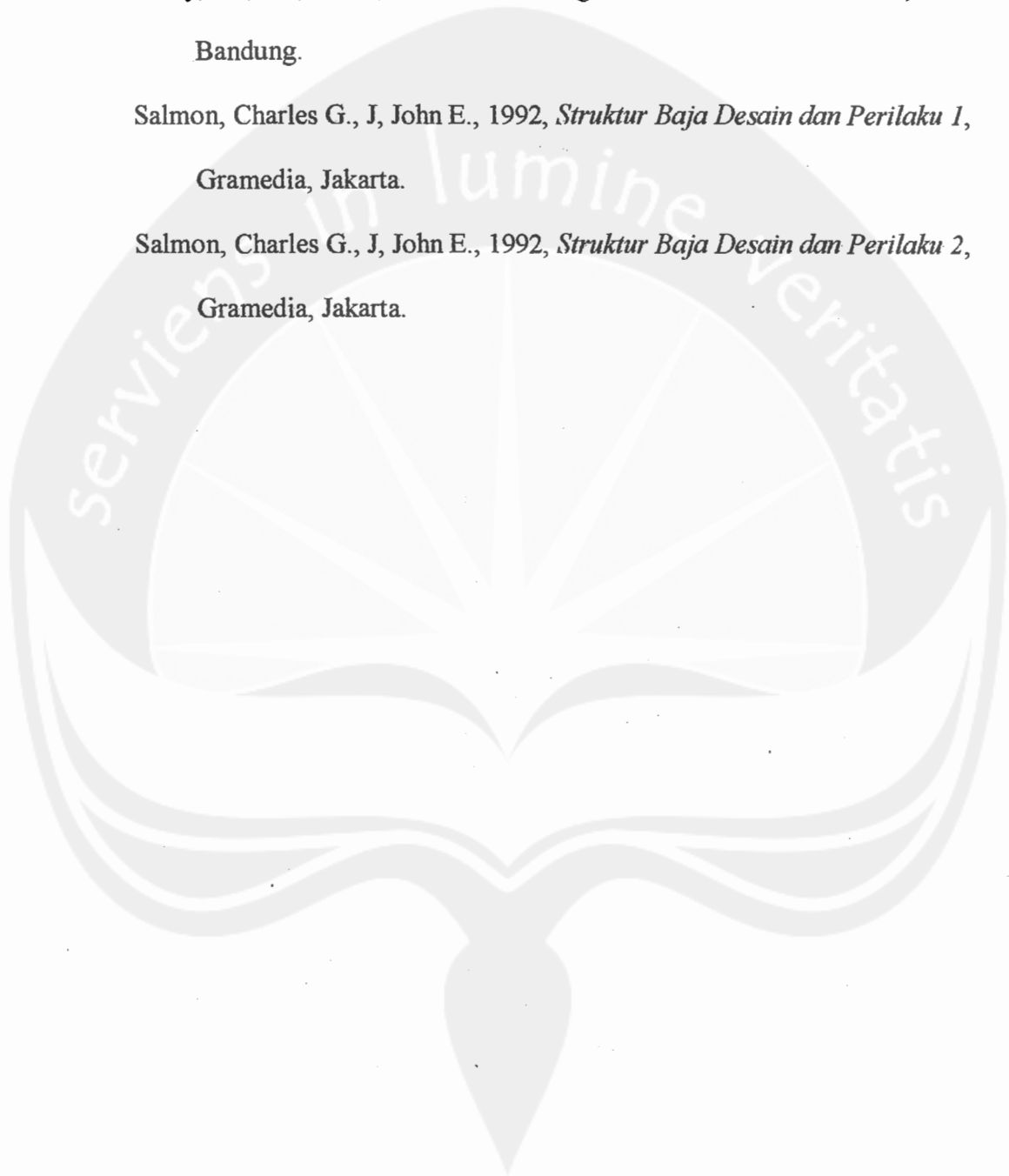
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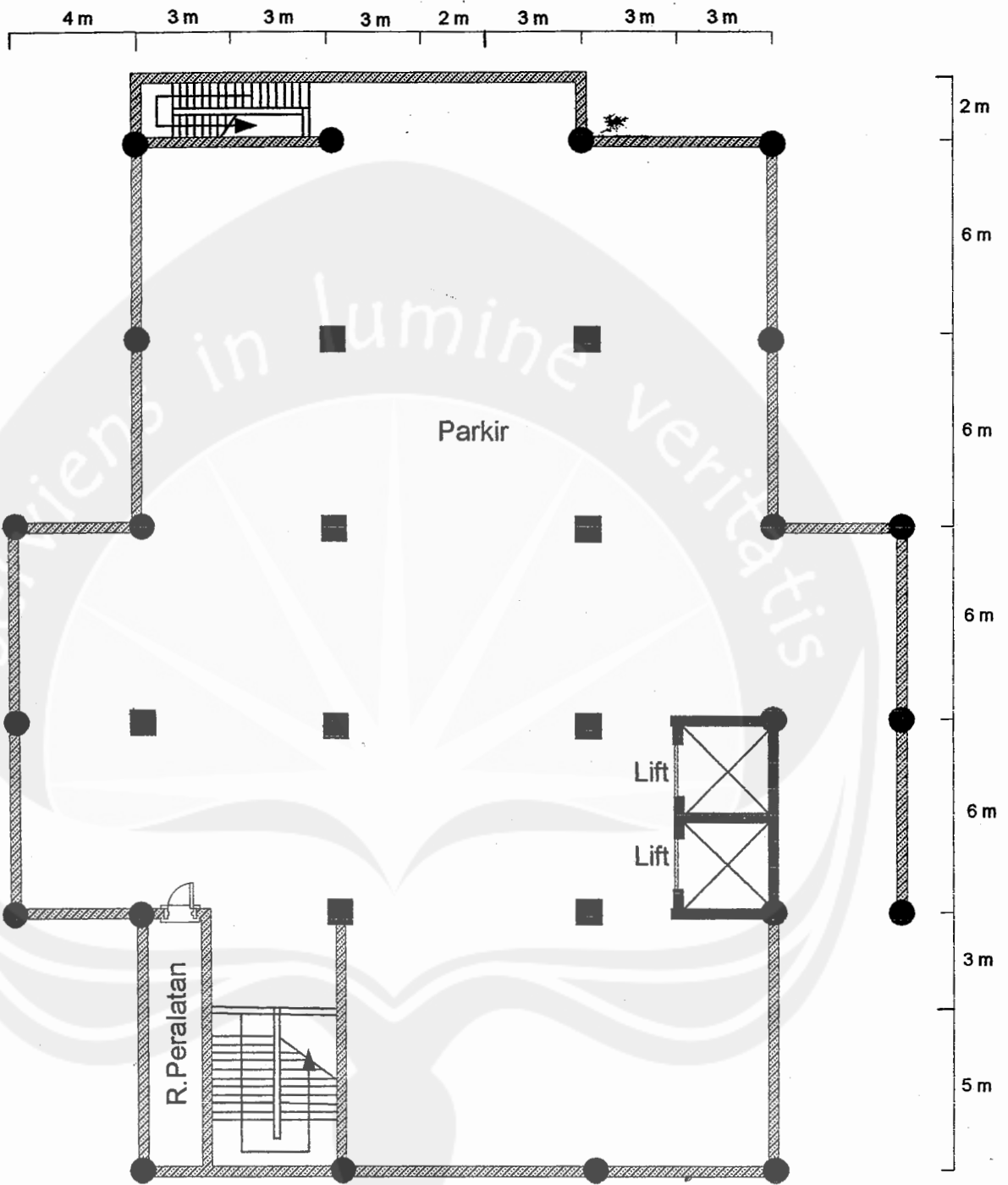
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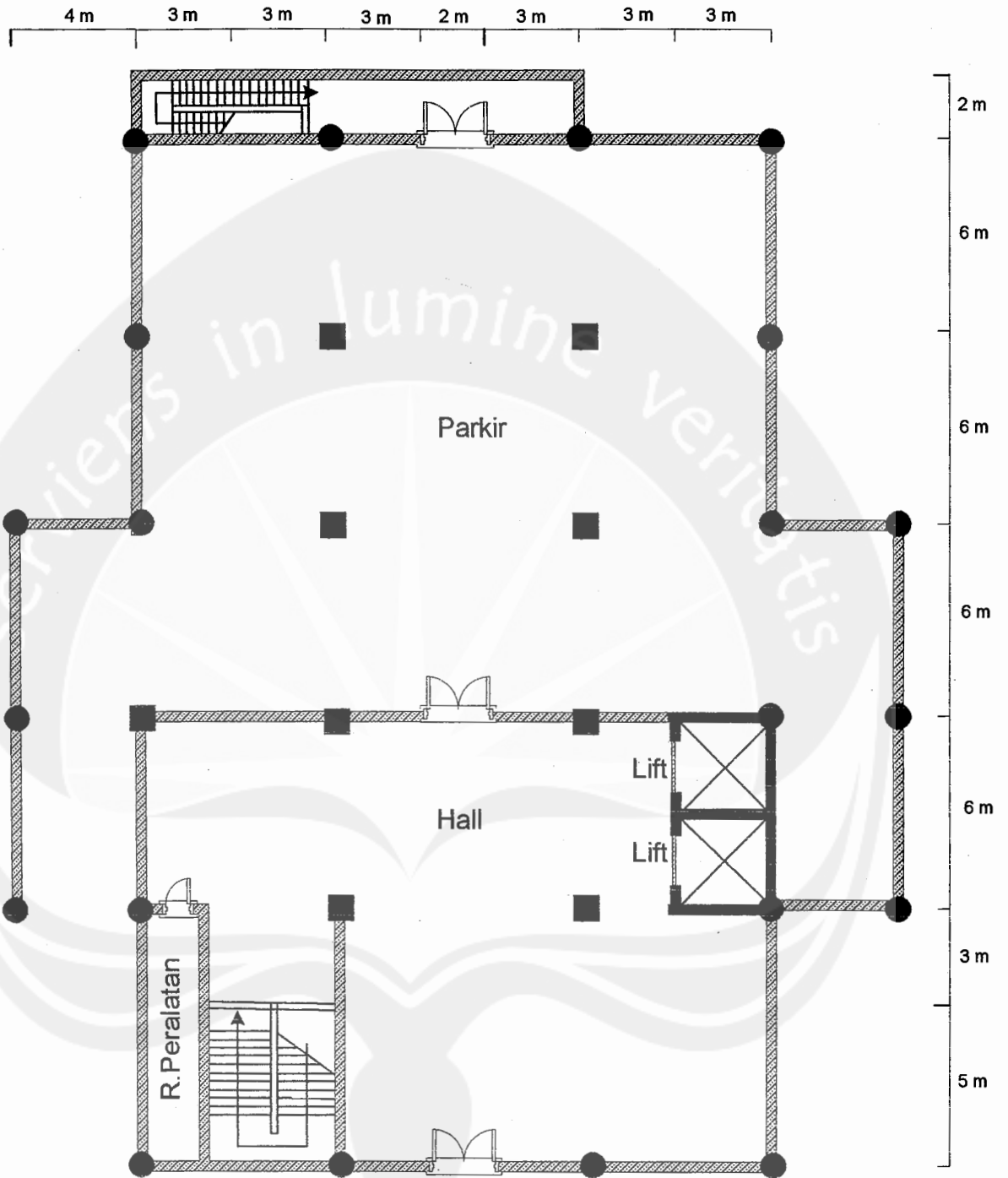
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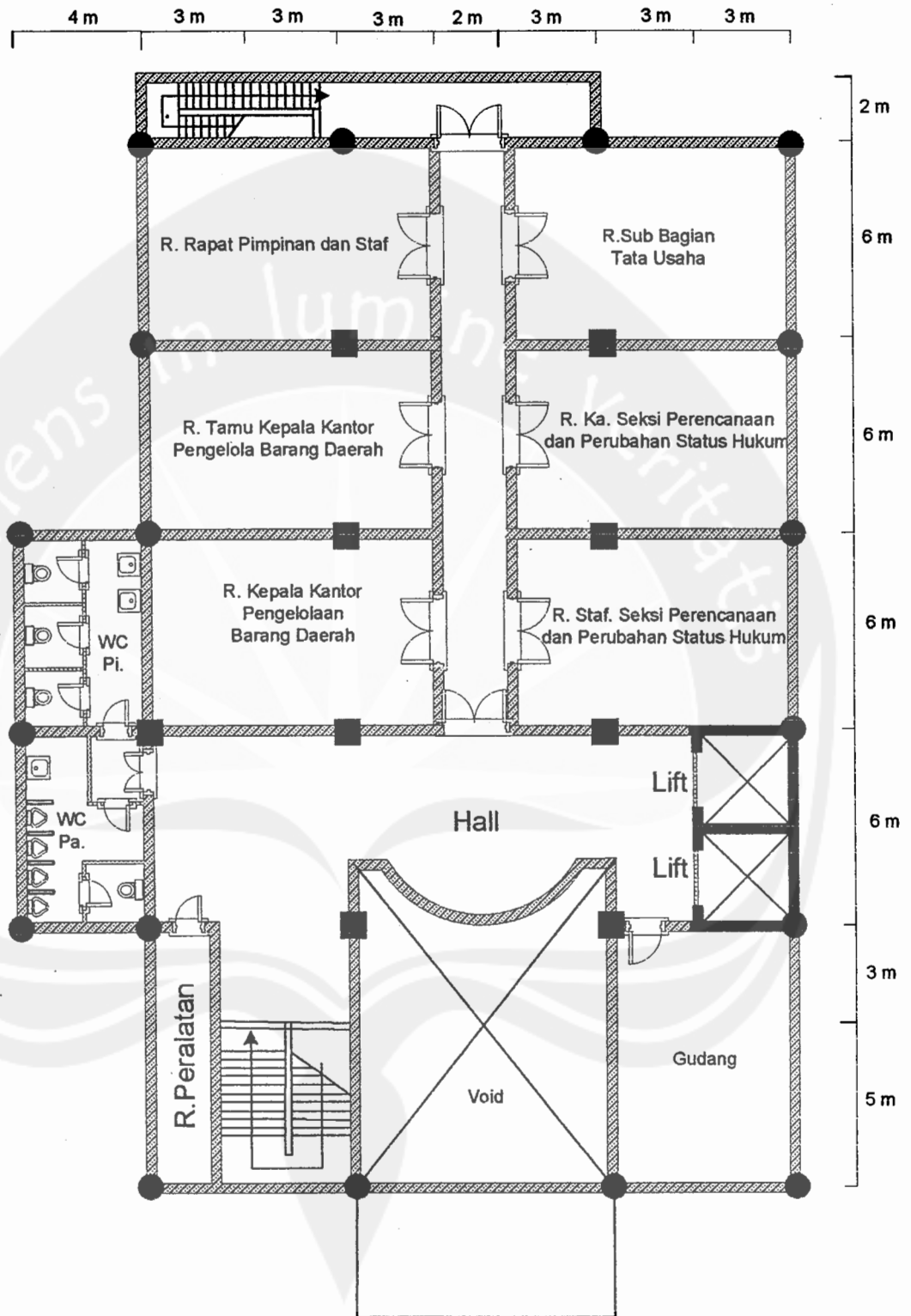




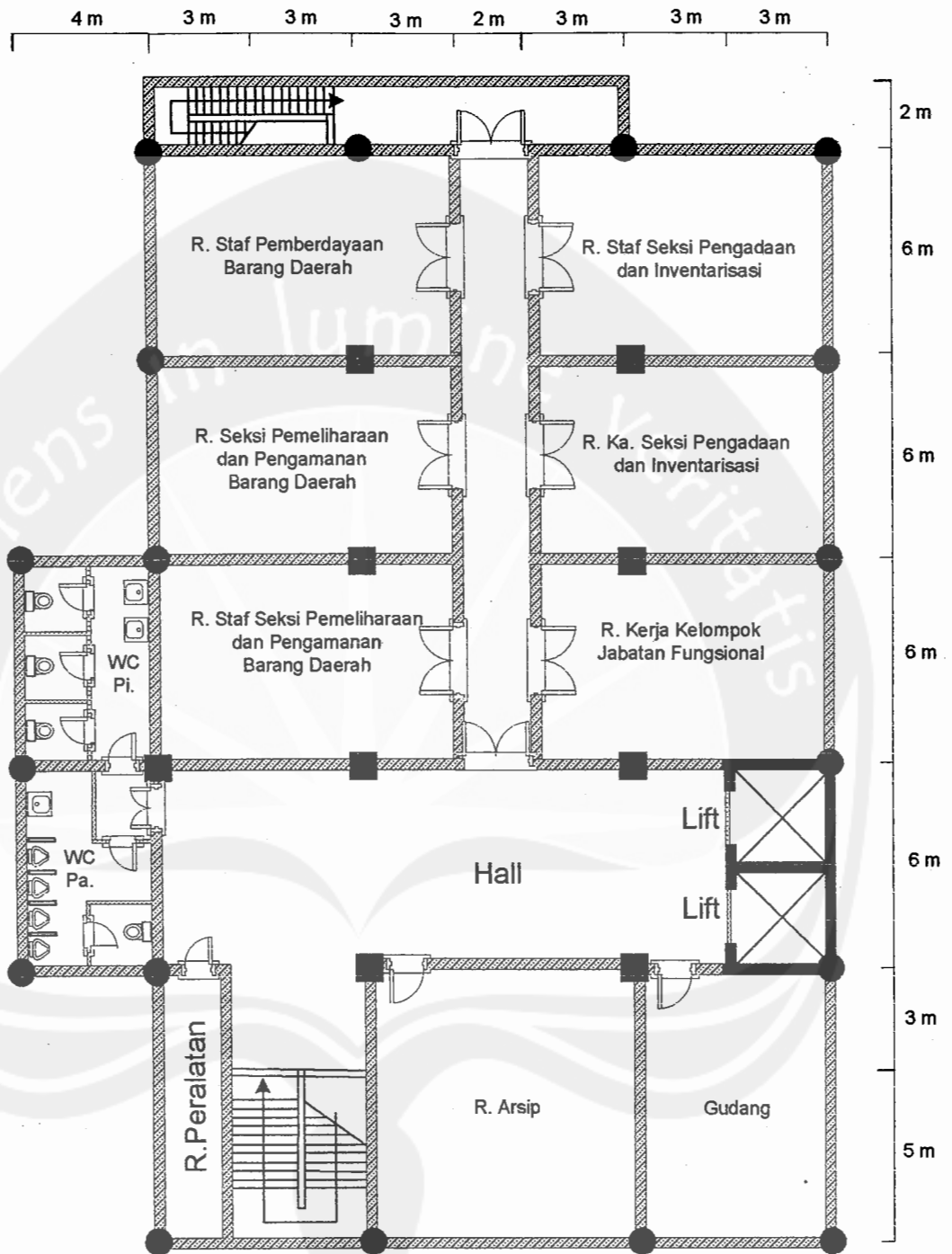
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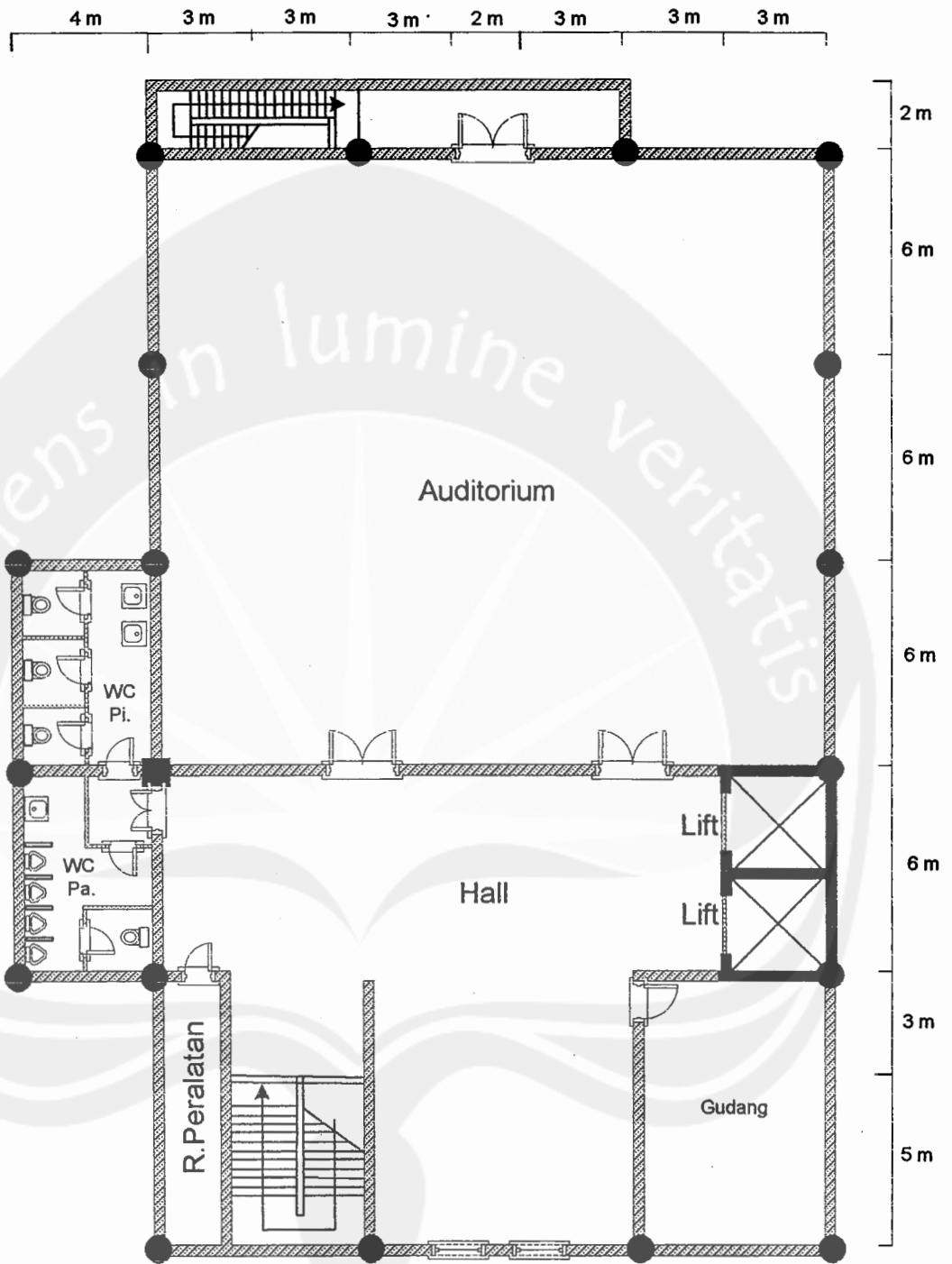
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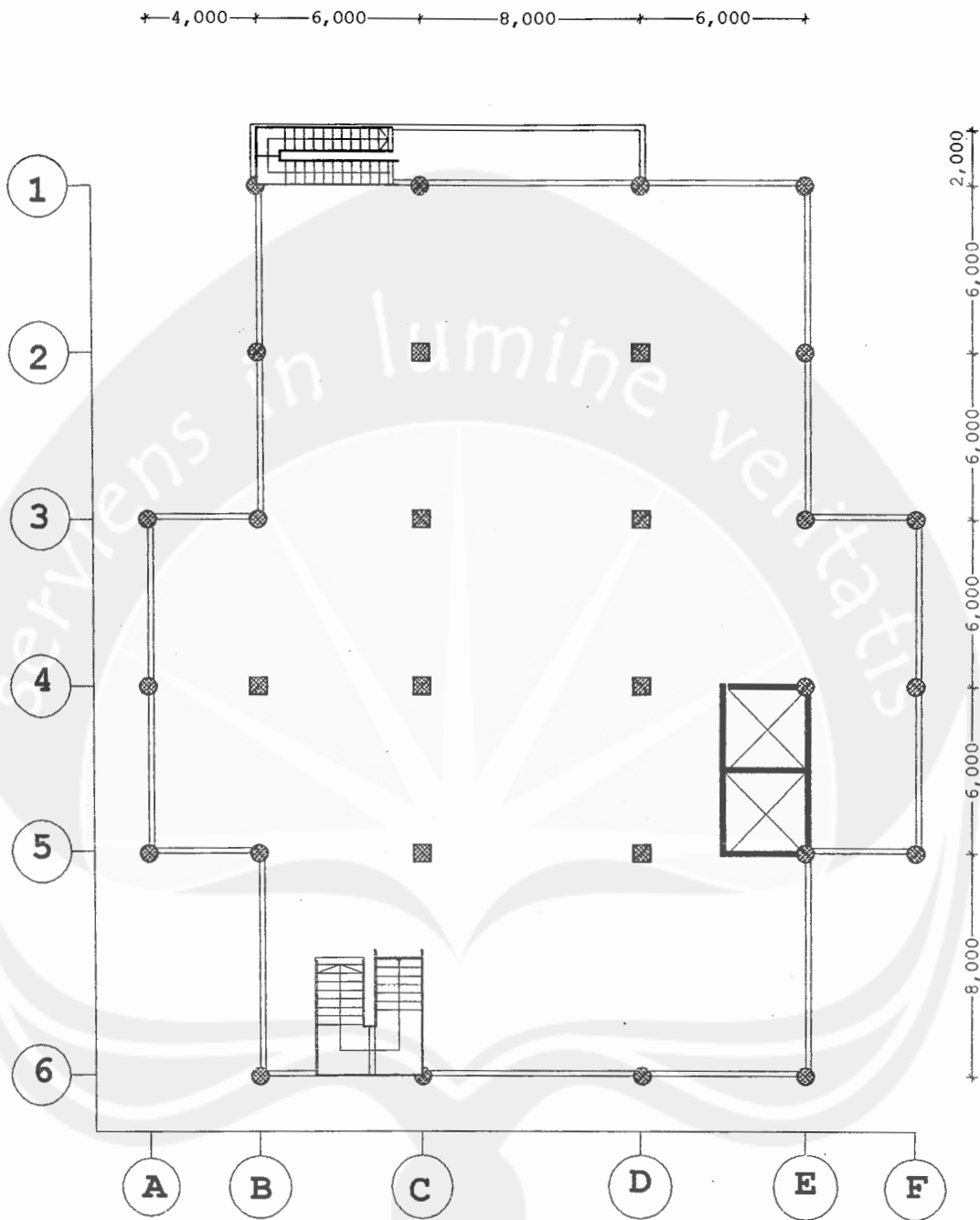
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Skala 1 : 200



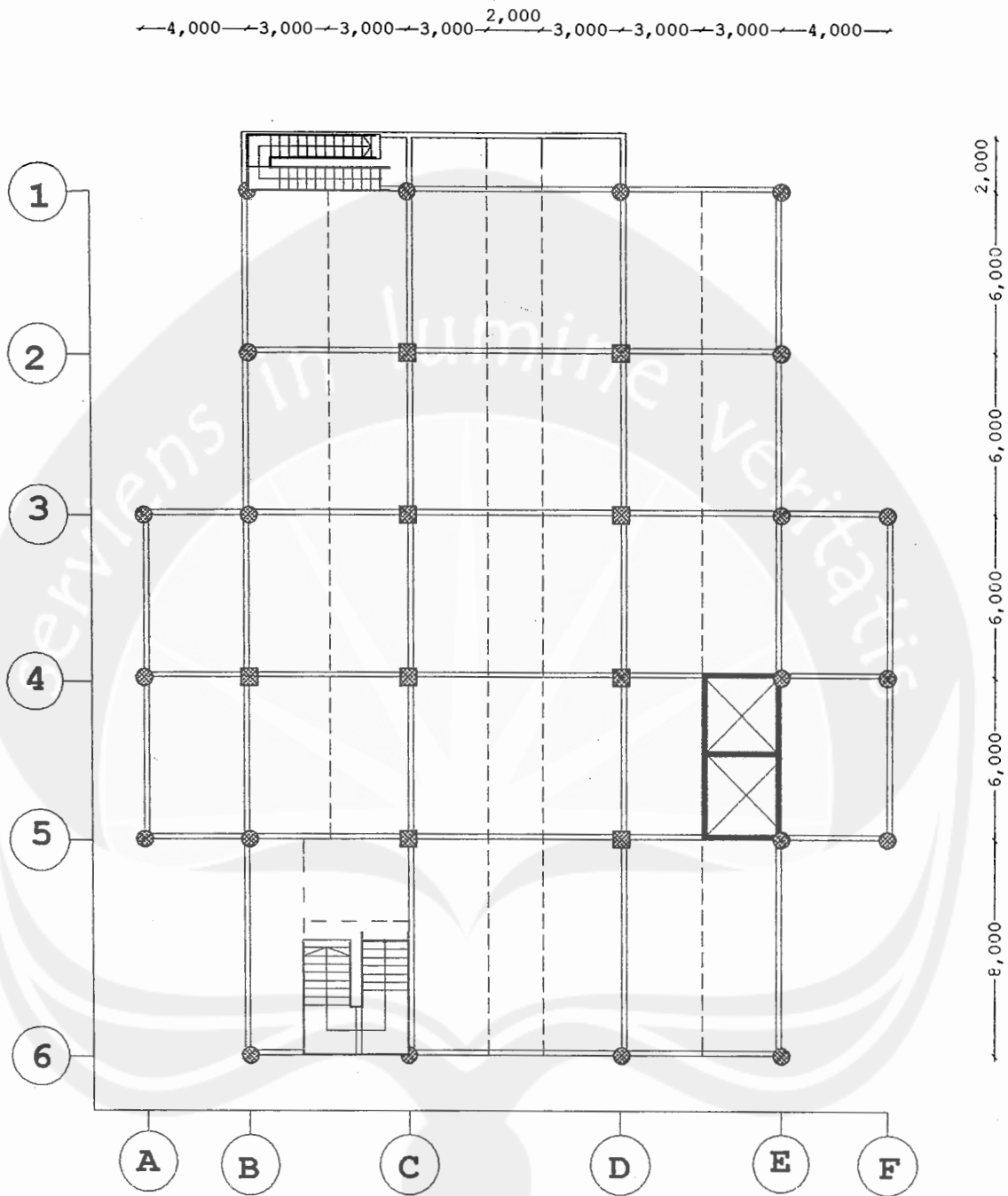
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BASEMENT

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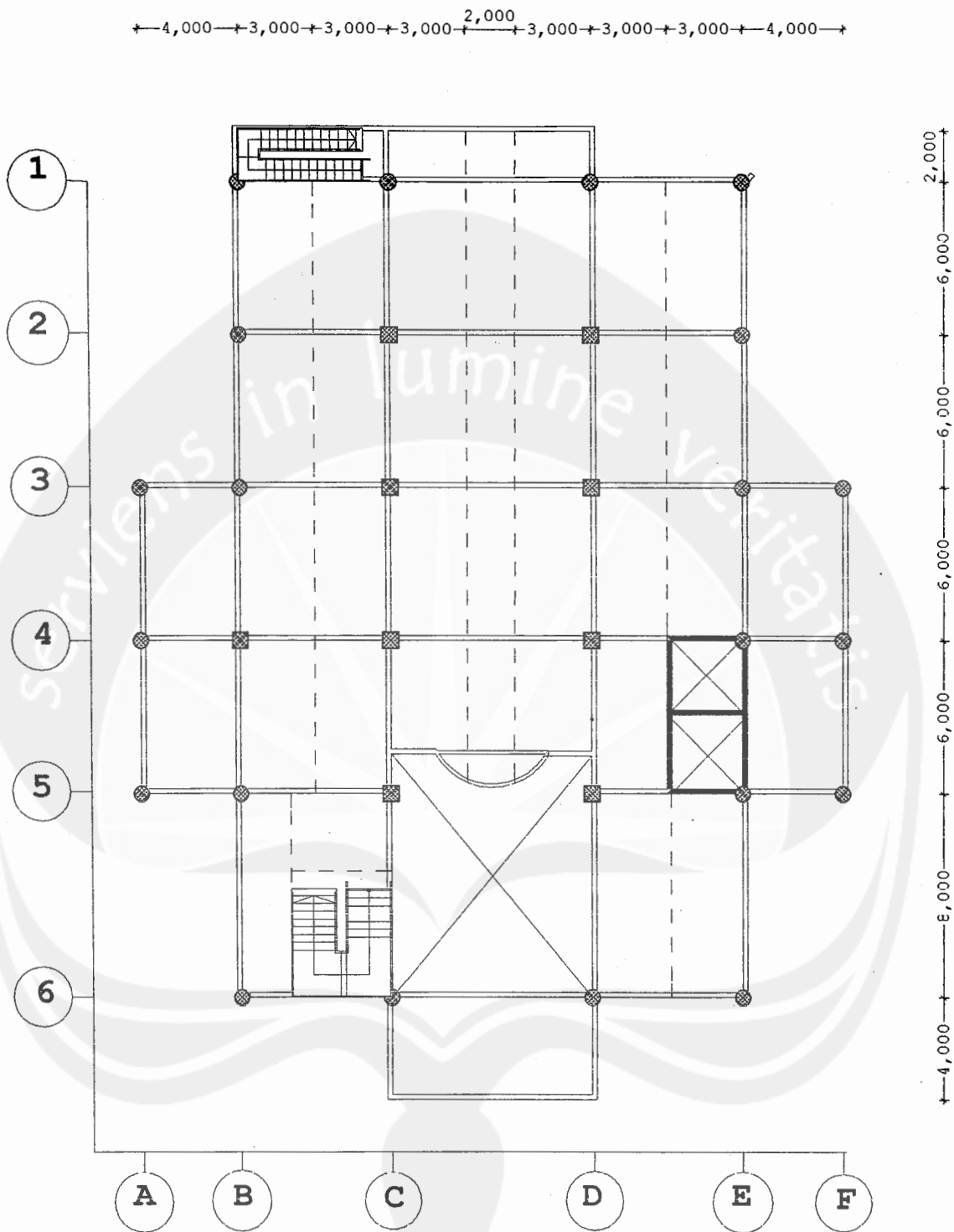
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LANTAI I

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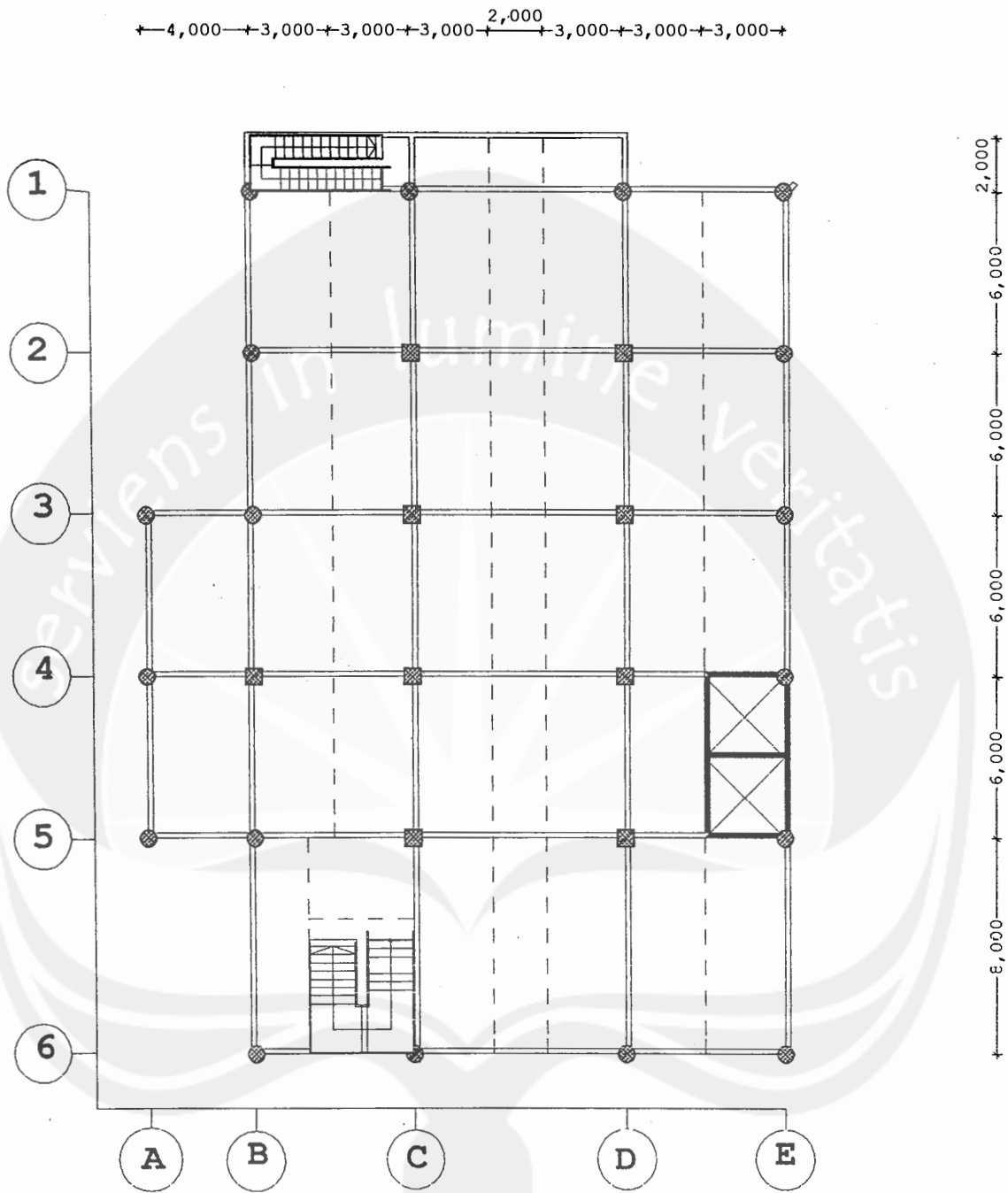
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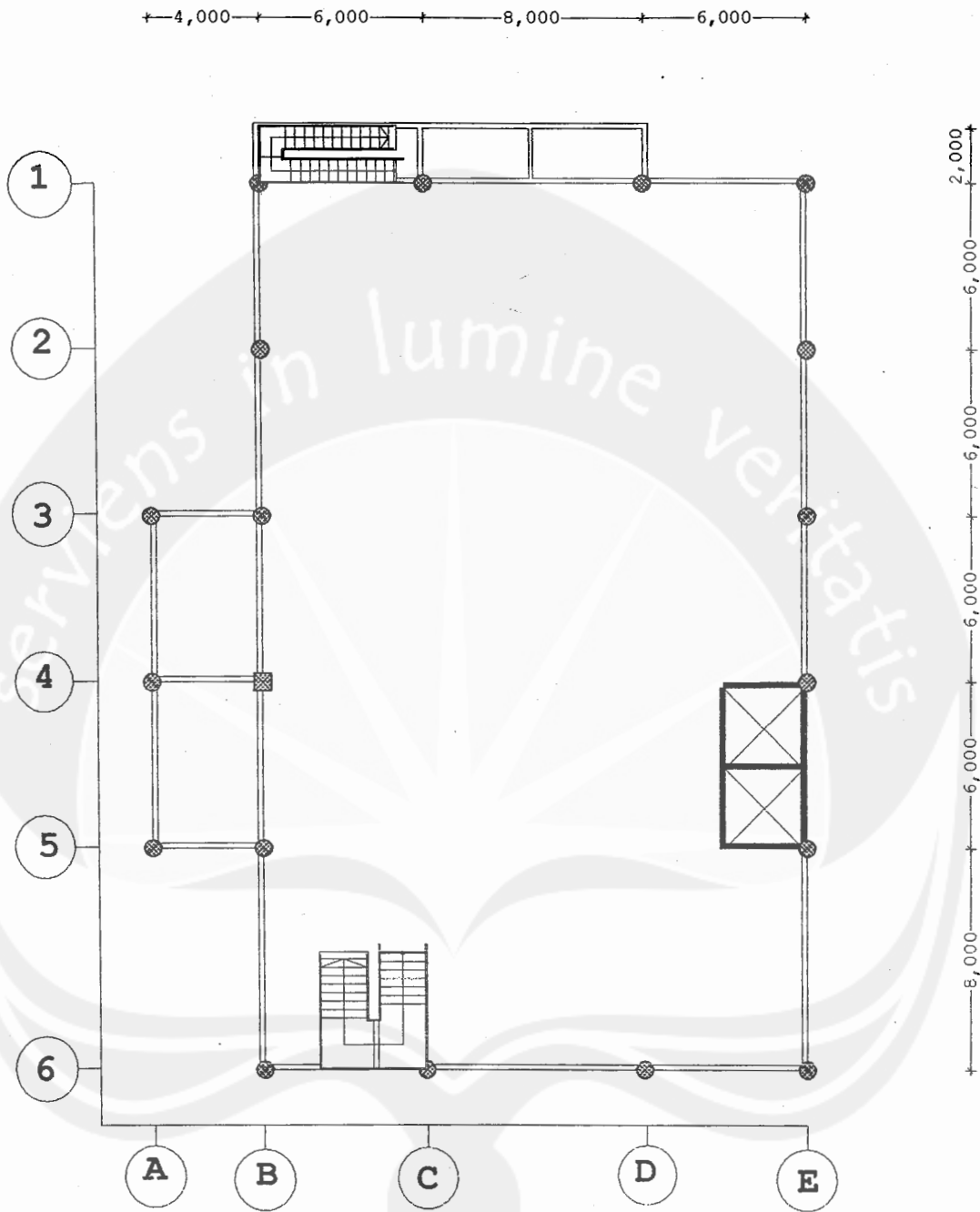
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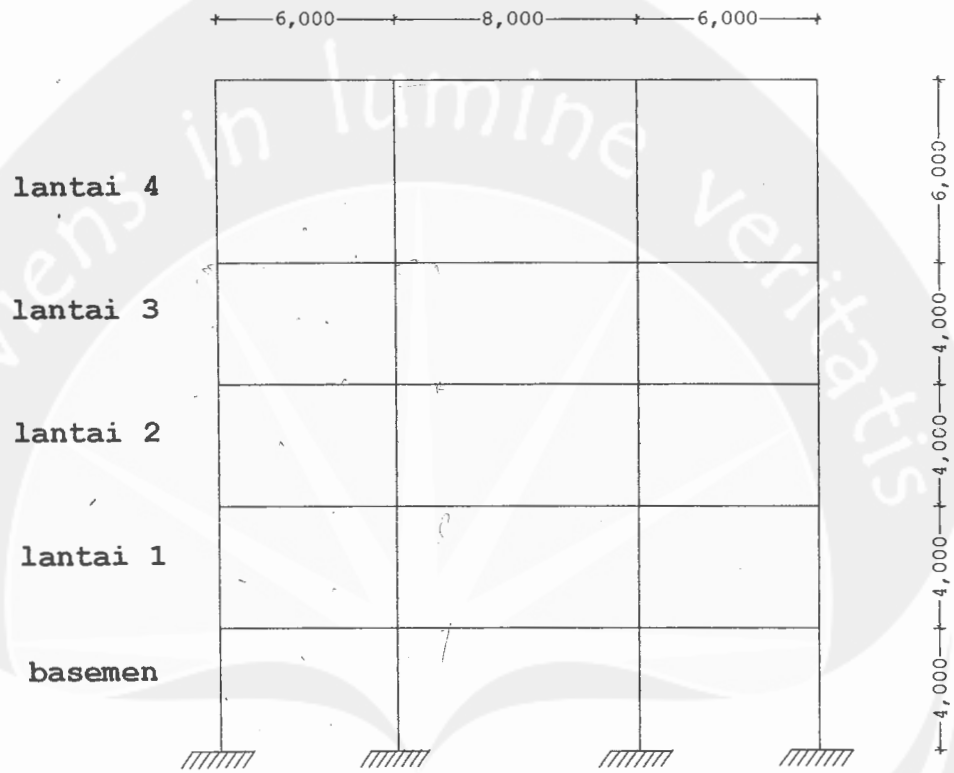
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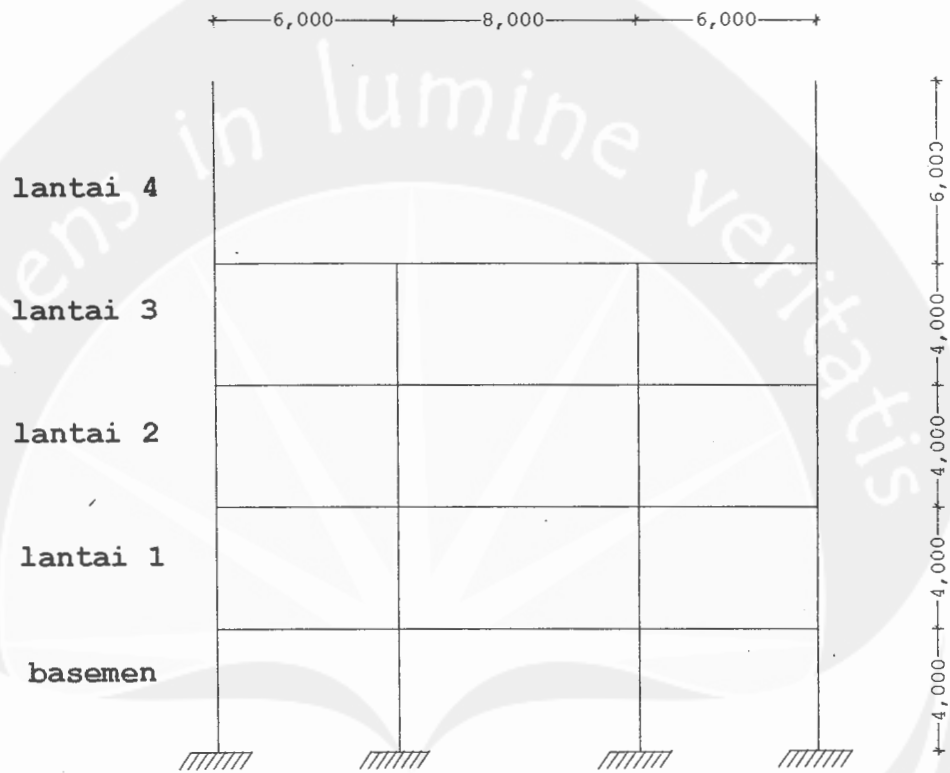
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POTONGAN ARAH 1,6

skala 1:250

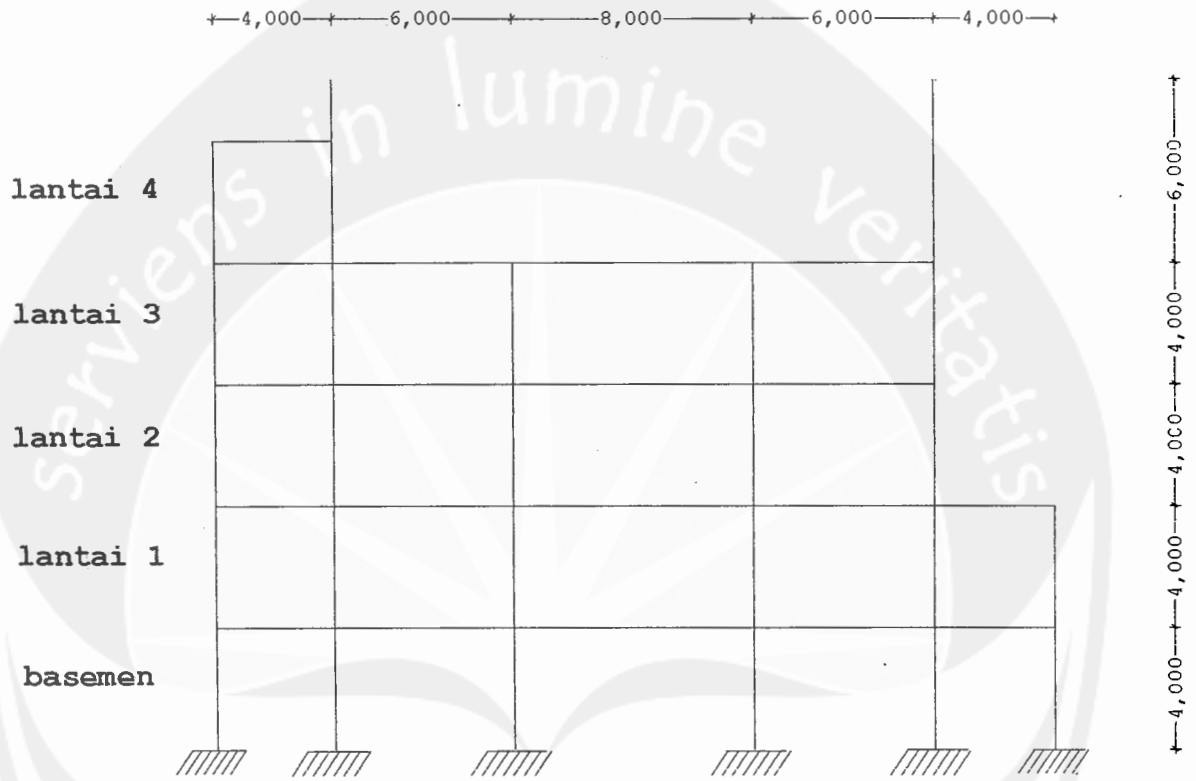
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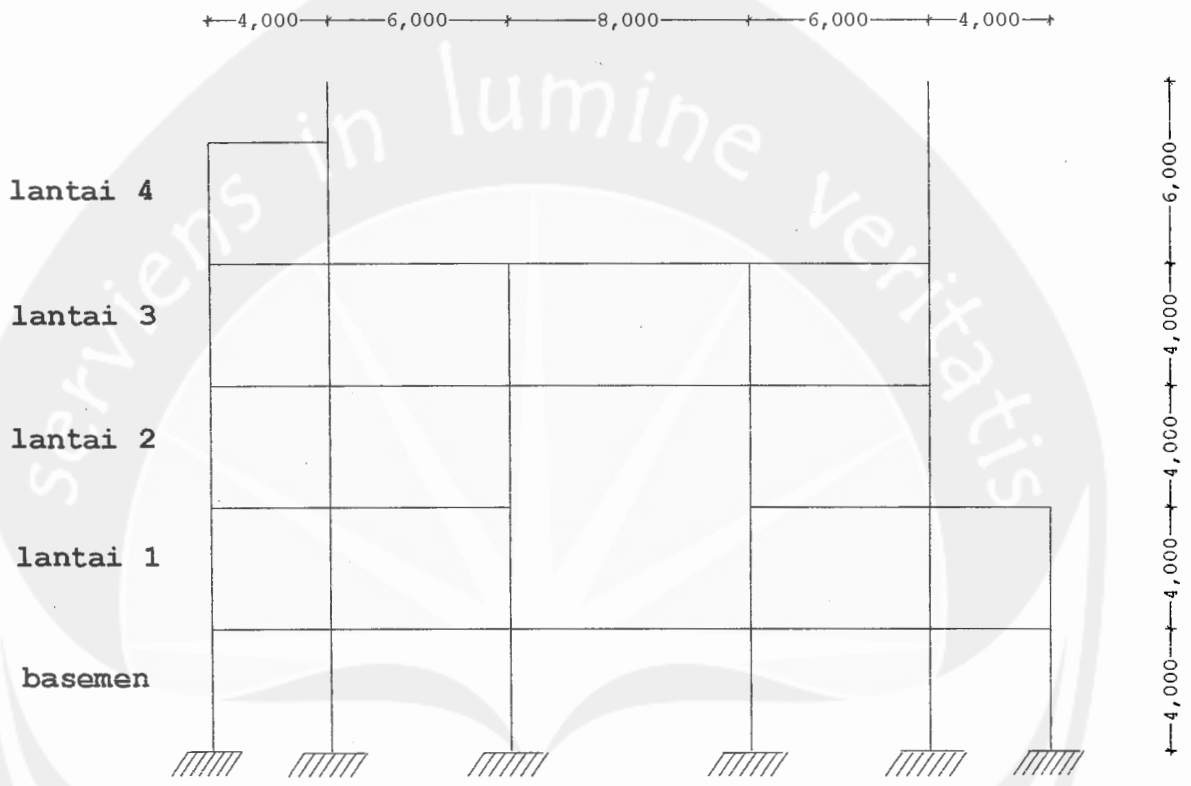
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POTONGAN ARAH 3,4

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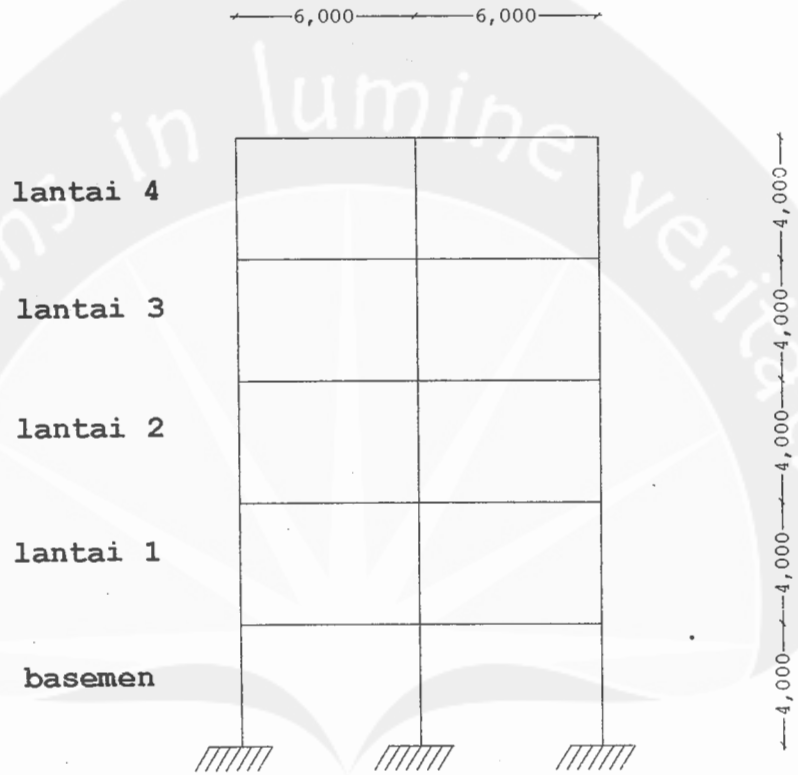
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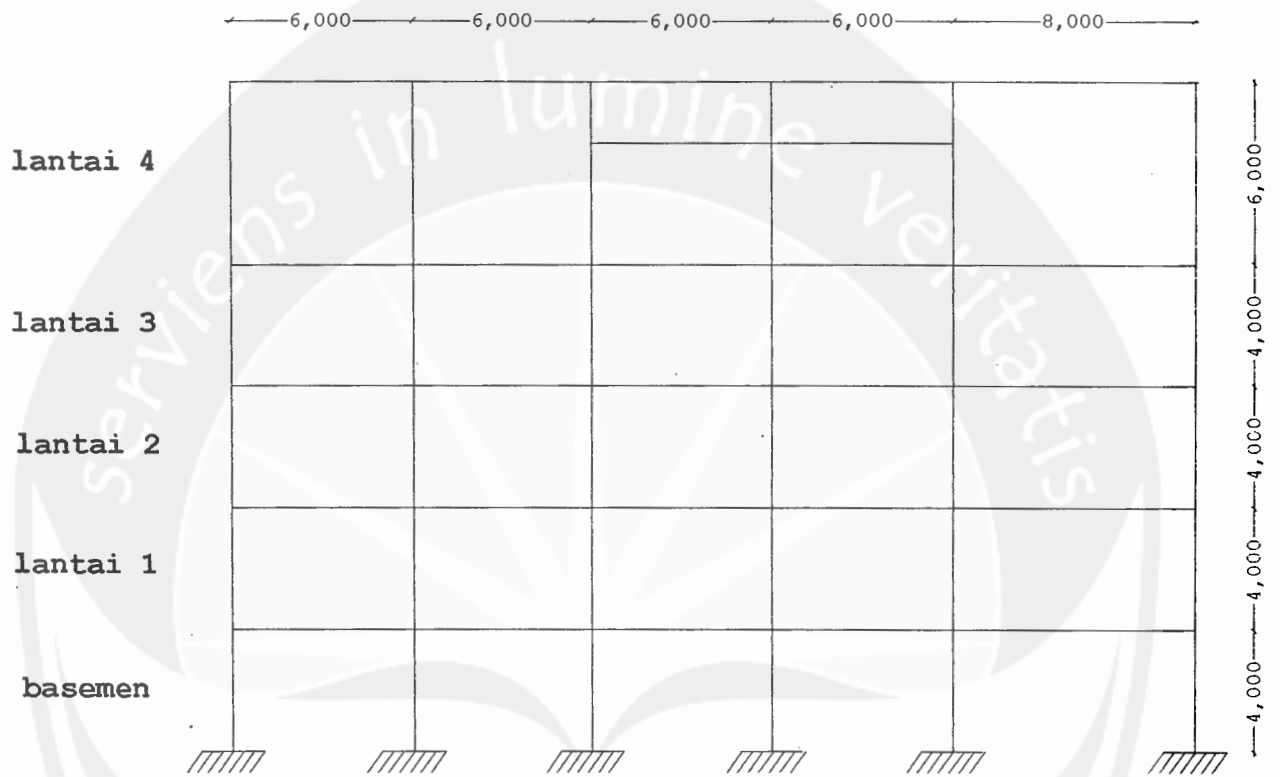
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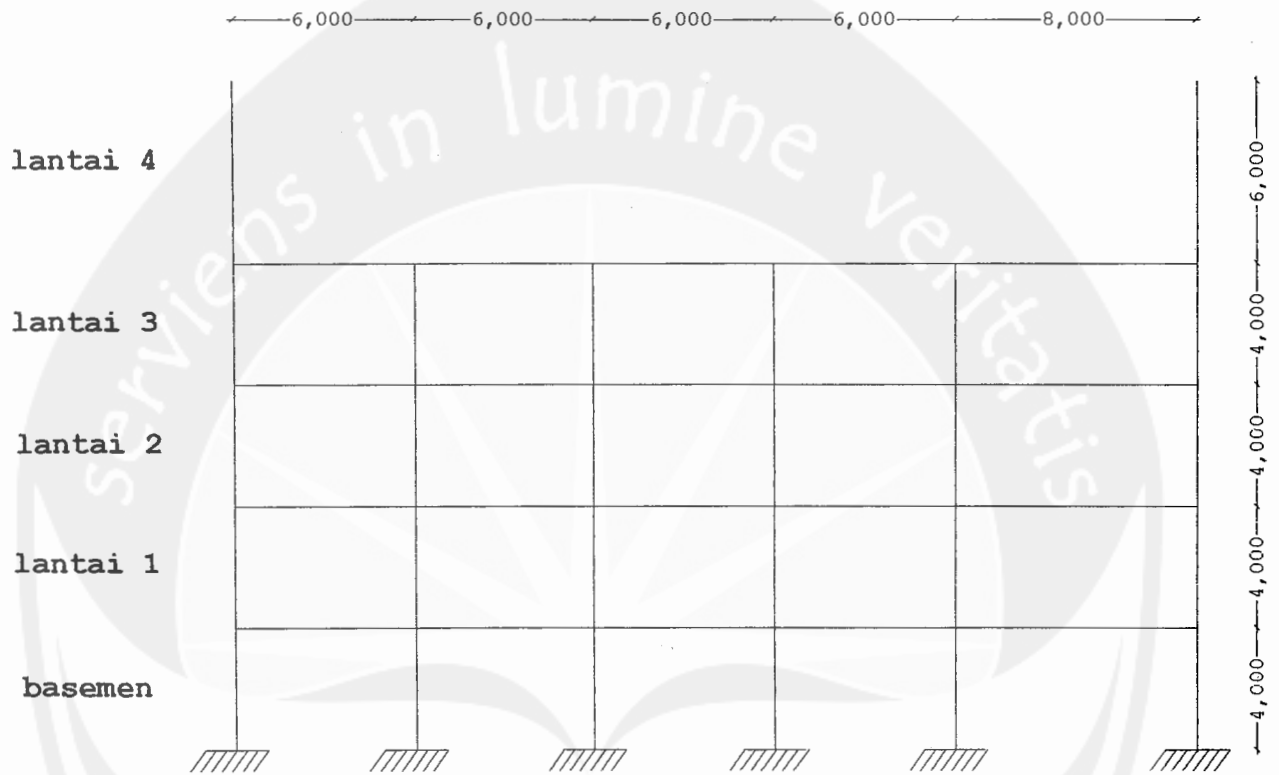
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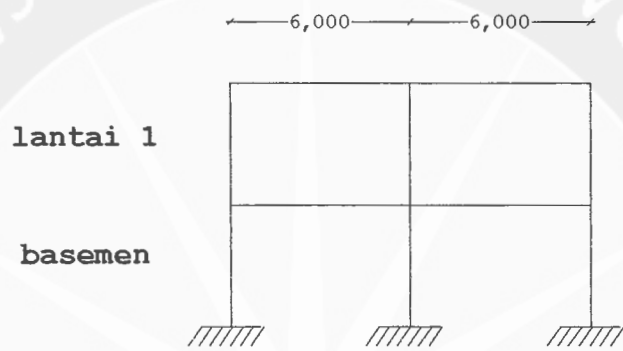
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satuan dalam meter



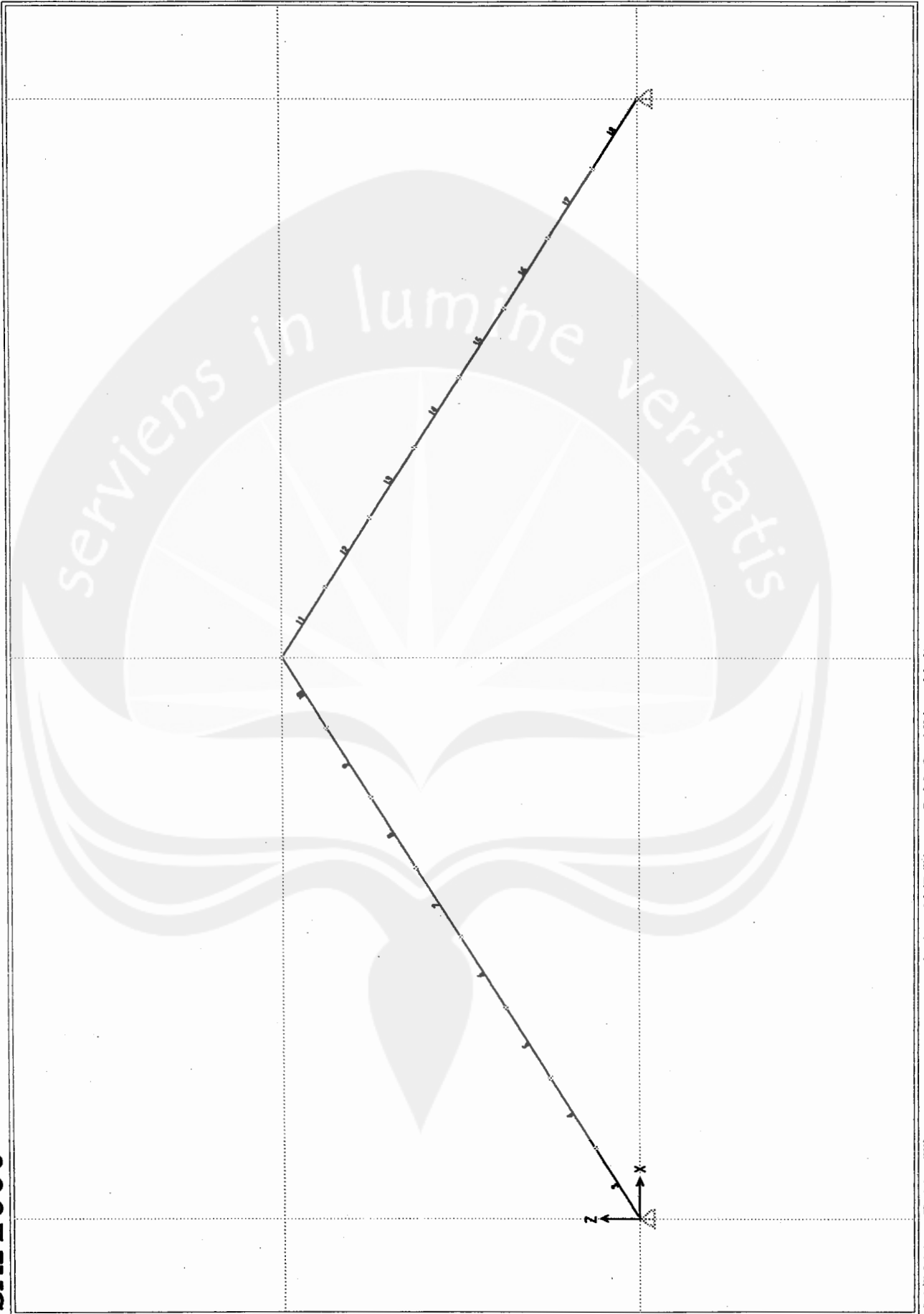
POTONGAN ARAH F

skala 1:250

satuan dalam meter

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SAP2000



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UAJY

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	0.0000
LL	LIVE	0.0000
W	WIND	0.0000

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UAJY

MATERIAL PROPERTY DATA

MAT LABEL	MODULUS OF ELASTICITY	POISSON'S RATIO	THERMAL COEFF	WEIGHT PER UNIT VOL	MASS PER UNIT VOL
STEEL	200000000	0.300	1.170E-05	76.820	7.827
CONC	25742960.0	0.200	9.900E-06	23.560	2.401
OTHER	24821128.4	0.200	9.900E-06	23.562	2.401

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UAJY

MATERIAL DESIGN DATA

MAT LABEL	DESIGN CODE	STEEL FY	CONCRETE FC	REBAR FY	CONCRETE FCS	REBAR FYS
STEEL	S	240000.000				
CONC	C		30000.000	400000.000	20000.000	240000.000
OTHER	N					

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UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	MAT LABEL	SECTION TYPE	DEPTH	FLANGE WIDTH TOP	FLANGE THICK TOP	WEB THICK	FLANGE WIDTH BOTTOM	FLANGE THICK BOTTOM
WF350	STEEL		0.350	0.350	1.900E-02	1.200E-02	0.350	1.900E-02

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FRAME SECTION PROPERTY DATA

SECTION LABEL	AREA	TORSIONAL INERTIA	MOMENTS OF INERTIA		SHEAR AREAS	
			I33	I22	A2	A3
WF350	1.704E-02	1.721E-06	3.951E-04	1.358E-04	4.200E-03	1.108E-02

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UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	SECTION S33	MODULII S22	PLASTIC MODULII		RADI OF GYRATION	
			Z33	Z22	R33	R22
WF350	2.257E-03	7.761E-04	2.493E-03	1.175E-03	0.152	8.927E-02

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FRAME SECTION PROPERTY DATA

SECTION LABEL	TOTAL WEIGHT	TOTAL MASS
WF350	31.232	3.182

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SHELL SECTION PROPERTY DATA

SECTION LABEL	MAT LABEL	SHELL TYPE	MEMBRANE THICK	BENDING THICK	MATERIAL ANGLE
SSEC1	CONC	4	1.000	1.000	0.000

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SHELL SECTION PROPERTY DATA

SECTION LABEL	TOTAL WEIGHT	TOTAL MASS
SSEC1	0.000	0.000

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UAJY

JOINT FORCES Load Case DL

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
1	0.000	0.000	-4.632	0.000	0.000	0.000
2	0.000	0.000	-4.632	0.000	0.000	0.000
3	0.000	0.000	-4.632	0.000	0.000	0.000
4	0.000	0.000	-4.632	0.000	0.000	0.000
5	0.000	0.000	-4.632	0.000	0.000	0.000
6	0.000	0.000	-4.632	0.000	0.000	0.000
7	0.000	0.000	-4.632	0.000	0.000	0.000
8	0.000	0.000	-4.632	0.000	0.000	0.000
9	0.000	0.000	-4.632	0.000	0.000	0.000
10	0.000	0.000	-4.632	0.000	0.000	0.000
11	0.000	0.000	-4.632	0.000	0.000	0.000
12	0.000	0.000	-4.632	0.000	0.000	0.000
13	0.000	0.000	-4.632	0.000	0.000	0.000
14	0.000	0.000	-4.632	0.000	0.000	0.000
15	0.000	0.000	-4.632	0.000	0.000	0.000
16	0.000	0.000	-4.632	0.000	0.000	0.000
17	0.000	0.000	-4.632	0.000	0.000	0.000

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UAJY

JOINT FORCES Load Case LL

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
1	0.000	0.000	-1.000	0.000	0.000	0.000
2	0.000	0.000	-1.000	0.000	0.000	0.000
3	0.000	0.000	-1.000	0.000	0.000	0.000
4	0.000	0.000	-1.000	0.000	0.000	0.000

5	0.000	0.000	-1.000	0.000	0.000	0.000
6	0.000	0.000	-1.000	0.000	0.000	0.000
7	0.000	0.000	-1.000	0.000	0.000	0.000
8	0.000	0.000	-1.000	0.000	0.000	0.000
9	0.000	0.000	-1.000	0.000	0.000	0.000
10	0.000	0.000	-1.000	0.000	0.000	0.000
11	0.000	0.000	-1.000	0.000	0.000	0.000
12	0.000	0.000	-1.000	0.000	0.000	0.000
13	0.000	0.000	-1.000	0.000	0.000	0.000
14	0.000	0.000	-1.000	0.000	0.000	0.000
15	0.000	0.000	-1.000	0.000	0.000	0.000
16	0.000	0.000	-1.000	0.000	0.000	0.000
17	0.000	0.000	-1.000	0.000	0.000	0.000

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JOINT FORCES Load Case W

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
1	7.965E-02	0.000	-0.123	0.000	0.000	0.000
2	0.202	0.000	6.605E-02	0.000	0.000	0.000
4	0.159	0.000	-0.245	0.000	0.000	0.000
5	0.159	0.000	-0.245	0.000	0.000	0.000
6	0.159	0.000	-0.245	0.000	0.000	0.000
7	0.159	0.000	-0.245	0.000	0.000	0.000
8	0.159	0.000	-0.245	0.000	0.000	0.000
9	0.159	0.000	-0.245	0.000	0.000	0.000
10	0.159	0.000	-0.245	0.000	0.000	0.000
3	0.123	0.000	0.189	0.000	0.000	0.000
11	0.245	0.000	0.377	0.000	0.000	0.000
12	0.245	0.000	0.377	0.000	0.000	0.000
13	0.245	0.000	0.377	0.000	0.000	0.000
14	0.245	0.000	0.377	0.000	0.000	0.000
15	0.245	0.000	0.377	0.000	0.000	0.000
16	0.245	0.000	0.377	0.000	0.000	0.000
17	0.245	0.000	0.377	0.000	0.000	0.000

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UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD	DL	1.4000	STATIC (DEAD)	COMB1
COMB2	ADD	DL	1.2000	STATIC (DEAD)	COMB2
		LL	1.6000	STATIC (LIVE)	
COMB3	ADD	DL	1.2000	STATIC (DEAD)	COMB3
		LL	1.6000	STATIC (LIVE)	
		W	0.8000	STATIC (WIND)	
COMB4	ADD	DL	1.2000	STATIC (DEAD)	COMB4
		LL	1.6000	STATIC (LIVE)	
		W	-0.8000	STATIC (WIND)	

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JOINT DISPLACEMENTS

JOINT	LOAD	U1	U2	U3	R1	R2	R3
1	DL	0.0000	0.0000	0.0000	0.0000	1.192E-03	0.0000
1	LL	0.0000	0.0000	0.0000	0.0000	2.573E-04	0.0000
1	W	0.0000	0.0000	0.0000	0.0000	1.955E-04	0.0000
1	COMB1	0.0000	0.0000	0.0000	0.0000	1.668E-03	0.0000
1	COMB2	0.0000	0.0000	0.0000	0.0000	1.842E-03	0.0000
1	COMB3	0.0000	0.0000	0.0000	0.0000	1.998E-03	0.0000
1	COMB4	0.0000	0.0000	0.0000	0.0000	1.685E-03	0.0000
2	DL	0.0000	0.0000	-2.555E-04	0.0000	0.0000	0.0000
2	LL	0.0000	0.0000	-5.517E-05	0.0000	0.0000	0.0000
2	W	4.025E-06	0.0000	3.870E-06	0.0000	-2.191E-04	0.0000
2	COMB1	0.0000	0.0000	-3.578E-04	0.0000	0.0000	0.0000
2	COMB2	0.0000	0.0000	-3.949E-04	0.0000	0.0000	0.0000
2	COMB3	3.220E-06	0.0000	-3.918E-04	0.0000	-1.753E-04	0.0000
2	COMB4	-3.220E-06	0.0000	-3.980E-04	0.0000	1.753E-04	0.0000
3	DL	0.0000	0.0000	0.0000	0.0000	-1.192E-03	0.0000
3	LL	0.0000	0.0000	0.0000	0.0000	-2.573E-04	0.0000
3	W	0.0000	0.0000	0.0000	0.0000	2.435E-04	0.0000
3	COMB1	0.0000	0.0000	0.0000	0.0000	-1.668E-03	0.0000
3	COMB2	0.0000	0.0000	0.0000	0.0000	-1.842E-03	0.0000
3	COMB3	0.0000	0.0000	0.0000	0.0000	-1.647E-03	0.0000
3	COMB4	0.0000	0.0000	0.0000	0.0000	-2.036E-03	0.0000
4	DL	9.377E-04	0.0000	-1.482E-03	0.0000	1.054E-03	0.0000
4	LL	2.024E-04	0.0000	-3.198E-04	0.0000	2.274E-04	0.0000
4	W	1.580E-04	0.0000	-2.418E-04	0.0000	1.800E-04	0.0000
4	COMB1	1.313E-03	0.0000	-2.074E-03	0.0000	1.475E-03	0.0000
4	COMB2	1.449E-03	0.0000	-2.290E-03	0.0000	1.628E-03	0.0000
4	COMB3	1.575E-03	0.0000	-2.483E-03	0.0000	1.772E-03	0.0000
4	COMB4	1.323E-03	0.0000	-2.096E-03	0.0000	1.484E-03	0.0000
5	DL	1.657E-03	0.0000	-2.625E-03	0.0000	6.938E-04	0.0000
5	LL	3.577E-04	0.0000	-5.667E-04	0.0000	1.498E-04	0.0000
5	W	2.912E-04	0.0000	-4.454E-04	0.0000	1.377E-04	0.0000
5	COMB1	2.320E-03	0.0000	-3.675E-03	0.0000	9.713E-04	0.0000
5	COMB2	2.560E-03	0.0000	-4.057E-03	0.0000	1.072E-03	0.0000
5	COMB3	2.793E-03	0.0000	-4.413E-03	0.0000	1.182E-03	0.0000
5	COMB4	2.328E-03	0.0000	-3.700E-03	0.0000	9.621E-04	0.0000
6	DL	2.022E-03	0.0000	-3.222E-03	0.0000	2.217E-04	0.0000
6	LL	4.365E-04	0.0000	-6.955E-04	0.0000	4.787E-05	0.0000
6	W	3.811E-04	0.0000	-5.826E-04	0.0000	7.674E-05	0.0000
6	COMB1	2.831E-03	0.0000	-4.510E-03	0.0000	3.104E-04	0.0000
6	COMB2	3.125E-03	0.0000	-4.979E-03	0.0000	3.427E-04	0.0000
6	COMB3	3.429E-03	0.0000	-5.445E-03	0.0000	4.041E-04	0.0000
6	COMB4	2.820E-03	0.0000	-4.513E-03	0.0000	2.813E-04	0.0000
7	DL	1.986E-03	0.0000	-3.199E-03	0.0000	-2.534E-04	0.0000
7	LL	4.287E-04	0.0000	-6.906E-04	0.0000	-5.471E-05	0.0000
7	W	4.161E-04	0.0000	-6.351E-04	0.0000	5.427E-06	0.0000
7	COMB1	2.780E-03	0.0000	-4.479E-03	0.0000	-3.548E-04	0.0000

7	COMB2	3.069E-03	0.0000	-4.944E-03	0.0000	-3.917E-04	0.0000
7	COMB3	3.402E-03	0.0000	-5.452E-03	0.0000	-3.873E-04	0.0000
7	COMB4	2.736E-03	0.0000	-4.436E-03	0.0000	-3.960E-04	0.0000
8	DL	1.591E-03	0.0000	-2.622E-03	0.0000	-6.225E-04	0.0000
8	LL	3.434E-04	0.0000	-5.660E-04	0.0000	-1.344E-04	0.0000
8	W	3.909E-04	0.0000	-5.951E-04	0.0000	-6.805E-05	0.0000
8	COMB1	2.227E-03	0.0000	-3.671E-03	0.0000	-8.714E-04	0.0000
8	COMB2	2.458E-03	0.0000	-4.052E-03	0.0000	-9.619E-04	0.0000
8	COMB3	2.771E-03	0.0000	-4.528E-03	0.0000	-1.016E-03	0.0000
8	COMB4	2.145E-03	0.0000	-3.576E-03	0.0000	-9.075E-04	0.0000
9	DL	9.668E-04	0.0000	-1.691E-03	0.0000	-7.761E-04	0.0000
9	LL	2.087E-04	0.0000	-3.651E-04	0.0000	-1.675E-04	0.0000
9	W	3.072E-04	0.0000	-4.651E-04	0.0000	-1.354E-04	0.0000
9	COMB1	1.354E-03	0.0000	-2.368E-03	0.0000	-1.086E-03	0.0000
9	COMB2	1.494E-03	0.0000	-2.614E-03	0.0000	-1.199E-03	0.0000
9	COMB3	1.740E-03	0.0000	-2.986E-03	0.0000	-1.308E-03	0.0000
9	COMB4	1.248E-03	0.0000	-2.242E-03	0.0000	-1.091E-03	0.0000
10	DL	3.339E-04	0.0000	-7.444E-04	0.0000	-6.050E-04	0.0000
10	LL	7.208E-05	0.0000	-1.607E-04	0.0000	-1.306E-04	0.0000
10	W	1.733E-04	0.0000	-2.577E-04	0.0000	-1.885E-04	0.0000
10	COMB1	4.674E-04	0.0000	-1.042E-03	0.0000	-8.470E-04	0.0000
10	COMB2	5.160E-04	0.0000	-1.150E-03	0.0000	-9.350E-04	0.0000
10	COMB3	6.546E-04	0.0000	-1.357E-03	0.0000	-1.086E-03	0.0000
10	COMB4	3.774E-04	0.0000	-9.442E-04	0.0000	-7.841E-04	0.0000
11	DL	-3.339E-04	0.0000	-7.444E-04	0.0000	6.050E-04	0.0000
11	LL	-7.208E-05	0.0000	-1.607E-04	0.0000	1.306E-04	0.0000
11	W	1.868E-04	0.0000	2.854E-04	0.0000	-2.132E-04	0.0000
11	COMB1	-4.674E-04	0.0000	-1.042E-03	0.0000	8.470E-04	0.0000
11	COMB2	-5.160E-04	0.0000	-1.150E-03	0.0000	9.350E-04	0.0000
11	COMB3	-3.665E-04	0.0000	-9.221E-04	0.0000	7.644E-04	0.0000
11	COMB4	-6.654E-04	0.0000	-1.379E-03	0.0000	1.105E-03	0.0000
12	DL	-9.668E-04	0.0000	-1.691E-03	0.0000	7.761E-04	0.0000
12	LL	-2.087E-04	0.0000	-3.651E-04	0.0000	1.675E-04	0.0000
12	W	3.464E-04	0.0000	5.312E-04	0.0000	-1.670E-04	0.0000
12	COMB1	-1.354E-03	0.0000	-2.368E-03	0.0000	1.086E-03	0.0000
12	COMB2	-1.494E-03	0.0000	-2.614E-03	0.0000	1.199E-03	0.0000
12	COMB3	-1.217E-03	0.0000	-2.189E-03	0.0000	1.066E-03	0.0000
12	COMB4	-1.771E-03	0.0000	-3.039E-03	0.0000	1.333E-03	0.0000
13	DL	-1.591E-03	0.0000	-2.622E-03	0.0000	6.225E-04	0.0000
13	LL	-3.434E-04	0.0000	-5.660E-04	0.0000	1.344E-04	0.0000
13	W	4.555E-04	0.0000	6.992E-04	0.0000	-9.346E-05	0.0000
13	COMB1	-2.227E-03	0.0000	-3.671E-03	0.0000	8.714E-04	0.0000
13	COMB2	-2.458E-03	0.0000	-4.052E-03	0.0000	9.619E-04	0.0000
13	COMB3	-2.094E-03	0.0000	-3.493E-03	0.0000	8.872E-04	0.0000
13	COMB4	-2.822E-03	0.0000	-4.611E-03	0.0000	1.037E-03	0.0000
14	DL	-1.986E-03	0.0000	-3.199E-03	0.0000	2.534E-04	0.0000
14	LL	-4.287E-04	0.0000	-6.906E-04	0.0000	5.471E-05	0.0000
14	W	4.967E-04	0.0000	7.630E-04	0.0000	-5.059E-06	0.0000
14	COMB1	-2.780E-03	0.0000	-4.479E-03	0.0000	3.548E-04	0.0000
14	COMB2	-3.069E-03	0.0000	-4.944E-03	0.0000	3.917E-04	0.0000
14	COMB3	-2.672E-03	0.0000	-4.334E-03	0.0000	3.876E-04	0.0000
14	COMB4	-3.466E-03	0.0000	-5.554E-03	0.0000	3.957E-04	0.0000
15	DL	-2.022E-03	0.0000	-3.222E-03	0.0000	-2.217E-04	0.0000
15	LL	-4.365E-04	0.0000	-6.955E-04	0.0000	-4.787E-05	0.0000
15	W	4.632E-04	0.0000	7.118E-04	0.0000	8.550E-05	0.0000
15	COMB1	-2.831E-03	0.0000	-4.510E-03	0.0000	-3.104E-04	0.0000
15	COMB2	-3.125E-03	0.0000	-4.979E-03	0.0000	-3.427E-04	0.0000
15	COMB3	-2.754E-03	0.0000	-4.409E-03	0.0000	-2.743E-04	0.0000
15	COMB4	-3.495E-03	0.0000	-5.548E-03	0.0000	-4.111E-04	0.0000
16	DL	-1.657E-03	0.0000	-2.625E-03	0.0000	-6.938E-04	0.0000
16	LL	-3.577E-04	0.0000	-5.667E-04	0.0000	-1.498E-04	0.0000
16	W	3.584E-04	0.0000	5.509E-04	0.0000	1.656E-04	0.0000
16	COMB1	-2.320E-03	0.0000	-3.675E-03	0.0000	-9.713E-04	0.0000
16	COMB2	-2.560E-03	0.0000	-4.057E-03	0.0000	-1.072E-03	0.0000
16	COMB3	-2.274E-03	0.0000	-3.616E-03	0.0000	-9.398E-04	0.0000
16	COMB4	-2.847E-03	0.0000	-4.497E-03	0.0000	-1.205E-03	0.0000
17	DL	-9.377E-04	0.0000	-1.482E-03	0.0000	-1.054E-03	0.0000
17	LL	-2.024E-04	0.0000	-3.198E-04	0.0000	-2.274E-04	0.0000
17	W	1.961E-04	0.0000	3.013E-04	0.0000	2.224E-04	0.0000
17	COMB1	-1.313E-03	0.0000	-2.074E-03	0.0000	-1.475E-03	0.0000
17	COMB2	-1.449E-03	0.0000	-2.290E-03	0.0000	-1.628E-03	0.0000
17	COMB3	-1.292E-03	0.0000	-2.049E-03	0.0000	-1.450E-03	0.0000
17	COMB4	-1.606E-03	0.0000	-2.531E-03	0.0000	-1.806E-03	0.0000

UAJY

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	DL	35.4303	0.0000	39.3737	0.0000	0.0000	0.0000
1	LL	7.6487	0.0000	8.5000	0.0000	0.0000	0.0000
1	W	-1.9932	0.0000	0.1913	0.0000	0.0000	0.0000
1	COMB1	49.6024	0.0000	55.1232	0.0000	0.0000	0.0000
1	COMB2	54.7543	0.0000	60.8484	0.0000	0.0000	0.0000
1	COMB3	53.1598	0.0000	61.0015	0.0000	0.0000	0.0000
1	COMB4	56.3488	0.0000	60.6954	0.0000	0.0000	0.0000
3	DL	-35.4303	0.0000	39.3737	0.0000	0.0000	0.0000
3	LL	-7.6487	0.0000	8.5000	0.0000	0.0000	0.0000
3	W	-1.2420	0.0000	-1.2481	0.0000	0.0000	0.0000
3	COMB1	-49.6024	0.0000	55.1232	0.0000	0.0000	0.0000
3	COMB2	-54.7543	0.0000	60.8484	0.0000	0.0000	0.0000
3	COMB3	-55.7479	0.0000	59.8500	0.0000	0.0000	0.0000
3	COMB4	-53.7607	0.0000	61.8469	0.0000	0.0000	0.0000

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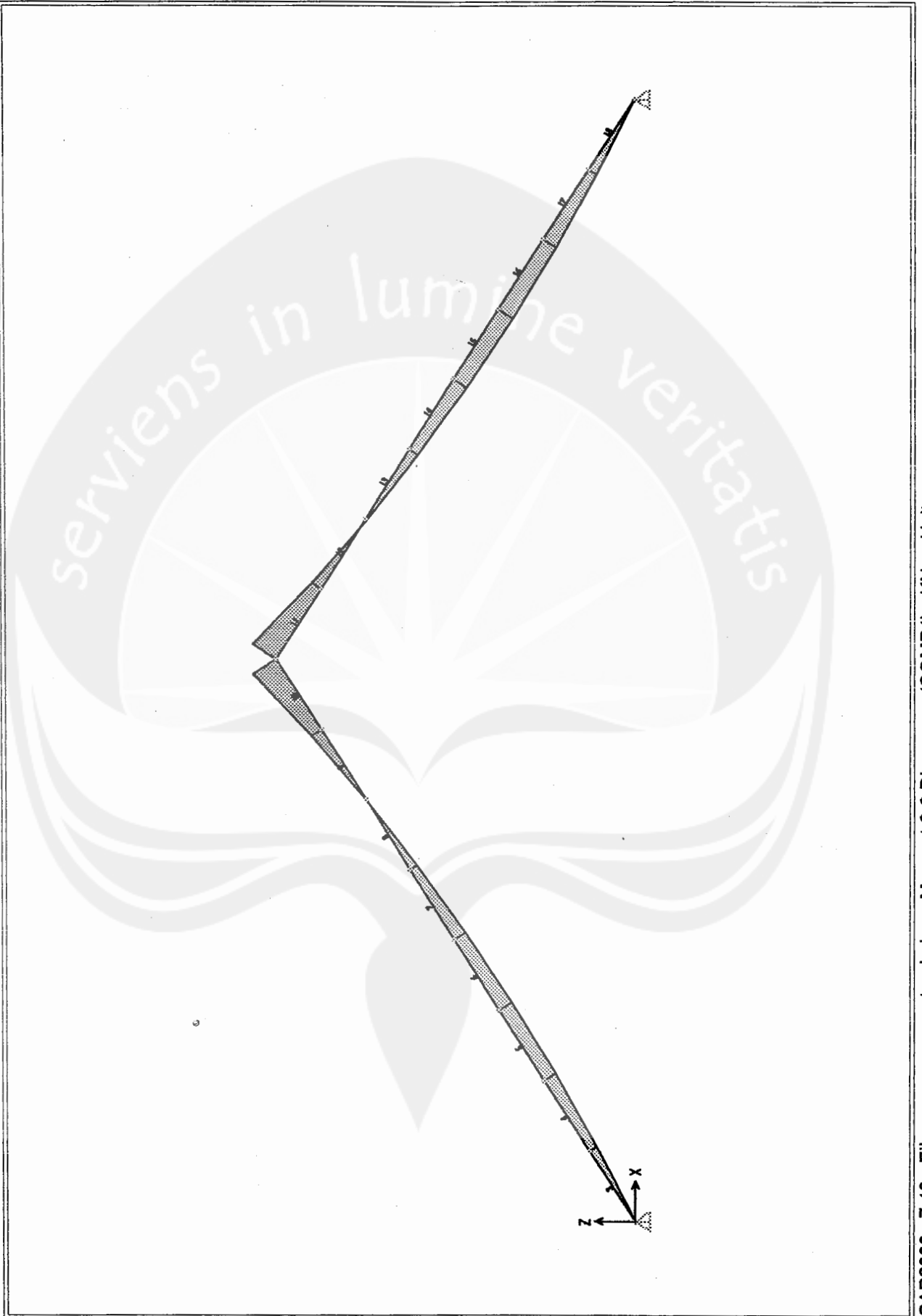
UAJY

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
3	DL							
		0.00	-48.64	-9.82	0.00	0.00	0.00	0.00
		7.5E-01	-48.64	-9.82	0.00	0.00	0.00	7.32
		1.49	-48.64	-9.82	0.00	0.00	0.00	14.64
3	LL							
		0.00	-10.50	-2.12	0.00	0.00	0.00	0.00
		7.5E-01	-10.50	-2.12	0.00	0.00	0.00	1.58
		1.49	-10.50	-2.12	0.00	0.00	0.00	3.16
3	W							
		0.00	1.57	-1.10	0.00	0.00	0.00	0.00
		7.5E-01	1.57	-1.10	0.00	0.00	0.00	8.203E-01
		1.49	1.57	-1.10	0.00	0.00	0.00	1.64
3	COMB1							
		0.00	-68.10	-13.75	0.00	0.00	0.00	0.00
		7.5E-01	-68.10	-13.75	0.00	0.00	0.00	10.25
		1.49	-68.10	-13.75	0.00	0.00	0.00	20.50
3	COMB2							
		0.00	-75.17	-15.18	0.00	0.00	0.00	0.00
		7.5E-01	-75.17	-15.18	0.00	0.00	0.00	11.31
		1.49	-75.17	-15.18	0.00	0.00	0.00	22.62
3	COMB3							
		0.00	-73.92	-16.06	0.00	0.00	0.00	0.00
		7.5E-01	-73.92	-16.06	0.00	0.00	0.00	11.97
		1.49	-73.92	-16.06	0.00	0.00	0.00	23.94
3	COMB4							
		0.00	-76.42	-14.30	0.00	0.00	0.00	0.00
		7.5E-01	-76.42	-14.30	0.00	0.00	0.00	10.66
		1.49	-76.42	-14.30	0.00	0.00	0.00	21.31
10	DL							
		0.00	-30.97	17.37	0.00	0.00	0.00	-19.12
		7.5E-01	-30.97	17.37	0.00	0.00	0.00	-32.06
		1.49	-30.97	17.37	0.00	0.00	0.00	-45.01
10	LL							
		0.00	-6.69	3.75	0.00	0.00	0.00	-4.13
		7.5E-01	-6.69	3.75	0.00	0.00	0.00	-6.92
		1.49	-6.69	3.75	0.00	0.00	0.00	-9.72
10	W							
		0.00	1.57	9.470E-01	0.00	0.00	0.00	2.33
		7.5E-01	1.57	9.470E-01	0.00	0.00	0.00	1.62
		1.49	1.57	9.470E-01	0.00	0.00	0.00	9.145E-01
10	COMB1							
		0.00	-43.36	24.31	0.00	0.00	0.00	-26.76
		7.5E-01	-43.36	24.31	0.00	0.00	0.00	-44.89
		1.49	-43.36	24.31	0.00	0.00	0.00	-63.01
10	COMB2							
		0.00	-47.86	26.84	0.00	0.00	0.00	-29.54
		7.5E-01	-47.86	26.84	0.00	0.00	0.00	-49.55
		1.49	-47.86	26.84	0.00	0.00	0.00	-69.56
10	COMB3							
		0.00	-46.60	27.60	0.00	0.00	0.00	-27.68
		7.5E-01	-46.60	27.60	0.00	0.00	0.00	-48.25
		1.49	-46.60	27.60	0.00	0.00	0.00	-68.83
10	COMB4							
		0.00	-49.11	26.08	0.00	0.00	0.00	-31.40
		7.5E-01	-49.11	26.08	0.00	0.00	0.00	-50.85
		1.49	-49.11	26.08	0.00	0.00	0.00	-70.29

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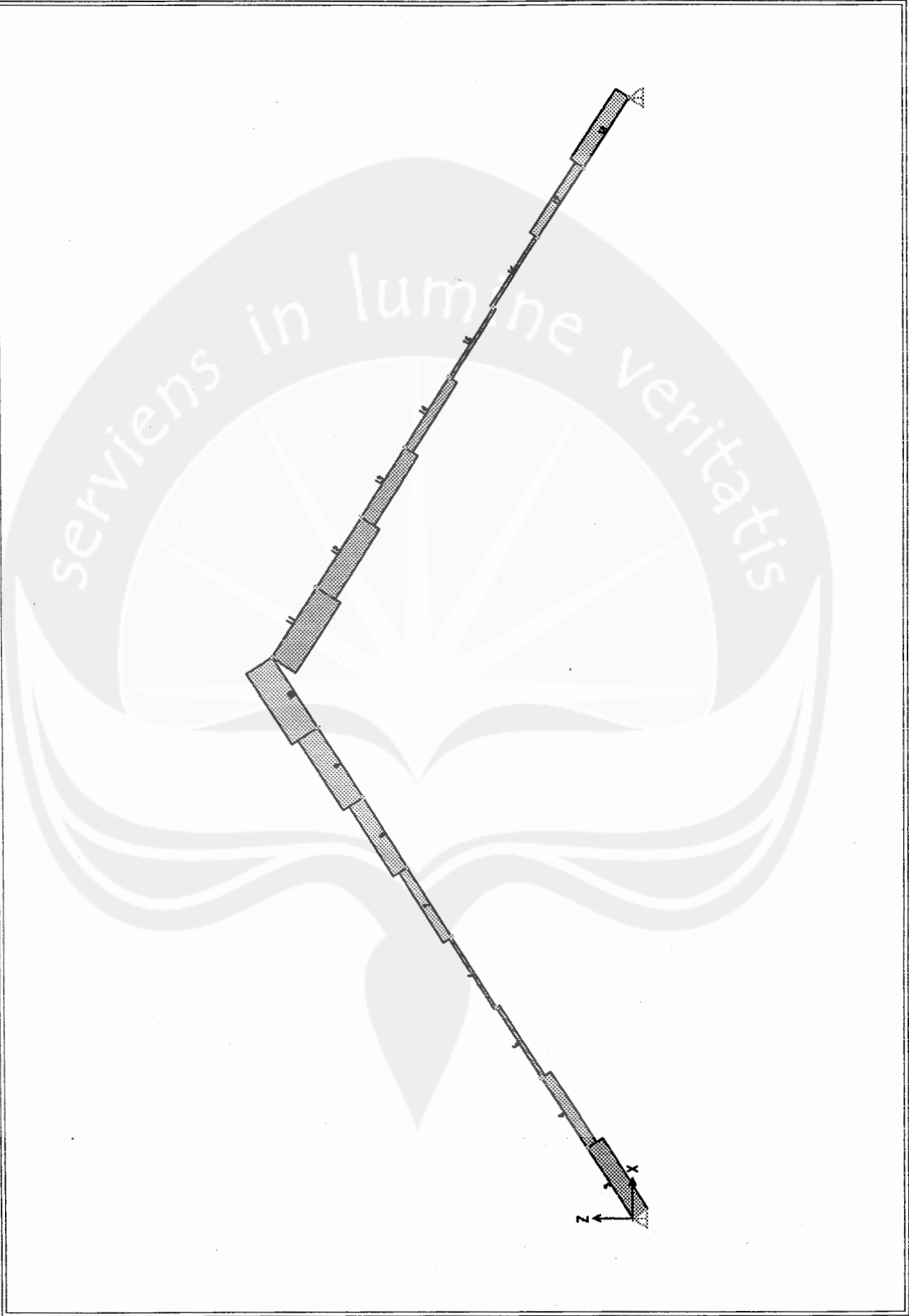
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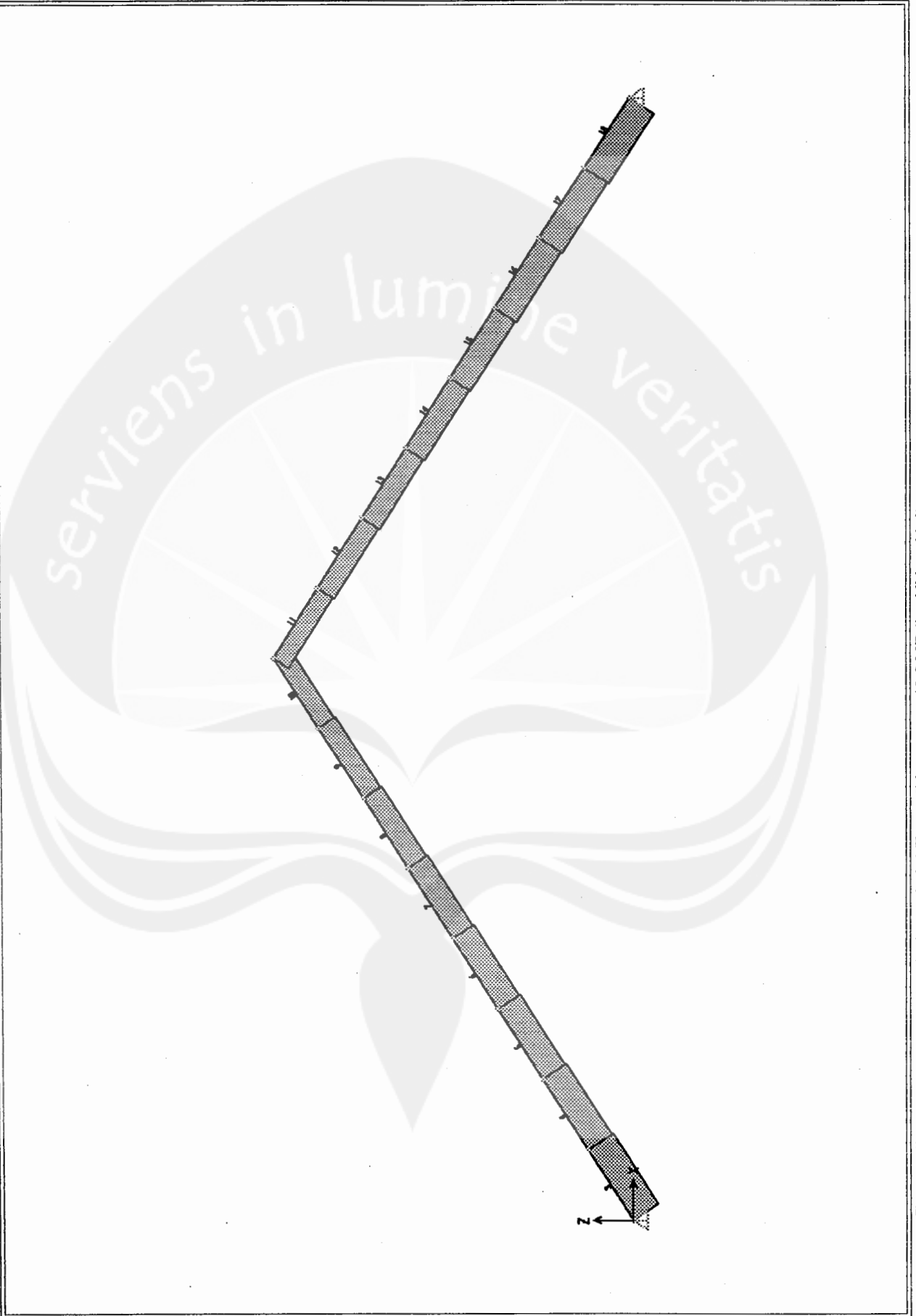
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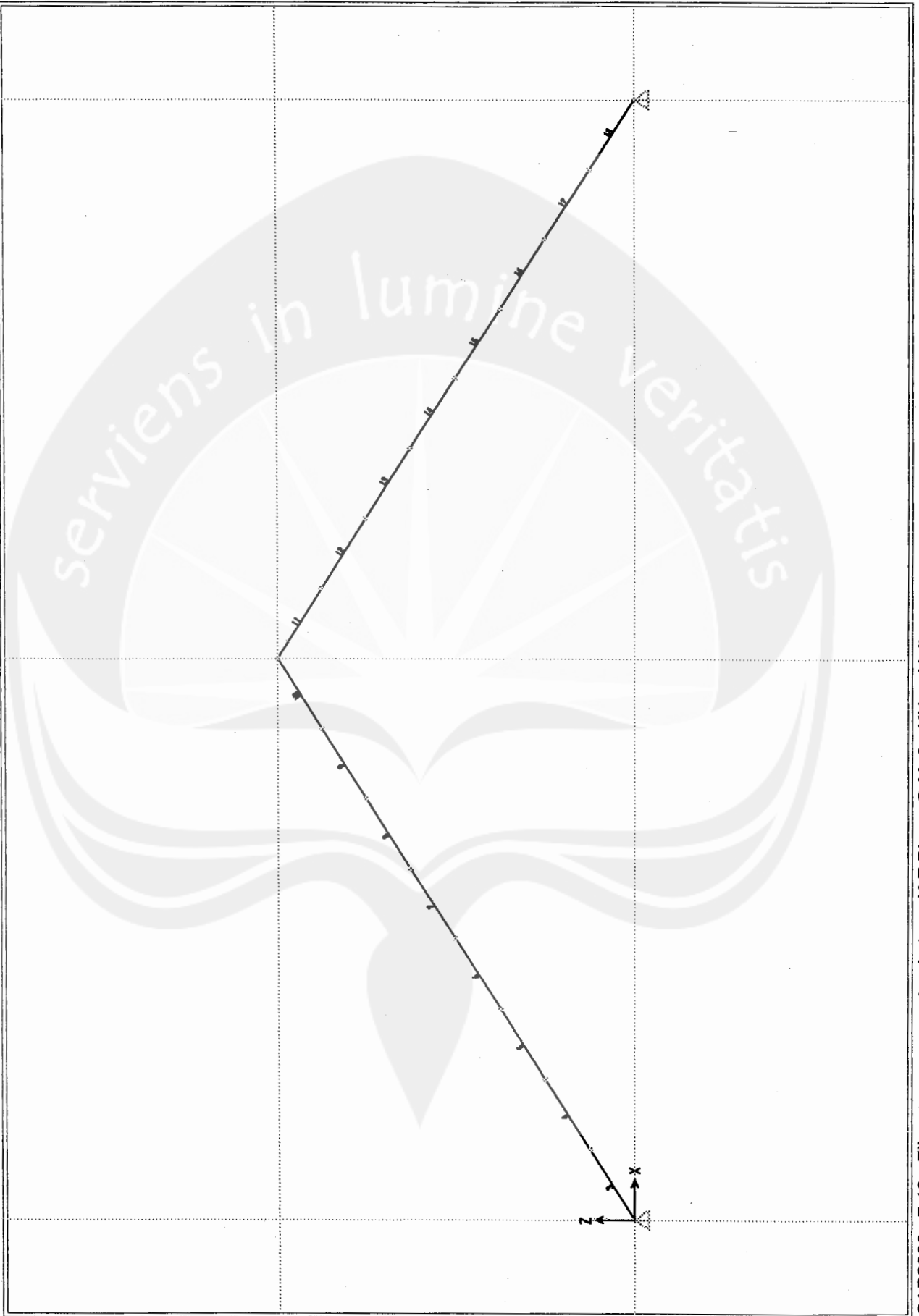
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SAP2000 v7.40 - File:perencanaan atap baja - Axial Force Diagram (COMB4) - KN-m Units

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SAP2000



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UAJY

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	0.0000
LL	LIVE	0.0000
W	WIND	0.0000

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UAJY

MATERIAL PROPERTY DATA

MAT LABEL	MODULUS OF ELASTICITY	POISSON'S RATIO	THERMAL COEFF	WEIGHT PER UNIT VOL	MASS PER UNIT VOL
STEEL	199900000	0.300	1.170E-05	76.820	7.827
CONC	25742960.0	0.200	9.900E-06	24.000	2.401
OTHER	24821128.4	0.200	9.900E-06	23.562	2.401

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UAJY

MATERIAL DESIGN DATA

MAT LABEL	DESIGN CODE	STEEL FY	CONCRETE FC	REBAR FY	CONCRETE FCS	REBAR FYS
STEEL	S	240000.000				
CONC	C		30000.000	400000.000	20000.000	240000.000
OTHER	N					

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UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	MAT LABEL	SECTION TYPE	DEPTH	FLANGE WIDTH	FLANGE THICK	WEB THICK	FLANGE WIDTH
BATAP	CONC		0.650	0.400	0.000	0.000	0.000

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UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	AREA	TORSIONAL INERTIA	MOMENTS OF INERTIA I33	MOMENTS OF INERTIA I22	SHEAR AREAS A2	SHEAR AREAS A3
BATAP	0.260	8.555E-03	9.154E-03	3.467E-03	0.217	0.217

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UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	SECTION MODULII S33	SECTION MODULII S22	PLASTIC MODULII Z33	PLASTIC MODULII Z22	RADII OF GYRATION R33	RADII OF GYRATION R22
BATAP	2.817E-02	1.733E-02	4.225E-02	2.600E-02	0.188	0.115

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UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	TOTAL WEIGHT	TOTAL MASS
BATAP	148.847	14.891

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UAJY

SHELL SECTION PROPERTY DATA

SECTION LABEL	MAT LABEL	SHELL TYPE	MEMBRANE THICK	BENDING THICK	MATERIAL ANGLE
SSEC1	CONC	4	1.000	1.000	0.000

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UAJY

SHELL SECTION PROPERTY DATA

SECTION LABEL	TOTAL WEIGHT	TOTAL MASS
SSEC1	0.000	0.000

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UAJY

JOINT FORCES Load Case DL

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
1	0.000	0.000	-9.512	0.000	0.000	0.000
2	0.000	0.000	-9.512	0.000	0.000	0.000
3	0.000	0.000	-9.512	0.000	0.000	0.000
4	0.000	0.000	-9.512	0.000	0.000	0.000
5	0.000	0.000	-9.512	0.000	0.000	0.000
6	0.000	0.000	-9.512	0.000	0.000	0.000
7	0.000	0.000	-9.512	0.000	0.000	0.000
8	0.000	0.000	-9.512	0.000	0.000	0.000
9	0.000	0.000	-9.512	0.000	0.000	0.000
10	0.000	0.000	-9.512	0.000	0.000	0.000
11	0.000	0.000	-9.512	0.000	0.000	0.000
12	0.000	0.000	-9.512	0.000	0.000	0.000
13	0.000	0.000	-9.512	0.000	0.000	0.000
14	0.000	0.000	-9.512	0.000	0.000	0.000
15	0.000	0.000	-9.512	0.000	0.000	0.000
16	0.000	0.000	-9.512	0.000	0.000	0.000
17	0.000	0.000	-9.512	0.000	0.000	0.000

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UAJY

JOINT FORCES Load Case LL

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
1	0.000	0.000	-1.000	0.000	0.000	0.000
2	0.000	0.000	-1.000	0.000	0.000	0.000
3	0.000	0.000	-1.000	0.000	0.000	0.000
4	0.000	0.000	-1.000	0.000	0.000	0.000
5	0.000	0.000	-1.000	0.000	0.000	0.000
6	0.000	0.000	-1.000	0.000	0.000	0.000
7	0.000	0.000	-1.000	0.000	0.000	0.000
8	0.000	0.000	-1.000	0.000	0.000	0.000
9	0.000	0.000	-1.000	0.000	0.000	0.000
10	0.000	0.000	-1.000	0.000	0.000	0.000

11	0.000	0.000	-1.000	0.000	0.000	0.000
12	0.000	0.000	-1.000	0.000	0.000	0.000
13	0.000	0.000	-1.000	0.000	0.000	0.000
14	0.000	0.000	-1.000	0.000	0.000	0.000
15	0.000	0.000	-1.000	0.000	0.000	0.000
16	0.000	0.000	-1.000	0.000	0.000	0.000
17	0.000	0.000	-1.000	0.000	0.000	0.000

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UAJY

JOINT FORCES Load Case W

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
1	7.965E-02	0.000	-0.123	0.000	0.000	0.000
2	0.202	0.000	6.605E-02	0.000	0.000	0.000
4	0.159	0.000	-0.245	0.000	0.000	0.000
5	0.159	0.000	-0.245	0.000	0.000	0.000
6	0.159	0.000	-0.245	0.000	0.000	0.000
7	0.159	0.000	-0.245	0.000	0.000	0.000
8	0.159	0.000	-0.245	0.000	0.000	0.000
9	0.159	0.000	-0.245	0.000	0.000	0.000
10	0.159	0.000	-0.245	0.000	0.000	0.000
3	0.123	0.000	0.189	0.000	0.000	0.000
11	0.245	0.000	0.377	0.000	0.000	0.000
12	0.245	0.000	0.377	0.000	0.000	0.000
13	0.245	0.000	0.377	0.000	0.000	0.000
14	0.245	0.000	0.377	0.000	0.000	0.000
15	0.245	0.000	0.377	0.000	0.000	0.000
16	0.245	0.000	0.377	0.000	0.000	0.000
17	0.245	0.000	0.377	0.000	0.000	0.000

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UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD	DL	1.4000	STATIC (DEAD)	COMB1
COMB2	ADD	DL	1.2000	STATIC (DEAD)	COMB2
		LL	1.6000	STATIC (LIVE)	
COMB3	ADD	DL	1.2000	STATIC (DEAD)	COMB3
		LL	1.0000	STATIC (LIVE)	
		W	1.6000	STATIC (WIND)	
COMB4	ADD	DL	1.2000	STATIC (DEAD)	COMB4
		LL	1.0000	STATIC (LIVE)	
		W	-1.6000	STATIC (WIND)	

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UAJY

JOINT DISPLACEMENTS

JOINT	LOAD	U1	U2	U3	R1	R2	R3
1	DL	0.0000	0.0000	0.0000	0.0000	8.230E-04	0.0000
1	LL	0.0000	0.0000	0.0000	0.0000	8.652E-05	0.0000
1	W	0.0000	0.0000	0.0000	0.0000	6.557E-05	0.0000
1	COMB1	0.0000	0.0000	0.0000	0.0000	1.152E-03	0.0000
1	COMB2	0.0000	0.0000	0.0000	0.0000	1.126E-03	0.0000
1	COMB3	0.0000	0.0000	0.0000	0.0000	1.179E-03	0.0000
1	COMB4	0.0000	0.0000	0.0000	0.0000	9.692E-04	0.0000
2	DL	0.0000	0.0000	-2.672E-04	0.0000	0.0000	0.0000
2	LL	0.0000	0.0000	-2.809E-05	0.0000	0.0000	0.0000
2	W	2.050E-06	0.0000	1.971E-06	0.0000	-7.344E-05	0.0000
2	COMB1	0.0000	0.0000	-3.741E-04	0.0000	0.0000	0.0000
2	COMB2	0.0000	0.0000	-3.656E-04	0.0000	0.0000	0.0000
2	COMB3	3.280E-06	0.0000	-3.456E-04	0.0000	-1.175E-04	0.0000
2	COMB4	-3.280E-06	0.0000	-3.519E-04	0.0000	1.175E-04	0.0000
3	DL	0.0000	0.0000	0.0000	0.0000	-8.230E-04	0.0000
3	LL	0.0000	0.0000	0.0000	0.0000	-8.652E-05	0.0000
3	W	0.0000	0.0000	0.0000	0.0000	8.168E-05	0.0000
3	COMB1	0.0000	0.0000	0.0000	0.0000	-1.152E-03	0.0000
3	COMB2	0.0000	0.0000	0.0000	0.0000	-1.126E-03	0.0000
3	COMB3	0.0000	0.0000	0.0000	0.0000	-9.434E-04	0.0000
3	COMB4	0.0000	0.0000	0.0000	0.0000	-1.205E-03	0.0000
4	DL	6.313E-04	0.0000	-1.012E-03	0.0000	7.279E-04	0.0000
4	LL	6.637E-05	0.0000	-1.064E-04	0.0000	7.652E-05	0.0000
4	W	5.255E-05	0.0000	-8.020E-05	0.0000	6.038E-05	0.0000
4	COMB1	8.839E-04	0.0000	-1.417E-03	0.0000	1.019E-03	0.0000
4	COMB2	8.638E-04	0.0000	-1.385E-03	0.0000	9.959E-04	0.0000
4	COMB3	9.080E-04	0.0000	-1.449E-03	0.0000	1.047E-03	0.0000
4	COMB4	7.399E-04	0.0000	-1.193E-03	0.0000	8.534E-04	0.0000
5	DL	1.116E-03	0.0000	-1.797E-03	0.0000	4.801E-04	0.0000
5	LL	1.174E-04	0.0000	-1.889E-04	0.0000	5.047E-05	0.0000
5	W	9.693E-05	0.0000	-1.478E-04	0.0000	4.619E-05	0.0000
5	COMB1	1.563E-03	0.0000	-2.516E-03	0.0000	6.721E-04	0.0000
5	COMB2	1.528E-03	0.0000	-2.459E-03	0.0000	6.569E-04	0.0000
5	COMB3	1.612E-03	0.0000	-2.582E-03	0.0000	7.005E-04	0.0000
5	COMB4	1.302E-03	0.0000	-2.109E-03	0.0000	5.527E-04	0.0000
6	DL	1.362E-03	0.0000	-2.211E-03	0.0000	1.549E-04	0.0000
6	LL	1.432E-04	0.0000	-2.325E-04	0.0000	1.628E-05	0.0000
6	W	1.270E-04	0.0000	-1.934E-04	0.0000	2.576E-05	0.0000
6	COMB1	1.907E-03	0.0000	-3.096E-03	0.0000	2.168E-04	0.0000
6	COMB2	1.863E-03	0.0000	-3.025E-03	0.0000	2.119E-04	0.0000
6	COMB3	1.981E-03	0.0000	-3.195E-03	0.0000	2.433E-04	0.0000
6	COMB4	1.574E-03	0.0000	-2.577E-03	0.0000	1.609E-04	0.0000
7	DL	1.335E-03	0.0000	-2.205E-03	0.0000	-1.726E-04	0.0000
7	LL	1.404E-04	0.0000	-2.318E-04	0.0000	-1.814E-05	0.0000
7	W	1.387E-04	0.0000	-2.108E-04	0.0000	1.851E-06	0.0000
7	COMB1	1.869E-03	0.0000	-3.087E-03	0.0000	-2.416E-04	0.0000

7	COMB2	1.827E-03	0.0000	-3.016E-03	0.0000	-2.361E-04	0.0000
7	COMB3	1.965E-03	0.0000	-3.215E-03	0.0000	-2.223E-04	0.0000
7	COMB4	1.521E-03	0.0000	-2.540E-03	0.0000	-2.282E-04	0.0000
8	DL	1.065E-03	0.0000	-1.822E-03	0.0000	-4.270E-04	0.0000
8	LL	1.120E-04	0.0000	-1.915E-04	0.0000	-4.489E-05	0.0000
8	W	1.304E-04	0.0000	-1.974E-04	0.0000	-2.278E-05	0.0000
8	COMB1	1.491E-03	0.0000	-2.550E-03	0.0000	-5.978E-04	0.0000
8	COMB2	1.457E-03	0.0000	-2.493E-03	0.0000	-5.842E-04	0.0000
8	COMB3	1.599E-03	0.0000	-2.693E-03	0.0000	-5.938E-04	0.0000
8	COMB4	1.182E-03	0.0000	-2.062E-03	0.0000	-5.208E-04	0.0000
9	DL	6.419E-04	0.0000	-1.201E-03	0.0000	-5.332E-04	0.0000
9	LL	6.748E-05	0.0000	-1.262E-04	0.0000	-5.605E-05	0.0000
9	W	1.027E-04	0.0000	-1.541E-04	0.0000	-4.538E-05	0.0000
9	COMB1	8.986E-04	0.0000	-1.681E-03	0.0000	-7.465E-04	0.0000
9	COMB2	8.782E-04	0.0000	-1.643E-03	0.0000	-7.295E-04	0.0000
9	COMB3	1.002E-03	0.0000	-1.814E-03	0.0000	-7.685E-04	0.0000
9	COMB4	6.735E-04	0.0000	-1.320E-03	0.0000	-6.233E-04	0.0000
10	DL	2.161E-04	0.0000	-5.737E-04	0.0000	-4.159E-04	0.0000
10	LL	2.272E-05	0.0000	-6.031E-05	0.0000	-4.373E-05	0.0000
10	W	5.820E-05	0.0000	-8.505E-05	0.0000	-6.319E-05	0.0000
10	COMB1	3.025E-04	0.0000	-8.031E-04	0.0000	-5.823E-04	0.0000
10	COMB2	2.956E-04	0.0000	-7.849E-04	0.0000	-5.691E-04	0.0000
10	COMB3	3.751E-04	0.0000	-8.848E-04	0.0000	-6.440E-04	0.0000
10	COMB4	1.889E-04	0.0000	-6.126E-04	0.0000	-4.418E-04	0.0000
11	DL	-2.161E-04	0.0000	-5.737E-04	0.0000	4.159E-04	0.0000
11	LL	-2.272E-05	0.0000	-6.031E-05	0.0000	4.373E-05	0.0000
11	W	6.247E-05	0.0000	9.507E-05	0.0000	-7.143E-05	0.0000
11	COMB1	-3.025E-04	0.0000	-8.031E-04	0.0000	5.823E-04	0.0000
11	COMB2	-2.956E-04	0.0000	-7.849E-04	0.0000	5.691E-04	0.0000
11	COMB3	-1.821E-04	0.0000	-5.966E-04	0.0000	4.286E-04	0.0000
11	COMB4	-3.820E-04	0.0000	-9.008E-04	0.0000	6.572E-04	0.0000
12	DL	-6.419E-04	0.0000	-1.201E-03	0.0000	5.332E-04	0.0000
12	LL	-6.748E-05	0.0000	-1.262E-04	0.0000	5.605E-05	0.0000
12	W	1.153E-04	0.0000	1.766E-04	0.0000	-5.597E-05	0.0000
12	COMB1	-8.986E-04	0.0000	-1.681E-03	0.0000	7.465E-04	0.0000
12	COMB2	-8.782E-04	0.0000	-1.643E-03	0.0000	7.295E-04	0.0000
12	COMB3	-6.532E-04	0.0000	-1.284E-03	0.0000	6.063E-04	0.0000
12	COMB4	-1.022E-03	0.0000	-1.849E-03	0.0000	7.855E-04	0.0000
13	DL	-1.065E-03	0.0000	-1.822E-03	0.0000	4.270E-04	0.0000
13	LL	-1.120E-04	0.0000	-1.915E-04	0.0000	4.489E-05	0.0000
13	W	1.515E-04	0.0000	2.323E-04	0.0000	-3.130E-05	0.0000
13	COMB1	-1.491E-03	0.0000	-2.550E-03	0.0000	5.978E-04	0.0000
13	COMB2	-1.457E-03	0.0000	-2.493E-03	0.0000	5.842E-04	0.0000
13	COMB3	-1.148E-03	0.0000	-2.006E-03	0.0000	5.072E-04	0.0000
13	COMB4	-1.633E-03	0.0000	-2.749E-03	0.0000	6.074E-04	0.0000
14	DL	-1.335E-03	0.0000	-2.205E-03	0.0000	1.726E-04	0.0000
14	LL	-1.404E-04	0.0000	-2.318E-04	0.0000	1.814E-05	0.0000
14	W	1.651E-04	0.0000	2.534E-04	0.0000	-1.663E-06	0.0000
14	COMB1	-1.869E-03	0.0000	-3.087E-03	0.0000	2.416E-04	0.0000
14	COMB2	-1.827E-03	0.0000	-3.016E-03	0.0000	2.361E-04	0.0000
14	COMB3	-1.478E-03	0.0000	-2.472E-03	0.0000	2.226E-04	0.0000
14	COMB4	-2.007E-03	0.0000	-3.283E-03	0.0000	2.279E-04	0.0000
15	DL	-1.362E-03	0.0000	-2.211E-03	0.0000	-1.549E-04	0.0000
15	LL	-1.432E-04	0.0000	-2.325E-04	0.0000	-1.628E-05	0.0000
15	W	1.539E-04	0.0000	2.363E-04	0.0000	2.870E-05	0.0000
15	COMB1	-1.907E-03	0.0000	-3.096E-03	0.0000	-2.168E-04	0.0000
15	COMB2	-1.863E-03	0.0000	-3.025E-03	0.0000	-2.119E-04	0.0000
15	COMB3	-1.531E-03	0.0000	-2.508E-03	0.0000	-1.562E-04	0.0000
15	COMB4	-2.024E-03	0.0000	-3.264E-03	0.0000	-2.480E-04	0.0000
16	DL	-1.116E-03	0.0000	-1.797E-03	0.0000	-4.801E-04	0.0000
16	LL	-1.174E-04	0.0000	-1.889E-04	0.0000	-5.047E-05	0.0000
16	W	1.190E-04	0.0000	1.828E-04	0.0000	5.554E-05	0.0000
16	COMB1	-1.563E-03	0.0000	-2.516E-03	0.0000	-6.721E-04	0.0000
16	COMB2	-1.528E-03	0.0000	-2.459E-03	0.0000	-6.569E-04	0.0000
16	COMB3	-1.267E-03	0.0000	-2.053E-03	0.0000	-5.377E-04	0.0000
16	COMB4	-1.648E-03	0.0000	-2.638E-03	0.0000	-7.154E-04	0.0000
17	DL	-6.313E-04	0.0000	-1.012E-03	0.0000	-7.279E-04	0.0000
17	LL	-6.637E-05	0.0000	-1.064E-04	0.0000	-7.652E-05	0.0000
17	W	6.504E-05	0.0000	9.992E-05	0.0000	7.462E-05	0.0000
17	COMB1	-8.839E-04	0.0000	-1.417E-03	0.0000	-1.019E-03	0.0000
17	COMB2	-8.638E-04	0.0000	-1.385E-03	0.0000	-9.959E-04	0.0000
17	COMB3	-7.199E-04	0.0000	-1.161E-03	0.0000	-8.306E-04	0.0000
17	COMB4	-9.280E-04	0.0000	-1.481E-03	0.0000	-1.069E-03	0.0000

UAJY

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	DL	72.7404	0.0000	80.8537	0.0000	0.0000	0.0000
1	LL	7.6471	0.0000	8.5000	0.0000	0.0000	0.0000
1	W	-1.9932	0.0000	0.1913	0.0000	0.0000	0.0000
1	COMB1	101.8366	0.0000	113.1952	0.0000	0.0000	0.0000
1	COMB2	99.5238	0.0000	110.6244	0.0000	0.0000	0.0000
1	COMB3	91.7465	0.0000	105.8305	0.0000	0.0000	0.0000
1	COMB4	98.1246	0.0000	105.2184	0.0000	0.0000	0.0000
3	DL	-72.7404	0.0000	80.8537	0.0000	0.0000	0.0000
3	LL	-7.6471	0.0000	8.5000	0.0000	0.0000	0.0000
3	W	-1.2420	0.0000	-1.2481	0.0000	0.0000	0.0000
3	COMB1	-101.8366	0.0000	113.1952	0.0000	0.0000	0.0000
3	COMB2	-99.5238	0.0000	110.6244	0.0000	0.0000	0.0000
3	COMB3	-96.9229	0.0000	103.5275	0.0000	0.0000	0.0000
3	COMB4	-92.9483	0.0000	107.5214	0.0000	0.0000	0.0000

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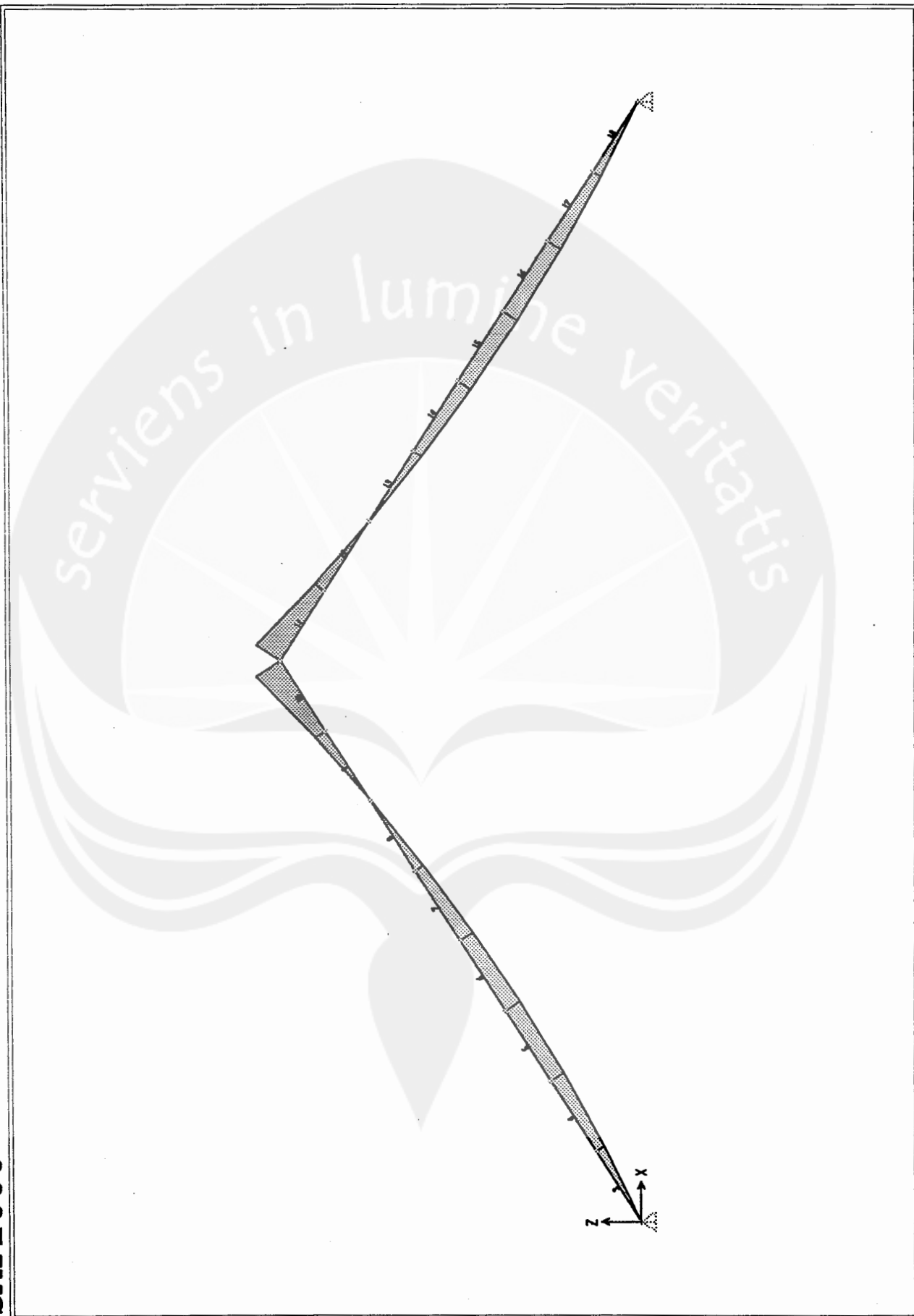
UAJY

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
3	DL							
		0.00	-99.87	-20.17	0.00	0.00	0.00	0.00
		7.5E-01	-99.87	-20.17	0.00	0.00	0.00	15.04
		1.49	-99.87	-20.17	0.00	0.00	0.00	30.08
3	LL							
		0.00	-10.50	-2.12	0.00	0.00	0.00	0.00
		7.5E-01	-10.50	-2.12	0.00	0.00	0.00	1.58
		1.49	-10.50	-2.12	0.00	0.00	0.00	3.16
3	W							
		0.00	1.57	-1.10	0.00	0.00	0.00	0.00
		7.5E-01	1.57	-1.10	0.00	0.00	0.00	8.203E-01
		1.49	1.57	-1.10	0.00	0.00	0.00	1.64
3	COMB1							
		0.00	-139.82	-28.24	0.00	0.00	0.00	0.00
		7.5E-01	-139.82	-28.24	0.00	0.00	0.00	21.05
		1.49	-139.82	-28.24	0.00	0.00	0.00	42.11
3	COMB2							
		0.00	-136.64	-27.60	0.00	0.00	0.00	0.00
		7.5E-01	-136.64	-27.60	0.00	0.00	0.00	20.57
		1.49	-136.64	-27.60	0.00	0.00	0.00	41.15
3	COMB3							
		0.00	-127.83	-28.09	0.00	0.00	0.00	0.00
		7.5E-01	-127.83	-28.09	0.00	0.00	0.00	20.94
		1.49	-127.83	-28.09	0.00	0.00	0.00	41.88
3	COMB4							
		0.00	-132.85	-24.57	0.00	0.00	0.00	0.00
		7.5E-01	-132.85	-24.57	0.00	0.00	0.00	18.31
		1.49	-132.85	-24.57	0.00	0.00	0.00	36.63
10	DL							
		0.00	-63.58	35.65	0.00	0.00	0.00	-39.17
		7.5E-01	-63.58	35.65	0.00	0.00	0.00	-65.75
		1.49	-63.58	35.65	0.00	0.00	0.00	-92.32
10	LL							
		0.00	-6.68	3.75	0.00	0.00	0.00	-4.12
		7.5E-01	-6.68	3.75	0.00	0.00	0.00	-6.91
		1.49	-6.68	3.75	0.00	0.00	0.00	-9.71
10	W							
		0.00	1.57	9.470E-01	0.00	0.00	0.00	2.33
		7.5E-01	1.57	9.470E-01	0.00	0.00	0.00	1.62
		1.49	1.57	9.470E-01	0.00	0.00	0.00	9.145E-01
10	COMB1							
		0.00	-89.01	49.92	0.00	0.00	0.00	-54.84
		7.5E-01	-89.01	49.92	0.00	0.00	0.00	-92.05
		1.49	-89.01	49.92	0.00	0.00	0.00	-129.25
10	COMB2							
		0.00	-86.99	48.78	0.00	0.00	0.00	-53.59
		7.5E-01	-86.99	48.78	0.00	0.00	0.00	-89.95
		1.49	-86.99	48.78	0.00	0.00	0.00	-126.32
10	COMB3							
		0.00	-80.47	48.05	0.00	0.00	0.00	-47.40
		7.5E-01	-80.47	48.05	0.00	0.00	0.00	-83.21
		1.49	-80.47	48.05	0.00	0.00	0.00	-119.03
10	COMB4							
		0.00	-85.49	45.02	0.00	0.00	0.00	-54.84
		7.5E-01	-85.49	45.02	0.00	0.00	0.00	-88.40
		1.49	-85.49	45.02	0.00	0.00	0.00	-121.96

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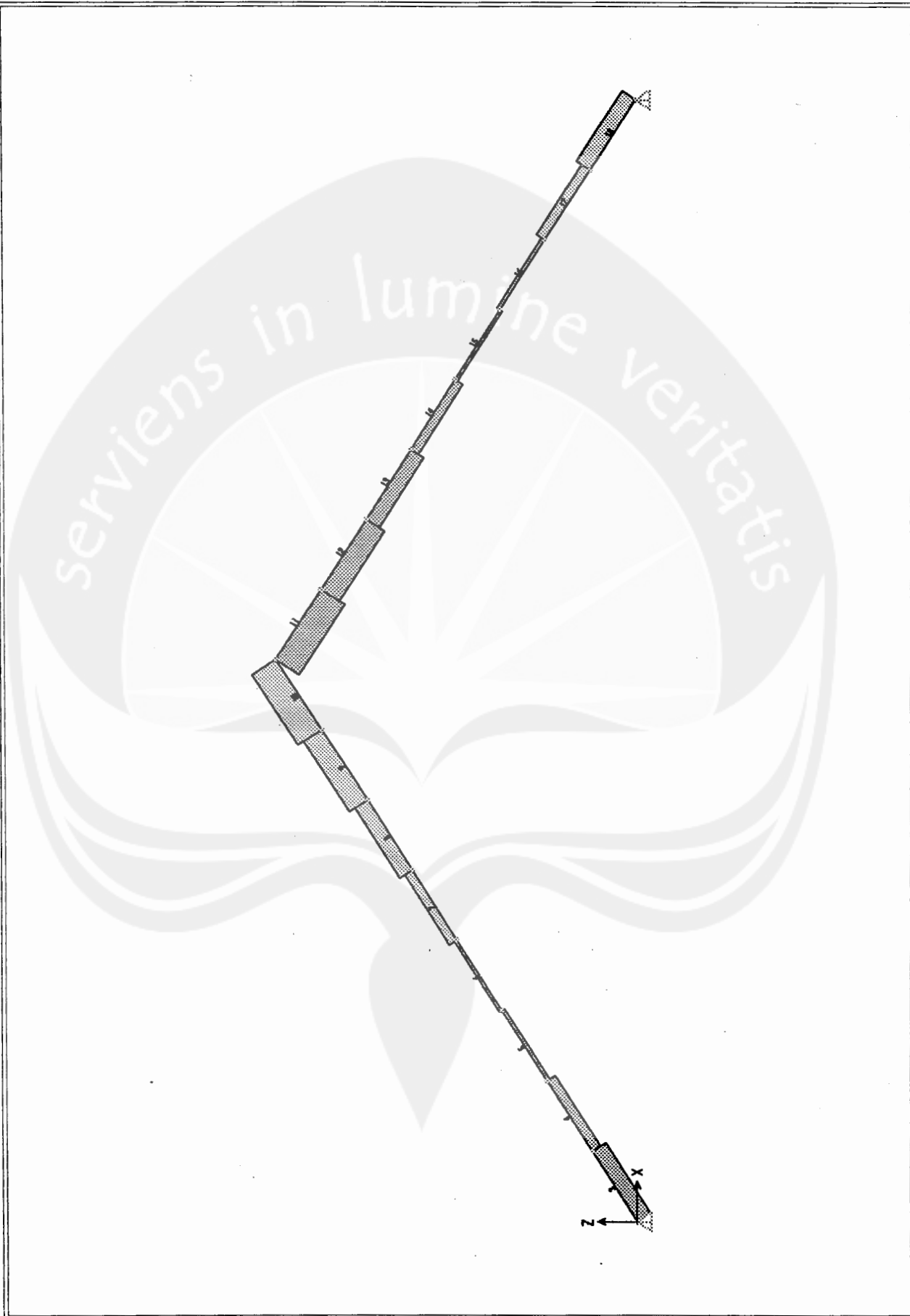
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SAP2000 v7.40 - File:perencanaan atap beton - Moment 3-3 Diagram (COMB1) - KN-m Units

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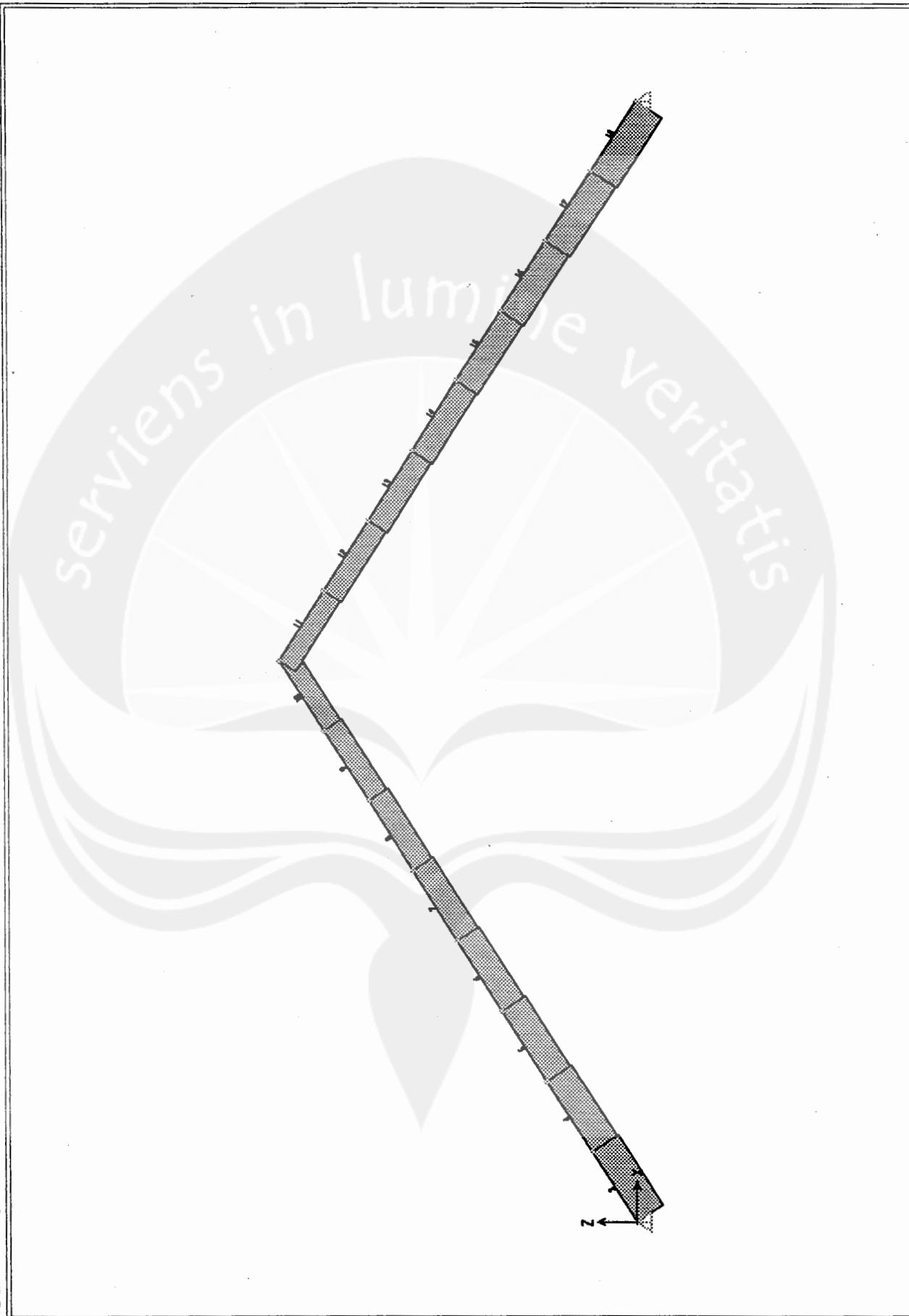
SAP2000



SAP2000 v7.40 - File:perencanaan atap beton - Shear Force 2-2 Diagram (COMB1) - KN-m Units

7/15/05 20:42:37

SAP2000



SAP2000 v7.40 - File:perencanaan atap beton - Axial Force Diagram (COMB1) - KN-m Units

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 1
7/10/05 19:34:35

UAJY

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	0.0000
LL	LIVE	0.0000

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 2
7/10/05 19:34:35

UAJY

JOINT DATA

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	RESTRAINTS	ANGLE-A	ANGLE-B	ANGLE-C
1	0.00000	0.00000	1.92000	1 1 1 0 0 0	0.000	0.000	0.000
2	1.40000	0.00000	1.92000	0 0 0 0 0 0	0.000	0.000	0.000
3	5.00000	0.00000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 3
7/10/05 19:34:35

UAJY

FRAME ELEMENT DATA

FRAME LENGTH	JNT-1	JNT-2	SECTION	ANGLE	RELEASES	SEGMENTS	R1	R2	FACTOR
1.400	1	2	TANGGA	0.000	000000	4	0.000	0.000	1.000
4.080	2	3	TANGGA	0.000	000000	10	0.000	0.000	1.000

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 4
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UAJY

FRAME SPAN DISTRIBUTED LOADS Load Case DL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
1	FORCE	GLOBAL-Z	0.0000	-5.7400	1.0000	-5.7400
2	FORCE	GLOBAL-Z	0.0000	-8.1400	1.0000	-8.1400

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 5
7/10/05 19:34:35

UAJY

FRAME SPAN DISTRIBUTED LOADS Load Case LL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
1	FORCE	GLOBAL-Z	0.0000	-3.0000	1.0000	-3.0000
2	FORCE	GLOBAL-Z	0.0000	-3.0000	1.0000	-3.0000

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 1
7/10/05 19:36:49

UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD				COMB1
		DL	1.2000	STATIC(DEAD)	
		LL	1.6000	STATIC(LIVE)	

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 2
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UAJY

JOINT DISPLACEMENTS

JOINT	LOAD	U1	U2	U3	R1	R2	R3
1	DL	0.0000	0.0000	0.0000	0.0000	7.382E-05	0.0000
1	LL	0.0000	0.0000	0.0000	0.0000	2.913E-05	0.0000
1	COMB1	0.0000	0.0000	0.0000	0.0000	1.352E-04	0.0000
2	DL	-1.102E-05	0.0000	-9.929E-05	0.0000	6.005E-05	0.0000
2	LL	-4.297E-06	0.0000	-3.878E-05	0.0000	2.284E-05	0.0000
2	COMB1	-2.010E-05	0.0000	-1.812E-04	0.0000	1.086E-04	0.0000
3	DL	0.0000	0.0000	0.0000	0.0000	-9.450E-05	0.0000
3	LL	0.0000	0.0000	0.0000	0.0000	-3.586E-05	0.0000
3	COMB1	0.0000	0.0000	0.0000	0.0000	-1.708E-04	0.0000

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UAJY

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	DL	30.3873	0.0000	7.1983	0.0000	0.0000	0.0000
1	LL	11.8520	0.0000	3.4672	0.0000	0.0000	0.0000
1	COMB1	55.4279	0.0000	14.1855	0.0000	0.0000	0.0000
3	DL	-30.3873	0.0000	34.0489	0.0000	0.0000	0.0000
3	LL	-11.8520	0.0000	12.9728	0.0000	0.0000	0.0000
3	COMB1	-55.4279	0.0000	61.6151	0.0000	0.0000	0.0000

SAP2000 v7.40 File: PERENCANAAN TANGGA 1 KN-m Units PAGE 4
7/10/05 19:36:49

UAJY

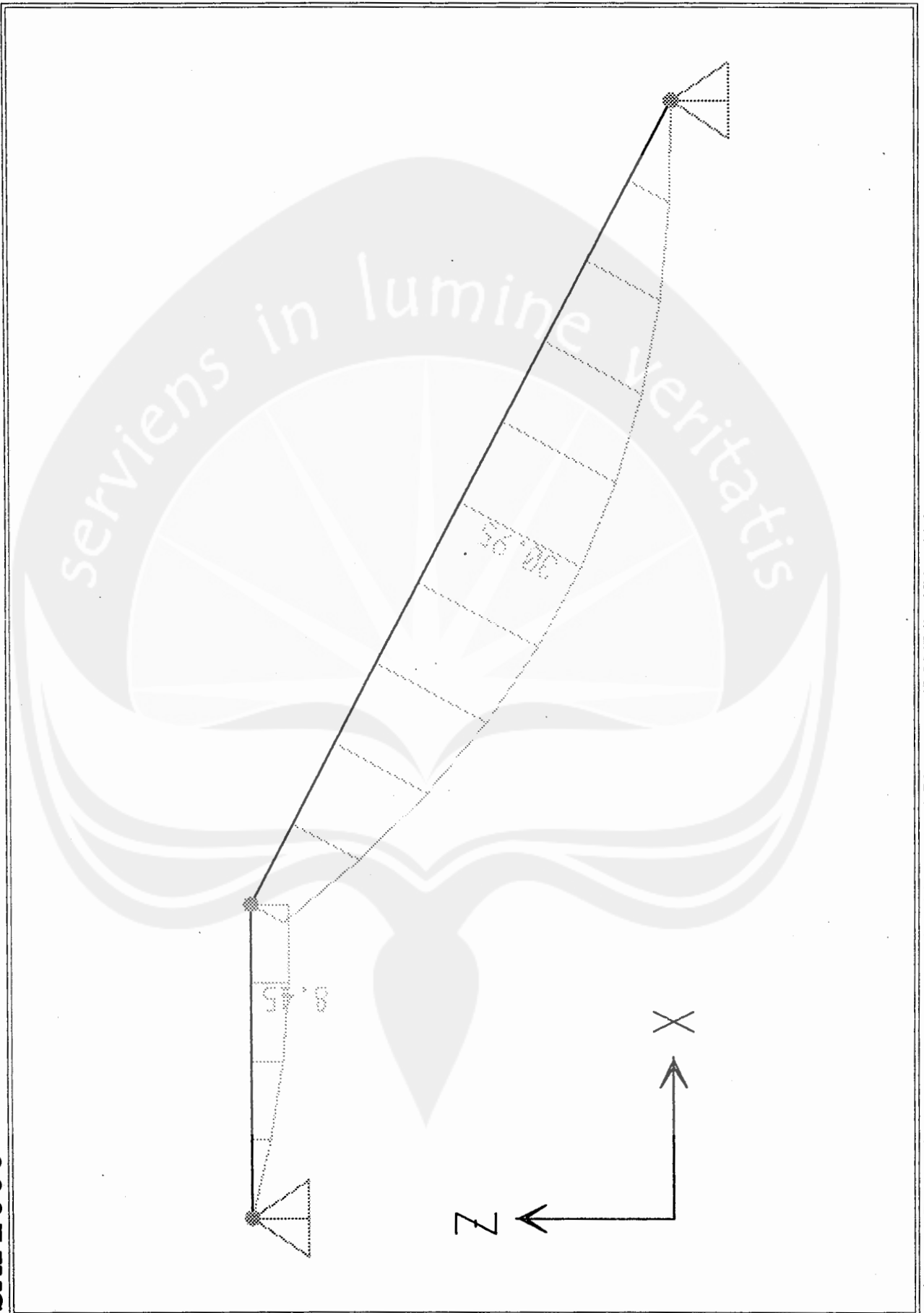
FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3	
1	DL	0.00	-30.39	-7.20	0.00	0.00	0.00	0.00	
		3.5E-01	-30.39	-5.19	0.00	0.00	0.00	2.17	
		7.0E-01	-30.39	-3.18	0.00	0.00	0.00	3.63	
		1.05	-30.39	-1.17	0.00	0.00	0.00	4.39	
		1.40	-30.39	8.377E-01	0.00	0.00	0.00	4.45	
		1	LL	0.00	-11.85	-3.47	0.00	0.00	0.00
1	LL	3.5E-01	-11.85	-2.42	0.00	0.00	0.00	1.03	
		7.0E-01	-11.85	-1.37	0.00	0.00	0.00	1.69	
		1.05	-11.85	-3.172E-01	0.00	0.00	0.00	1.99	
		1.40	-11.85	7.328E-01	0.00	0.00	0.00	1.91	
		1	COMB1	0.00	-55.43	-14.19	0.00	0.00	0.00
		3.5E-01	-55.43	-10.09	0.00	0.00	0.00	4.25	
1	COMB1	7.0E-01	-55.43	-6.00	0.00	0.00	0.00	7.07	
		1.05	-55.43	-1.91	0.00	0.00	0.00	8.45	
		1.40	-55.43	2.18	0.00	0.00	0.00	8.41	
		2	DL						

	0.00	-27.21	-13.56	0.00	0.00	0.00	4.45
	4.1E-01	-28.77	-10.63	0.00	0.00	0.00	9.39
	8.2E-01	-30.33	-7.70	0.00	0.00	0.00	13.13
	1.22	-31.90	-4.77	0.00	0.00	0.00	15.67
	1.63	-33.46	-1.84	0.00	0.00	0.00	17.02
	2.04	-35.02	1.09	0.00	0.00	0.00	17.17
	2.45	-36.58	4.02	0.00	0.00	0.00	16.13
	2.86	-38.15	6.95	0.00	0.00	0.00	13.89
	3.26	-39.71	9.88	0.00	0.00	0.00	10.46
	3.67	-41.27	12.81	0.00	0.00	0.00	5.83
	4.08	-42.84	15.74	0.00	0.00	0.00	0.00
2	LL						
	0.00	-10.80	-4.93	0.00	0.00	0.00	1.91
	4.1E-01	-11.38	-3.85	0.00	0.00	0.00	3.71
	8.2E-01	-11.95	-2.77	0.00	0.00	0.00	5.06
	1.22	-12.53	-1.69	0.00	0.00	0.00	5.97
	1.63	-13.11	-6.109E-01	0.00	0.00	0.00	6.44
	2.04	-13.68	4.691E-01	0.00	0.00	0.00	6.47
	2.45	-14.26	1.55	0.00	0.00	0.00	6.05
	2.86	-14.83	2.63	0.00	0.00	0.00	5.20
	3.26	-15.41	3.71	0.00	0.00	0.00	3.91
	3.67	-15.99	4.79	0.00	0.00	0.00	2.17
	4.08	-16.56	5.87	0.00	0.00	0.00	0.00
2	COMBI						
	0.00	-49.93	-24.16	0.00	0.00	0.00	8.41
	4.1E-01	-52.73	-18.92	0.00	0.00	0.00	17.19
	8.2E-01	-55.53	-13.67	0.00	0.00	0.00	23.84
	1.22	-58.32	-8.43	0.00	0.00	0.00	28.35
	1.63	-61.12	-3.18	0.00	0.00	0.00	30.72
	2.04	-63.92	2.06	0.00	0.00	0.00	30.95
	2.45	-66.71	7.30	0.00	0.00	0.00	29.04
	2.86	-69.51	12.55	0.00	0.00	0.00	24.99
	3.26	-72.31	17.79	0.00	0.00	0.00	18.80
	3.67	-75.11	23.04	0.00	0.00	0.00	10.47
	4.08	-77.90	28.28	0.00	0.00	0.00	0.00

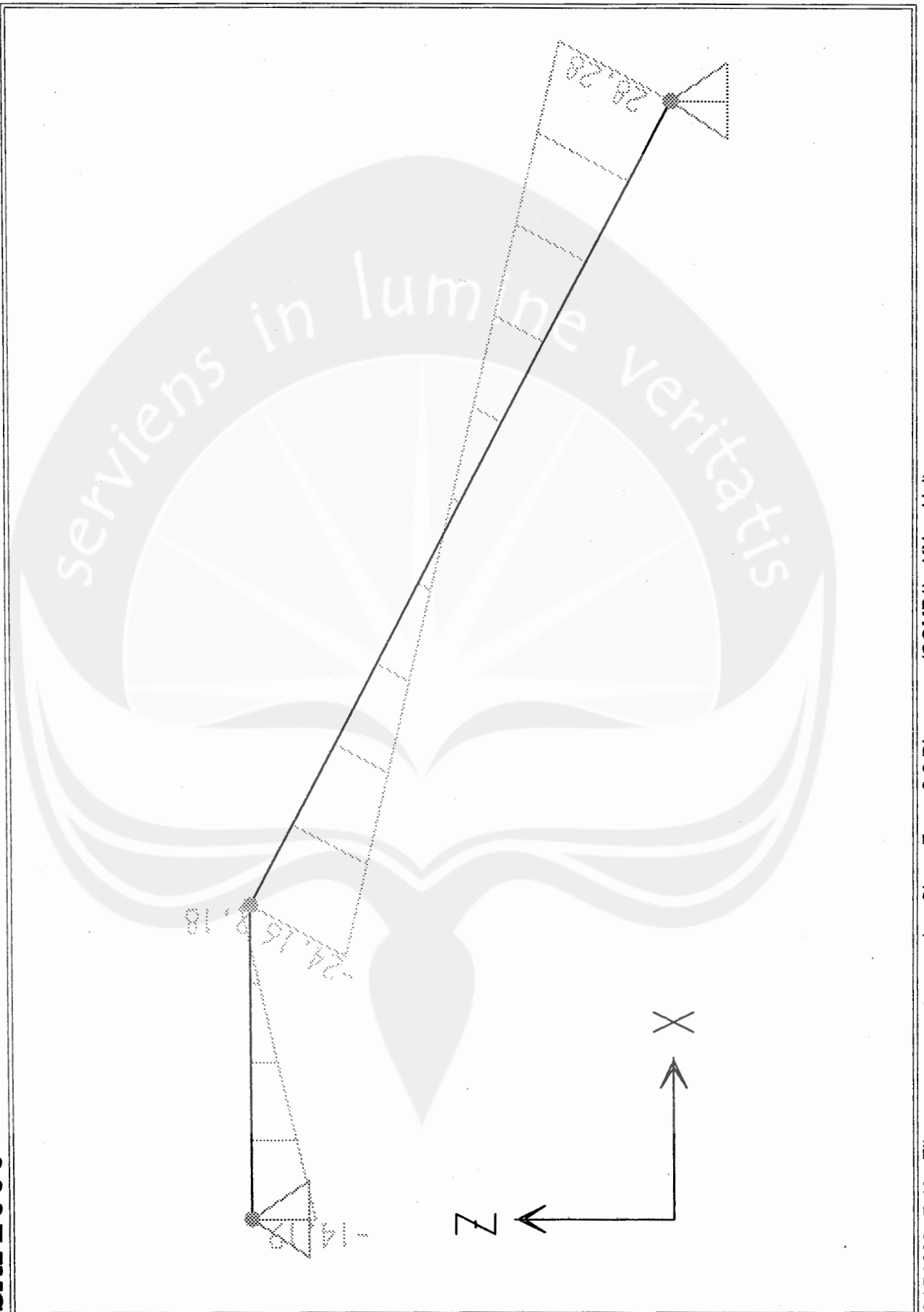
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7/31/05 8:51:40

SAP2000



SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 1
7/10/05 19:41:31

UAJY

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	0.0000
LL	LIVE	0.0000

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 2
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UAJY

JOINT DATA

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	RESTRAINTS	ANGLE-A	ANGLE-B	ANGLE-C
1	0.00000	0.00000	1.92000	1 1 1 0 0 0	0.000	0.000	0.000
2	2.40000	0.00000	1.92000	0 0 0 0 0 0	0.000	0.000	0.000
3	6.00000	0.00000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 3
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UAJY

FRAME ELEMENT DATA

FRAME LENGTH	JNT-1	JNT-2	SECTION	ANGLE	RELEASES	SEGMENTS	R1	R2	FACTOR
2.400	1	2	TANGGA	0.000	000000	4	0.000	0.000	1.000
4.080	2	3	TANGGA	0.000	000000	10	0.000	0.000	1.000

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 4
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UAJY

FRAME SPAN DISTRIBUTED LOADS Load Case DL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
1	FORCE	GLOBAL-Z	0.0000	-5.7400	1.0000	-5.7400
2	FORCE	GLOBAL-Z	0.0000	-8.1400	1.0000	-8.1400

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 5
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UAJY

FRAME SPAN DISTRIBUTED LOADS Load Case LL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
1	FORCE	GLOBAL-Z	0.0000	-3.0000	1.0000	-3.0000
2	FORCE	GLOBAL-Z	0.0000	-3.0000	1.0000	-3.0000

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 1
7/10/05 19:41:47

UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD				COMB1
		DL	1.2000	STATIC (DEAD)	
		LL	1.6000	STATIC (LIVE)	

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 2
7/10/05 19:41:47

UAJY

JOINT DISPLACEMENTS

JOINT	LOAD	U1	U2	U3	R1	R2	R3
1	DL	0.0000	0.0000	0.0000	0.0000	7.525E-05	0.0000
1	LL	0.0000	0.0000	0.0000	0.0000	3.209E-05	0.0000
1	COMB1	0.0000	0.0000	0.0000	0.0000	1.416E-04	0.0000
2	DL	-2.474E-05	0.0000	-1.486E-04	0.0000	4.254E-05	0.0000
2	LL	-1.010E-05	0.0000	-6.072E-05	0.0000	1.568E-05	0.0000
2	COMB1	-4.585E-05	0.0000	-2.755E-04	0.0000	7.614E-05	0.0000
3	DL	0.0000	0.0000	0.0000	0.0000	-1.045E-04	0.0000
3	LL	0.0000	0.0000	0.0000	0.0000	-4.051E-05	0.0000
3	COMB1	0.0000	0.0000	0.0000	0.0000	-1.902E-04	0.0000

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 3
7/10/05 19:41:47

UAJY

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	DL	39.8057	0.0000	8.2463	0.0000	0.0000	0.0000
1	LL	16.2468	0.0000	4.2330	0.0000	0.0000	0.0000
1	COMB1	73.7617	0.0000	16.6685	0.0000	0.0000	0.0000
3	DL	-39.8057	0.0000	38.7409	0.0000	0.0000	0.0000
3	LL	-16.2468	0.0000	15.2070	0.0000	0.0000	0.0000
3	COMB1	-73.7617	0.0000	70.8202	0.0000	0.0000	0.0000

SAP2000 v7.40 File: PERENCANAAN TANGGA 2 KN-m Units PAGE 4
7/10/05 19:41:47

UAJY

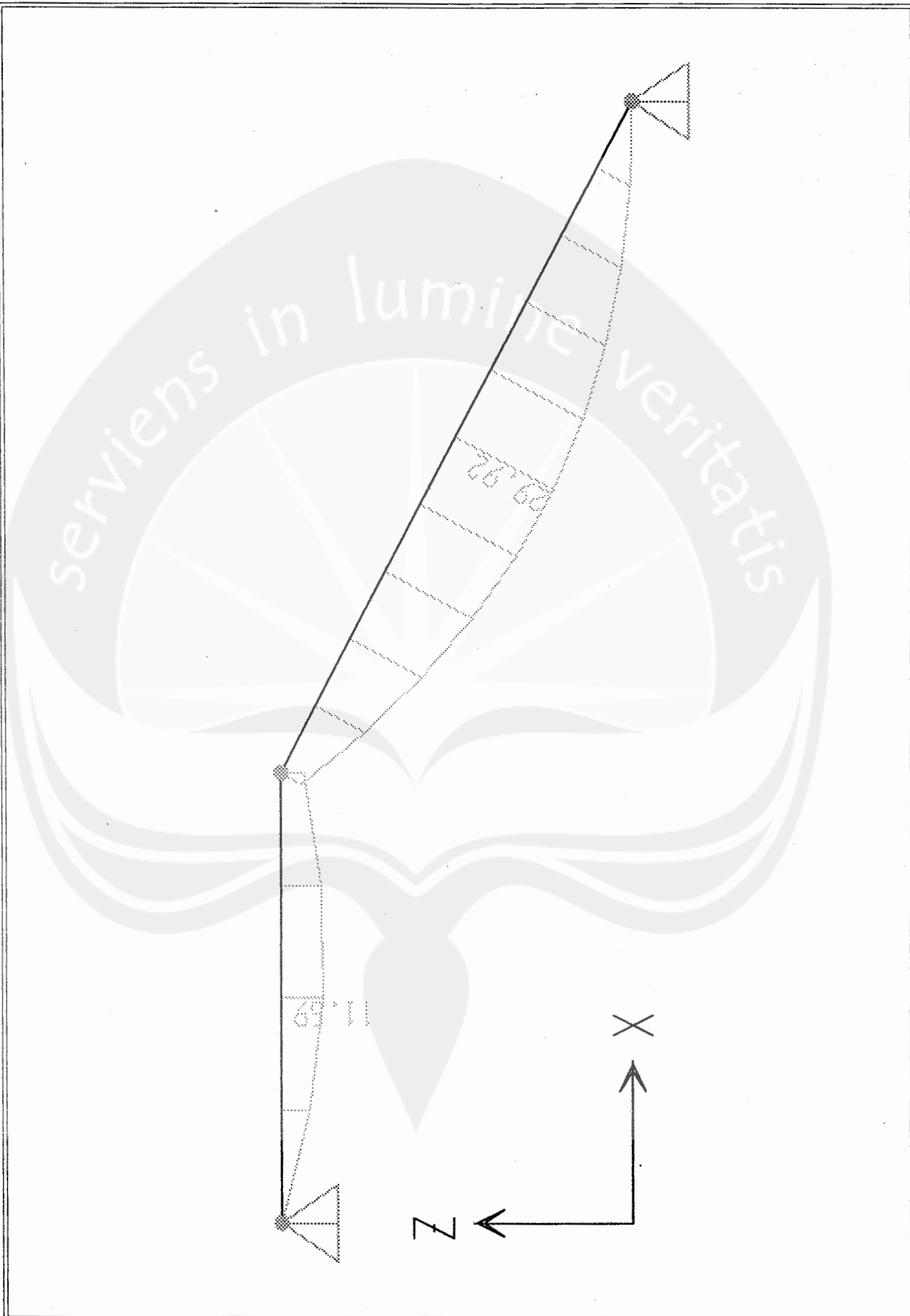
FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
1	DL							
		0.00	-39.81	-8.25	0.00	0.00	0.00	0.00
		6.0E-01	-39.81	-4.80	0.00	0.00	0.00	3.91
		1.20	-39.81	-1.36	0.00	0.00	0.00	5.76
		1.80	-39.81	2.09	0.00	0.00	0.00	5.54
		2.40	-39.81	5.53	0.00	0.00	0.00	3.26
1	LL							
		0.00	-16.25	-4.23	0.00	0.00	0.00	0.00
		6.0E-01	-16.25	-2.43	0.00	0.00	0.00	2.00
		1.20	-16.25	-6.330E-01	0.00	0.00	0.00	2.92
		1.80	-16.25	1.17	0.00	0.00	0.00	2.76
		2.40	-16.25	2.97	0.00	0.00	0.00	1.52
1	COMB1							
		0.00	-73.76	-16.67	0.00	0.00	0.00	0.00
		6.0E-01	-73.76	-9.66	0.00	0.00	0.00	7.90
		1.20	-73.76	-2.64	0.00	0.00	0.00	11.59
		1.80	-73.76	4.37	0.00	0.00	0.00	11.07
		2.40	-73.76	11.38	0.00	0.00	0.00	6.34
2	DL							

	0.00	-37.72	-13.85	0.00	0.00	0.00	3.26
	4.1E-01	-39.29	-10.92	0.00	0.00	0.00	8.31
	8.2E-01	-40.85	-7.99	0.00	0.00	0.00	12.17
	1.22	-42.41	-5.06	0.00	0.00	0.00	14.84
	1.63	-43.98	-2.13	0.00	0.00	0.00	16.30
	2.04	-45.54	7.990E-01	0.00	0.00	0.00	16.58
	2.45	-47.10	3.73	0.00	0.00	0.00	15.65
	2.86	-48.67	6.66	0.00	0.00	0.00	13.53
	3.26	-50.23	9.59	0.00	0.00	0.00	10.22
	3.67	-51.79	12.52	0.00	0.00	0.00	5.71
	4.08	-53.35	15.45	0.00	0.00	0.00	0.00
2	LL						
	0.00	-15.73	-5.03	0.00	0.00	0.00	1.52
	4.1E-01	-16.31	-3.95	0.00	0.00	0.00	3.35
	8.2E-01	-16.88	-2.87	0.00	0.00	0.00	4.74
	1.22	-17.46	-1.79	0.00	0.00	0.00	5.69
	1.63	-18.04	-7.076E-01	0.00	0.00	0.00	6.20
	2.04	-18.61	3.724E-01	0.00	0.00	0.00	6.27
	2.45	-19.19	1.45	0.00	0.00	0.00	5.90
	2.86	-19.76	2.53	0.00	0.00	0.00	5.08
	3.26	-20.34	3.61	0.00	0.00	0.00	3.83
	3.67	-20.92	4.69	0.00	0.00	0.00	2.13
	4.08	-21.49	5.77	0.00	0.00	0.00	0.00
2	COMB1						
	0.00	-70.44	-24.67	0.00	0.00	0.00	6.34
	4.1E-01	-73.24	-19.42	0.00	0.00	0.00	15.34
	8.2E-01	-76.03	-14.18	0.00	0.00	0.00	22.19
	1.22	-78.83	-8.93	0.00	0.00	0.00	26.91
	1.63	-81.63	-3.69	0.00	0.00	0.00	29.48
	2.04	-84.43	1.55	0.00	0.00	0.00	29.92
	2.45	-87.22	6.80	0.00	0.00	0.00	28.21
	2.86	-90.02	12.04	0.00	0.00	0.00	24.37
	3.26	-92.82	17.29	0.00	0.00	0.00	18.39
	3.67	-95.61	22.53	0.00	0.00	0.00	10.26
	4.08	-98.41	27.78	0.00	0.00	0.00	0.00

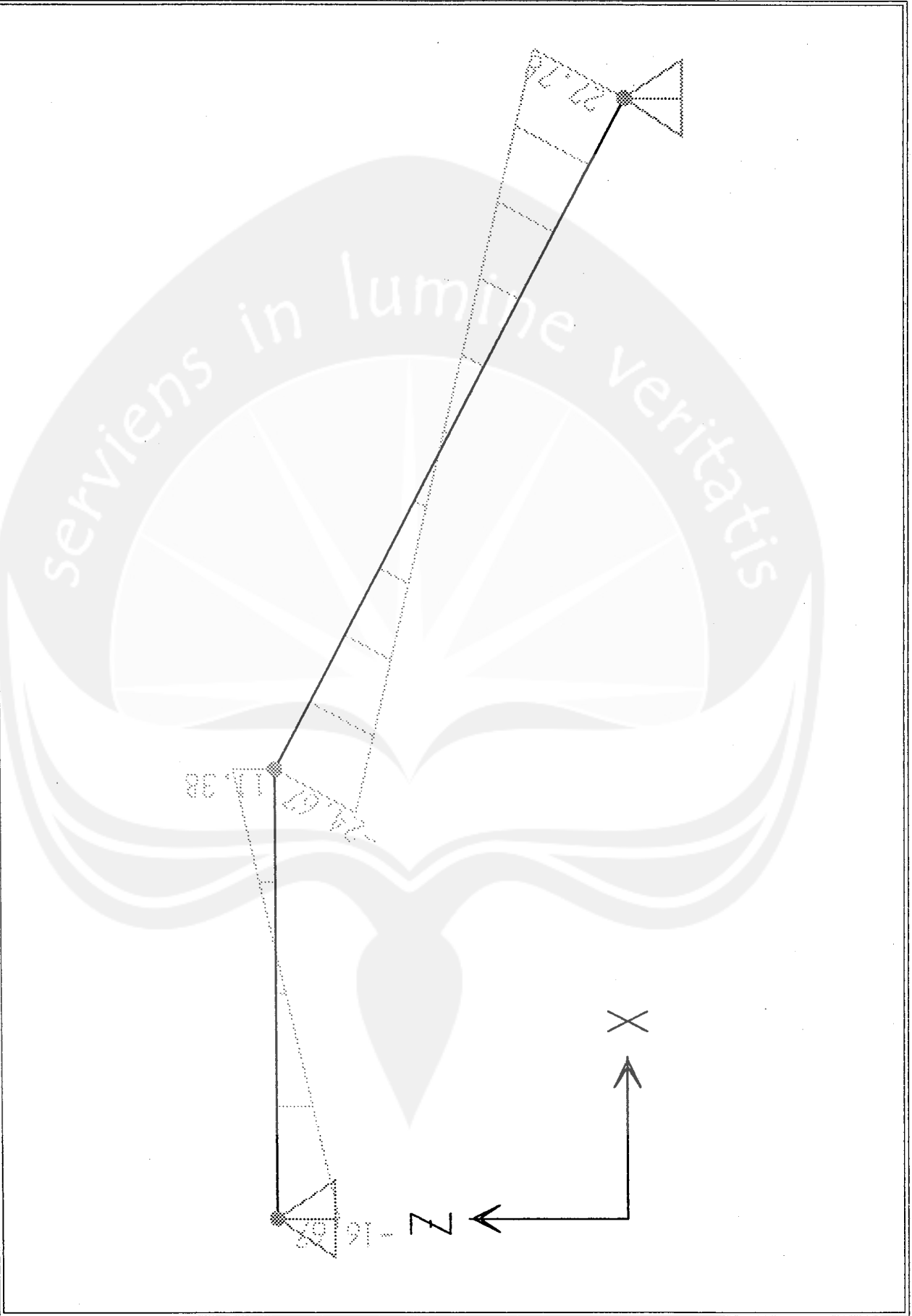
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SAP2000



7/31/05 8:52:58

SAP2000



SAP2000 v7.40 File: PELAT LENGKUNG KN-m Units PAGE 1
7/10/05 19:45:52

UAJY

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	1.0000
LL	LIVE	0.0000

SAP2000 v7.40 File: PELAT LENGKUNG KN-m Units PAGE 2
7/10/05 19:45:52

UAJY

JOINT DATA

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	RESTRAINTS	ANGLE-A	ANGLE-B	ANGLE-C
1	0.00000	0.00000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000
2	0.60000	-1.40000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
3	2.00000	-2.00000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000
4	4.00000	-2.00000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000
5	5.40000	-1.40000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
6	6.00000	0.00000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000

SAP2000 v7.40 File: PELAT LENGKUNG KN-m Units PAGE 3
7/10/05 19:45:52

UAJY

FRAME ELEMENT DATA

FRAME LENGTH	JNT-1	JNT-2	SECTION	ANGLE	RELEASES	SEGMENTS	R1	R2	FACTOR
1.523	1	2	BALOK	0.000	000000	4	0.000	0.000	1.000
1.523	2	3	BALOK	0.000	000000	4	0.000	0.000	1.000
2.000	3	4	BALOK	0.000	000000	4	0.000	0.000	1.000
1.523	4	5	BALOK	0.000	000000	4	0.000	0.000	1.000
1.523	5	6	BALOK	0.000	000000	4	0.000	0.000	1.000

SAP2000 v7.40 File: PELAT LENGKUNG KN-m Units PAGE 4
7/10/05 19:45:52

UAJY

FRAME SPAN DISTRIBUTED LOADS Load Case DL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
3	FORCE	GLOBAL-Z	0.0000	0.0000	0.5000	-5.3200
3	FORCE	GLOBAL-Z	0.5000	-5.3200	1.0000	0.0000
4	FORCE	GLOBAL-Z	0.0000	0.0000	0.6959	-5.3200
4	FORCE	GLOBAL-Z	0.6959	-5.3200	0.9979	0.0000
1	FORCE	GLOBAL-Z	0.0000	0.0000	0.6959	-5.3200
1	FORCE	GLOBAL-Z	0.6959	-5.3200	0.9979	0.0000
2	FORCE	GLOBAL-Z	0.0000	0.0000	0.3020	-5.3200
2	FORCE	GLOBAL-Z	0.3020	-5.3200	0.9979	0.0000
5	FORCE	GLOBAL-Z	0.0000	0.0000	0.3020	-5.3200
5	FORCE	GLOBAL-Z	0.3020	-5.3200	0.9979	0.0000
1	FORCE	GLOBAL-Z	0.0000	-2.5000	1.0000	-2.5000
2	FORCE	GLOBAL-Z	0.0000	-2.5000	1.0000	-2.5000
3	FORCE	GLOBAL-Z	0.0000	-2.5000	1.0000	-2.5000
4	FORCE	GLOBAL-Z	0.0000	-2.5000	1.0000	-2.5000
5	FORCE	GLOBAL-Z	0.0000	-2.5000	1.0000	-2.5000

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UAJY

FRAME SPAN DISTRIBUTED LOADS Load Case LL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
3	FORCE	GLOBAL-Z	0.0000	0.0000	0.5000	-2.5000
3	FORCE	GLOBAL-Z	0.5000	-2.5000	1.0000	0.0000
2	FORCE	GLOBAL-Z	0.0000	0.0000	0.3020	-2.5000
2	FORCE	GLOBAL-Z	0.3020	-2.5000	0.9979	0.0000
5	FORCE	GLOBAL-Z	0.0000	0.0000	0.3020	-2.5000
5	FORCE	GLOBAL-Z	0.3020	-2.5000	0.9979	0.0000
1	FORCE	GLOBAL-Z	0.0000	0.0000	0.6959	-2.5000
1	FORCE	GLOBAL-Z	0.6959	-2.5000	0.9979	0.0000
4	FORCE	GLOBAL-Z	0.0000	0.0000	0.6959	-2.5000
4	FORCE	GLOBAL-Z	0.6959	-2.5000	0.9979	0.0000



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UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD	DL	1.2000	STATIC(DEAD)	COMB1
		LL	1.6000	STATIC(LIVE)	

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UAJY

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	DL	0.0000	0.0000	12.3055	0.0000	0.0000	0.0000
1	LL	0.0000	0.0000	1.9007	0.0000	0.0000	0.0000
1	COMB1	0.0000	0.0000	17.8077	0.0000	0.0000	0.0000
3	DL	0.0000	0.0000	20.2096	0.0000	0.0000	0.0000
3	LL	0.0000	0.0000	3.1491	0.0000	0.0000	0.0000
3	COMB1	0.0000	0.0000	29.2901	0.0000	0.0000	0.0000
4	DL	0.0000	0.0000	20.2193	0.0000	0.0000	0.0000
4	LL	0.0000	0.0000	3.1537	0.0000	0.0000	0.0000
4	COMB1	0.0000	0.0000	29.3091	0.0000	0.0000	0.0000
6	DL	0.0000	0.0000	12.2967	0.0000	0.0000	0.0000
6	LL	0.0000	0.0000	1.8965	0.0000	0.0000	0.0000
6	COMB1	0.0000	0.0000	17.7904	0.0000	0.0000	0.0000

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UAJY

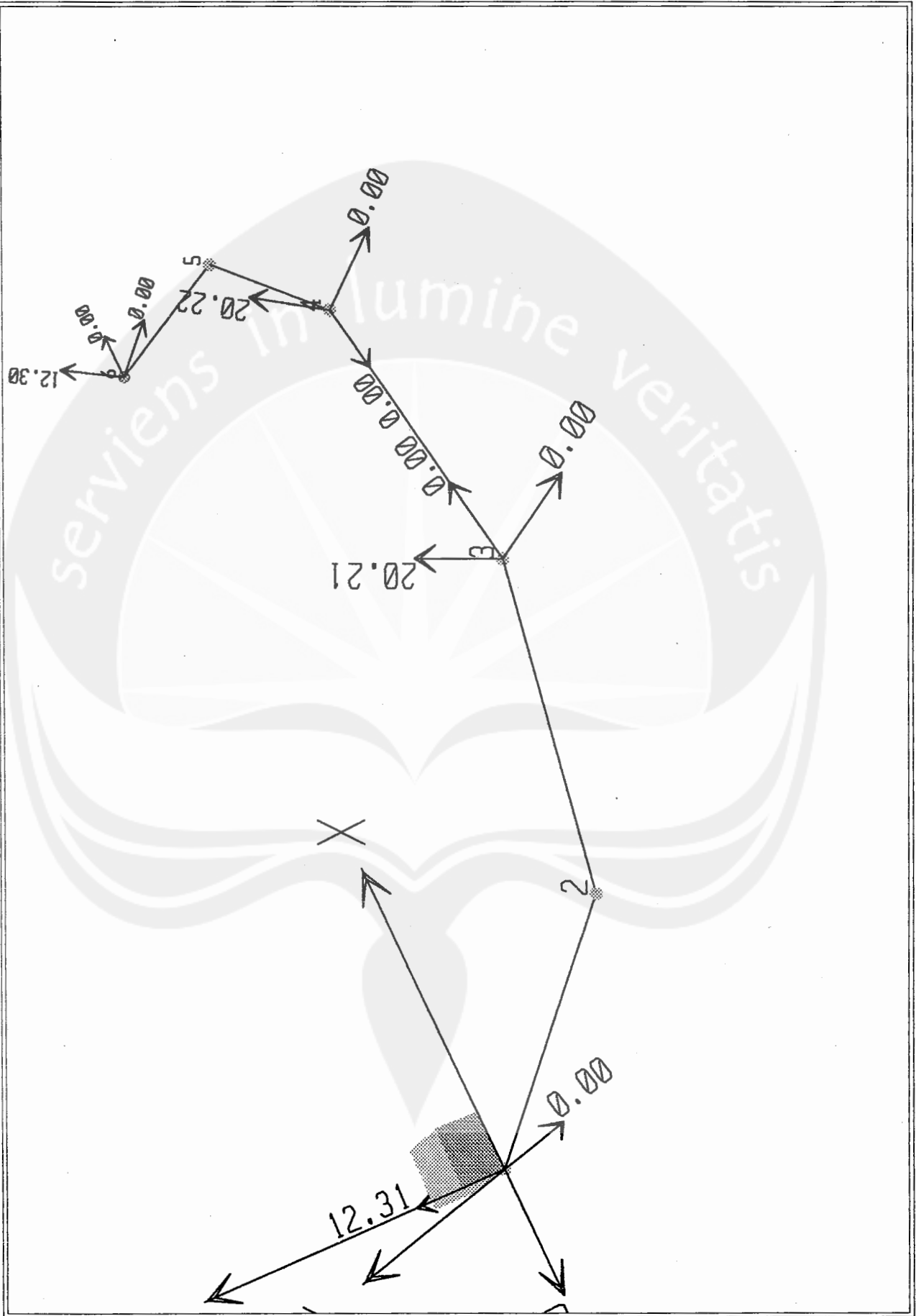
FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
1	DL							
		0.00	0.00	-12.31	0.00	2.07	0.00	-4.82
		3.8E-01	0.00	-9.89	0.00	2.07	0.00	-5.736E-01
		7.6E-01	0.00	-6.75	0.00	2.07	0.00	2.62
		1.14	0.00	-2.94	0.00	2.07	0.00	4.48
		1.52	0.00	-6.773E-02	0.00	2.07	0.00	5.00
1	LL							
		0.00	0.00	-1.90	0.00	3.491E-01	0.00	-8.145E-01
		3.8E-01	0.00	-1.73	0.00	3.491E-01	0.00	-1.125E-01
		7.6E-01	0.00	-1.22	0.00	3.491E-01	0.00	4.594E-01
		1.14	0.00	-3.882E-01	0.00	3.491E-01	0.00	7.715E-01
		1.52	0.00	-6.656E-04	0.00	3.491E-01	0.00	8.205E-01
1	COMB1							
		0.00	0.00	-17.81	0.00	3.04	0.00	-7.09
		3.8E-01	0.00	-14.64	0.00	3.04	0.00	-8.683E-01
		7.6E-01	0.00	-10.05	0.00	3.04	0.00	3.88
		1.14	0.00	-4.15	0.00	3.04	0.00	6.61
		1.52	0.00	-8.235E-02	0.00	3.04	0.00	7.31
2	DL							
		0.00	0.00	-6.773E-02	0.00	2.098E-01	0.00	4.12
		3.8E-01	0.00	2.82	0.00	2.098E-01	0.00	3.65
		7.6E-01	0.00	6.63	0.00	2.098E-01	0.00	1.83
		1.14	0.00	9.76	0.00	2.098E-01	0.00	-1.31
		1.52	0.00	12.17	0.00	2.098E-01	0.00	-5.51
2	LL							
		0.00	0.00	-6.656E-04	0.00	3.442E-02	0.00	6.860E-01
		3.8E-01	0.00	3.934E-01	0.00	3.442E-02	0.00	6.362E-01
		7.6E-01	0.00	1.22	0.00	3.442E-02	0.00	3.220E-01
		1.14	0.00	1.73	0.00	3.442E-02	0.00	-2.509E-01
		1.52	0.00	1.90	0.00	3.442E-02	0.00	-9.530E-01
2	COMB1							
		0.00	0.00	-8.235E-02	0.00	3.069E-01	0.00	6.04
		3.8E-01	0.00	4.01	0.00	3.069E-01	0.00	5.40
		7.6E-01	0.00	9.91	0.00	3.069E-01	0.00	2.72

	1.14	0.00	14.49	0.00	3.069E-01	0.00	-1.97
	1.52	0.00	17.64	0.00	3.069E-01	0.00	-8.13
3 DL	0.00	0.00	-8.04	0.00	0.00	0.00	-4.98
	5.0E-01	0.00	-4.68	0.00	0.00	0.00	-1.74
	1.0E+00	0.00	4.675E-04	0.00	0.00	0.00	-5.175E-01
	1.50	0.00	4.69	0.00	0.00	0.00	-1.74
	2.00	0.00	8.04	0.00	0.00	0.00	-4.98
3 LL	0.00	0.00	-1.25	0.00	0.00	0.00	-8.624E-01
	5.0E-01	0.00	-9.373E-01	0.00	0.00	0.00	-2.896E-01
	1.0E+00	0.00	2.197E-04	0.00	0.00	0.00	-2.928E-02
	1.50	0.00	9.377E-01	0.00	0.00	0.00	-2.898E-01
	2.00	0.00	1.25	0.00	0.00	0.00	-8.628E-01
3 COMB1	0.00	0.00	-11.65	0.00	0.00	0.00	-7.36
	5.0E-01	0.00	-7.12	0.00	0.00	0.00	-2.56
	1.0E+00	0.00	9.126E-04	0.00	0.00	0.00	-6.679E-01
	1.50	0.00	7.12	0.00	0.00	0.00	-2.56
	2.00	0.00	11.65	0.00	0.00	0.00	-7.36
4 DL	0.00	0.00	-12.18	0.00	-2.099E-01	0.00	-5.51
	3.8E-01	0.00	-9.77	0.00	-2.099E-01	0.00	-1.31
	7.6E-01	0.00	-6.63	0.00	-2.099E-01	0.00	1.84
	1.14	0.00	-2.81	0.00	-2.099E-01	0.00	3.65
	1.52	0.00	5.889E-02	0.00	-2.099E-01	0.00	4.12
4 LL	0.00	0.00	-1.90	0.00	-3.443E-02	0.00	-9.535E-01
	3.8E-01	0.00	-1.73	0.00	-3.443E-02	0.00	-2.504E-01
	7.6E-01	0.00	-1.22	0.00	-3.443E-02	0.00	3.225E-01
	1.14	0.00	-3.910E-01	0.00	-3.443E-02	0.00	6.357E-01
	1.52	0.00	-3.489E-03	0.00	-3.443E-02	0.00	6.858E-01
4 COMB1	0.00	0.00	-17.66	0.00	-3.069E-01	0.00	-8.14
	3.8E-01	0.00	-14.49	0.00	-3.069E-01	0.00	-1.97
	7.6E-01	0.00	-9.90	0.00	-3.069E-01	0.00	2.72
	1.14	0.00	-4.00	0.00	-3.069E-01	0.00	5.39
	1.52	0.00	6.509E-02	0.00	-3.069E-01	0.00	6.04
5 DL	0.00	0.00	5.889E-02	0.00	-2.07	0.00	5.00
	3.8E-01	0.00	2.95	0.00	-2.07	0.00	4.48
	7.6E-01	0.00	6.76	0.00	-2.07	0.00	2.62
	1.14	0.00	9.89	0.00	-2.07	0.00	-5.750E-01
	1.52	0.00	12.30	0.00	-2.07	0.00	-4.82
5 LL	0.00	0.00	-3.489E-03	0.00	-3.489E-01	0.00	8.206E-01
	3.8E-01	0.00	3.905E-01	0.00	-3.489E-01	0.00	7.719E-01
	7.6E-01	0.00	1.22	0.00	-3.489E-01	0.00	4.588E-01
	1.14	0.00	1.73	0.00	-3.489E-01	0.00	-1.131E-01
	1.52	0.00	1.90	0.00	-3.489E-01	0.00	-8.141E-01
5 COMB1	0.00	0.00	6.509E-02	0.00	-3.04	0.00	7.31
	3.8E-01	0.00	4.16	0.00	-3.04	0.00	6.61
	7.6E-01	0.00	10.06	0.00	-3.04	0.00	3.87
	1.14	0.00	14.63	0.00	-3.04	0.00	-8.709E-01
	1.52	0.00	17.79	0.00	-3.04	0.00	-7.09

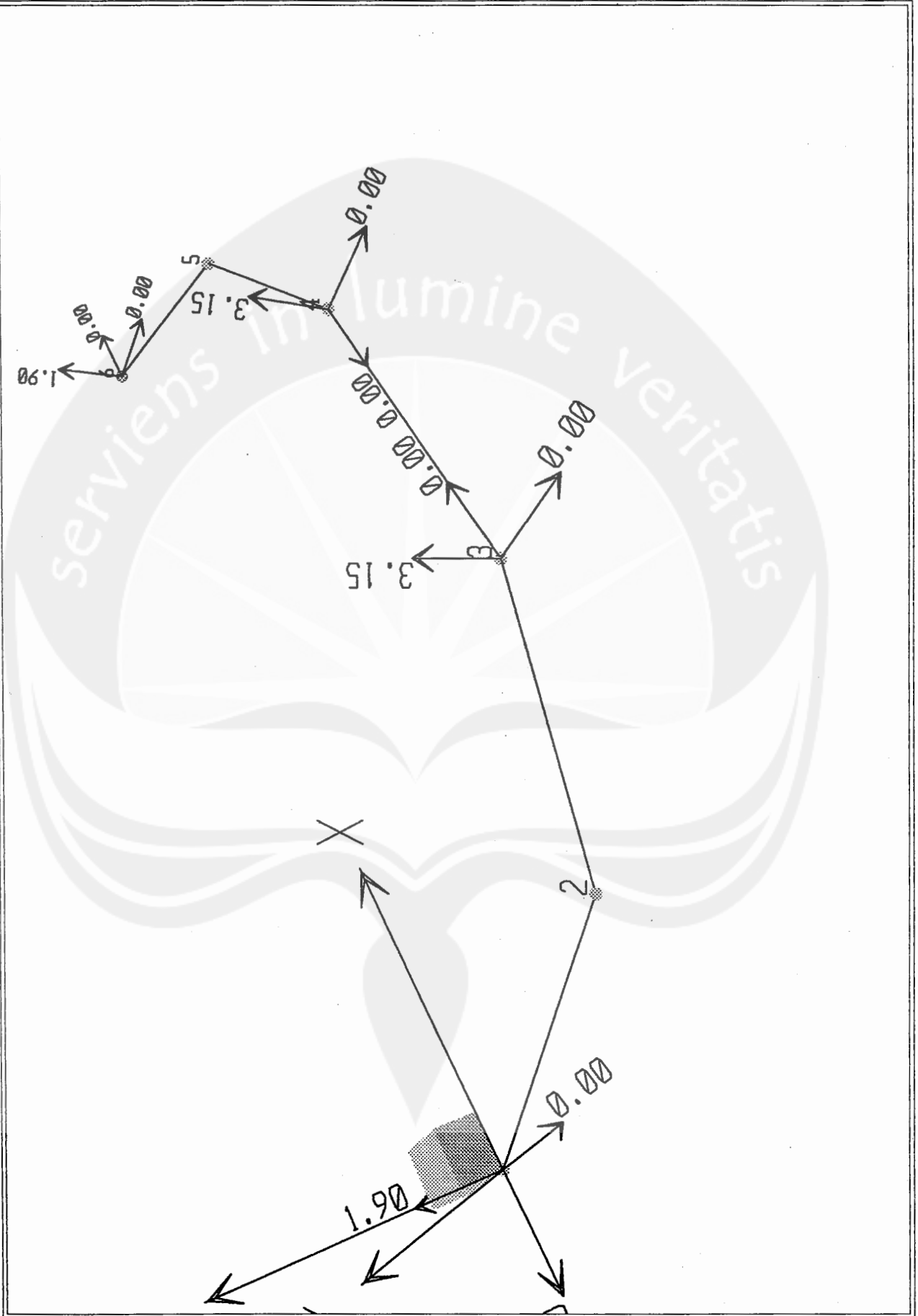
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UAJY

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	0.0000
LL	LIVE	0.0000
HUJAN	OTHER	0.0000
BS	DEAD	0.0000
ANGIN	WIND	0.0000
EX	QUAKE	0.0000
EY	QUAKE	0.0000

RESPONSE SPECTRUM CASES

SPECTRUM CASE	EXCITATION ANGLE	MODAL COMBO	DIRECTION COMBO
SNI2002	0.0000	CQC	SRSS

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UAJY

JOINT MASS DATA

JOINT	M-U1	M-U2	M-U3	M-R1	M-R2	M-R3
323	1028.360	1028.360	0.000	0.000	0.000	102890.880
325	958.790	958.790	0.000	0.000	0.000	106224.113
326	973.520	973.520	0.000	0.000	0.000	97128.869
329	1210.160	1210.160	0.000	0.000	0.000	98945.763
331	106.550	106.550	0.000	0.000	0.000	914.633

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UAJY

FRAME ELEMENT DATA

FRAME	JNT-1	JNT-2	SECTION	ANGLE	RELEASES	SEGMENTS	R1	R2	FACTOR	LENGTH
46	40	52	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
68	52	62	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
70	54	55	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
71	55	56	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
72	56	57	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
73	57	58	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
74	58	59	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
75	59	60	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
76	60	61	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
77	61	62	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
78	62	63	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
87	62	72	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
105	72	81	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
120	81	89	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
180	105	117	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
202	117	133	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
208	125	126	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
209	126	127	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
210	127	128	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
211	128	129	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
212	129	130	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
213	130	131	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
214	131	132	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
215	132	133	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
216	133	134	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
225	133	143	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
243	143	152	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
258	152	160	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
316	176	188	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
337	188	197	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
338	189	190	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
339	190	191	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
340	191	192	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
341	192	193	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
342	193	194	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
343	194	195	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
344	195	196	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
345	196	197	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
354	197	206	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000

370	206	214	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
385	214	222	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
424	300	315	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
428	315	302	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
443	238	250	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
464	250	259	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
465	251	252	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
466	252	253	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
467	253	254	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
468	254	255	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
469	255	256	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
470	256	257	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
471	257	258	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
472	258	259	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
481	259	268	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
497	268	276	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
512	276	284	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
549	291	292	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
561	302	316	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
562	316	304	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
563	304	317	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
564	317	306	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
565	306	318	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
566	318	310	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
596	320	300	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
599	298	322	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
600	322	320	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000

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UAJY

MATERIAL PROPERTY DATA

MAT LABEL	MODULUS OF ELASTICITY	POISSON'S RATIO	THERMAL COEFF	WEIGHT PER UNIT VOL	MASS PER UNIT VOL
STEEL	199900000	0.300	1.170E-05	76.820	7.827
CONC	25742960.2	0.200	9.900E-06	24.000	2.401
OTHER	24821128.4	0.200	9.900E-06	23.562	2.401

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UAJY

MATERIAL DESIGN DATA

MAT LABEL	DESIGN CODE	STEEL FY	CONCRETE FC	REBAR FY	CONCRETE FCS	REBAR FYS
STEEL	S	240000.000				
CONC	C		30000.000	400000.000	20000.000	240000.000
OTHER	N					

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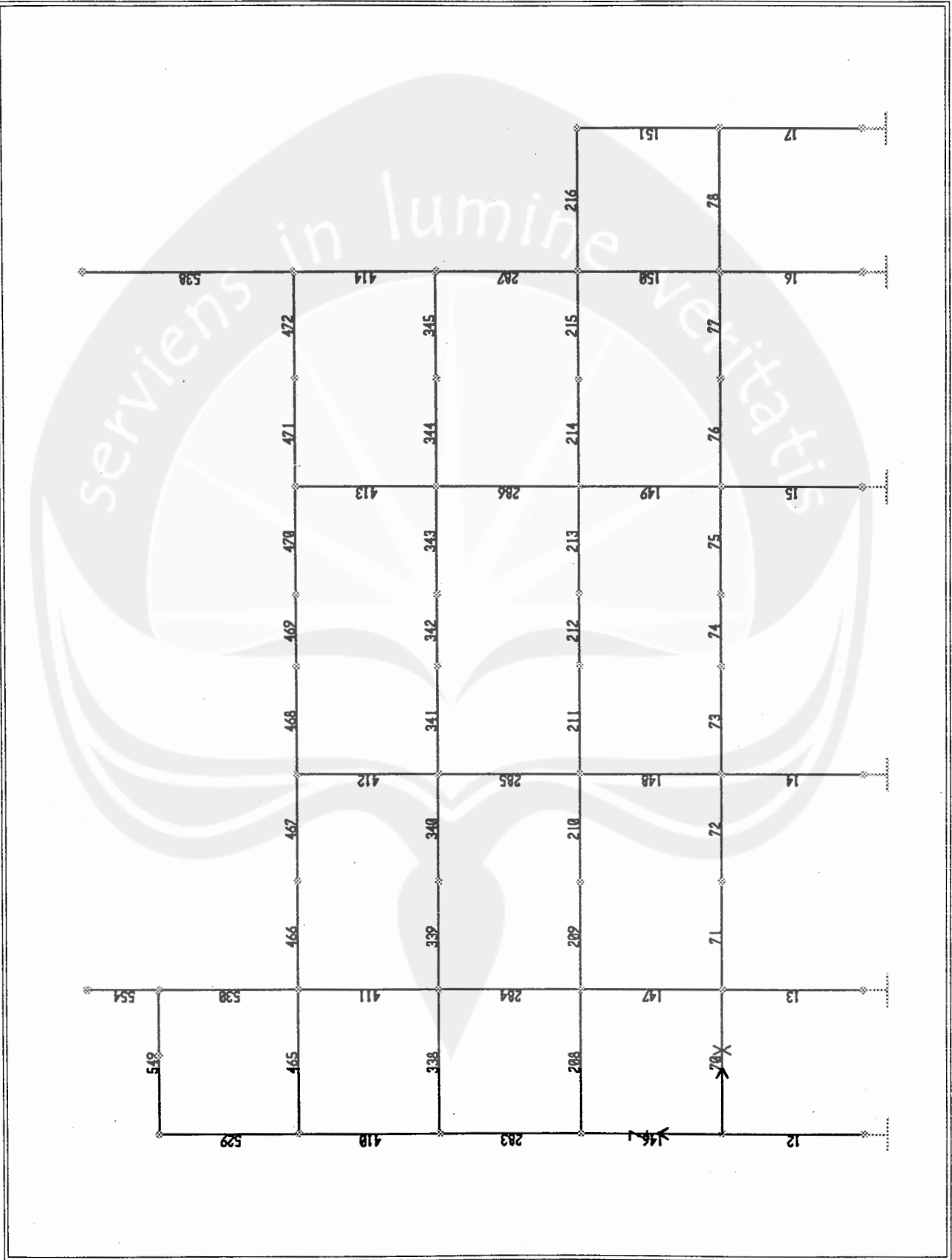
UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	MAT LABEL	SECTION TYPE	DEPTH	FLANGE WIDTH TOP	FLANGE THICK TOP	WEB THICK	FLANGE WIDTH BOTTOM	FLANGE THICK BOTTOM
B4X6	CONC		0.600	0.400	0.000	0.000	0.000	0.000
B3X5	CONC		0.500	0.300	0.000	0.000	0.000	0.000
B25X40	CONC		0.400	0.250	0.000	0.000	0.000	0.000
B4X8	CONC		0.800	0.400	0.000	0.000	0.000	0.000
K70X70	CONC		0.700	0.700	0.000	0.000	0.000	0.000
KL70	CONC		0.700	0.700	0.000	0.000	0.000	0.000
K80X80	CONC		0.800	0.800	0.000	0.000	0.000	0.000
KL80	CONC		0.800	0.800	0.000	0.000	0.000	0.000
B4X7	CONC		0.700	0.400	0.000	0.000	0.000	0.000

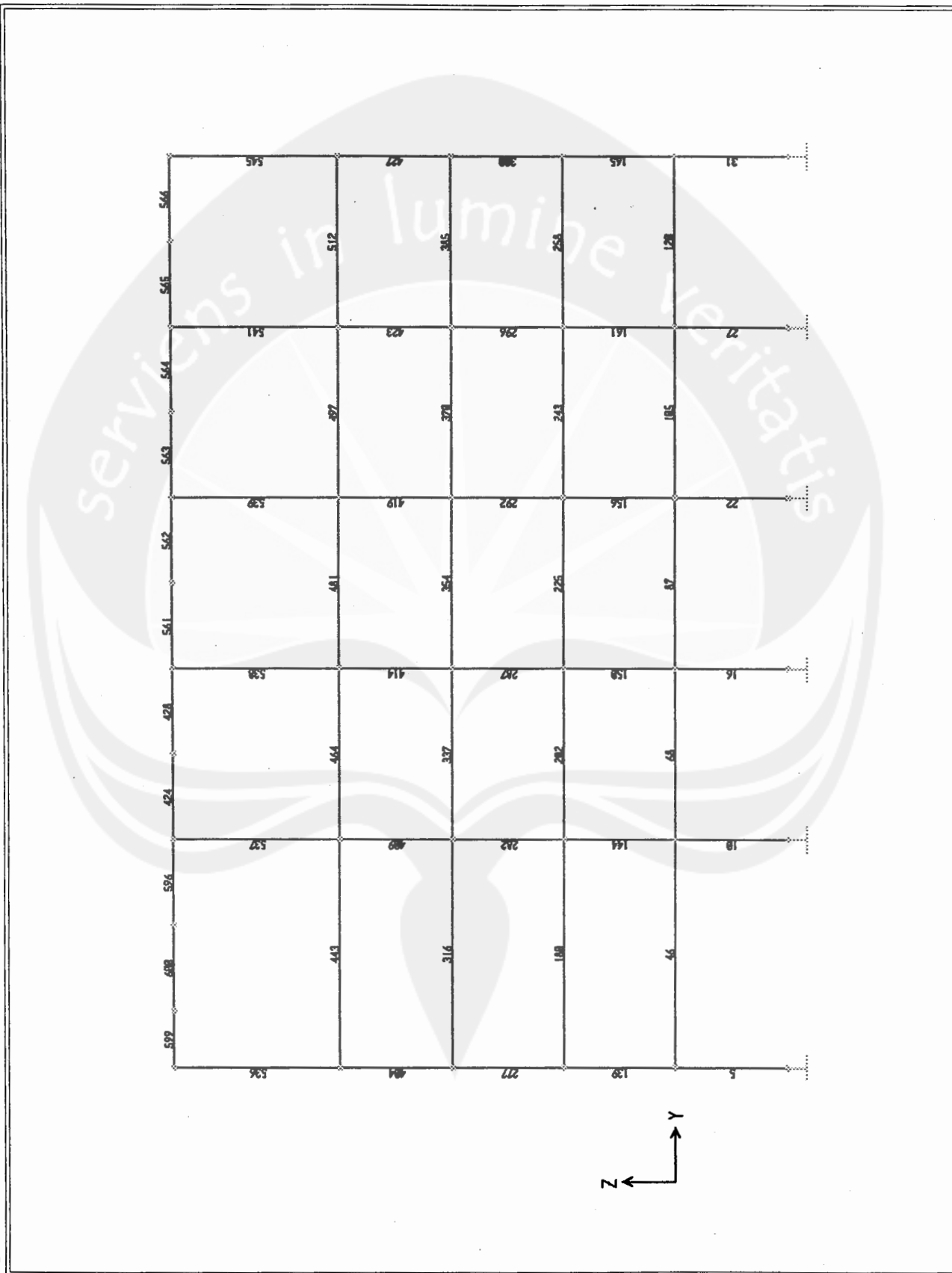
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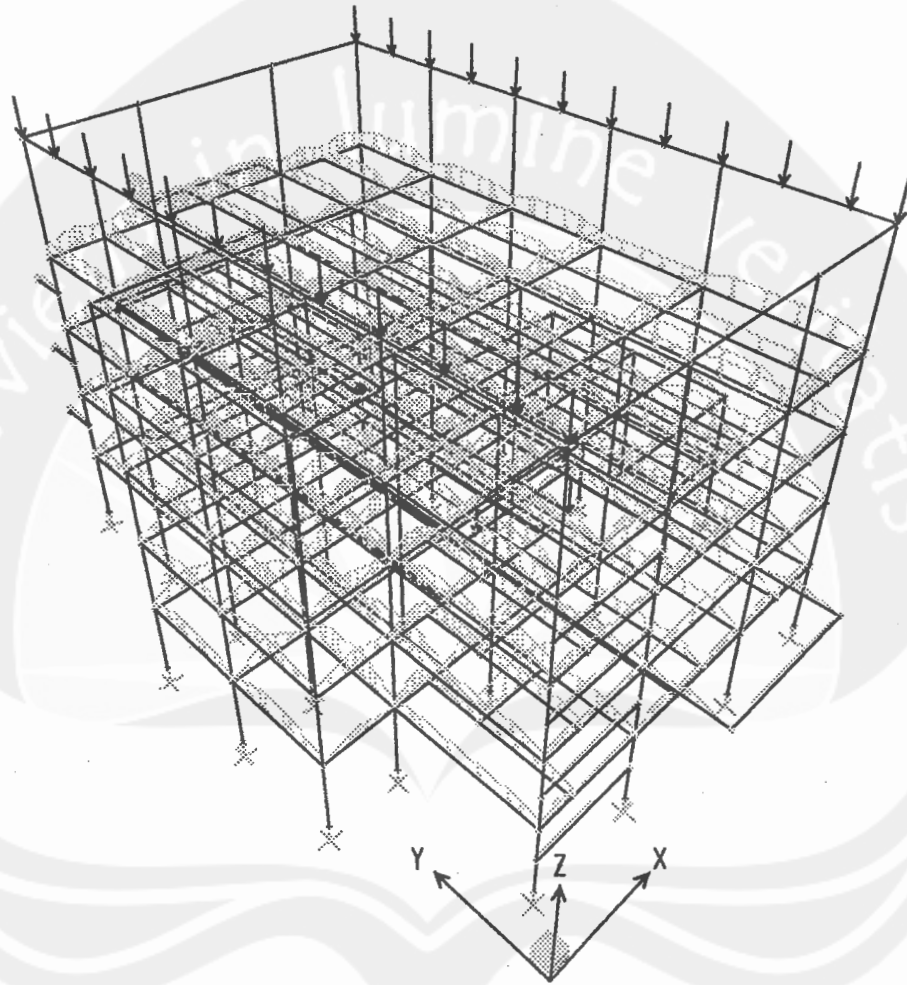


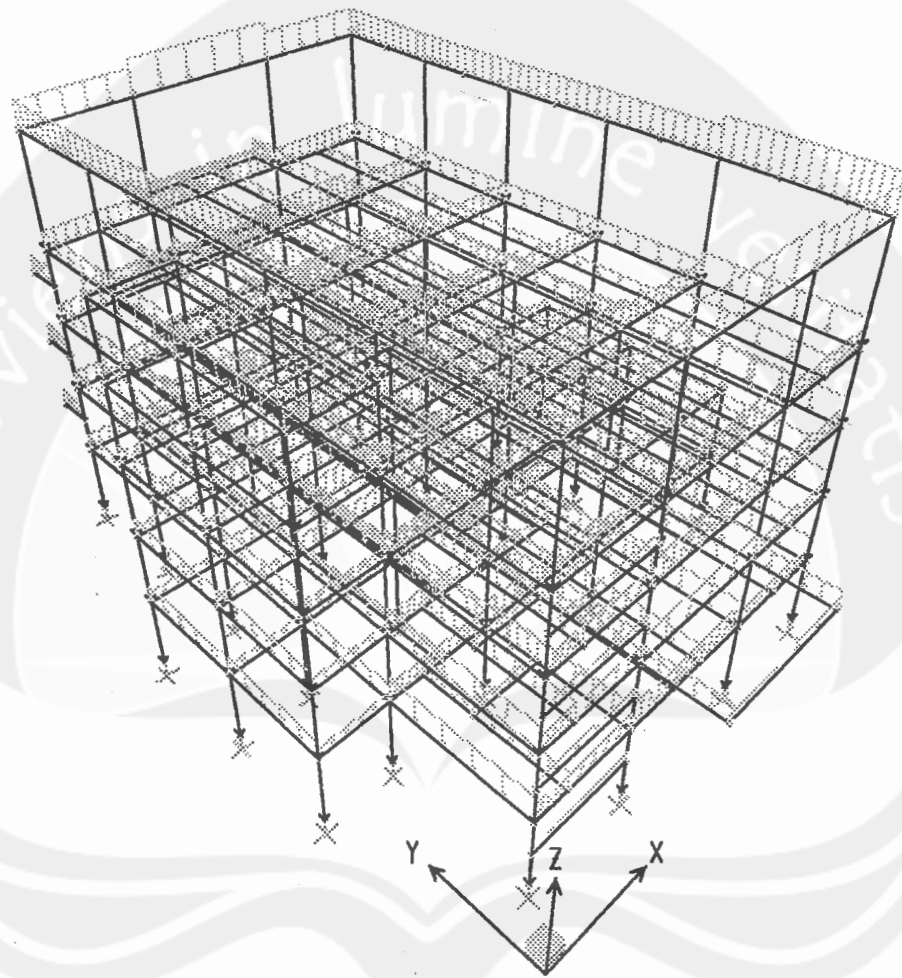
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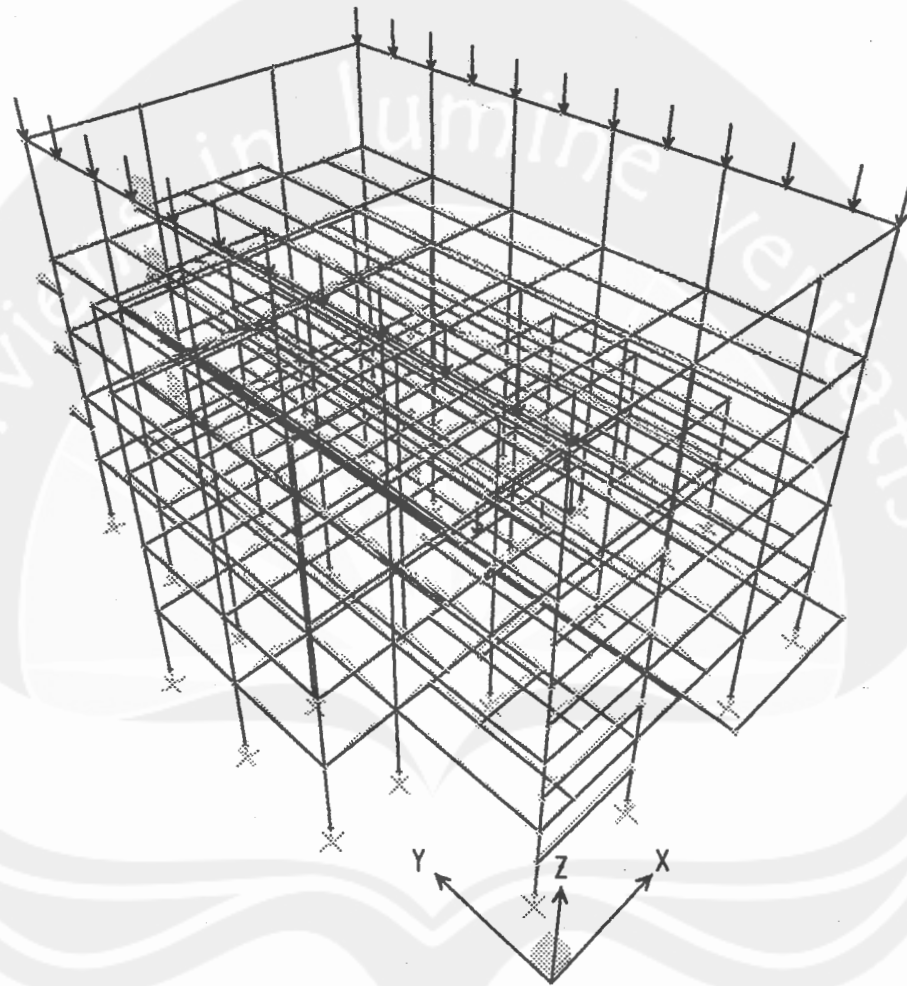
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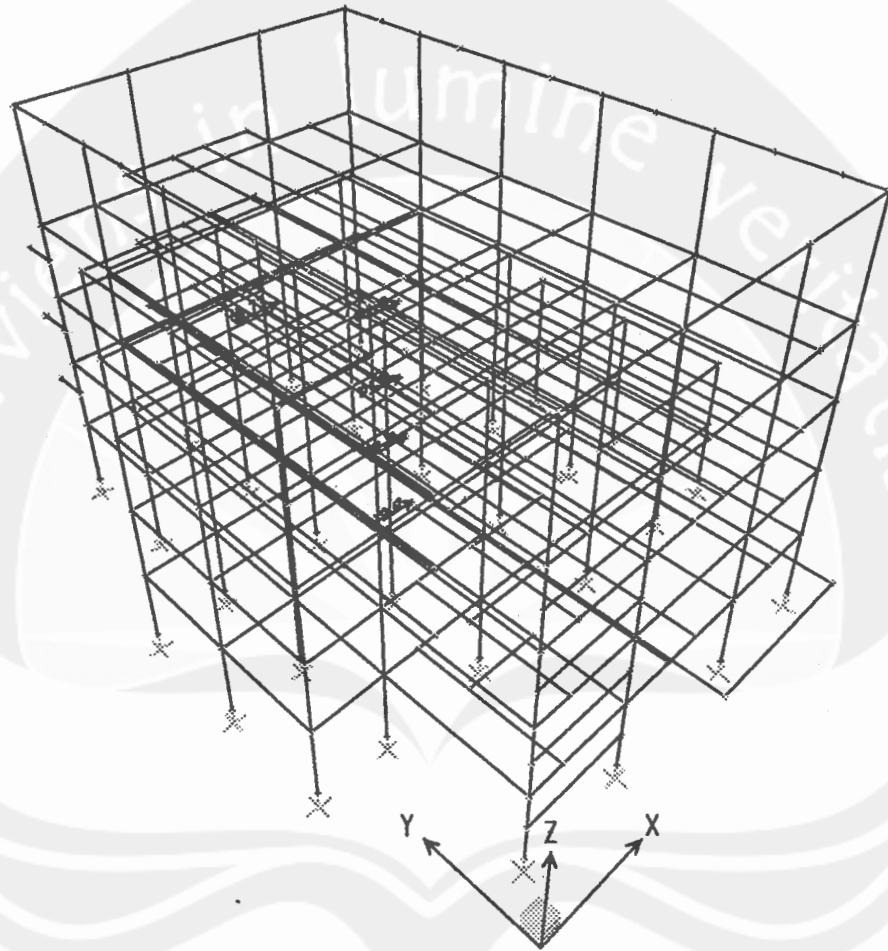


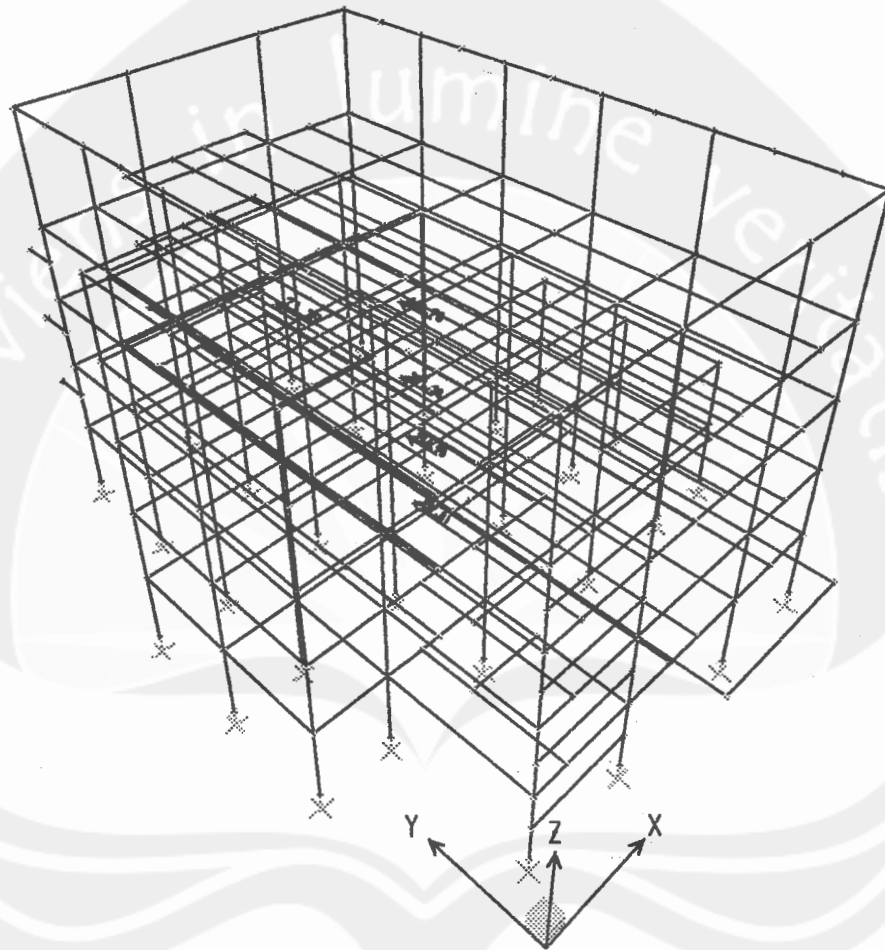
SAP2000 v7.40 - File:TA lengkap b gempa atap baja - Y-Z Plane @ X=24 - KN-m Units

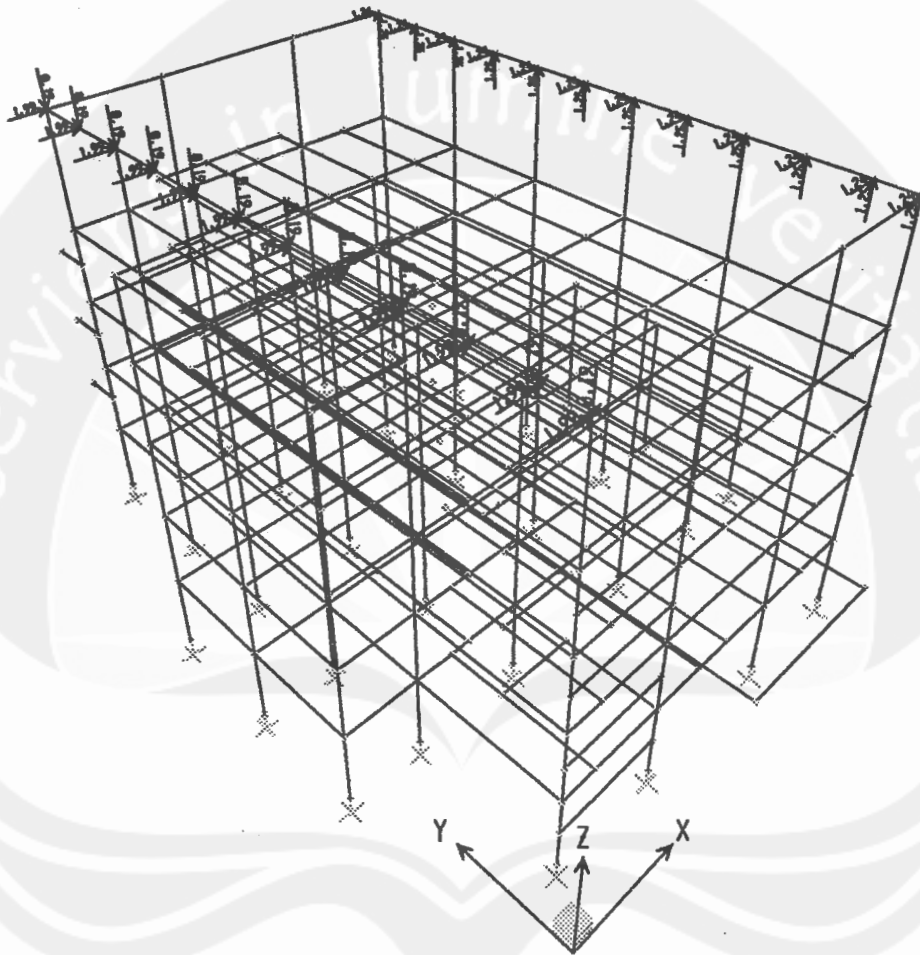












SAP2000 v7.40 File: TA LENGKAP B GEMPA ATAP BETON KN-m Units PAGE 1
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UAJY

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	0.0000
LL	LIVE	0.0000
HUJAN	OTHER	0.0000
BS	DEAD	0.0000
ANGIN	WIND	0.0000
EX	QUAKE	0.0000
EY	QUAKE	0.0000

RESPONSE SPECTRUM CASES

SPECTRUM CASE	EXCITATION ANGLE	MODAL COMBO	DIRECTION COMBO
SNI2002	0.0000	CQC	SRSS

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UAJY

JOINT MASS DATA

JOINT	M-U1	M-U2	M-U3	M-R1	M-R2	M-R3
323	1028.360	1028.360	0.000	0.000	0.000	102890.880
325	958.790	958.790	0.000	0.000	0.000	106224.113
326	973.520	973.520	0.000	0.000	0.000	97128.869
329	1290.503	1290.503	0.000	0.000	0.000	98945.763
331	127.692	127.692	0.000	0.000	0.000	914.633

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UAJY

FRAME ELEMENT DATA

FRAME	JNT-1	JNT-2	SECTION	ANGLE	RELEASES	SEGMENTS	R1	R2	FACTOR	LENGTH
46	40	52	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
68	52	62	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
70	54	55	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
71	55	56	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
72	56	57	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
73	57	58	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
74	58	59	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
75	59	60	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
76	60	61	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
77	61	62	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
78	62	63	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
87	62	72	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
105	72	81	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
120	81	89	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
180	105	117	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
202	117	133	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
208	125	126	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
209	126	127	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
210	127	128	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
211	128	129	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
212	129	130	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
213	130	131	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
214	131	132	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
215	132	133	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
216	133	134	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
225	133	143	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
243	143	152	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
258	152	160	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
316	176	188	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
337	188	197	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
338	189	190	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
339	190	191	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
340	191	192	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
341	192	193	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000

342	193	194	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
343	194	195	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
344	195	196	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
345	196	197	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
354	197	206	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
370	206	214	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
385	214	222	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
424	300	315	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
428	315	302	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
443	238	250	B4X8	0.000	000000	4	0.000	0.000	1.000	8.000
464	250	259	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
465	251	252	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
466	252	253	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
467	253	254	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
468	254	255	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
469	255	256	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
470	256	257	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
471	257	258	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
472	258	259	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
481	259	268	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
497	268	276	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
512	276	284	B4X6	0.000	000000	4	0.000	0.000	1.000	6.000
549	291	292	B3X5	0.000	000000	4	0.000	0.000	1.000	4.000
561	302	316	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
562	316	304	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
563	304	317	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
564	317	306	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
565	306	318	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
566	318	310	B4X6	0.000	000000	4	0.000	0.000	1.000	3.000
596	320	300	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000
599	298	322	B4X8	0.000	000000	4	0.000	0.000	1.000	2.000
600	322	320	B4X8	0.000	000000	4	0.000	0.000	1.000	3.000

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UAJY

MATERIAL PROPERTY DATA

MAT LABEL	MODULUS OF ELASTICITY	POISSON'S RATIO	THERMAL COEFF	WEIGHT PER UNIT VOL	MASS PER UNIT VOL
STEEL	199900000	0.300	1.170E-05	76.820	7.827
CONC	25742960.2	0.200	9.900E-06	24.000	2.401
OTHER	24821128.4	0.200	9.900E-06	23.562	2.401

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UAJY

MATERIAL DESIGN DATA

MAT LABEL	DESIGN CODE	STEEL FY	CONCRETE FC	REBAR FY	CONCRETE FCS	REBAR FYS
STEEL	S	240000.000				
CONC	C		30000.000	400000.000	20000.000	240000.000
OTHER	N					

SAP2000 v7.40 File: TA LENGKAP B GEMPA ATAP BETON KN-m Units PAGE 8
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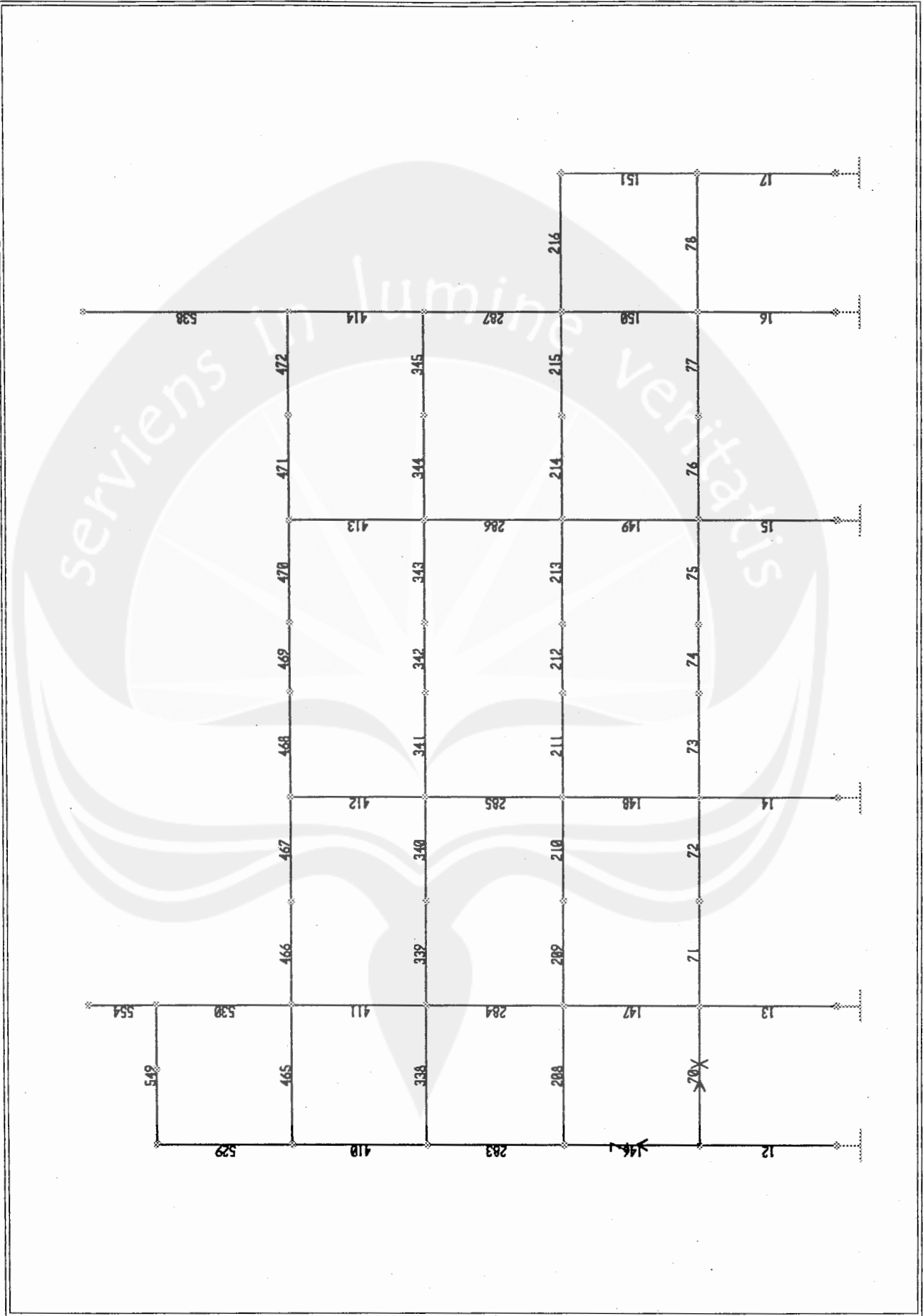
UAJY

FRAME SECTION PROPERTY DATA

SECTION LABEL	MAT LABEL	SECTION TYPE	DEPTH	FLANGE WIDTH	FLANGE THICK TOP	WEB THICK	FLANGE WIDTH BOTTOM	FLANGE THICK BOTTOM
B4X6	CONC		0.600	0.400	0.000	0.000	0.000	0.000
B3X5	CONC		0.500	0.300	0.000	0.000	0.000	0.000
B4X8	CONC		0.800	0.400	0.000	0.000	0.000	0.000
K70X70	CONC		0.700	0.700	0.000	0.000	0.000	0.000
KL70	CONC		0.700	0.700	0.000	0.000	0.000	0.000
K80X80	CONC		0.800	0.800	0.000	0.000	0.000	0.000
KL80	CONC		0.800	0.800	0.000	0.000	0.000	0.000
B4X7	CONC		0.700	0.400	0.000	0.000	0.000	0.000

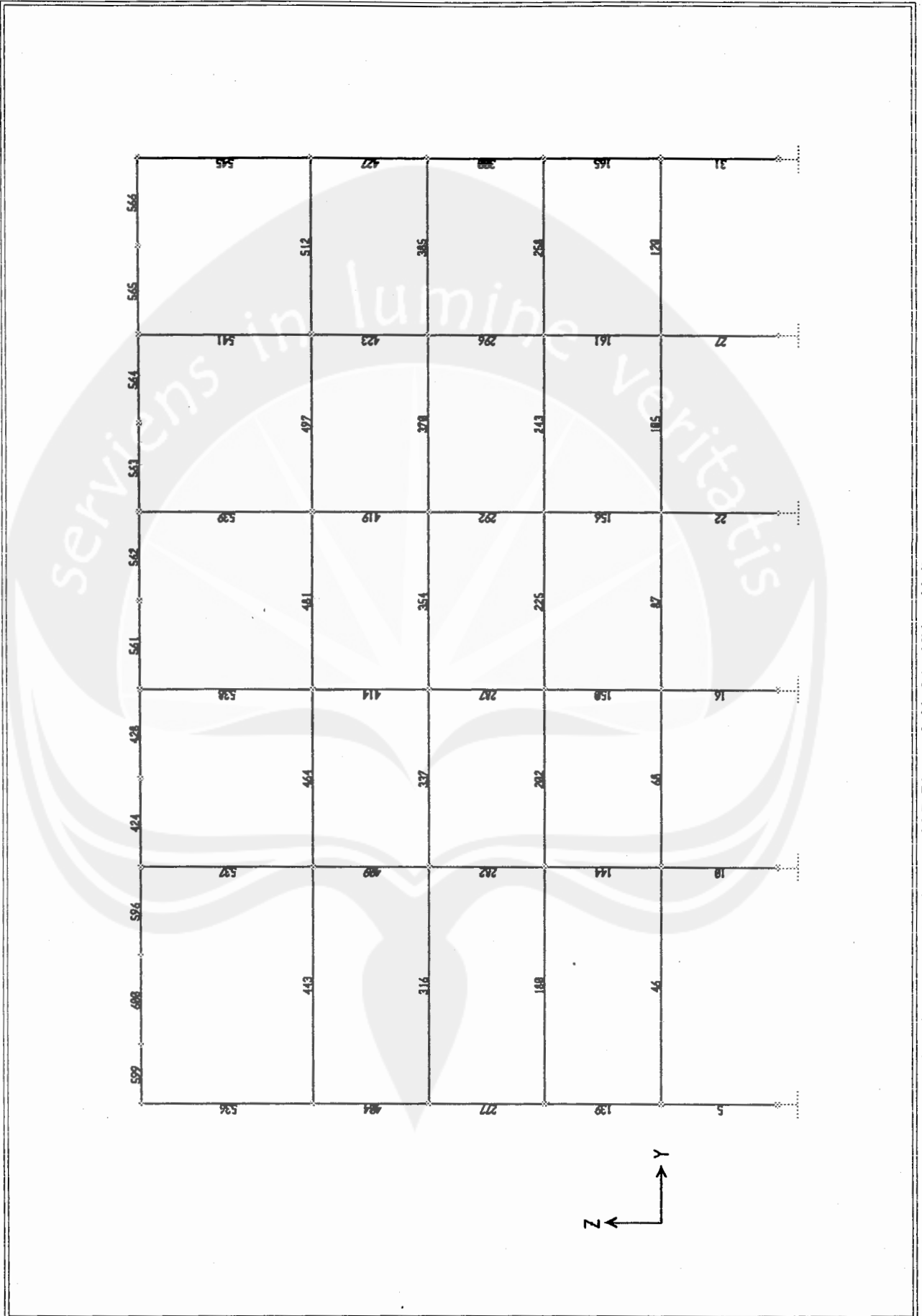
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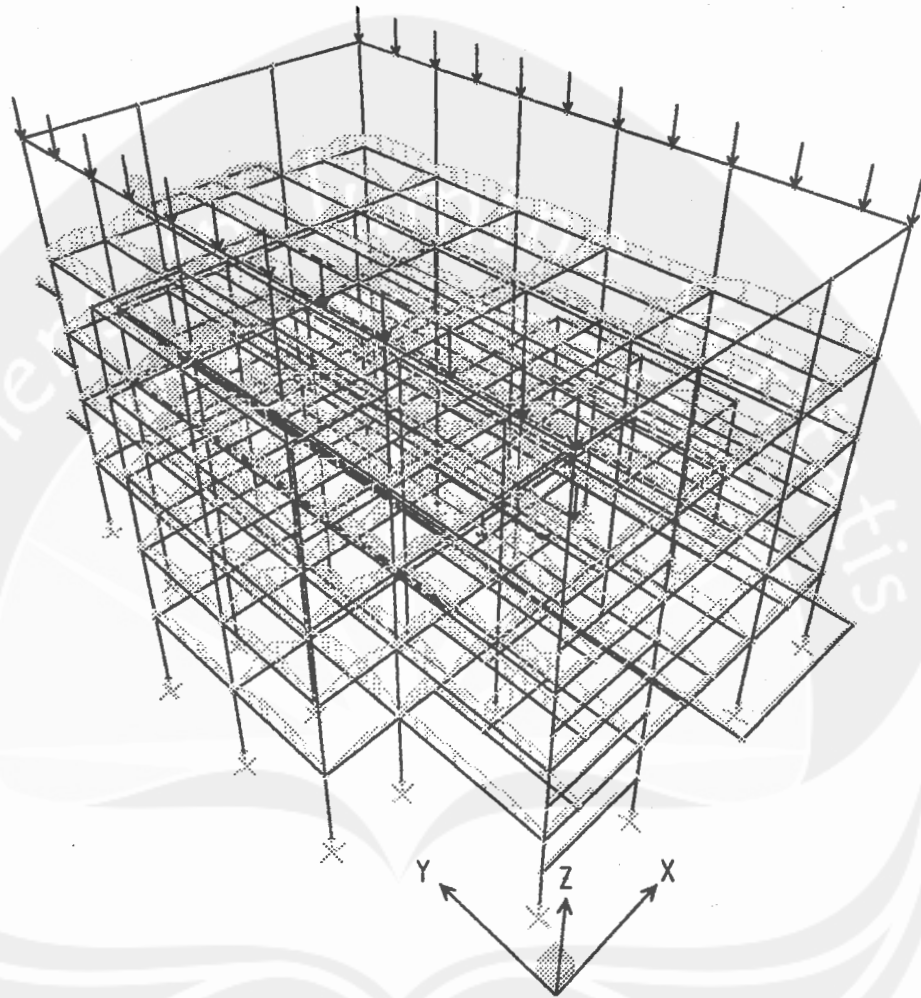
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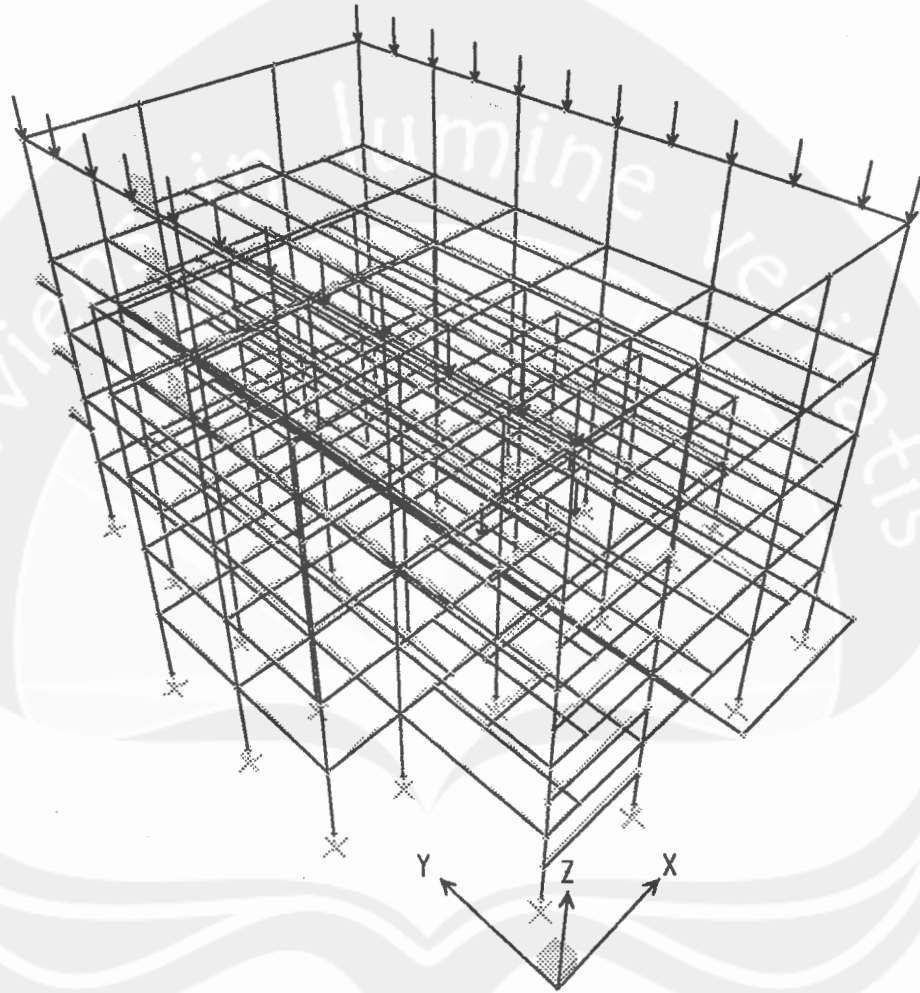
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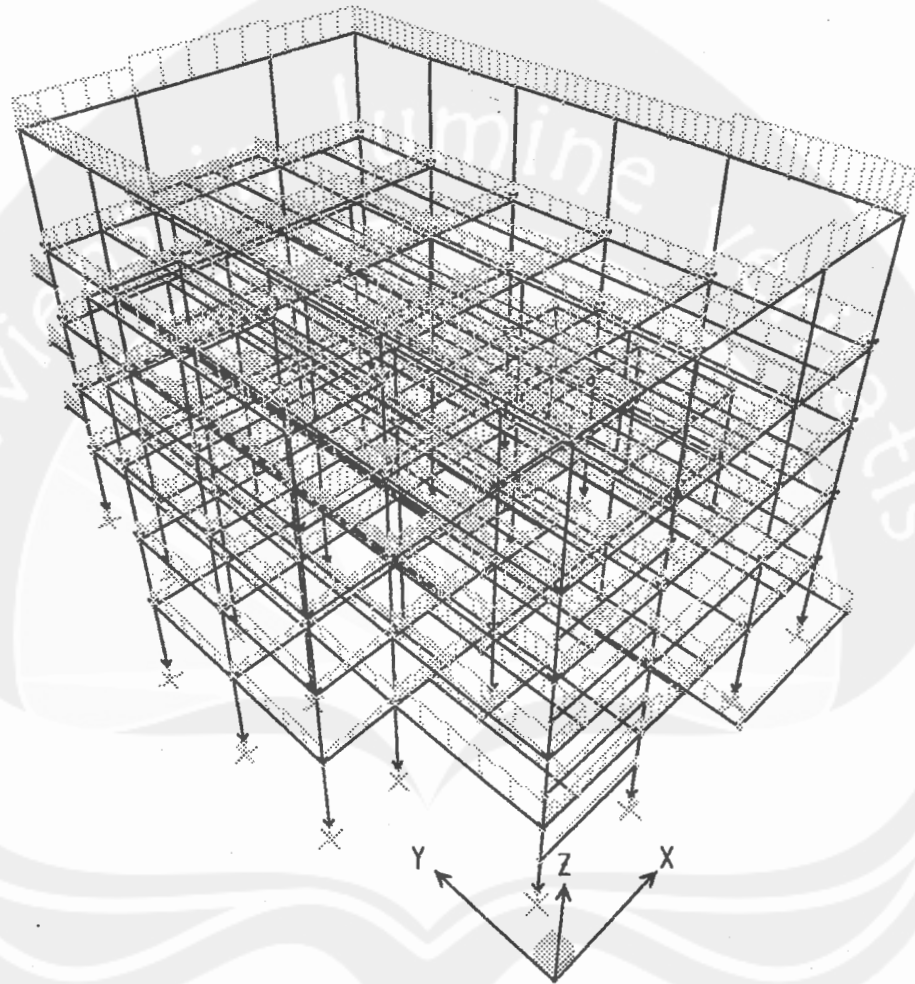
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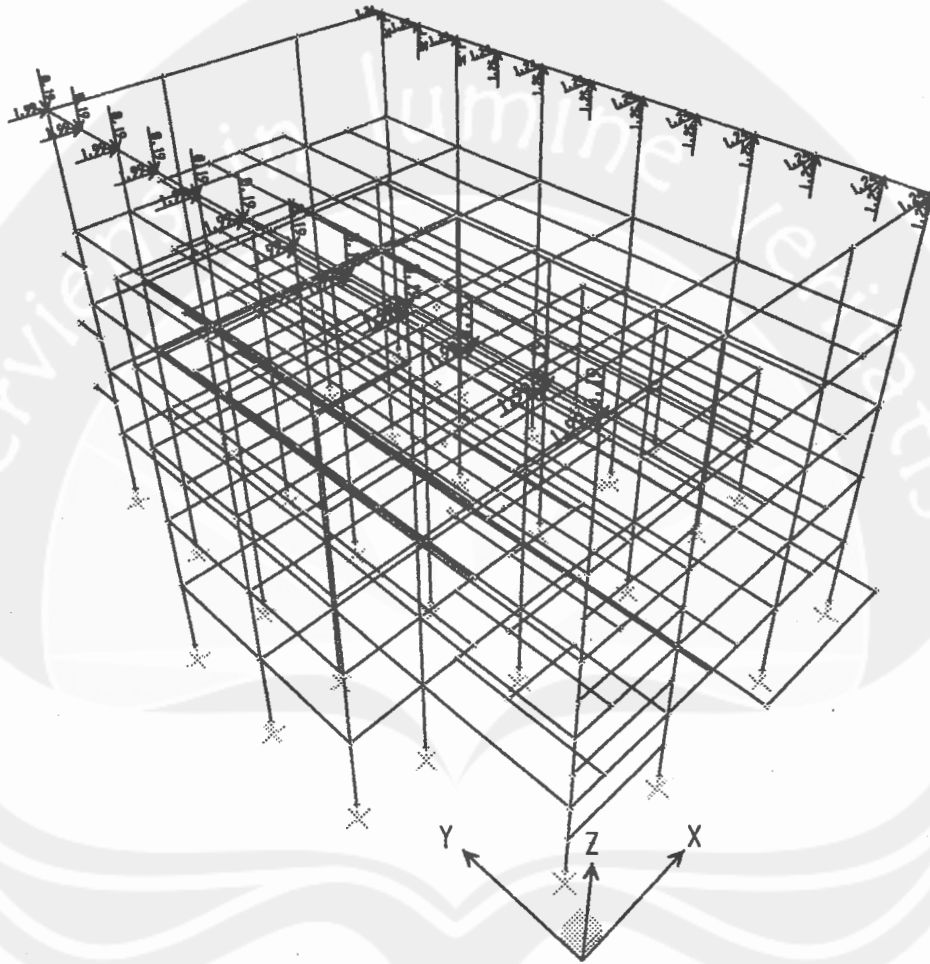


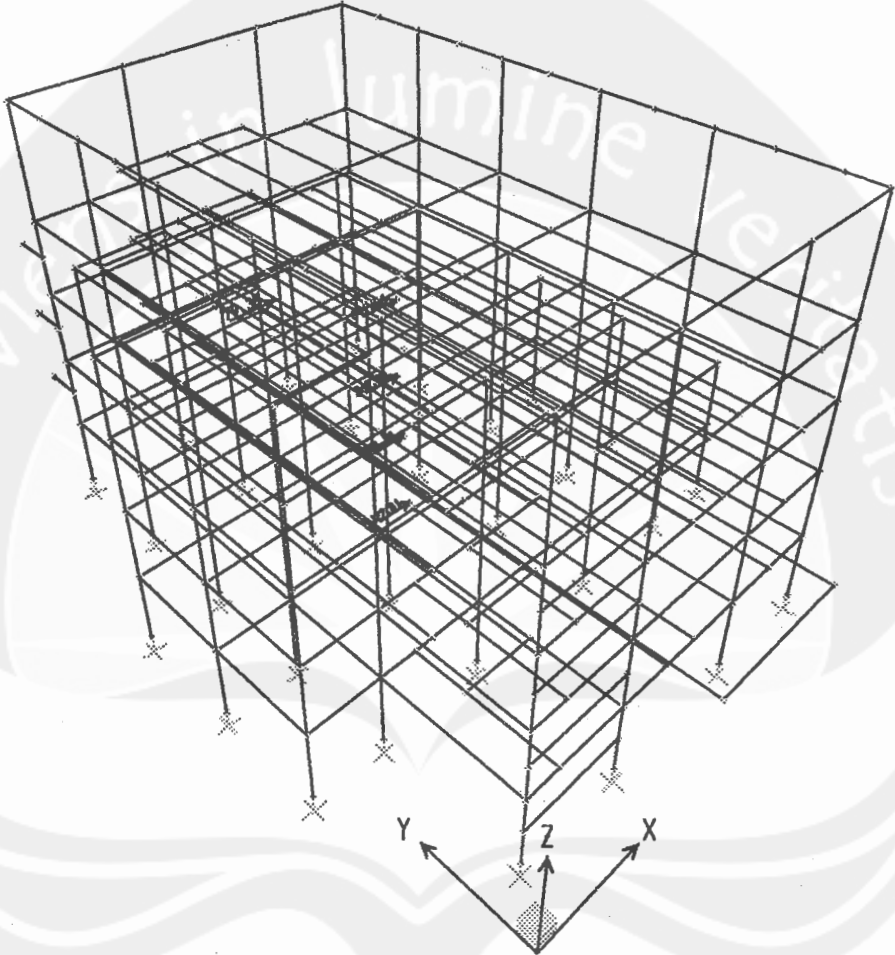


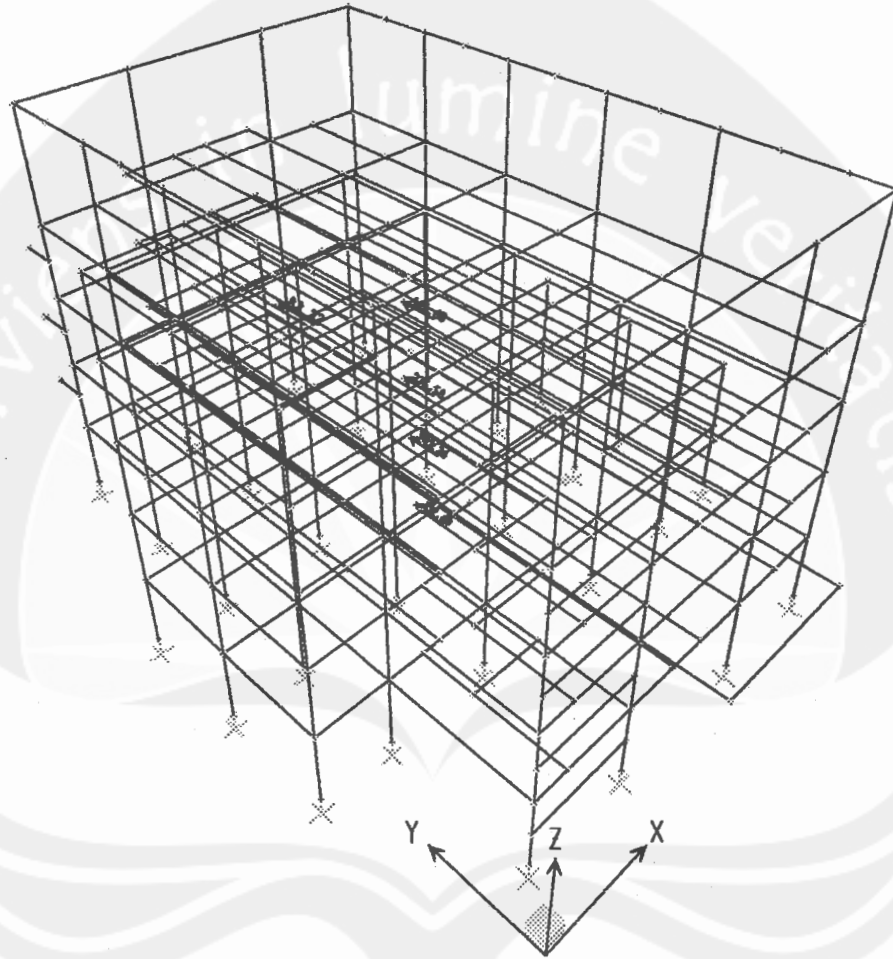
SAP2000 v7.40 - File:TA lengkap b gempa atap beton - Frame Span Loads (DL) - KN-m Units











DIAPHRAGM MASS DATA

STORY	DIAPHRAGM	MASS-X	MASS-Y	MMI	X-M	Y-M
STORY5	D5	107.5624	107.5624	1219.5106	2.168	18.000
STORY4	D4	1098.2451	1098.2451	131927.6840	13.103	20.044
STORY3	D3	972.5212	972.5212	129505.1580	13.159	20.063
STORY2	D2	1150.2144	1150.2144	141632.1511	13.834	19.592
STORY1	D1	1120.0565	1120.0565	137187.8402	13.867	19.958

CENTERS OF CUMULATIVE MASS & CENTERS OF RIGIDITY

STORY LEVEL	DIAPHRAGM NAME	/-----CENTER OF MASS-----//			---CENTER OF RIGIDITY---/	
		MASS	ORDINATE-X	ORDINATE-Y	ORDINATE-X	ORDINATE-Y
STORY5	D5	107.5624	2.168	18.000	3.813	18.258
STORY4	D4	1098.2451	13.103	20.044	12.909	20.161
STORY3	D3	972.5212	13.159	20.063	13.038	20.210
STORY2	D2	1150.2144	13.834	19.592	13.075	20.188
STORY1	D1	1120.0565	13.867	19.958	12.892	20.232

MODAL PERIODS AND FREQUENCIES

MODE	PERIOD (TIME)	FREQUENCY (CYC/TIME)	FREQUENCY (RAD/TIME)	ETGENVALUE (RAD/TIME)**2
1	0.875522	1.142176	7.176503	51.502194
2	0.844262	1.184466	7.442219	55.386617
3	0.689895	1.449497	9.107457	82.945767
4	0.297731	3.358734	21.103547	445.359700
5	0.274574	3.642012	22.883436	523.651643
6	0.256605	3.897042	24.485836	599.556143
7	0.242790	4.118784	25.879084	669.726971
8	0.224514	4.454074	27.985771	783.203399
9	0.217779	4.591808	28.851183	832.390782
10	0.207428	4.820959	30.290977	917.543277

MODAL PARTICIPATING MASS RATIOS

MODE	PERIOD	INDIVIDUAL MODE (PERCENT)			CUMULATIVE SUM (PERCENT)		
		UX	UY	UZ	UX	UY	UZ
1	0.875522	78.7352	0.0945	0.0000	78.7352	0.0945	0.0000
2	0.844262	0.1303	78.7306	0.0000	78.8655	78.8251	0.0000
3	0.689895	0.2176	1.0942	0.0000	79.0831	79.9193	0.0000
4	0.297731	8.6725	0.0014	0.0001	87.7556	79.9207	0.0001
5	0.274574	0.0007	9.8685	0.0001	87.7563	89.7892	0.0002
6	0.256605	0.6243	0.0000	0.0015	88.3806	89.7892	0.0017
7	0.242790	0.0952	0.0006	0.0000	88.4758	89.7898	0.0017
8	0.224514	0.0562	0.3266	0.0000	88.5319	90.1164	0.0018
9	0.217779	0.0948	1.8818	0.0002	88.6267	91.9982	0.0020
10	0.207428	4.2044	0.0289	0.0005	92.8311	92.0271	0.0025

GROUP JOINT FORCE SUMMATION

GROUP	LOAD	F-X	F-Y	F-Z	M-X	M-Y	M-Z
BASE SHEAR (Sum at X=14 Y=20.13333 Z=-4)							
	DL	1.788E-06	0.000	27546.400	-2403.251	26803.373	1.719E-05
	LL	0.000	0.000	2663.961	1982.465	2853.403	5.220E-06
	HUJAN	0.000	0.000	24.000	-51.200	288.000	0.000
	BS	-1.043E-06	0.000	12973.920	-4112.975	11728.241	0.000
	ANGIN	-38.760	0.000	-12.720	6.996	-679.920	-21.318
	SNI2002	1450.050	1506.268	1.179	19238.995	18531.127	3812.423

DIAPHRAGM MASS DATA

STORY	DIAPHRAGM	MASS-X	MASS-Y	MMI	X-M	Y-M
STORY5	D5	107.5624	107.5624	1219.5106	2.168	18.000
STORY4	D4	1098.2451	1098.2451	131927.6840	13.103	20.044
STORY3	D3	972.5212	972.5212	129505.1580	13.159	20.063
STORY2	D2	1151.2532	1151.2532	141632.1511	13.834	19.592
STORY1	D1	1120.0565	1120.0565	137187.8402	13.867	19.958

CENTERS OF CUMULATIVE MASS & CENTERS OF RIGIDITY

STORY LEVEL	DIAPHRAGM NAME	/-----CENTER OF MASS-----/			/---CENTER OF RIGIDITY---/	
		MASS	ORDINATE-X	ORDINATE-Y	ORDINATE-X	ORDINATE-Y
STORY5	D5	107.5624	2.168	18.000	3.813	18.258
STORY4	D4	1098.2451	13.103	20.044	12.909	20.161
STORY3	D3	972.5212	13.159	20.063	13.038	20.210
STORY2	D2	1151.2532	13.834	19.583	13.075	20.188
STORY1	D1	1120.0565	13.867	19.958	12.892	20.232

MODAL PERIODS AND FREQUENCIES

MODE	PERIOD (TIME)	FREQUENCY (CYC/TIME)	FREQUENCY (RAD/TIME)	EIGENVALUE (RAD/TIME)**2
1	0.891265	1.122000	7.049736	49.698778
2	0.859534	1.163421	7.309987	53.435911
3	0.692560	1.443918	9.072405	82.308538
4	0.302948	3.300892	20.740118	430.152509
5	0.277342	3.605651	22.654975	513.247898
6	0.260103	3.844634	24.156548	583.538834
7	0.244533	4.089420	25.694585	660.211683
8	0.224699	4.450405	27.962718	781.913626
9	0.218309	4.580660	28.781138	828.353907
10	0.212844	4.698282	29.520176	871.440796

MODAL PARTICIPATING MASS RATIOS

MODE	PERIOD	INDIVIDUAL MODE (PERCENT)			CUMULATIVE SUM (PERCENT)		
		UX	UY	UZ	UX	UY	UZ
1	0.891265	78.7307	0.1231	0.0000	78.7307	0.1231	0.0000
2	0.859534	0.1669	78.5649	0.0000	78.8976	78.6880	0.0000
3	0.692560	0.2128	1.2967	0.0000	79.1104	79.9847	0.0000
4	0.302948	8.6914	0.0011	0.0002	87.8018	79.9857	0.0002
5	0.277342	0.0001	9.9068	0.0001	87.8019	89.8925	0.0003
6	0.260103	0.1388	0.0005	0.0014	87.9407	89.8930	0.0017
7	0.244533	0.0733	0.0271	0.0000	88.0140	89.9202	0.0017
8	0.224699	0.0138	0.3353	0.0001	88.0278	90.2555	0.0018
9	0.218309	0.2422	1.6625	0.0002	88.2700	91.9180	0.0020
10	0.212844	4.6459	0.0975	0.0003	92.9160	92.0154	0.0023

GROUP JOINT FORCE SUMMATION

GROUP	LOAD	F-X	F-Y	F-Z	M-X	M-Y	M-Z
BASE SHEAR (Sum at X=14 Y=20.13333 Z=-4)							
	DL	1.431E-06	3.491E-06	28541.920	-2950.788	26803.373	7.542E-06
	LL	0.000	0.000	2725.161	1948.805	2853.404	2.401E-06
	HUJAN	0.000	0.000	24.000	-51.200	288.000	0.000
	BS	-1.043E-06	0.000	12973.920	-4112.975	11728.241	0.000
	ANGIN	-38.760	0.000	-12.720	6.996	-679.920	-21.318
	SNI2002	1450.030	1504.361	1.114	19378.931	18673.031	4103.292

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UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB23	ENVE				COMB23
		COMB1	1.0000	COMBO	
		COMB2	1.0000	COMBO	
		COMB3	1.0000	COMBO	
		COMB4	1.0000	COMBO	
		COMB5	1.0000	COMBO	
		COMB6	1.0000	COMBO	
		COMB7	1.0000	COMBO	
		COMB8	1.0000	COMBO	
		COMB9	1.0000	COMBO	
		COMB10	1.0000	COMBO	
		COMB11	1.0000	COMBO	
		COMB12	1.0000	COMBO	
		COMB13	1.0000	COMBO	
		COMB14	1.0000	COMBO	
		COMB15	1.0000	COMBO	
		COMB16	1.0000	COMBO	
		COMB17	1.0000	COMBO	
		COMB18	1.0000	COMBO	
		COMB19	1.0000	COMBO	
		COMB20	1.0000	COMBO	
		COMB21	1.0000	COMBO	
		COMB22	1.0000	COMBO	
		DL	1.0000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	1.0000	STATIC (OTHER)	
		BS	1.0000	STATIC (DEAD)	
		ANGIN	1.0000	STATIC (WIND)	
		EX	1.0000	STATIC (QUAKE)	
		EY	1.0000	STATIC (QUAKE)	
COMB24	ADD				COMB24
		DL	1.2000	STATIC (DEAD)	
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	

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UAJY

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
46	COMB23	MAX						
		0.00	0.00	25.97	0.00	1.68	0.00	106.36
		2.00	0.00	25.97	0.00	1.68	0.00	97.66
		4.00	0.00	29.31	0.00	1.68	0.00	116.04
		6.00	0.00	97.95	0.00	1.68	0.00	82.60
		8.00	0.00	155.47	0.00	1.68	0.00	7.260E-04
46	COMB23	MIN						
		0.00	0.00	-150.48	0.00	-1.03	0.00	-263.71
		2.00	0.00	-92.96	0.00	-1.03	0.00	-26.98
		4.00	0.00	-25.13	0.00	-1.03	0.00	-1.318E-05
		6.00	0.00	-1.848E-04	0.00	-1.03	0.00	-49.48
		8.00	0.00	-1.848E-04	0.00	-1.03	0.00	-278.59
46	COMB24							
		0.00	0.00	-123.66	0.00	4.506E-01	0.00	-153.89
		2.00	0.00	-66.14	0.00	4.506E-01	0.00	41.48
		4.00	0.00	2.50	0.00	4.506E-01	0.00	105.13
		6.00	0.00	71.14	0.00	4.506E-01	0.00	31.50
		8.00	0.00	128.65	0.00	4.506E-01	0.00	-173.85
61	COMB23	MAX						
		0.00	0.00	25.83	0.00	3.576E-01	0.00	74.72
		1.50	0.00	25.83	0.00	3.576E-01	0.00	51.21
		3.00	0.00	25.83	0.00	3.576E-01	0.00	78.72
		4.50	0.00	102.26	0.00	3.576E-01	0.00	58.60
		6.00	0.00	150.28	0.00	3.576E-01	0.00	5.67
61	COMB23	MIN						
		0.00	0.00	-151.41	0.00	-2.04	0.00	-218.87
		1.50	0.00	-103.39	0.00	-2.04	0.00	-26.93
		3.00	0.00	-26.94	0.00	-2.04	0.00	-2.77
		4.50	0.00	-1.81	0.00	-2.04	0.00	-41.52
		6.00	0.00	-1.81	0.00	-2.04	0.00	-221.17
61	COMB24							
		0.00	0.00	-125.04	0.00	-1.62	0.00	-142.60

	1.50	0.00	-77.02	0.00	-1.62	0.00	14.50
	3.00	0.00	-5.652E-01	0.00	-1.62	0.00	73.41
	4.50	0.00	75.89	0.00	-1.62	0.00	16.20
	6.00	0.00	123.91	0.00	-1.62	0.00	-139.21
67	COMB23	MAX					
	0.00	0.00	2.09	0.00	1.975E-02	0.00	5.69
	1.50	0.00	2.09	0.00	1.975E-02	0.00	2.55
	3.00	0.00	2.09	0.00	1.975E-02	0.00	5.92
	4.50	0.00	20.37	0.00	1.975E-02	0.00	1.88
	6.00	0.00	36.68	0.00	1.975E-02	0.00	9.864E-06
67	COMB23	MIN					
	0.00	0.00	-52.91	0.00	-1.756E-01	0.00	-97.02
	1.50	0.00	-36.21	0.00	-1.756E-01	0.00	-29.11
	3.00	0.00	-9.67	0.00	-1.756E-01	0.00	-9.431E-01
	4.50	0.00	-3.055E-06	0.00	-1.756E-01	0.00	-7.69
	6.00	0.00	-3.055E-06	0.00	-1.756E-01	0.00	-52.26
67	COMB24						
	0.00	0.00	-48.46	0.00	-9.640E-02	0.00	-90.49
	1.50	0.00	-33.31	0.00	-9.640E-02	0.00	-26.51
	3.00	0.00	-7.54	0.00	-9.640E-02	0.00	4.13
	4.50	0.00	18.23	0.00	-9.640E-02	0.00	-3.89
	6.00	0.00	33.39	0.00	-9.640E-02	0.00	-45.26
68	COMB23	MAX					
	0.00	0.00	19.45	0.00	5.325E-01	0.00	57.36
	1.50	0.00	19.45	0.00	5.325E-01	0.00	36.15
	3.00	0.00	19.45	0.00	5.325E-01	0.00	55.23
	4.50	0.00	73.01	0.00	5.325E-01	0.00	41.94
	6.00	0.00	109.91	0.00	5.325E-01	0.00	3.980E-04
68	COMB23	MIN					
	0.00	0.00	-112.41	0.00	-5.151E-01	0.00	-165.70
	1.50	0.00	-75.51	0.00	-5.151E-01	0.00	-24.06
	3.00	0.00	-21.31	0.00	-5.151E-01	0.00	-9.871E-01
	4.50	0.00	-1.305E-04	0.00	-5.151E-01	0.00	-30.16
	6.00	0.00	-1.305E-04	0.00	-5.151E-01	0.00	-160.25
68	COMB24						
	0.00	0.00	-92.35	0.00	3.982E-02	0.00	-106.55
	1.50	0.00	-55.45	0.00	3.982E-02	0.00	7.09
	3.00	0.00	-1.25	0.00	3.982E-02	0.00	50.33
	4.50	0.00	52.96	0.00	3.982E-02	0.00	10.83
	6.00	0.00	89.86	0.00	3.982E-02	0.00	-99.05
70	COMB23	MAX					
	0.00	0.00	26.56	0.00	3.739E-01	0.00	53.62
	1.00	0.00	26.56	0.00	3.739E-01	0.00	31.07
	2.00	0.00	27.93	0.00	3.739E-01	0.00	22.02
	3.00	0.00	60.62	0.00	3.739E-01	0.00	27.70
	4.00	0.00	73.53	0.00	3.739E-01	0.00	25.87
70	COMB23	MIN					
	0.00	0.00	-71.17	0.00	-2.069E-01	0.00	-89.81
	1.00	0.00	-58.26	0.00	-2.069E-01	0.00	-24.74
	2.00	0.00	-25.97	0.00	-2.069E-01	0.00	-1.157E-02
	3.00	0.00	-4.15	0.00	-2.069E-01	0.00	-26.05
	4.00	0.00	-6.498E-01	0.00	-2.069E-01	0.00	-93.51
70	COMB24						
	0.00	0.00	-44.42	0.00	1.448E-01	0.00	-35.80
	1.00	0.00	-31.51	0.00	1.448E-01	0.00	3.81
	2.00	0.00	1.18	0.00	1.448E-01	0.00	20.63
	3.00	0.00	33.87	0.00	1.448E-01	0.00	1.46
	4.00	0.00	46.78	0.00	1.448E-01	0.00	-40.51
71	COMB23	MAX					
	0.00	0.00	26.37	0.00	9.46	0.00	80.27
	7.5E-01	0.00	26.37	0.00	9.46	0.00	60.49
	1.50	0.00	26.37	0.00	9.46	0.00	63.76
	2.25	0.00	26.37	0.00	9.46	0.00	119.93
	3.00	0.00	25.37	0.00	9.46	0.00	165.92
71	COMB23	MIN					
	0.00	0.00	-191.73	0.00	-10.57	0.00	-275.45
	7.5E-01	0.00	-173.28	0.00	-10.57	0.00	-137.87
	1.50	0.00	-143.71	0.00	-10.57	0.00	-25.15
	2.25	0.00	-114.13	0.00	-10.57	0.00	-6.095E-01
	3.00	0.00	-95.68	0.00	-10.57	0.00	-1.689E-01
71	COMB24						
	0.00	0.00	-165.19	0.00	-9.152E-01	0.00	-194.60
	7.5E-01	0.00	-146.74	0.00	-9.152E-01	0.00	-76.93
	1.50	0.00	-117.16	0.00	-9.152E-01	0.00	22.72
	2.25	0.00	-87.59	0.00	-9.152E-01	0.00	98.81
	3.00	0.00	-69.14	0.00	-9.152E-01	0.00	156.89
72	COMB23	MAX					
	0.00	0.00	105.55	0.00	8.73	0.00	164.62
	7.5E-01	0.00	124.00	0.00	8.73	0.00	108.97
	1.50	0.00	153.57	0.00	8.73	0.00	45.57
	2.25	0.00	183.15	0.00	8.73	0.00	1.59
	3.00	0.00	201.60	0.00	8.73	0.00	2.19
72	COMB23	MIN					
	0.00	0.00	-7.978E-01	0.00	-8.56	0.00	-2.075E-01
	7.5E-01	0.00	-7.978E-01	0.00	-8.56	0.00	-18.53
	1.50	0.00	-7.978E-01	0.00	-8.56	0.00	-38.35
	2.25	0.00	-7.978E-01	0.00	-8.56	0.00	-158.68
	3.00	0.00	-7.978E-01	0.00	-8.56	0.00	-303.65

72	COMB24	0.00	0.00	78.88	0.00	8.352E-02	0.00	155.71
		7.5E-01	0.00	97.33	0.00	8.352E-02	0.00	90.33
		1.50	0.00	126.91	0.00	8.352E-02	0.00	6.93
		2.25	0.00	156.48	0.00	8.352E-02	0.00	-100.04
		3.00	0.00	174.93	0.00	8.352E-02	0.00	-225.01
73	COMB23 MAX	0.00	0.00	33.44	0.00	14.38	0.00	<u>133.63</u>
		7.5E-01	0.00	33.44	0.00	14.38	0.00	108.55
		1.50	0.00	33.44	0.00	14.38	0.00	83.47
		2.25	0.00	33.44	0.00	14.38	0.00	154.09
		3.00	0.00	33.44	0.00	14.38	0.00	252.06
73	COMB23 MIN	0.00	0.00	-291.57	0.00	-17.72	0.00	<u>-535.59</u>
		7.5E-01	0.00	-271.40	0.00	-17.72	0.00	-323.78
		1.50	0.00	-240.09	0.00	-17.72	0.00	-131.28
		2.25	0.00	-208.79	0.00	-17.72	0.00	-1.59
		3.00	0.00	-188.61	0.00	-17.72	0.00	-1.25
73	COMB24	0.00	0.00	-258.00	0.00	-3.21	0.00	-401.18
		7.5E-01	0.00	-237.82	0.00	-3.21	0.00	-214.55
		1.50	0.00	-206.52	0.00	-3.21	0.00	-47.23
		2.25	0.00	-175.22	0.00	-3.21	0.00	95.23
		3.00	0.00	-155.04	0.00	-3.21	0.00	218.38
74	COMB23 MAX	0.00	0.00	33.41	0.00	5.638E-01	0.00	252.32
		5.0E-01	0.00	33.41	0.00	5.638E-01	0.00	247.44
		1.00	0.00	33.58	0.00	5.638E-01	0.00	250.99
		1.50	0.00	50.62	0.00	5.638E-01	0.00	247.56
		2.00	0.00	62.83	0.00	5.638E-01	0.00	252.65
74	COMB23 MIN	0.00	0.00	-63.24	0.00	-5.348E-01	0.00	-1.23
		5.0E-01	0.00	-51.02	0.00	-5.348E-01	0.00	-8.152E-01
		1.00	0.00	-33.86	0.00	-5.348E-01	0.00	-4.003E-01
		1.50	0.00	-21.55	0.00	-5.348E-01	0.00	-16.79
		2.00	0.00	-12.61	0.00	-5.348E-01	0.00	-33.49
74	COMB24	0.00	0.00	-29.58	0.00	1.405E-02	0.00	218.63
		5.0E-01	0.00	-17.36	0.00	1.405E-02	0.00	230.57
		1.00	0.00	-2.017E-01	0.00	1.405E-02	0.00	235.16
		1.50	0.00	16.96	0.00	1.405E-02	0.00	230.77
		2.00	0.00	29.17	0.00	1.405E-02	0.00	219.03
75	COMB23 MAX	0.00	0.00	100.53	0.00	16.18	0.00	252.34
		7.5E-01	0.00	208.71	0.00	16.18	0.00	154.69
		1.50	0.00	240.01	0.00	16.18	0.00	52.34
		2.25	0.00	271.31	0.00	16.18	0.00	3.10
		3.00	0.00	291.49	0.00	16.18	0.00	4.00
75	COMB23 MIN	0.00	0.00	-1.20	0.00	-13.03	0.00	-33.47
		7.5E-01	0.00	-1.20	0.00	-13.03	0.00	-58.52
		1.50	0.00	-1.20	0.00	-13.03	0.00	-130.70
		2.25	0.00	-1.20	0.00	-13.03	0.00	-323.14
		3.00	0.00	-1.20	0.00	-13.03	0.00	-534.89
75	COMB24	0.00	0.00	154.78	0.00	2.97	0.00	218.74
		7.5E-01	0.00	174.96	0.00	2.97	0.00	95.78
		1.50	0.00	206.26	0.00	2.97	0.00	-46.48
		2.25	0.00	237.56	0.00	2.97	0.00	-213.61
		3.00	0.00	257.74	0.00	2.97	0.00	-400.04
76	COMB23 MAX	0.00	0.00	25.32	0.00	8.10	0.00	75.72
		7.5E-01	0.00	25.32	0.00	8.10	0.00	56.73
		1.50	0.00	25.32	0.00	8.10	0.00	46.16
		2.25	0.00	25.32	0.00	8.10	0.00	91.33
		3.00	0.00	25.32	0.00	8.10	0.00	128.22
76	COMB23 MIN	0.00	0.00	-174.84	0.00	-19.96	0.00	-261.65
		7.5E-01	0.00	-156.39	0.00	-19.96	0.00	-136.74
		1.50	0.00	-126.82	0.00	-19.96	0.00	-32.22
		2.25	0.00	-97.24	0.00	-19.96	0.00	-6.136E-01
		3.00	0.00	-78.79	0.00	-19.96	0.00	-3.312E-01
76	COMB24	0.00	0.00	-149.40	0.00	-11.78	0.00	-185.49
		7.5E-01	0.00	-130.95	0.00	-11.78	0.00	-79.66
		1.50	0.00	-101.38	0.00	-11.78	0.00	8.16
		2.25	0.00	-71.81	0.00	-11.78	0.00	72.41
		3.00	0.00	-53.36	0.00	-11.78	0.00	118.65
77	COMB23 MAX	0.00	0.00	77.25	0.00	18.50	0.00	128.41
		7.5E-01	0.00	92.92	0.00	18.50	0.00	93.78
		1.50	0.00	114.15	0.00	18.50	0.00	54.75
		2.25	0.00	135.39	0.00	18.50	0.00	17.03
		3.00	0.00	151.05	0.00	18.50	0.00	2.10
77	COMB23 MIN	0.00	0.00	-8.053E-01	0.00	-6.42	0.00	-3.190E-01
		7.5E-01	0.00	-8.053E-01	0.00	-6.42	0.00	-19.18
		1.50	0.00	-8.053E-01	0.00	-6.42	0.00	-38.14

	2.25	0.00	-8.053E-01	0.00	-6.42	0.00	-115.98
	3.00	0.00	-8.053E-01	0.00	-6.42	0.00	-223.75
77	COMB24						
	0.00	0.00	51.74	0.00	11.86	0.00	118.84
	7.5E-01	0.00	67.41	0.00	11.86	0.00	74.51
	1.50	0.00	88.64	0.00	11.86	0.00	16.34
	2.25	0.00	109.87	0.00	11.86	0.00	-58.44
	3.00	0.00	125.54	0.00	11.86	0.00	-147.07
78	COMB23	MAX					
	0.00	0.00	21.90	0.00	1.69	0.00	45.50
	1.00	0.00	21.90	0.00	1.69	0.00	24.72
	2.00	0.00	21.90	0.00	1.69	0.00	24.41
	3.00	0.00	50.99	0.00	1.69	0.00	28.85
	4.00	0.00	63.90	0.00	1.69	0.00	23.08
78	COMB23	MIN					
	0.00	0.00	-71.44	0.00	-1.56	0.00	-89.45
	1.00	0.00	-58.52	0.00	-1.56	0.00	-23.08
	2.00	0.00	-25.84	0.00	-1.56	0.00	-3.847E-02
	3.00	0.00	-2.67	0.00	-1.56	0.00	-20.22
	4.00	0.00	-5.467E-01	0.00	-1.56	0.00	-70.98
78	COMB24						
	0.00	0.00	-49.37	0.00	9.620E-02	0.00	-43.61
	1.00	0.00	-36.46	0.00	9.620E-02	0.00	9.488E-01
	2.00	0.00	-3.77	0.00	9.620E-02	0.00	22.71
	3.00	0.00	28.92	0.00	9.620E-02	0.00	8.48
	4.00	0.00	41.83	0.00	9.620E-02	0.00	-28.54
80	COMB23	MAX					
	0.00	0.00	26.97	0.00	1.09	0.00	82.39
	1.50	0.00	26.97	0.00	1.09	0.00	53.22
	3.00	0.00	26.97	0.00	1.09	0.00	60.07
	4.50	0.00	85.02	0.00	1.09	0.00	53.12
	6.00	0.00	115.04	0.00	1.09	0.00	13.24
80	COMB23	MIN					
	0.00	0.00	-117.00	0.00	-7.467E-01	0.00	-191.00
	1.50	0.00	-86.98	0.00	-7.467E-01	0.00	-36.08
	3.00	0.00	-28.53	0.00	-7.467E-01	0.00	-9.080E-02
	4.50	0.00	-1.93	0.00	-7.467E-01	0.00	-38.96
	6.00	0.00	-1.93	0.00	-7.467E-01	0.00	-182.08
80	COMB24						
	0.00	0.00	-89.46	0.00	2.293E-01	0.00	-106.85
	1.50	0.00	-59.43	0.00	2.293E-01	0.00	10.38
	3.00	0.00	-9.802E-01	0.00	2.293E-01	0.00	56.41
	4.50	0.00	57.47	0.00	2.293E-01	0.00	13.32
	6.00	0.00	87.50	0.00	2.293E-01	0.00	-100.96
87	COMB23	MAX					
	0.00	0.00	20.30	0.00	4.016E-01	0.00	60.93
	1.50	0.00	20.30	0.00	4.016E-01	0.00	44.35
	3.00	0.00	20.98	0.00	4.016E-01	0.00	61.18
	4.50	0.00	79.44	0.00	4.016E-01	0.00	44.18
	6.00	0.00	109.46	0.00	4.016E-01	0.00	4.032E-04
87	COMB23	MIN					
	0.00	0.00	-109.37	0.00	-6.543E-01	0.00	-165.60
	1.50	0.00	-79.35	0.00	-6.543E-01	0.00	-22.96
	3.00	0.00	-20.94	0.00	-6.543E-01	0.00	-3.272E-03
	4.50	0.00	-1.343E-04	0.00	-6.543E-01	0.00	-30.43
	6.00	0.00	-1.343E-04	0.00	-6.543E-01	0.00	-165.83
87	COMB24						
	0.00	0.00	-88.43	0.00	-1.884E-01	0.00	-102.77
	1.50	0.00	-58.41	0.00	-1.884E-01	0.00	12.93
	3.00	0.00	4.453E-02	0.00	-1.884E-01	0.00	57.42
	4.50	0.00	58.50	0.00	-1.884E-01	0.00	12.79
	6.00	0.00	88.52	0.00	-1.884E-01	0.00	-103.03
105	COMB23	MAX					
	0.00	0.00	20.25	0.00	4.361E-01	0.00	60.79
	1.50	0.00	20.25	0.00	4.361E-01	0.00	42.70
	3.00	0.00	21.15	0.00	4.361E-01	0.00	51.91
	4.50	0.00	69.17	0.00	4.361E-01	0.00	41.71
	6.00	0.00	106.07	0.00	4.361E-01	0.00	3.812E-04
105	COMB23	MIN					
	0.00	0.00	-105.48	0.00	-1.01	0.00	-153.27
	1.50	0.00	-68.58	0.00	-1.01	0.00	-23.08
	3.00	0.00	-20.60	0.00	-1.01	0.00	-7.252E-05
	4.50	0.00	-1.272E-04	0.00	-1.01	0.00	-30.33
	6.00	0.00	-1.272E-04	0.00	-1.01	0.00	-154.96
105	COMB24						
	0.00	0.00	-84.63	0.00	-5.340E-01	0.00	-90.67
	1.50	0.00	-47.73	0.00	-5.340E-01	0.00	11.37
	3.00	0.00	2.979E-01	0.00	-5.340E-01	0.00	46.95
	4.50	0.00	48.32	0.00	-5.340E-01	0.00	10.48
	6.00	0.00	85.22	0.00	-5.340E-01	0.00	-92.46
120	COMB23	MAX					
	0.00	0.00	21.44	0.00	1.02	0.00	62.77
	1.50	0.00	21.44	0.00	1.02	0.00	44.26
	3.00	0.00	21.44	0.00	1.02	0.00	55.49
	4.50	0.00	69.01	0.00	1.02	0.00	50.85
	6.00	0.00	105.91	0.00	1.02	0.00	7.80
120	COMB23	MIN					
	0.00	0.00	-108.17	0.00	-2.707E-01	0.00	-156.26

	1.50	0.00	-71.27	0.00	-2.707E-01	0.00	-22.65
	3.00	0.00	-23.25	0.00	-2.707E-01	0.00	-1.55
	4.50	0.00	-1.375E-04	0.00	-2.707E-01	0.00	-33.71
	6.00	0.00	-1.375E-04	0.00	-2.707E-01	0.00	-152.65
120	COMB24						
	0.00	0.00	-86.06	0.00	5.574E-01	0.00	-91.51
	1.50	0.00	-49.16	0.00	5.574E-01	0.00	12.68
	3.00	0.00	-1.13	0.00	5.574E-01	0.00	50.40
	4.50	0.00	46.89	0.00	5.574E-01	0.00	16.08
	6.00	0.00	83.79	0.00	5.574E-01	0.00	-84.71
180	COMB23	MAX					
	0.00	0.00	28.24	0.00	1.05	0.00	115.24
	2.00	0.00	28.24	0.00	1.05	0.00	89.17
	4.00	0.00	29.44	0.00	1.05	0.00	99.27
	6.00	0.00	89.82	0.00	1.05	0.00	83.69
	8.00	0.00	142.17	0.00	1.05	0.00	6.50
180	COMB23	MIN					
	0.00	0.00	-141.79	0.00	-1.93	0.00	-267.76
	2.00	0.00	-89.43	0.00	-1.93	0.00	-40.50
	4.00	0.00	-29.18	0.00	-1.93	0.00	-2.779E-05
	6.00	0.00	-3.894E-04	0.00	-1.93	0.00	-54.20
	8.00	0.00	-3.894E-04	0.00	-1.93	0.00	-264.58
180	COMB24						
	0.00	0.00	-112.54	0.00	-5.099E-01	0.00	-148.42
	2.00	0.00	-60.19	0.00	-5.099E-01	0.00	28.32
	4.00	0.00	1.915E-01	0.00	-5.099E-01	0.00	88.32
	6.00	0.00	60.57	0.00	-5.099E-01	0.00	27.56
	8.00	0.00	112.92	0.00	-5.099E-01	0.00	-149.95
202	COMB23	MAX					
	0.00	0.00	21.39	0.00	1.24	0.00	63.29
	1.50	0.00	21.39	0.00	1.24	0.00	41.69
	3.00	0.00	22.85	0.00	1.24	0.00	48.48
	4.50	0.00	69.14	0.00	1.24	0.00	41.28
	6.00	0.00	102.94	0.00	1.24	0.00	2.27
202	COMB23	MIN					
	0.00	0.00	-101.46	0.00	-2.680E-01	0.00	-151.68
	1.50	0.00	-67.66	0.00	-2.680E-01	0.00	-25.56
	3.00	0.00	-21.64	0.00	-2.680E-01	0.00	-8.738E-01
	4.50	0.00	-2.764E-04	0.00	-2.680E-01	0.00	-32.95
	6.00	0.00	-2.764E-04	0.00	-2.680E-01	0.00	-157.92
202	COMB24						
	0.00	0.00	-79.35	0.00	7.224E-01	0.00	-86.25
	1.50	0.00	-45.55	0.00	7.224E-01	0.00	9.43
	3.00	0.00	7.390E-01	0.00	7.224E-01	0.00	43.55
	4.50	0.00	47.03	0.00	7.224E-01	0.00	7.21
	6.00	0.00	80.83	0.00	7.224E-01	0.00	-90.69
208	COMB23	MAX					
	0.00	0.00	29.08	0.00	1.606E-01	0.00	58.61
	1.00	0.00	29.08	0.00	1.606E-01	0.00	32.76
	2.00	0.00	29.08	0.00	1.606E-01	0.00	26.42
	3.00	0.00	64.03	0.00	1.606E-01	0.00	35.27
	4.00	0.00	86.18	0.00	1.606E-01	0.00	29.38
208	COMB23	MIN					
	0.00	0.00	-89.59	0.00	-1.971E-01	0.00	-106.43
	1.00	0.00	-67.43	0.00	-1.971E-01	0.00	-27.53
	2.00	0.00	-31.00	0.00	-1.971E-01	0.00	-1.235E-02
	3.00	0.00	-4.82	0.00	-1.971E-01	0.00	-28.64
	4.00	0.00	-7.237E-01	0.00	-1.971E-01	0.00	-98.74
208	COMB24						
	0.00	0.00	-60.29	0.00	-2.024E-02	0.00	-47.38
	1.00	0.00	-38.13	0.00	-2.024E-02	0.00	3.01
	2.00	0.00	-1.70	0.00	-2.024E-02	0.00	24.12
	3.00	0.00	34.72	0.00	-2.024E-02	0.00	6.42
	4.00	0.00	56.88	0.00	-2.024E-02	0.00	-40.58
209	COMB23	MAX					
	0.00	0.00	29.54	0.00	10.44	0.00	89.81
	7.5E-01	0.00	29.54	0.00	10.44	0.00	67.66
	1.50	0.00	29.54	0.00	10.44	0.00	63.63
	2.25	0.00	29.54	0.00	10.44	0.00	101.55
	3.00	0.00	29.54	0.00	10.44	0.00	132.31
209	COMB23	MIN					
	0.00	0.00	-165.03	0.00	-11.05	0.00	-248.31
	7.5E-01	0.00	-148.13	0.00	-11.05	0.00	-130.38
	1.50	0.00	-123.20	0.00	-11.05	0.00	-33.08
	2.25	0.00	-98.28	0.00	-11.05	0.00	-6.974E-01
	3.00	0.00	-81.38	0.00	-11.05	0.00	-1.476E-01
209	COMB24						
	0.00	0.00	-135.27	0.00	-3.416E-01	0.00	-157.80
	7.5E-01	0.00	-118.37	0.00	-3.416E-01	0.00	-62.18
	1.50	0.00	-93.45	0.00	-3.416E-01	0.00	17.75
	2.25	0.00	-68.52	0.00	-3.416E-01	0.00	77.99
	3.00	0.00	-51.62	0.00	-3.416E-01	0.00	122.54
210	COMB23	MAX					
	0.00	0.00	90.26	0.00	9.77	0.00	131.27
	7.5E-01	0.00	107.16	0.00	9.77	0.00	91.33
	1.50	0.00	132.08	0.00	9.77	0.00	46.63
	2.25	0.00	157.01	0.00	9.77	0.00	6.91
	3.00	0.00	173.91	0.00	9.77	0.00	2.70

210	COMB23 MIN						
	0.00	0.00	-9.637E-01	0.00	-8.66	0.00	-1.943E-01
	7.5E-01	0.00	-9.637E-01	0.00	-8.66	0.00	-20.82
	1.50	0.00	-9.637E-01	0.00	-8.66	0.00	-42.86
	2.25	0.00	-9.637E-01	0.00	-8.66	0.00	-148.75
	3.00	0.00	-9.637E-01	0.00	-8.66	0.00	-273.35
210	COMB24						
	0.00	0.00	60.58	0.00	1.06	0.00	121.63
	7.5E-01	0.00	77.48	0.00	1.06	0.00	70.35
	1.50	0.00	102.41	0.00	1.06	0.00	3.40
	2.25	0.00	127.34	0.00	1.06	0.00	-83.26
	3.00	0.00	144.24	0.00	1.06	0.00	-185.60
211	COMB23 MAX						
	0.00	0.00	37.86	0.00	14.76	0.00	149.46
	7.5E-01	0.00	37.86	0.00	14.76	0.00	121.06
	1.50	0.00	37.86	0.00	14.76	0.00	92.67
	2.25	0.00	37.86	0.00	14.76	0.00	159.73
	3.00	0.00	37.86	0.00	14.76	0.00	255.07
211	COMB23 MIN						
	0.00	0.00	-284.76	0.00	-22.50	0.00	-536.35
	7.5E-01	0.00	-266.14	0.00	-22.50	0.00	-329.27
	1.50	0.00	-239.48	0.00	-22.50	0.00	-139.17
	2.25	0.00	-212.83	0.00	-22.50	0.00	-2.07
	3.00	0.00	-194.20	0.00	-22.50	0.00	-2.08
211	COMB24						
	0.00	0.00	-246.90	0.00	-7.50	0.00	-386.29
	7.5E-01	0.00	-228.27	0.00	-7.50	0.00	-207.60
	1.50	0.00	-201.62	0.00	-7.50	0.00	-45.89
	2.25	0.00	-174.96	0.00	-7.50	0.00	94.83
	3.00	0.00	-156.33	0.00	-7.50	0.00	218.56
212	COMB23 MAX						
	0.00	0.00	36.74	0.00	1.03	0.00	259.08
	5.0E-01	0.00	36.74	0.00	1.03	0.00	256.71
	1.00	0.00	37.59	0.00	1.03	0.00	260.76
	1.50	0.00	52.68	0.00	1.03	0.00	256.03
	2.00	0.00	64.21	0.00	1.03	0.00	257.60
212	COMB23 MIN						
	0.00	0.00	-63.07	0.00	-1.11	0.00	-2.22
	5.0E-01	0.00	-51.54	0.00	-1.11	0.00	-1.75
	1.00	0.00	-36.58	0.00	-1.11	0.00	-1.28
	1.50	0.00	-25.68	0.00	-1.11	0.00	-18.48
	2.00	0.00	-17.18	0.00	-1.11	0.00	-36.85
212	COMB24						
	0.00	0.00	-26.05	0.00	-4.583E-02	0.00	221.79
	5.0E-01	0.00	-14.52	0.00	-4.583E-02	0.00	232.08
	1.00	0.00	5.712E-01	0.00	-4.583E-02	0.00	235.72
	1.50	0.00	15.67	0.00	-4.583E-02	0.00	231.51
	2.00	0.00	27.19	0.00	-4.583E-02	0.00	220.65
213	COMB23 MAX						
	0.00	0.00	195.96	0.00	20.99	0.00	253.63
	7.5E-01	0.00	214.59	0.00	20.99	0.00	157.60
	1.50	0.00	241.25	0.00	20.99	0.00	59.03
	2.25	0.00	267.90	0.00	20.99	0.00	4.06
	3.00	0.00	286.53	0.00	20.99	0.00	5.53
213	COMB23 MIN						
	0.00	0.00	-1.96	0.00	-13.31	0.00	-36.11
	7.5E-01	0.00	-1.96	0.00	-13.31	0.00	-64.48
	1.50	0.00	-1.96	0.00	-13.31	0.00	-142.48
	2.25	0.00	-1.96	0.00	-13.31	0.00	-333.91
	3.00	0.00	-1.96	0.00	-13.31	0.00	-542.32
213	COMB24						
	0.00	0.00	157.54	0.00	7.38	0.00	217.42
	7.5E-01	0.00	176.17	0.00	7.38	0.00	92.78
	1.50	0.00	202.83	0.00	7.38	0.00	-48.84
	2.25	0.00	229.48	0.00	7.38	0.00	-211.46
	3.00	0.00	248.11	0.00	7.38	0.00	-391.05
214	COMB23 MAX						
	0.00	0.00	27.93	0.00	8.16	0.00	83.87
	7.5E-01	0.00	27.93	0.00	8.16	0.00	62.93
	1.50	0.00	27.93	0.00	8.16	0.00	48.52
	2.25	0.00	27.93	0.00	8.16	0.00	81.24
	3.00	0.00	27.93	0.00	8.16	0.00	107.01
214	COMB23 MIN						
	0.00	0.00	-154.66	0.00	-16.63	0.00	-240.62
	7.5E-01	0.00	-137.76	0.00	-16.63	0.00	-130.46
	1.50	0.00	-112.83	0.00	-16.63	0.00	-38.05
	2.25	0.00	-87.91	0.00	-16.63	0.00	-6.276E-01
	3.00	0.00	-71.01	0.00	-16.63	0.00	-3.548E-01
214	COMB24						
	0.00	0.00	-126.62	0.00	-8.35	0.00	-156.31
	7.5E-01	0.00	-109.72	0.00	-8.35	0.00	-67.18
	1.50	0.00	-84.80	0.00	-8.35	0.00	6.27
	2.25	0.00	-59.87	0.00	-8.35	0.00	60.02
	3.00	0.00	-42.97	0.00	-8.35	0.00	98.08
215	COMB23 MAX						
	0.00	0.00	70.08	0.00	14.53	0.00	107.00
	7.5E-01	0.00	84.97	0.00	14.53	0.00	82.75
	1.50	0.00	103.88	0.00	14.53	0.00	54.88

	2.25	0.00	122.79	0.00	14.53	0.00	27.98
	3.00	0.00	137.68	0.00	14.53	0.00	2.27
215	COMB23	MIN					
	0.00	0.00	-8.632E-01	0.00	-7.11	0.00	-3.215E-01
	7.5E-01	0.00	-8.632E-01	0.00	-7.11	0.00	-21.14
	1.50	0.00	-8.632E-01	0.00	-7.11	0.00	-42.29
	2.25	0.00	-8.632E-01	0.00	-7.11	0.00	-115.54
	3.00	0.00	-8.632E-01	0.00	-7.11	0.00	-213.47
215	COMB24						
	0.00	0.00	41.62	0.00	7.10	0.00	98.06
	7.5E-01	0.00	56.51	0.00	7.10	0.00	61.52
	1.50	0.00	75.42	0.00	7.10	0.00	12.30
	2.25	0.00	94.33	0.00	7.10	0.00	-51.61
	3.00	0.00	109.22	0.00	7.10	0.00	-128.19
216	COMB23	MAX					
	0.00	0.00	19.85	0.00	2.39	0.00	44.71
	1.00	0.00	19.85	0.00	2.39	0.00	29.67
	2.00	0.00	19.85	0.00	2.39	0.00	24.33
	3.00	0.00	43.17	0.00	2.39	0.00	22.11
	4.00	0.00	53.32	0.00	2.39	0.00	19.40
216	COMB23	MIN					
	0.00	0.00	-55.86	0.00	-2.11	0.00	-72.41
	1.00	0.00	-45.70	0.00	-2.11	0.00	-21.63
	2.00	0.00	-21.27	0.00	-2.11	0.00	-1.239E-01
	3.00	0.00	-4.03	0.00	-2.11	0.00	-14.84
	4.00	0.00	-5.238E-01	0.00	-2.11	0.00	-57.24
216	COMB24						
	0.00	0.00	-35.85	0.00	1.696E-01	0.00	-27.34
	1.00	0.00	-25.69	0.00	1.696E-01	0.00	4.62
	2.00	0.00	-1.27	0.00	1.696E-01	0.00	19.29
	3.00	0.00	23.16	0.00	1.696E-01	0.00	7.15
	4.00	0.00	33.32	0.00	1.696E-01	0.00	-22.27
225	COMB23	MAX					
	0.00	0.00	22.09	0.00	4.301E-01	0.00	66.28
	1.50	0.00	22.09	0.00	4.301E-01	0.00	48.88
	3.00	0.00	22.40	0.00	4.301E-01	0.00	68.80
	4.50	0.00	84.57	0.00	4.301E-01	0.00	50.73
	6.00	0.00	126.39	0.00	4.301E-01	0.00	8.519E-04
225	COMB23	MIN					
	0.00	0.00	-127.62	0.00	-1.02	0.00	-183.72
	1.50	0.00	-85.79	0.00	-1.02	0.00	-23.95
	3.00	0.00	-23.46	0.00	-1.02	0.00	-1.520E-02
	4.50	0.00	-2.835E-04	0.00	-1.02	0.00	-33.14
	6.00	0.00	-2.835E-04	0.00	-1.02	0.00	-180.04
225	COMB24						
	0.00	0.00	-104.78	0.00	-4.925E-01	0.00	-115.19
	1.50	0.00	-62.95	0.00	-4.925E-01	0.00	14.62
	3.00	0.00	-6.147E-01	0.00	-4.925E-01	0.00	62.81
	4.50	0.00	61.72	0.00	-4.925E-01	0.00	16.46
	6.00	0.00	103.55	0.00	-4.925E-01	0.00	-111.51
243	COMB23	MAX					
	0.00	0.00	22.12	0.00	4.773E-01	0.00	66.36
	1.50	0.00	22.12	0.00	4.773E-01	0.00	42.44
	3.00	0.00	22.38	0.00	4.773E-01	0.00	45.32
	4.50	0.00	64.09	0.00	4.773E-01	0.00	44.13
	6.00	0.00	97.90	0.00	4.773E-01	0.00	11.35
243	COMB23	MIN					
	0.00	0.00	-99.02	0.00	-5.679E-01	0.00	-151.20
	1.50	0.00	-65.21	0.00	-5.679E-01	0.00	-28.35
	3.00	0.00	-23.39	0.00	-5.679E-01	0.00	-9.239E-03
	4.50	0.00	-2.741E-04	0.00	-5.679E-01	0.00	-33.19
	6.00	0.00	-2.741E-04	0.00	-5.679E-01	0.00	-147.86
243	COMB24						
	0.00	0.00	-76.19	0.00	-6.225E-02	0.00	-82.73
	1.50	0.00	-42.39	0.00	-6.225E-02	0.00	8.21
	3.00	0.00	-5.599E-01	0.00	-6.225E-02	0.00	40.42
	4.50	0.00	41.27	0.00	-6.225E-02	0.00	9.89
	6.00	0.00	75.07	0.00	-6.225E-02	0.00	-79.37
258	COMB23	MAX					
	0.00	0.00	22.99	0.00	1.00	0.00	67.61
	1.50	0.00	22.99	0.00	1.00	0.00	47.09
	3.00	0.00	24.47	0.00	1.00	0.00	48.36
	4.50	0.00	66.30	0.00	1.00	0.00	47.80
	6.00	0.00	100.10	0.00	1.00	0.00	14.96
258	COMB23	MIN					
	0.00	0.00	-98.71	0.00	-3.297E-01	0.00	-146.16
	1.50	0.00	-64.91	0.00	-3.297E-01	0.00	-25.15
	3.00	0.00	-23.37	0.00	-3.297E-01	0.00	-1.35
	4.50	0.00	-2.909E-04	0.00	-3.297E-01	0.00	-35.83
	6.00	0.00	-2.909E-04	0.00	-3.297E-01	0.00	-153.11
258	COMB24						
	0.00	0.00	-74.94	0.00	4.740E-01	0.00	-76.23
	1.50	0.00	-41.13	0.00	4.740E-01	0.00	12.82
	3.00	0.00	6.932E-01	0.00	4.740E-01	0.00	43.16
	4.50	0.00	42.52	0.00	4.740E-01	0.00	10.74
	6.00	0.00	76.32	0.00	4.740E-01	0.00	-80.39
316	COMB23	MAX					
	0.00	0.00	22.91	0.00	6.316E-01	0.00	94.00

	2.00	0.00	22.91	0.00	6.316E-01	0.00	82.87
	4.00	0.00	23.69	0.00	6.316E-01	0.00	104.69
	6.00	0.00	84.07	0.00	6.316E-01	0.00	78.22
	8.00	0.00	136.43	0.00	6.316E-01	0.00	2.283E-03
316	COMB23	MIN					
	0.00	0.00	-136.56	0.00	-7.514E-01	0.00	-241.88
	2.00	0.00	-84.21	0.00	-7.514E-01	0.00	-26.50
	4.00	0.00	-23.87	0.00	-7.514E-01	0.00	-7.771E-03
	6.00	0.00	-5.849E-04	0.00	-7.514E-01	0.00	-43.43
	8.00	0.00	-5.849E-04	0.00	-7.514E-01	0.00	-236.42
316	COMB24						
	0.00	0.00	-112.80	0.00	-7.737E-02	0.00	-144.37
	2.00	0.00	-60.45	0.00	-7.737E-02	0.00	32.88
	4.00	0.00	-6.755E-02	0.00	-7.737E-02	0.00	93.40
	6.00	0.00	60.31	0.00	-7.737E-02	0.00	33.15
	8.00	0.00	112.66	0.00	-7.737E-02	0.00	-143.83
337	COMB23	MAX					
	0.00	0.00	17.52	0.00	6.938E-01	0.00	51.63
	1.50	0.00	17.52	0.00	6.938E-01	0.00	29.49
	3.00	0.00	18.46	0.00	6.938E-01	0.00	26.11
	4.50	0.00	44.24	0.00	6.938E-01	0.00	30.49
	6.00	0.00	70.02	0.00	6.938E-01	0.00	13.63
337	COMB23	MIN					
	0.00	0.00	-69.38	0.00	-3.944E-01	0.00	-107.72
	1.50	0.00	-43.60	0.00	-3.944E-01	0.00	-23.66
	3.00	0.00	-17.95	0.00	-3.944E-01	0.00	-9.402E-01
	4.50	0.00	-4.192E-04	0.00	-3.944E-01	0.00	-27.23
	6.00	0.00	-4.192E-04	0.00	-3.944E-01	0.00	-111.59
337	COMB24						
	0.00	0.00	-51.23	0.00	1.830E-01	0.00	-54.26
	1.50	0.00	-25.46	0.00	1.830E-01	0.00	3.25
	3.00	0.00	3.188E-01	0.00	1.830E-01	0.00	22.11
	4.50	0.00	26.09	0.00	1.830E-01	0.00	2.30
	6.00	0.00	51.87	0.00	1.830E-01	0.00	-56.18
338	COMB23	MAX					
	0.00	0.00	23.88	0.00	2.441E-01	0.00	48.22
	1.00	0.00	23.88	0.00	2.441E-01	0.00	25.89
	2.00	0.00	23.88	0.00	2.441E-01	0.00	26.25
	3.00	0.00	57.31	0.00	2.441E-01	0.00	31.35
	4.00	0.00	79.47	0.00	2.441E-01	0.00	20.92
338	COMB23	MIN					
	0.00	0.00	-85.82	0.00	-1.935E-01	0.00	-99.07
	1.00	0.00	-63.67	0.00	-1.935E-01	0.00	-23.47
	2.00	0.00	-27.24	0.00	-1.935E-01	0.00	-1.238E-02
	3.00	0.00	-6.501E-01	0.00	-1.935E-01	0.00	-23.44
	4.00	0.00	-5.915E-01	0.00	-1.935E-01	0.00	-85.46
338	COMB24						
	0.00	0.00	-61.76	0.00	3.136E-02	0.00	-50.49
	1.00	0.00	-39.60	0.00	3.136E-02	0.00	1.38
	2.00	0.00	-3.18	0.00	3.136E-02	0.00	23.96
	3.00	0.00	33.25	0.00	3.136E-02	0.00	7.74
	4.00	0.00	55.41	0.00	3.136E-02	0.00	-37.78
339	COMB23	MAX					
	0.00	0.00	24.75	0.00	8.51	0.00	75.19
	7.5E-01	0.00	24.75	0.00	8.51	0.00	56.62
	1.50	0.00	24.75	0.00	8.51	0.00	57.15
	2.25	0.00	24.75	0.00	8.51	0.00	98.08
	3.00	0.00	24.75	0.00	8.51	0.00	132.11
339	COMB23	MIN					
	0.00	0.00	-159.41	0.00	-9.63	0.00	-231.34
	7.5E-01	0.00	-142.50	0.00	-9.63	0.00	-117.62
	1.50	0.00	-117.58	0.00	-9.63	0.00	-24.81
	2.25	0.00	-92.65	0.00	-9.63	0.00	-5.743E-01
	3.00	0.00	-75.75	0.00	-9.63	0.00	-1.163E-01
339	COMB24						
	0.00	0.00	-134.47	0.00	-9.327E-01	0.00	-155.57
	7.5E-01	0.00	-117.57	0.00	-9.327E-01	0.00	-60.55
	1.50	0.00	-92.64	0.00	-9.327E-01	0.00	18.78
	2.25	0.00	-67.72	0.00	-9.327E-01	0.00	78.41
	3.00	0.00	-50.81	0.00	-9.327E-01	0.00	122.36
340	COMB23	MAX					
	0.00	0.00	85.53	0.00	8.19	0.00	130.60
	7.5E-01	0.00	102.43	0.00	8.19	0.00	87.51
	1.50	0.00	127.36	0.00	8.19	0.00	39.43
	2.25	0.00	152.29	0.00	8.19	0.00	1.53
	3.00	0.00	169.19	0.00	8.19	0.00	2.09
340	COMB23	MIN					
	0.00	0.00	-7.537E-01	0.00	-7.77	0.00	-1.690E-01
	7.5E-01	0.00	-7.537E-01	0.00	-7.77	0.00	-17.55
	1.50	0.00	-7.537E-01	0.00	-7.77	0.00	-36.18
	2.25	0.00	-7.537E-01	0.00	-7.77	0.00	-138.88
	3.00	0.00	-7.537E-01	0.00	-7.77	0.00	-259.94
340	COMB24						
	0.00	0.00	60.47	0.00	4.028E-01	0.00	121.02
	7.5E-01	0.00	77.37	0.00	4.028E-01	0.00	69.83
	1.50	0.00	102.30	0.00	4.028E-01	0.00	2.96
	2.25	0.00	127.23	0.00	4.028E-01	0.00	-83.62
	3.00	0.00	144.13	0.00	4.028E-01	0.00	-185.87

341	COMB23	MAX						
		0.00	0.00	31.24	0.00	13.07	0.00	124.94
		7.5E-01	0.00	31.24	0.00	13.07	0.00	101.52
		1.50	0.00	31.24	0.00	13.07	0.00	78.09
		2.25	0.00	31.24	0.00	13.07	0.00	151.35
		3.00	0.00	31.24	0.00	13.07	0.00	253.27
341	COMB23	MIN						
		0.00	0.00	-280.57	0.00	-28.04	0.00	-515.69
		7.5E-01	0.00	-261.94	0.00	-28.04	0.00	-311.75
		1.50	0.00	-235.28	0.00	-28.04	0.00	-124.79
		2.25	0.00	-208.63	0.00	-28.04	0.00	-1.44
		3.00	0.00	-190.00	0.00	-28.04	0.00	-1.09
341	COMB24							
		0.00	0.00	-249.19	0.00	-14.84	0.00	-390.01
		7.5E-01	0.00	-230.56	0.00	-14.84	0.00	-209.60
		1.50	0.00	-203.91	0.00	-14.84	0.00	-46.17
		2.25	0.00	-177.25	0.00	-14.84	0.00	96.26
		3.00	0.00	-158.62	0.00	-14.84	0.00	221.71
342	COMB23	MAX						
		0.00	0.00	31.21	0.00	4.252E-01	0.00	253.77
		5.0E-01	0.00	31.21	0.00	4.252E-01	0.00	256.80
		1.00	0.00	32.24	0.00	4.252E-01	0.00	260.72
		1.50	0.00	47.33	0.00	4.252E-01	0.00	255.84
		2.00	0.00	58.86	0.00	4.252E-01	0.00	251.95
342	COMB23	MIN						
		0.00	0.00	-57.27	0.00	-6.507E-01	0.00	-1.08
		5.0E-01	0.00	-45.74	0.00	-6.507E-01	0.00	-6.928E-01
		1.00	0.00	-30.83	0.00	-6.507E-01	0.00	-3.094E-01
		1.50	0.00	-19.93	0.00	-6.507E-01	0.00	-15.58
		2.00	0.00	-11.42	0.00	-6.507E-01	0.00	-31.19
342	COMB24							
		0.00	0.00	-25.83	0.00	-1.309E-01	0.00	222.21
		5.0E-01	0.00	-14.30	0.00	-1.309E-01	0.00	232.39
		1.00	0.00	7.934E-01	0.00	-1.309E-01	0.00	235.92
		1.50	0.00	15.89	0.00	-1.309E-01	0.00	231.60
		2.00	0.00	27.42	0.00	-1.309E-01	0.00	220.62
343	COMB23	MAX						
		0.00	0.00	191.72	0.00	26.63	0.00	251.35
		7.5E-01	0.00	210.35	0.00	26.63	0.00	148.33
		1.50	0.00	237.00	0.00	26.63	0.00	42.92
		2.25	0.00	263.66	0.00	26.63	0.00	2.83
		3.00	0.00	282.29	0.00	26.63	0.00	3.63
343	COMB23	MIN						
		0.00	0.00	-1.06	0.00	-11.81	0.00	-31.18
		7.5E-01	0.00	-1.06	0.00	-11.81	0.00	-54.57
		1.50	0.00	-1.06	0.00	-11.81	0.00	-128.81
		2.25	0.00	-1.06	0.00	-11.81	0.00	-317.06
		3.00	0.00	-1.06	0.00	-11.81	0.00	-522.29
343	COMB24							
		0.00	0.00	160.22	0.00	14.63	0.00	220.03
		7.5E-01	0.00	178.85	0.00	14.63	0.00	93.39
		1.50	0.00	205.50	0.00	14.63	0.00	-50.24
		2.25	0.00	232.15	0.00	14.63	0.00	-214.86
		3.00	0.00	250.78	0.00	14.63	0.00	-396.46
344	COMB23	MAX						
		0.00	0.00	24.81	0.00	7.36	0.00	72.84
		7.5E-01	0.00	24.81	0.00	7.36	0.00	54.23
		1.50	0.00	24.81	0.00	7.36	0.00	42.73
		2.25	0.00	24.81	0.00	7.36	0.00	77.26
		3.00	0.00	24.81	0.00	7.36	0.00	106.49
344	COMB23	MIN						
		0.00	0.00	-150.86	0.00	-15.29	0.00	-227.93
		7.5E-01	0.00	-133.96	0.00	-15.29	0.00	-120.62
		1.50	0.00	-109.03	0.00	-15.29	0.00	-31.25
		2.25	0.00	-84.11	0.00	-15.29	0.00	-5.228E-01
		3.00	0.00	-67.21	0.00	-15.29	0.00	-1.60
344	COMB24							
		0.00	0.00	-125.93	0.00	-7.85	0.00	-154.67
		7.5E-01	0.00	-109.03	0.00	-7.85	0.00	-66.06
		1.50	0.00	-84.10	0.00	-7.85	0.00	6.87
		2.25	0.00	-59.18	0.00	-7.85	0.00	60.10
		3.00	0.00	-42.28	0.00	-7.85	0.00	97.64
345	COMB23	MAX						
		0.00	0.00	65.75	0.00	13.65	0.00	106.84
		7.5E-01	0.00	80.64	0.00	13.65	0.00	82.16
		1.50	0.00	99.55	0.00	13.65	0.00	52.19
		2.25	0.00	118.46	0.00	13.65	0.00	22.65
		3.00	0.00	133.35	0.00	13.65	0.00	1.96
345	COMB23	MIN						
		0.00	0.00	-7.222E-01	0.00	-5.80	0.00	-1.56
		7.5E-01	0.00	-7.222E-01	0.00	-5.80	0.00	-20.07
		1.50	0.00	-7.222E-01	0.00	-5.80	0.00	-38.58
		2.25	0.00	-7.222E-01	0.00	-5.80	0.00	-107.51
		3.00	0.00	-7.222E-01	0.00	-5.80	0.00	-202.19
345	COMB24							
		0.00	0.00	40.85	0.00	7.64	0.00	97.95
		7.5E-01	0.00	55.74	0.00	7.64	0.00	61.99
		1.50	0.00	74.65	0.00	7.64	0.00	13.34

		2.25	0.00	93.56	0.00	7.64	0.00	-49.99
		3.00	0.00	108.45	0.00	7.64	0.00	-125.99
354	COMB23	MAX						
		0.00	0.00	18.23	0.00	3.905E-01	0.00	54.73
		1.50	0.00	18.23	0.00	3.905E-01	0.00	40.23
		3.00	0.00	19.78	0.00	3.905E-01	0.00	46.88
		4.50	0.00	61.61	0.00	3.905E-01	0.00	37.45
		6.00	0.00	95.41	0.00	3.905E-01	0.00	1.309E-03
354	COMB23	MIN						
		0.00	0.00	-93.61	0.00	-9.509E-01	0.00	-133.55
		1.50	0.00	-59.81	0.00	-9.509E-01	0.00	-19.91
		3.00	0.00	-18.29	0.00	-9.509E-01	0.00	-3.195E-03
		4.50	0.00	-4.366E-04	0.00	-9.509E-01	0.00	-27.31
		6.00	0.00	-4.366E-04	0.00	-9.509E-01	0.00	-138.88
354	COMB24							
		0.00	0.00	-74.73	0.00	-4.668E-01	0.00	-76.88
		1.50	0.00	-40.93	0.00	-4.668E-01	0.00	11.87
		3.00	0.00	9.005E-01	0.00	-4.668E-01	0.00	41.89
		4.50	0.00	42.73	0.00	-4.668E-01	0.00	9.17
		6.00	0.00	76.53	0.00	-4.668E-01	0.00	-82.28
370	COMB23	MAX						
		0.00	0.00	18.18	0.00	4.238E-01	0.00	54.58
		1.50	0.00	18.18	0.00	4.238E-01	0.00	39.97
		3.00	0.00	19.76	0.00	4.238E-01	0.00	46.66
		4.50	0.00	61.59	0.00	4.238E-01	0.00	36.95
		6.00	0.00	95.39	0.00	4.238E-01	0.00	1.273E-03
370	COMB23	MIN						
		0.00	0.00	-93.43	0.00	-6.237E-01	0.00	-133.27
		1.50	0.00	-59.63	0.00	-6.237E-01	0.00	-19.89
		3.00	0.00	-18.17	0.00	-6.237E-01	0.00	0.00
		4.50	0.00	-4.245E-04	0.00	-6.237E-01	0.00	-27.23
		6.00	0.00	-4.245E-04	0.00	-6.237E-01	0.00	-139.05
370	COMB24							
		0.00	0.00	-74.65	0.00	-1.136E-01	0.00	-76.87
		1.50	0.00	-40.85	0.00	-1.136E-01	0.00	11.76
		3.00	0.00	9.790E-01	0.00	-1.136E-01	0.00	41.66
		4.50	0.00	42.81	0.00	-1.136E-01	0.00	8.82
		6.00	0.00	76.61	0.00	-1.136E-01	0.00	-82.75
385	COMB23	MAX						
		0.00	0.00	19.04	0.00	9.769E-01	0.00	55.61
		1.50	0.00	19.04	0.00	9.769E-01	0.00	42.26
		3.00	0.00	21.06	0.00	9.769E-01	0.00	48.83
		4.50	0.00	62.89	0.00	9.769E-01	0.00	41.35
		6.00	0.00	96.69	0.00	9.769E-01	0.00	1.92
385	COMB23	MIN						
		0.00	0.00	-94.01	0.00	-2.462E-01	0.00	-131.48
		1.50	0.00	-60.21	0.00	-2.462E-01	0.00	-17.93
		3.00	0.00	-18.86	0.00	-2.462E-01	0.00	-1.51
		4.50	0.00	-4.564E-04	0.00	-2.462E-01	0.00	-30.06
		6.00	0.00	-4.564E-04	0.00	-2.462E-01	0.00	-142.61
385	COMB24							
		0.00	0.00	-74.29	0.00	5.459E-01	0.00	-73.86
		1.50	0.00	-40.49	0.00	5.459E-01	0.00	14.23
		3.00	0.00	1.34	0.00	5.459E-01	0.00	43.59
		4.50	0.00	43.17	0.00	5.459E-01	0.00	10.21
		6.00	0.00	76.97	0.00	5.459E-01	0.00	-81.89
424	COMB23	MAX						
		0.00	4.942E-01	1.50	1.26	5.170E-01	3.64	4.56
		7.5E-01	4.942E-01	1.50	1.26	5.170E-01	2.89	3.43
		1.50	4.942E-01	1.50	1.26	5.170E-01	2.73	2.31
		2.25	4.942E-01	1.50	1.26	5.170E-01	3.31	23.81
		3.00	4.942E-01	1.50	1.26	5.170E-01	3.92	48.15
424	COMB23	MIN						
		0.00	-19.40	-53.62	-8.809E-01	-2.07	-3.919E-01	-76.42
		7.5E-01	-19.40	-47.57	-8.809E-01	-2.07	-4.174E-01	-38.47
		1.50	-19.40	-41.52	-8.809E-01	-2.07	-4.430E-01	-6.39
		2.25	-19.40	-35.47	-8.809E-01	-2.07	-7.776E-01	-3.134E-01
		3.00	-19.40	-29.43	-8.809E-01	-2.07	-1.26	-8.298E-01
424	COMB24							
		0.00	-16.98	-45.84	2.195E-01	-1.45	2.56	-65.00
		7.5E-01	-16.98	-40.65	2.195E-01	-1.45	2.39	-32.57
		1.50	-16.98	-35.47	2.195E-01	-1.45	2.23	-4.03
		2.25	-16.98	-30.28	2.195E-01	-1.45	2.06	20.63
		3.00	-16.98	-25.10	2.195E-01	-1.45	1.90	41.40
428	COMB23	MAX						
		0.00	4.942E-01	25.69	1.17	5.170E-01	3.92	48.15
		7.5E-01	4.942E-01	31.74	1.17	5.170E-01	3.04	26.61
		1.50	4.942E-01	37.79	1.17	5.170E-01	2.17	2.66
		2.25	4.942E-01	43.84	1.17	5.170E-01	1.99	4.335E-01
		3.00	4.942E-01	49.88	1.17	5.170E-01	2.06	8.546E-01
428	COMB23	MIN						
		0.00	-19.40	-8.171E-01	-7.924E-01	-2.07	-1.26	-8.298E-01
		7.5E-01	-19.40	-5.615E-01	-7.924E-01	-2.07	-8.190E-01	-1.06
		1.50	-19.40	-5.615E-01	-7.924E-01	-2.07	-5.451E-01	-2.18
		2.25	-19.40	-5.615E-01	-7.924E-01	-2.07	-5.707E-01	-30.07
		3.00	-19.40	-5.615E-01	-7.924E-01	-2.07	-5.962E-01	-65.21
428	COMB24							
		0.00	-16.98	22.14	2.195E-01	-1.45	1.90	41.40

	7.5E-01	-16.98	27.33	2.195E-01	-1.45	1.73	22.85
	1.50	-16.98	32.51	2.195E-01	-1.45	1.57	4.116E-01
	2.25	-16.98	37.70	2.195E-01	-1.45	1.40	-25.92
	3.00	-16.98	42.88	2.195E-01	-1.45	1.24	-56.13
443	COMB23	MAX					
	0.00	0.00	10.52	0.00	3.511E-01	0.00	43.70
	2.00	0.00	10.52	0.00	3.511E-01	0.00	77.64
	4.00	0.00	13.56	0.00	3.511E-01	0.00	136.48
	6.00	0.00	85.93	0.00	3.511E-01	0.00	63.72
	8.00	0.00	158.16	0.00	3.511E-01	0.00	1.645E-03
443	COMB23	MIN					
	0.00	0.00	-152.35	0.00	-2.66	0.00	-199.06
	2.00	0.00	-80.65	0.00	-2.66	0.00	-9.468E-04
	4.00	0.00	-9.05	0.00	-2.66	0.00	-8.275E-05
	6.00	0.00	-4.320E-04	0.00	-2.66	0.00	-19.42
	8.00	0.00	-4.320E-04	0.00	-2.66	0.00	-216.82
443	COMB24						
	0.00	0.00	-134.09	0.00	-2.10	0.00	-153.71
	2.00	0.00	-69.74	0.00	-2.10	0.00	54.13
	4.00	0.00	2.64	0.00	-2.10	0.00	121.23
	6.00	0.00	75.02	0.00	-2.10	0.00	43.57
	8.00	0.00	139.37	0.00	-2.10	0.00	-174.83
464	COMB23	MAX					
	0.00	0.00	8.35	0.00	8.481E-01	0.00	24.46
	1.50	0.00	8.35	0.00	8.481E-01	0.00	13.85
	3.00	0.00	8.44	0.00	8.481E-01	0.00	33.15
	4.50	0.00	43.19	0.00	8.481E-01	0.00	15.71
	6.00	0.00	80.86	0.00	8.481E-01	0.00	8.288E-03
464	COMB23	MIN					
	0.00	0.00	-81.43	0.00	-5.549E-02	0.00	-102.34
	1.50	0.00	-43.62	0.00	-5.549E-02	0.00	-10.86
	3.00	0.00	-8.85	0.00	-5.549E-02	0.00	-5.773E-01
	4.50	0.00	-1.087E-02	0.00	-5.549E-02	0.00	-13.10
	6.00	0.00	-1.087E-02	0.00	-5.549E-02	0.00	-102.24
464	COMB24						
	0.00	0.00	-69.77	0.00	6.297E-01	0.00	-77.06
	1.50	0.00	-34.99	0.00	6.297E-01	0.00	1.51
	3.00	0.00	-2.174E-01	0.00	6.297E-01	0.00	27.92
	4.50	0.00	34.56	0.00	6.297E-01	0.00	2.16
	6.00	0.00	69.33	0.00	6.297E-01	0.00	-75.76
465	COMB23	MAX					
	0.00	0.00	16.20	0.00	2.090E-01	0.00	33.03
	1.00	0.00	16.20	0.00	2.090E-01	0.00	24.04
	2.00	0.00	19.68	0.00	2.090E-01	0.00	25.34
	3.00	0.00	56.10	0.00	2.090E-01	0.00	15.99
	4.00	0.00	78.26	0.00	2.090E-01	0.00	5.374E-01
465	COMB23	MIN					
	0.00	0.00	-71.48	0.00	-3.876E-01	0.00	-71.39
	1.00	0.00	-49.32	0.00	-3.876E-01	0.00	-11.84
	2.00	0.00	-13.88	0.00	-3.876E-01	0.00	-3.546E-02
	3.00	0.00	-2.751E-01	0.00	-3.876E-01	0.00	-15.57
	4.00	0.00	-2.751E-01	0.00	-3.876E-01	0.00	-83.68
465	COMB24						
	0.00	0.00	-55.19	0.00	-1.030E-01	0.00	-38.18
	1.00	0.00	-33.04	0.00	-1.030E-01	0.00	7.12
	2.00	0.00	3.39	0.00	-1.030E-01	0.00	23.13
	3.00	0.00	39.82	0.00	-1.030E-01	0.00	3.380E-01
	4.00	0.00	61.97	0.00	-1.030E-01	0.00	-51.75
466	COMB23	MAX					
	0.00	0.00	15.05	0.00	5.38	0.00	47.85
	7.5E-01	0.00	15.05	0.00	5.38	0.00	36.57
	1.50	0.00	15.05	0.00	5.38	0.00	61.26
	2.25	0.00	15.05	0.00	5.38	0.00	107.23
	3.00	0.00	15.05	0.00	5.38	0.00	142.68
466	COMB23	MIN					
	0.00	0.00	-157.80	0.00	-5.76	0.00	-192.23
	7.5E-01	0.00	-136.40	0.00	-5.76	0.00	-81.40
	1.50	0.00	-106.97	0.00	-5.76	0.00	-5.559E-01
	2.25	0.00	-77.55	0.00	-5.76	0.00	-2.990E-01
	3.00	0.00	-56.15	0.00	-5.76	0.00	-4.221E-02
466	COMB24						
	0.00	0.00	-142.65	0.00	-3.233E-01	0.00	-144.05
	7.5E-01	0.00	-121.25	0.00	-3.233E-01	0.00	-44.59
	1.50	0.00	-91.82	0.00	-3.233E-01	0.00	35.82
	2.25	0.00	-62.40	0.00	-3.233E-01	0.00	93.15
	3.00	0.00	-41.00	0.00	-3.233E-01	0.00	131.42
467	COMB23	MAX					
	0.00	0.00	82.69	0.00	4.18	0.00	141.21
	7.5E-01	0.00	104.09	0.00	4.18	0.00	80.56
	1.50	0.00	133.51	0.00	4.18	0.00	16.24
	2.25	0.00	162.94	0.00	4.18	0.00	8.775E-01
	3.00	0.00	186.81	0.00	4.18	0.00	1.20
467	COMB23	MIN					
	0.00	0.00	-4.273E-01	0.00	-4.26	0.00	-8.378E-02
	7.5E-01	0.00	-4.273E-01	0.00	-4.26	0.00	-8.50
	1.50	0.00	-4.273E-01	0.00	-4.26	0.00	-25.19
	2.25	0.00	-4.273E-01	0.00	-4.26	0.00	-136.86
	3.00	0.00	-4.273E-01	0.00	-4.26	0.00	-267.59

467	COMB24	0.00	0.00	67.47	0.00	-8.671E-02	0.00	130.11
	7.5E-01	0.00	0.00	88.88	0.00	-8.671E-02	0.00	71.98
	1.50	0.00	0.00	118.30	0.00	-8.671E-02	0.00	-5.21
	2.25	0.00	0.00	147.73	0.00	-8.671E-02	0.00	-105.47
	3.00	0.00	0.00	169.13	0.00	-8.671E-02	0.00	-224.79
468	COMB23 MAX	0.00	0.00	16.13	0.00	7.15	0.00	64.22
	7.5E-01	0.00	0.00	16.13	0.00	7.15	0.00	52.12
	1.50	0.00	0.00	16.13	0.00	7.15	0.00	40.02
	2.25	0.00	0.00	16.13	0.00	7.15	0.00	125.83
	3.00	0.00	0.00	16.13	0.00	7.15	0.00	217.55
468	COMB23 MIN	0.00	0.00	-257.28	0.00	-9.61	0.00	-402.00
	7.5E-01	0.00	0.00	-230.79	0.00	-9.61	0.00	-223.13
	1.50	0.00	0.00	-195.92	0.00	-9.61	0.00	-64.62
	2.25	0.00	0.00	-163.95	0.00	-9.61	0.00	-7.768E-01
	3.00	0.00	0.00	-140.82	0.00	-9.61	0.00	-5.990E-01
468	COMB24	0.00	0.00	-233.18	0.00	-2.40	0.00	-337.39
	7.5E-01	0.00	0.00	-210.05	0.00	-2.40	0.00	-170.67
	1.50	0.00	0.00	-178.90	0.00	-2.40	0.00	-24.31
	2.25	0.00	0.00	-147.74	0.00	-2.40	0.00	97.68
	3.00	0.00	0.00	-124.62	0.00	-2.40	0.00	199.31
469	COMB23 MAX	0.00	0.00	16.15	0.00	3.422E-01	0.00	217.06
	5.0E-01	0.00	0.00	16.15	0.00	3.422E-01	0.00	231.56
	1.00	0.00	0.00	16.33	0.00	3.422E-01	0.00	236.80
	1.50	0.00	0.00	34.34	0.00	3.422E-01	0.00	231.48
	2.00	0.00	0.00	48.87	0.00	3.422E-01	0.00	216.87
469	COMB23 MIN	0.00	0.00	-48.92	0.00	-2.944E-01	0.00	-5.899E-01
	5.0E-01	0.00	0.00	-34.39	0.00	-2.944E-01	0.00	-3.875E-01
	1.00	0.00	0.00	-16.30	0.00	-2.944E-01	0.00	-3.656E-01
	1.50	0.00	0.00	-3.06	0.00	-2.944E-01	0.00	-8.44
	2.00	0.00	0.00	-4.047E-01	0.00	-2.944E-01	0.00	-16.52
469	COMB24	0.00	0.00	-32.65	0.00	2.574E-02	0.00	198.93
	5.0E-01	0.00	0.00	-18.12	0.00	2.574E-02	0.00	211.77
	1.00	0.00	0.00	-2.772E-02	0.00	2.574E-02	0.00	216.46
	1.50	0.00	0.00	18.07	0.00	2.574E-02	0.00	211.80
	2.00	0.00	0.00	32.59	0.00	2.574E-02	0.00	198.99
470	COMB23 MAX	0.00	0.00	141.04	0.00	8.66	0.00	217.28
	7.5E-01	0.00	0.00	164.17	0.00	8.66	0.00	126.33
	1.50	0.00	0.00	196.37	0.00	8.66	0.00	23.59
	2.25	0.00	0.00	231.24	0.00	8.66	0.00	1.46
	3.00	0.00	0.00	257.73	0.00	8.66	0.00	1.88
470	COMB23 MIN	0.00	0.00	-5.527E-01	0.00	-6.42	0.00	-16.55
	7.5E-01	0.00	0.00	-5.527E-01	0.00	-6.42	0.00	-28.62
	1.50	0.00	0.00	-5.527E-01	0.00	-6.42	0.00	-65.59
	2.25	0.00	0.00	-5.527E-01	0.00	-6.42	0.00	-224.27
	3.00	0.00	0.00	-5.527E-01	0.00	-6.42	0.00	-403.31
470	COMB24	0.00	0.00	124.79	0.00	2.16	0.00	199.29
	7.5E-01	0.00	0.00	147.92	0.00	2.16	0.00	97.52
	1.50	0.00	0.00	179.08	0.00	2.16	0.00	-24.60
	2.25	0.00	0.00	210.23	0.00	2.16	0.00	-171.09
	3.00	0.00	0.00	233.36	0.00	2.16	0.00	-337.94
471	COMB23 MAX	0.00	0.00	13.48	0.00	4.07	0.00	39.08
	7.5E-01	0.00	0.00	13.48	0.00	4.07	0.00	28.97
	1.50	0.00	0.00	13.48	0.00	4.07	0.00	18.86
	2.25	0.00	0.00	13.48	0.00	4.07	0.00	71.73
	3.00	0.00	0.00	13.48	0.00	4.07	0.00	120.56
471	COMB23 MIN	0.00	0.00	-171.33	0.00	-11.12	0.00	-239.24
	7.5E-01	0.00	0.00	-146.86	0.00	-11.12	0.00	-121.06
	1.50	0.00	0.00	-116.77	0.00	-11.12	0.00	-21.95
	2.25	0.00	0.00	-87.35	0.00	-11.12	0.00	-2.415E-01
	3.00	0.00	0.00	-65.94	0.00	-11.12	0.00	-1.37
471	COMB24	0.00	0.00	-154.06	0.00	-7.00	0.00	-199.96
	7.5E-01	0.00	0.00	-132.66	0.00	-7.00	0.00	-91.94
	1.50	0.00	0.00	-103.23	0.00	-7.00	0.00	-2.98
	2.25	0.00	0.00	-73.81	0.00	-7.00	0.00	62.91
	3.00	0.00	0.00	-52.41	0.00	-7.00	0.00	109.74
472	COMB23 MAX	0.00	0.00	43.20	0.00	8.99	0.00	120.61
	7.5E-01	0.00	0.00	62.60	0.00	8.99	0.00	92.04
	1.50	0.00	0.00	86.01	0.00	8.99	0.00	56.93
	2.25	0.00	0.00	109.41	0.00	8.99	0.00	12.32
	3.00	0.00	0.00	128.81	0.00	8.99	0.00	9.322E-01
472	COMB23 MIN	0.00	0.00	-3.382E-01	0.00	-2.71	0.00	-1.36
	7.5E-01	0.00	0.00	-3.382E-01	0.00	-2.71	0.00	-11.44
	1.50	0.00	0.00	-3.382E-01	0.00	-2.71	0.00	-21.54

		2.25	0.00	-3.382E-01	0.00	-2.71	0.00	-59.94
		3.00	0.00	-3.382E-01	0.00	-2.71	0.00	-149.52
472	COMB24							
		0.00	0.00	29.63	0.00	6.17	0.00	109.80
		7.5E-01	0.00	49.03	0.00	6.17	0.00	80.56
		1.50	0.00	72.43	0.00	6.17	0.00	35.26
		2.25	0.00	95.84	0.00	6.17	0.00	-28.09
		3.00	0.00	115.24	0.00	6.17	0.00	-107.50
481	COMB23 MAX							
		0.00	0.00	8.71	0.00	8.006E-01	0.00	26.14
		1.50	0.00	8.71	0.00	8.006E-01	0.00	30.17
		3.00	0.00	10.73	0.00	8.006E-01	0.00	58.74
		4.50	0.00	61.56	0.00	8.006E-01	0.00	24.96
		6.00	0.00	108.13	0.00	8.006E-01	0.00	9.454E-04
481	COMB23 MIN							
		0.00	0.00	-104.44	0.00	-1.643E-01	0.00	-118.14
		1.50	0.00	-58.10	0.00	-1.643E-01	0.00	-1.63
		3.00	0.00	-7.82	0.00	-1.643E-01	0.00	-1.373E-02
		4.50	0.00	-3.147E-04	0.00	-1.643E-01	0.00	-13.03
		6.00	0.00	-3.147E-04	0.00	-1.643E-01	0.00	-128.46
481	COMB24							
		0.00	0.00	-91.90	0.00	5.294E-01	0.00	-91.11
		1.50	0.00	-49.10	0.00	5.294E-01	0.00	16.65
		3.00	0.00	1.73	0.00	5.294E-01	0.00	52.18
		4.50	0.00	52.55	0.00	5.294E-01	0.00	11.47
		6.00	0.00	95.36	0.00	5.294E-01	0.00	-101.47
497	COMB23 MAX							
		0.00	0.00	8.70	0.00	5.276E-01	0.00	26.11
		1.50	0.00	8.70	0.00	5.276E-01	0.00	27.11
		3.00	0.00	10.12	0.00	5.276E-01	0.00	56.49
		4.50	0.00	60.94	0.00	5.276E-01	0.00	23.60
		6.00	0.00	107.47	0.00	5.276E-01	0.00	9.094E-04
497	COMB23 MIN							
		0.00	0.00	-105.09	0.00	-2.466E-01	0.00	-121.84
		1.50	0.00	-58.62	0.00	-2.466E-01	0.00	-3.63
		3.00	0.00	-8.19	0.00	-2.466E-01	0.00	-7.797E-03
		4.50	0.00	-3.038E-04	0.00	-2.466E-01	0.00	-13.04
		6.00	0.00	-3.038E-04	0.00	-2.466E-01	0.00	-128.77
497	COMB24							
		0.00	0.00	-92.47	0.00	2.201E-01	0.00	-94.95
		1.50	0.00	-49.67	0.00	2.201E-01	0.00	13.66
		3.00	0.00	1.16	0.00	2.201E-01	0.00	50.04
		4.50	0.00	51.99	0.00	2.201E-01	0.00	10.18
		6.00	0.00	94.79	0.00	2.201E-01	0.00	-101.91
512	COMB23 MAX							
		0.00	0.00	9.11	0.00	1.26	0.00	26.28
		1.50	0.00	9.11	0.00	1.26	0.00	30.16
		3.00	0.00	9.36	0.00	1.26	0.00	62.37
		4.50	0.00	60.19	0.00	1.26	0.00	32.57
		6.00	0.00	106.07	0.00	1.26	0.00	3.491E-02
512	COMB23 MIN							
		0.00	0.00	-106.49	0.00	-3.264E-01	0.00	-120.56
		1.50	0.00	-60.33	0.00	-3.264E-01	0.00	-8.015E-01
		3.00	0.00	-9.57	0.00	-3.264E-01	0.00	-1.07
		4.50	0.00	-6.734E-03	0.00	-3.264E-01	0.00	-14.74
		6.00	0.00	-6.734E-03	0.00	-3.264E-01	0.00	-122.31
512	COMB24							
		0.00	0.00	-93.70	0.00	8.725E-01	0.00	-93.36
		1.50	0.00	-50.90	0.00	8.725E-01	0.00	17.10
		3.00	0.00	-7.377E-02	0.00	8.725E-01	0.00	55.33
		4.50	0.00	50.75	0.00	8.725E-01	0.00	17.32
		6.00	0.00	93.56	0.00	8.725E-01	0.00	-92.91
549	COMB23 MAX							
		0.00	0.00	12.93	0.00	1.296E-01	0.00	24.99
		1.00	0.00	12.93	0.00	1.296E-01	0.00	21.25
		2.00	0.00	17.46	0.00	1.296E-01	0.00	16.40
		3.00	0.00	36.00	0.00	1.296E-01	0.00	13.95
		4.00	0.00	44.20	0.00	1.296E-01	0.00	6.87
549	COMB23 MIN							
		0.00	0.00	-35.16	0.00	-7.327E-02	0.00	-34.83
		1.00	0.00	-26.97	0.00	-7.327E-02	0.00	-5.56
		2.00	0.00	-9.74	0.00	-7.327E-02	0.00	-8.627E-01
		3.00	0.00	-6.141E-02	0.00	-7.327E-02	0.00	-13.79
		4.00	0.00	-6.141E-02	0.00	-7.327E-02	0.00	-54.63
549	COMB24							
		0.00	0.00	-22.22	0.00	4.784E-02	0.00	-9.81
		1.00	0.00	-14.02	0.00	4.784E-02	0.00	9.17
		2.00	0.00	4.52	0.00	4.784E-02	0.00	14.79
		3.00	0.00	23.06	0.00	4.784E-02	0.00	1.377E-01
		4.00	0.00	31.25	0.00	4.784E-02	0.00	-27.88
561	COMB23 MAX							
		0.00	1.16	1.30	1.23	4.439E-01	2.33	3.85
		7.5E-01	1.16	1.30	1.23	4.439E-01	1.58	2.88
		1.50	1.16	1.30	1.23	4.439E-01	1.33	4.14
		2.25	1.16	1.30	1.23	4.439E-01	1.82	30.26
		3.00	1.16	1.30	1.23	4.439E-01	2.38	53.18
561	COMB23 MIN							
		0.00	-20.67	-51.73	-7.769E-01	-1.519E-01	-5.108E-01	-65.72

	7.5E-01	-20.67	-45.68	-7.769E-01	-1.519E-01	-4.608E-01	-29.19
	1.50	-20.67	-39.63	-7.769E-01	-1.519E-01	-4.108E-01	-4.437E-01
	2.25	-20.67	-33.59	-7.769E-01	-1.519E-01	-7.025E-01	-4.942E-01
	3.00	-20.67	-27.54	-7.769E-01	-1.519E-01	-1.50	-9.535E-01
561	COMB24						
	0.00	-18.27	-44.44	2.413E-01	2.560E-01	1.24	-56.72
	7.5E-01	-18.27	-39.26	2.413E-01	2.560E-01	1.06	-25.33
	1.50	-18.27	-34.08	2.413E-01	2.560E-01	8.785E-01	2.17
	2.25	-18.27	-28.89	2.413E-01	2.560E-01	6.975E-01	25.79
	3.00	-18.27	-23.71	2.413E-01	2.560E-01	5.166E-01	45.51
562	COMB23 MAX						
	0.00	1.16	27.58	1.24	4.439E-01	2.38	53.18
	7.5E-01	1.16	33.63	1.24	4.439E-01	1.45	30.23
	1.50	1.16	39.68	1.24	4.439E-01	5.180E-01	4.49
	2.25	1.16	45.72	1.24	4.439E-01	3.600E-01	4.808E-01
	3.00	1.16	51.77	1.24	4.439E-01	9.286E-01	9.589E-01
562	COMB23 MIN						
	0.00	-20.67	-6.375E-01	-7.918E-01	-1.519E-01	-1.50	-9.535E-01
	7.5E-01	-20.67	-6.375E-01	-7.918E-01	-1.519E-01	-9.098E-01	-1.01
	1.50	-20.67	-6.375E-01	-7.918E-01	-1.519E-01	-3.159E-01	-1.98
	2.25	-20.67	-6.375E-01	-7.918E-01	-1.519E-01	-4.947E-01	-29.29
	3.00	-20.67	-6.375E-01	-7.918E-01	-1.519E-01	-1.40	-65.85
562	COMB24						
	0.00	-18.27	23.54	2.413E-01	2.560E-01	5.166E-01	45.51
	7.5E-01	-18.27	28.72	2.413E-01	2.560E-01	3.356E-01	25.91
	1.50	-18.27	33.90	2.413E-01	2.560E-01	1.547E-01	2.43
	2.25	-18.27	39.09	2.413E-01	2.560E-01	-2.629E-02	-24.94
	3.00	-18.27	44.27	2.413E-01	2.560E-01	-2.072E-01	-56.20
563	COMB23 MAX						
	0.00	1.82	1.44	9.427E-01	2.39	2.37	4.24
	7.5E-01	1.82	1.44	9.427E-01	2.39	2.15	3.16
	1.50	1.82	1.44	9.427E-01	2.39	2.20	6.17
	2.25	1.82	1.44	9.427E-01	2.39	2.74	31.50
	3.00	1.82	1.44	9.427E-01	2.39	3.27	53.90
563	COMB23 MIN						
	0.00	-19.61	-51.03	-7.527E-01	-7.803E-01	-9.797E-01	-62.91
	7.5E-01	-19.61	-44.99	-7.527E-01	-7.803E-01	-8.558E-01	-26.90
	1.50	-19.61	-38.94	-7.527E-01	-7.803E-01	-7.319E-01	-4.986E-03
	2.25	-19.61	-32.89	-7.527E-01	-7.803E-01	-1.01	-4.668E-01
	3.00	-19.61	-26.84	-7.527E-01	-7.803E-01	-1.55	-9.287E-01
563	COMB24						
	0.00	-17.36	-43.70	1.128E-01	1.38	1.38	-53.70
	7.5E-01	-17.36	-38.52	1.128E-01	1.38	1.29	-22.87
	1.50	-17.36	-33.34	1.128E-01	1.38	1.21	4.08
	2.25	-17.36	-28.15	1.128E-01	1.38	1.12	27.14
	3.00	-17.36	-22.97	1.128E-01	1.38	1.04	46.31
564	COMB23 MAX						
	0.00	1.82	28.28	1.27	2.39	3.27	53.90
	7.5E-01	1.82	34.32	1.27	2.39	2.32	30.43
	1.50	1.82	40.37	1.27	2.39	1.37	4.39
	2.25	1.82	46.42	1.27	2.39	1.15	4.982E-01
	3.00	1.82	52.47	1.27	2.39	1.93	9.739E-01
564	COMB23 MIN						
	0.00	-19.61	-6.342E-01	-1.08	-7.803E-01	-1.55	-9.287E-01
	7.5E-01	-19.61	-6.342E-01	-1.08	-7.803E-01	-8.550E-01	-1.17
	1.50	-19.61	-6.342E-01	-1.08	-7.803E-01	-3.140E-01	-2.25
	2.25	-19.61	-6.342E-01	-1.08	-7.803E-01	-2.297E-01	-30.13
	3.00	-19.61	-6.342E-01	-1.08	-7.803E-01	-7.751E-01	-67.21
564	COMB24						
	0.00	-17.36	24.28	1.128E-01	1.38	1.04	46.31
	7.5E-01	-17.36	29.46	1.128E-01	1.38	9.553E-01	26.16
	1.50	-17.36	34.64	1.128E-01	1.38	8.707E-01	2.12
	2.25	-17.36	39.83	1.128E-01	1.38	7.862E-01	-25.81
	3.00	-17.36	45.01	1.128E-01	1.38	7.016E-01	-57.63
565	COMB23 MAX						
	0.00	2.39	1.21	2.90	3.28	7.91	3.32
	7.5E-01	2.39	1.21	2.90	3.28	5.81	2.41
	1.50	2.39	1.21	2.90	3.28	4.19	7.64
	2.25	2.39	1.21	2.90	3.28	2.58	35.03
	3.00	2.39	1.21	2.90	3.28	1.08	58.70
565	COMB23 MIN						
	0.00	-18.88	-52.73	-8.651E-01	-1.70	-2.34	-63.20
	7.5E-01	-18.88	-46.68	-8.651E-01	-1.70	-1.69	-25.92
	1.50	-18.88	-40.63	-8.651E-01	-1.70	-1.05	-2.580E-02
	2.25	-18.88	-34.59	-8.651E-01	-1.70	-9.403E-01	-5.315E-01
	3.00	-18.88	-28.54	-8.651E-01	-1.70	-1.75	-1.04
565	COMB24						
	0.00	-16.38	-44.98	1.96	9.588E-01	5.48	-53.62
	7.5E-01	-16.38	-39.79	1.96	9.588E-01	4.01	-21.83
	1.50	-16.38	-34.61	1.96	9.588E-01	2.54	6.07
	2.25	-16.38	-29.43	1.96	9.588E-01	1.07	30.08
	3.00	-16.38	-24.24	1.96	9.588E-01	-3.935E-01	50.21
566	COMB23 MAX						
	0.00	2.39	26.58	4.13	3.28	1.08	58.70
	7.5E-01	2.39	32.63	4.13	3.28	9.011E-01	36.50
	1.50	2.39	38.68	4.13	3.28	1.55	10.09
	2.25	2.39	44.72	4.13	3.28	2.21	2.580E-01
	3.00	2.39	50.77	4.13	3.28	3.23	6.898E-01

566	COMB23 MIN							
	0.00	-18.88	-8.834E-01	-1.36	-1.70	-1.75	-1.04	
	7.5E-01	-18.88	-5.757E-01	-1.36	-1.70	-2.96	-1.21	
	1.50	-18.88	-5.757E-01	-1.36	-1.70	-5.24	-2.11	
	2.25	-18.88	-5.757E-01	-1.36	-1.70	-8.34	-22.14	
	3.00	-18.88	-5.757E-01	-1.36	-1.70	-11.44	-57.33	
566	COMB24							
	0.00	-16.38	23.00	1.96	9.588E-01	-3.935E-01	50.21	
	7.5E-01	-16.38	28.19	1.96	9.588E-01	-1.86	31.01	
	1.50	-16.38	33.37	1.96	9.588E-01	-3.33	7.93	
	2.25	-16.38	38.55	1.96	9.588E-01	-4.80	-19.04	
	3.00	-16.38	43.74	1.96	9.588E-01	-6.27	-49.90	
596	COMB23 MAX							
	0.00	5.822E-01	62.74	5.378E-01	2.13	3.26	102.54	
	7.5E-01	5.822E-01	70.80	5.378E-01	2.13	4.73	52.46	
	1.50	5.822E-01	78.87	5.378E-01	2.13	6.22	2.52	
	2.25	5.822E-01	86.93	5.378E-01	2.13	7.91	9.741E-01	
	3.00	5.822E-01	95.00	5.378E-01	2.13	10.45	1.84	
596	COMB23 MIN							
	0.00	-38.67	-1.16	-3.64	-5.14	-3.35	-1.63	
	7.5E-01	-38.67	-1.16	-3.64	-5.14	-1.67	-1.94	
	1.50	-38.67	-1.16	-3.64	-5.14	-1.29	-6.46	
	2.25	-38.67	-1.16	-3.64	-5.14	-1.59	-65.84	
	3.00	-38.67	-1.16	-3.64	-5.14	-1.99	-134.06	
596	COMB24							
	0.00	-33.90	53.73	-2.81	-1.94	-5.920E-02	87.66	
	7.5E-01	-33.90	60.65	-2.81	-1.94	2.05	44.77	
	1.50	-33.90	67.56	-2.81	-1.94	4.16	-3.31	
	2.25	-33.90	74.47	-2.81	-1.94	6.27	-56.57	
	3.00	-33.90	81.38	-2.81	-1.94	8.38	-115.02	
599	COMB23 MAX							
	0.00	5.822E-01	1.41	1.96	2.13	4.04	6.14	
	5.0E-01	5.822E-01	1.41	1.96	2.13	3.06	5.44	
	1.0E+00	5.822E-01	1.41	1.96	2.13	2.08	4.74	
	1.50	5.822E-01	1.41	1.96	2.13	1.50	35.80	
	2.00	5.822E-01	1.41	1.96	2.13	1.23	77.02	
599	COMB23 MIN							
	0.00	-38.67	-101.26	-5.96	-5.14	-20.60	-103.99	
	5.0E-01	-38.67	-95.88	-5.96	-5.14	-17.62	-54.70	
	1.0E+00	-38.67	-90.50	-5.96	-5.14	-14.64	-12.29	
	1.50	-38.67	-85.13	-5.96	-5.14	-11.66	-6.813E-01	
	2.00	-38.67	-79.75	-5.96	-5.14	-9.90	-1.35	
599	COMB24							
	0.00	-33.90	-86.83	-2.81	-1.94	-14.13	-89.57	
	5.0E-01	-33.90	-82.23	-2.81	-1.94	-12.72	-47.31	
	1.0E+00	-33.90	-77.62	-2.81	-1.94	-11.32	-7.35	
	1.50	-33.90	-73.01	-2.81	-1.94	-9.91	30.31	
	2.00	-33.90	-68.40	-2.81	-1.94	-8.50	65.66	
600	COMB23 MAX							
	0.00	5.822E-01	1.41	7.242E-01	2.13	1.23	77.02	
	7.5E-01	5.822E-01	1.41	7.242E-01	2.13	8.295E-01	92.47	
	1.50	5.822E-01	1.41	7.242E-01	2.13	4.262E-01	101.88	
	2.25	5.822E-01	3.31	7.242E-01	2.13	8.879E-01	105.23	
	3.00	5.822E-01	9.07	7.242E-01	2.13	3.26	102.54	
600	COMB23 MIN							
	0.00	-38.67	-24.63	-3.97	-5.14	-9.90	-1.35	
	7.5E-01	-38.67	-16.57	-3.97	-5.14	-7.36	-1.42	
	1.50	-38.67	-8.80	-3.97	-5.14	-5.84	-1.49	
	2.25	-38.67	-3.63	-3.97	-5.14	-4.60	-1.56	
	3.00	-38.67	-3.63	-3.97	-5.14	-3.35	-1.63	
600	COMB24							
	0.00	-33.90	-21.16	-2.81	-1.94	-8.50	65.66	
	7.5E-01	-33.90	-14.25	-2.81	-1.94	-6.39	78.94	
	1.50	-33.90	-7.33	-2.81	-1.94	-4.28	87.03	
	2.25	-33.90	-4.211E-01	-2.81	-1.94	-2.17	89.94	
	3.00	-33.90	6.49	-2.81	-1.94	-5.920E-02	87.66	

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UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB23	ENVE				COMB23
		COMB1	1.0000	COMBO	
		COMB2	1.0000	COMBO	
		COMB3	1.0000	COMBO	
		COMB4	1.0000	COMBO	
		COMB5	1.0000	COMBO	
		COMB6	1.0000	COMBO	
		COMB7	1.0000	COMBO	
		COMB8	1.0000	COMBO	
		COMB9	1.0000	COMBO	
		COMB10	1.0000	COMBO	
		COMB11	1.0000	COMBO	
		COMB12	1.0000	COMBO	
		COMB13	1.0000	COMBO	
		COMB14	1.0000	COMBO	
		COMB15	1.0000	COMBO	
		COMB16	1.0000	COMBO	
		COMB17	1.0000	COMBO	
		COMB18	1.0000	COMBO	
		COMB19	1.0000	COMBO	
		COMB20	1.0000	COMBO	
		COMB21	1.0000	COMBO	
		COMB22	1.0000	COMBO	
		DL	1.0000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	1.0000	STATIC (OTHER)	
		BS	1.0000	STATIC (DEAD)	
		ANGIN	1.0000	STATIC (WIND)	
		EX	1.0000	STATIC (QUAKE)	
		EY	1.0000	STATIC (QUAKE)	
COMB24	ADD				COMB24
		DL	1.2000	STATIC (DEAD)	
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	

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UAJY

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
46	COMB23	MAX						
		0.00	0.00	25.91	0.00	1.69	0.00	106.09
		2.00	0.00	25.91	0.00	1.69	0.00	97.27
		4.00	0.00	29.11	0.00	1.69	0.00	116.08
		6.00	0.00	97.75	0.00	1.69	0.00	82.83
		8.00	0.00	155.26	0.00	1.69	0.00	7.260E-04
46	COMB23	MIN						
		0.00	0.00	-150.58	0.00	-1.04	0.00	-264.07
		2.00	0.00	-93.06	0.00	-1.04	0.00	-27.07
		4.00	0.00	-25.19	0.00	-1.04	0.00	-1.318E-05
		6.00	0.00	-1.848E-04	0.00	-1.04	0.00	-49.36
		8.00	0.00	-1.848E-04	0.00	-1.04	0.00	-277.74
46	COMB24							
		0.00	0.00	-123.81	0.00	4.481E-01	0.00	-154.47
		2.00	0.00	-66.30	0.00	4.481E-01	0.00	41.20
		4.00	0.00	2.34	0.00	4.481E-01	0.00	105.16
		6.00	0.00	70.98	0.00	4.481E-01	0.00	31.83
		8.00	0.00	128.50	0.00	4.481E-01	0.00	-173.21
61	COMB23	MAX						
		0.00	0.00	25.98	0.00	3.711E-01	0.00	75.15
		1.50	0.00	25.98	0.00	3.711E-01	0.00	51.62
		3.00	0.00	26.08	0.00	3.711E-01	0.00	78.73
		4.50	0.00	102.53	0.00	3.711E-01	0.00	58.68
		6.00	0.00	150.56	0.00	3.711E-01	0.00	5.75
61	COMB23	MIN						
		0.00	0.00	-151.45	0.00	-2.05	0.00	-218.97

	1.50	0.00	-103.43	0.00	-2.05	0.00	-27.02
	3.00	0.00	-26.98	0.00	-2.05	0.00	-2.78
	4.50	0.00	-1.83	0.00	-2.05	0.00	-41.75
	6.00	0.00	-1.83	0.00	-2.05	0.00	-222.00
61	COMB24						
	0.00	0.00	-124.92	0.00	-1.62	0.00	-142.25
	1.50	0.00	-76.90	0.00	-1.62	0.00	14.68
	3.00	0.00	-4.486E-01	0.00	-1.62	0.00	73.42
	4.50	0.00	76.00	0.00	-1.62	0.00	16.03
	6.00	0.00	124.03	0.00	-1.62	0.00	-139.55
68	COMB23	MAX					
	0.00	0.00	19.40	0.00	5.476E-01	0.00	57.22
	1.50	0.00	19.40	0.00	5.476E-01	0.00	36.22
	3.00	0.00	19.40	0.00	5.476E-01	0.00	55.24
	4.50	0.00	73.05	0.00	5.476E-01	0.00	41.78
	6.00	0.00	109.95	0.00	5.476E-01	0.00	3.980E-04
68	COMB23	MIN					
	0.00	0.00	-112.30	0.00	-5.311E-01	0.00	-165.37
	1.50	0.00	-75.40	0.00	-5.311E-01	0.00	-23.92
	3.00	0.00	-21.20	0.00	-5.311E-01	0.00	-9.837E-01
	4.50	0.00	-1.305E-04	0.00	-5.311E-01	0.00	-30.09
	6.00	0.00	-1.305E-04	0.00	-5.311E-01	0.00	-160.34
68	COMB24						
	0.00	0.00	-92.28	0.00	3.933E-02	0.00	-106.32
	1.50	0.00	-55.38	0.00	3.933E-02	0.00	7.20
	3.00	0.00	-1.18	0.00	3.933E-02	0.00	50.34
	4.50	0.00	53.03	0.00	3.933E-02	0.00	10.73
	6.00	0.00	89.93	0.00	3.933E-02	0.00	-99.27
70	COMB23	MAX					
	0.00	0.00	26.64	0.00	3.714E-01	0.00	53.79
	1.00	0.00	26.64	0.00	3.714E-01	0.00	30.87
	2.00	0.00	27.72	0.00	3.714E-01	0.00	22.03
	3.00	0.00	60.41	0.00	3.714E-01	0.00	28.11
	4.00	0.00	73.32	0.00	3.714E-01	0.00	26.52
70	COMB23	MIN					
	0.00	0.00	-71.57	0.00	-2.034E-01	0.00	-90.60
	1.00	0.00	-58.66	0.00	-2.034E-01	0.00	-25.06
	2.00	0.00	-26.29	0.00	-2.034E-01	0.00	-1.201E-02
	3.00	0.00	-4.47	0.00	-2.034E-01	0.00	-26.14
	4.00	0.00	-6.734E-01	0.00	-2.034E-01	0.00	-93.08
70	COMB24						
	0.00	0.00	-44.73	0.00	1.456E-01	0.00	-36.40
	1.00	0.00	-31.81	0.00	1.456E-01	0.00	3.52
	2.00	0.00	8.731E-01	0.00	1.456E-01	0.00	20.64
	3.00	0.00	33.56	0.00	1.456E-01	0.00	1.77
	4.00	0.00	46.47	0.00	1.456E-01	0.00	-39.89
71	COMB23	MAX					
	0.00	0.00	26.48	0.00	9.51	0.00	80.60
	7.5E-01	0.00	26.48	0.00	9.51	0.00	60.74
	1.50	0.00	26.48	0.00	9.51	0.00	64.28
	2.25	0.00	26.48	0.00	9.51	0.00	120.22
	3.00	0.00	26.48	0.00	9.51	0.00	165.97
71	COMB23	MIN					
	0.00	0.00	-191.64	0.00	-10.62	0.00	-275.15
	7.5E-01	0.00	-173.19	0.00	-10.62	0.00	-137.64
	1.50	0.00	-143.62	0.00	-10.62	0.00	-25.07
	2.25	0.00	-114.05	0.00	-10.62	0.00	-6.289E-01
	3.00	0.00	-95.60	0.00	-10.62	0.00	-1.706E-01
71	COMB24						
	0.00	0.00	-164.98	0.00	-9.057E-01	0.00	-193.95
	7.5E-01	0.00	-146.53	0.00	-9.057E-01	0.00	-76.43
	1.50	0.00	-116.96	0.00	-9.057E-01	0.00	23.07
	2.25	0.00	-87.38	0.00	-9.057E-01	0.00	99.00
	3.00	0.00	-68.93	0.00	-9.057E-01	0.00	156.93
72	COMB23	MAX					
	0.00	0.00	105.90	0.00	8.75	0.00	164.65
	7.5E-01	0.00	124.35	0.00	8.75	0.00	108.90
	1.50	0.00	153.93	0.00	8.75	0.00	45.42
	2.25	0.00	183.50	0.00	8.75	0.00	1.64
	3.00	0.00	201.95	0.00	8.75	0.00	2.26
72	COMB23	MIN					
	0.00	0.00	-8.225E-01	0.00	-8.59	0.00	-2.097E-01
	7.5E-01	0.00	-8.225E-01	0.00	-8.59	0.00	-18.61
	1.50	0.00	-8.225E-01	0.00	-8.59	0.00	-38.51
	2.25	0.00	-8.225E-01	0.00	-8.59	0.00	-159.45
	3.00	0.00	-8.225E-01	0.00	-8.59	0.00	-304.69
72	COMB24						
	0.00	0.00	79.12	0.00	7.179E-02	0.00	155.73
	7.5E-01	0.00	97.57	0.00	7.179E-02	0.00	90.17
	1.50	0.00	127.14	0.00	7.179E-02	0.00	6.60
	2.25	0.00	156.72	0.00	7.179E-02	0.00	-100.55
	3.00	0.00	175.17	0.00	7.179E-02	0.00	-225.70

73	COMB23	MAX					
	0.00	0.00	33.58	0.00	14.43	0.00	134.18
	7.5E-01	0.00	33.58	0.00	14.43	0.00	109.00
	1.50	0.00	33.58	0.00	14.43	0.00	83.82
	2.25	0.00	33.58	0.00	14.43	0.00	154.34
	3.00	0.00	33.58	0.00	14.43	0.00	252.19
73	COMB23	MIN					
	0.00	0.00	-291.71	0.00	-17.78	0.00	-536.17
	7.5E-01	0.00	-271.53	0.00	-17.78	0.00	-324.26
	1.50	0.00	-240.23	0.00	-17.78	0.00	-131.65
	2.25	0.00	-208.93	0.00	-17.78	0.00	-1.64
	3.00	0.00	-188.75	0.00	-17.78	0.00	-1.28
73	COMB24						
	0.00	0.00	-257.99	0.00	-3.21	0.00	-401.17
	7.5E-01	0.00	-237.81	0.00	-3.21	0.00	-214.55
	1.50	0.00	-206.51	0.00	-3.21	0.00	-47.24
	2.25	0.00	-175.21	0.00	-3.21	0.00	95.21
	3.00	0.00	-155.03	0.00	-3.21	0.00	218.36
74	COMB23	MAX					
	0.00	0.00	33.55	0.00	5.820E-01	0.00	252.45
	5.0E-01	0.00	33.55	0.00	5.820E-01	0.00	247.48
	1.00	0.00	33.73	0.00	5.820E-01	0.00	250.95
	1.50	0.00	50.77	0.00	5.820E-01	0.00	247.60
	2.00	0.00	62.99	0.00	5.820E-01	0.00	252.75
74	COMB23	MIN					
	0.00	0.00	-63.37	0.00	-5.526E-01	0.00	-1.26
	5.0E-01	0.00	-51.16	0.00	-5.526E-01	0.00	-8.301E-01
	1.00	0.00	-34.00	0.00	-5.526E-01	0.00	-4.002E-01
	1.50	0.00	-21.69	0.00	-5.526E-01	0.00	-16.85
	2.00	0.00	-12.75	0.00	-5.526E-01	0.00	-33.63
74	COMB24						
	0.00	0.00	-29.57	0.00	1.430E-02	0.00	218.60
	5.0E-01	0.00	-17.35	0.00	1.430E-02	0.00	230.54
	1.00	0.00	-1.915E-01	0.00	1.430E-02	0.00	235.13
	1.50	0.00	16.97	0.00	1.430E-02	0.00	230.73
	2.00	0.00	29.18	0.00	1.430E-02	0.00	218.99
75	COMB23	MAX					
	0.00	0.00	188.69	0.00	16.18	0.00	252.44
	7.5E-01	0.00	208.87	0.00	16.18	0.00	154.90
	1.50	0.00	240.17	0.00	16.18	0.00	52.66
	2.25	0.00	271.47	0.00	16.18	0.00	3.20
	3.00	0.00	291.65	0.00	16.18	0.00	4.12
75	COMB23	MIN					
	0.00	0.00	-1.23	0.00	-13.04	0.00	-33.61
	7.5E-01	0.00	-1.23	0.00	-13.04	0.00	-58.76
	1.50	0.00	-1.23	0.00	-13.04	0.00	-131.13
	2.25	0.00	-1.23	0.00	-13.04	0.00	-323.69
	3.00	0.00	-1.23	0.00	-13.04	0.00	-535.55
75	COMB24						
	0.00	0.00	154.79	0.00	2.97	0.00	218.70
	7.5E-01	0.00	174.97	0.00	2.97	0.00	95.73
	1.50	0.00	206.27	0.00	2.97	0.00	-46.54
	2.25	0.00	237.57	0.00	2.97	0.00	-213.67
	3.00	0.00	257.75	0.00	2.97	0.00	-400.12
76	COMB23	MAX					
	0.00	0.00	25.43	0.00	8.11	0.00	76.03
	7.5E-01	0.00	25.43	0.00	8.11	0.00	56.96
	1.50	0.00	25.43	0.00	8.11	0.00	45.93
	2.25	0.00	25.43	0.00	8.11	0.00	91.23
	3.00	0.00	25.43	0.00	8.11	0.00	128.24
76	COMB23	MIN					
	0.00	0.00	-175.23	0.00	-19.96	0.00	-262.79
	7.5E-01	0.00	-156.78	0.00	-19.96	0.00	-137.59
	1.50	0.00	-127.20	0.00	-19.96	0.00	-32.68
	2.25	0.00	-97.63	0.00	-19.96	0.00	-6.301E-01
	3.00	0.00	-79.18	0.00	-19.96	0.00	-3.302E-01
76	COMB24						
	0.00	0.00	-149.68	0.00	-11.77	0.00	-186.30
	7.5E-01	0.00	-131.23	0.00	-11.77	0.00	-80.26
	1.50	0.00	-101.66	0.00	-11.77	0.00	7.76
	2.25	0.00	-72.08	0.00	-11.77	0.00	72.22
	3.00	0.00	-53.63	0.00	-11.77	0.00	118.67
77	COMB23	MAX					
	0.00	0.00	77.10	0.00	18.48	0.00	128.44
	7.5E-01	0.00	92.77	0.00	18.48	0.00	94.08
	1.50	0.00	114.00	0.00	18.48	0.00	55.32
	2.25	0.00	135.24	0.00	18.48	0.00	17.73
	3.00	0.00	150.90	0.00	18.48	0.00	2.16
77	COMB23	MIN					
	0.00	0.00	-8.275E-01	0.00	-6.40	0.00	-3.180E-01
	7.5E-01	0.00	-8.275E-01	0.00	-6.40	0.00	-19.26
	1.50	0.00	-8.275E-01	0.00	-6.40	0.00	-38.29

	2.25	0.00	-8.275E-01	0.00	-6.40	0.00	-115.62
	3.00	0.00	-8.275E-01	0.00	-6.40	0.00	-223.27
77	COMB24						
	0.00	0.00	51.48	0.00	11.85	0.00	118.87
	7.5E-01	0.00	67.15	0.00	11.85	0.00	74.73
	1.50	0.00	88.38	0.00	11.85	0.00	16.76
	2.25	0.00	109.61	0.00	11.85	0.00	-57.84
	3.00	0.00	125.28	0.00	11.85	0.00	-146.27
78	COMB23	MAX					
	0.00	0.00	22.01	0.00	1.69	0.00	45.71
	1.00	0.00	22.01	0.00	1.69	0.00	25.23
	2.00	0.00	22.01	0.00	1.69	0.00	24.45
	3.00	0.00	51.47	0.00	1.69	0.00	28.63
	4.00	0.00	64.38	0.00	1.69	0.00	22.78
78	COMB23	MIN					
	0.00	0.00	-71.18	0.00	-1.55	0.00	-88.90
	1.00	0.00	-58.27	0.00	-1.55	0.00	-22.89
	2.00	0.00	-25.58	0.00	-1.55	0.00	-3.981E-02
	3.00	0.00	-2.51	0.00	-1.55	0.00	-20.32
	4.00	0.00	-5.669E-01	0.00	-1.55	0.00	-71.89
78	COMB24						
	0.00	0.00	-49.00	0.00	9.590E-02	0.00	-42.84
	1.00	0.00	-36.09	0.00	9.590E-02	0.00	1.35
	2.00	0.00	-3.40	0.00	9.590E-02	0.00	22.75
	3.00	0.00	29.29	0.00	9.590E-02	0.00	8.15
	4.00	0.00	42.20	0.00	9.590E-02	0.00	-29.24
80	COMB23	MAX					
	0.00	0.00	27.12	0.00	1.10	0.00	82.85
	1.50	0.00	27.12	0.00	1.10	0.00	53.40
	3.00	0.00	27.12	0.00	1.10	0.00	60.07
	4.50	0.00	85.14	0.00	1.10	0.00	53.41
	6.00	0.00	115.16	0.00	1.10	0.00	13.80
80	COMB23	MIN					
	0.00	0.00	-117.20	0.00	-7.564E-01	0.00	-191.61
	1.50	0.00	-87.18	0.00	-7.564E-01	0.00	-36.38
	3.00	0.00	-28.72	0.00	-7.564E-01	0.00	-9.200E-02
	4.50	0.00	-1.96	0.00	-7.564E-01	0.00	-39.18
	6.00	0.00	-1.96	0.00	-7.564E-01	0.00	-182.44
80	COMB24						
	0.00	0.00	-89.50	0.00	2.291E-01	0.00	-106.97
	1.50	0.00	-59.47	0.00	2.291E-01	0.00	10.32
	3.00	0.00	-1.02	0.00	2.291E-01	0.00	56.41
	4.50	0.00	57.43	0.00	2.291E-01	0.00	13.38
	6.00	0.00	87.46	0.00	2.291E-01	0.00	-100.85
87	COMB23	MAX					
	0.00	0.00	20.25	0.00	4.173E-01	0.00	60.78
	1.50	0.00	20.25	0.00	4.173E-01	0.00	44.29
	3.00	0.00	20.94	0.00	4.173E-01	0.00	61.18
	4.50	0.00	79.39	0.00	4.173E-01	0.00	44.12
	6.00	0.00	109.42	0.00	4.173E-01	0.00	4.032E-04
87	COMB23	MIN					
	0.00	0.00	-109.33	0.00	-6.692E-01	0.00	-165.50
	1.50	0.00	-79.31	0.00	-6.692E-01	0.00	-22.90
	3.00	0.00	-20.90	0.00	-6.692E-01	0.00	-3.275E-03
	4.50	0.00	-1.343E-04	0.00	-6.692E-01	0.00	-30.36
	6.00	0.00	-1.343E-04	0.00	-6.692E-01	0.00	-165.71
87	COMB24						
	0.00	0.00	-88.43	0.00	-1.880E-01	0.00	-102.78
	1.50	0.00	-58.41	0.00	-1.880E-01	0.00	12.92
	3.00	0.00	4.198E-02	0.00	-1.880E-01	0.00	57.42
	4.50	0.00	58.49	0.00	-1.880E-01	0.00	12.79
	6.00	0.00	88.52	0.00	-1.880E-01	0.00	-103.03
105	COMB23	MAX					
	0.00	0.00	20.20	0.00	4.520E-01	0.00	60.64
	1.50	0.00	20.20	0.00	4.520E-01	0.00	42.64
	3.00	0.00	21.10	0.00	4.520E-01	0.00	51.91
	4.50	0.00	69.13	0.00	4.520E-01	0.00	41.66
	6.00	0.00	106.03	0.00	4.520E-01	0.00	3.812E-04
105	COMB23	MIN					
	0.00	0.00	-105.44	0.00	-1.02	0.00	-153.17
	1.50	0.00	-68.54	0.00	-1.02	0.00	-23.02
	3.00	0.00	-20.57	0.00	-1.02	0.00	-7.252E-05
	4.50	0.00	-1.272E-04	0.00	-1.02	0.00	-30.25
	6.00	0.00	-1.272E-04	0.00	-1.02	0.00	-154.82
105	COMB24						
	0.00	0.00	-84.63	0.00	-5.273E-01	0.00	-90.68
	1.50	0.00	-47.73	0.00	-5.273E-01	0.00	11.37
	3.00	0.00	2.927E-01	0.00	-5.273E-01	0.00	46.95
	4.50	0.00	48.32	0.00	-5.273E-01	0.00	10.49
	6.00	0.00	85.22	0.00	-5.273E-01	0.00	-92.44
120	COMB23	MAX					
	0.00	0.00	21.39	0.00	1.04	0.00	62.61

	1.50	0.00	21.39	0.00	1.04	0.00	44.32
	3.00	0.00	21.39	0.00	1.04	0.00	55.50
	4.50	0.00	69.04	0.00	1.04	0.00	50.66
	6.00	0.00	105.94	0.00	1.04	0.00	7.49
120	COMB23	MIN					
	0.00	0.00	-108.05	0.00	-2.750E-01	0.00	-155.89
	1.50	0.00	-71.15	0.00	-2.750E-01	0.00	-22.49
	3.00	0.00	-23.12	0.00	-2.750E-01	0.00	-1.54
	4.50	0.00	-1.375E-04	0.00	-2.750E-01	0.00	-33.62
	6.00	0.00	-1.375E-04	0.00	-2.750E-01	0.00	-152.74
120	COMB24						
	0.00	0.00	-85.98	0.00	5.556E-01	0.00	-91.27
	1.50	0.00	-49.08	0.00	5.556E-01	0.00	12.80
	3.00	0.00	-1.05	0.00	5.556E-01	0.00	50.40
	4.50	0.00	46.97	0.00	5.556E-01	0.00	15.97
	6.00	0.00	83.87	0.00	5.556E-01	0.00	-84.94
180	COMB23	MAX					
	0.00	0.00	28.32	0.00	1.07	0.00	115.57
	2.00	0.00	28.32	0.00	1.07	0.00	88.63
	4.00	0.00	29.21	0.00	1.07	0.00	99.17
	6.00	0.00	89.59	0.00	1.07	0.00	84.47
	8.00	0.00	141.94	0.00	1.07	0.00	7.84
180	COMB23	MIN					
	0.00	0.00	-142.22	0.00	-1.97	0.00	-269.59
	2.00	0.00	-89.87	0.00	-1.97	0.00	-41.27
	4.00	0.00	-29.53	0.00	-1.97	0.00	-2.779E-05
	6.00	0.00	-3.894E-04	0.00	-1.97	0.00	-54.36
	8.00	0.00	-3.894E-04	0.00	-1.97	0.00	-263.74
180	COMB24						
	0.00	0.00	-112.87	0.00	-5.179E-01	0.00	-144.83
	2.00	0.00	-60.52	0.00	-5.179E-01	0.00	27.57
	4.00	0.00	-1.407E-01	0.00	-5.179E-01	0.00	88.23
	6.00	0.00	60.24	0.00	-5.179E-01	0.00	28.13
	8.00	0.00	112.59	0.00	-5.179E-01	0.00	-148.71
202	COMB23	MAX					
	0.00	0.00	21.45	0.00	1.26	0.00	63.49
	1.50	0.00	21.45	0.00	1.26	0.00	42.12
	3.00	0.00	23.10	0.00	1.26	0.00	48.54
	4.50	0.00	69.39	0.00	1.26	0.00	41.19
	6.00	0.00	103.19	0.00	1.26	0.00	2.17
202	COMB23	MIN					
	0.00	0.00	-101.37	0.00	-2.738E-01	0.00	-151.35
	1.50	0.00	-67.57	0.00	-2.738E-01	0.00	-25.44
	3.00	0.00	-21.59	0.00	-2.738E-01	0.00	-8.753E-01
	4.50	0.00	-2.764E-04	0.00	-2.738E-01	0.00	-33.06
	6.00	0.00	-2.764E-04	0.00	-2.738E-01	0.00	-158.64
202	COMB24						
	0.00	0.00	-79.18	0.00	7.217E-01	0.00	-85.68
	1.50	0.00	-45.37	0.00	7.217E-01	0.00	9.74
	3.00	0.00	9.127E-01	0.00	7.217E-01	0.00	43.60
	4.50	0.00	47.20	0.00	7.217E-01	0.00	7.00
	6.00	0.00	81.00	0.00	7.217E-01	0.00	-91.16
208	COMB23	MAX					
	0.00	0.00	29.36	0.00	1.585E-01	0.00	59.16
	1.00	0.00	29.36	0.00	1.585E-01	0.00	32.49
	2.00	0.00	29.36	0.00	1.585E-01	0.00	26.44
	3.00	0.00	63.73	0.00	1.585E-01	0.00	36.14
	4.00	0.00	85.89	0.00	1.585E-01	0.00	30.81
208	COMB23	MIN					
	0.00	0.00	-90.45	0.00	-1.944E-01	0.00	-108.14
	1.00	0.00	-68.29	0.00	-1.944E-01	0.00	-28.24
	2.00	0.00	-31.86	0.00	-1.944E-01	0.00	-1.279E-02
	3.00	0.00	-5.54	0.00	-1.944E-01	0.00	-28.91
	4.00	0.00	-7.539E-01	0.00	-1.944E-01	0.00	-98.12
208	COMB24						
	0.00	0.00	-60.86	0.00	-1.992E-02	0.00	-48.52
	1.00	0.00	-38.70	0.00	-1.992E-02	0.00	2.45
	2.00	0.00	-2.28	0.00	-1.992E-02	0.00	24.13
	3.00	0.00	34.15	0.00	-1.992E-02	0.00	7.01
	4.00	0.00	56.31	0.00	-1.992E-02	0.00	-39.41
209	COMB23	MAX					
	0.00	0.00	29.84	0.00	10.56	0.00	90.74
	7.5E-01	0.00	29.84	0.00	10.56	0.00	68.36
	1.50	0.00	29.84	0.00	10.56	0.00	64.86
	2.25	0.00	29.84	0.00	10.56	0.00	102.22
	3.00	0.00	29.84	0.00	10.56	0.00	132.41
209	COMB23	MIN					
	0.00	0.00	-164.90	0.00	-11.16	0.00	-247.87
	7.5E-01	0.00	-148.00	0.00	-11.16	0.00	-130.03
	1.50	0.00	-123.08	0.00	-11.16	0.00	-33.01
	2.25	0.00	-98.15	0.00	-11.16	0.00	-7.229E-01
	3.00	0.00	-81.25	0.00	-11.16	0.00	-1.496E-01

209	COMB24	0.00	0.00	-134.84	0.00	-3.188E-01	0.00	-156.40
		7.5E-01	0.00	-117.93	0.00	-3.188E-01	0.00	-61.11
		1.50	0.00	-93.01	0.00	-3.188E-01	0.00	18.50
		2.25	0.00	-68.08	0.00	-3.188E-01	0.00	78.40
		3.00	0.00	-51.18	0.00	-3.188E-01	0.00	122.63
210	COMB23 MAX	0.00	0.00	91.06	0.00	9.82	0.00	131.33
		7.5E-01	0.00	107.96	0.00	9.82	0.00	91.22
		1.50	0.00	132.89	0.00	9.82	0.00	46.38
		2.25	0.00	157.82	0.00	9.82	0.00	6.79
		3.00	0.00	174.72	0.00	9.82	0.00	2.79
210	COMB23 MIN	0.00	0.00	-9.966E-01	0.00	-8.73	0.00	-1.969E-01
		7.5E-01	0.00	-9.966E-01	0.00	-8.73	0.00	-21.02
		1.50	0.00	-9.966E-01	0.00	-8.73	0.00	-43.29
		2.25	0.00	-9.966E-01	0.00	-8.73	0.00	-150.49
		3.00	0.00	-9.966E-01	0.00	-8.73	0.00	-275.70
210	COMB24	0.00	0.00	61.08	0.00	1.03	0.00	121.68
		7.5E-01	0.00	77.98	0.00	1.03	0.00	70.03
		1.50	0.00	102.91	0.00	1.03	0.00	2.70
		2.25	0.00	127.83	0.00	1.03	0.00	-84.33
		3.00	0.00	144.73	0.00	1.03	0.00	-187.04
211	COMB23 MAX	0.00	0.00	38.23	0.00	14.90	0.00	150.92
		7.5E-01	0.00	38.23	0.00	14.90	0.00	122.24
		1.50	0.00	38.23	0.00	14.90	0.00	93.57
		2.25	0.00	38.23	0.00	14.90	0.00	160.38
		3.00	0.00	38.23	0.00	14.90	0.00	255.40
211	COMB23 MIN	0.00	0.00	-285.09	0.00	-22.64	0.00	-537.74
		7.5E-01	0.00	-266.46	0.00	-22.64	0.00	-330.41
		1.50	0.00	-239.80	0.00	-22.64	0.00	-140.06
		2.25	0.00	-213.15	0.00	-22.64	0.00	-2.14
		3.00	0.00	-194.52	0.00	-22.64	0.00	-2.13
211	COMB24	0.00	0.00	-246.85	0.00	-7.50	0.00	-386.17
		7.5E-01	0.00	-228.22	0.00	-7.50	0.00	-207.52
		1.50	0.00	-201.57	0.00	-7.50	0.00	-45.84
		2.25	0.00	-174.91	0.00	-7.50	0.00	94.84
		3.00	0.00	-156.29	0.00	-7.50	0.00	218.54
212	COMB23 MAX	0.00	0.00	37.10	0.00	1.04	0.00	259.43
		5.0E-01	0.00	37.10	0.00	1.04	0.00	256.65
		1.00	0.00	38.01	0.00	1.04	0.00	260.68
		1.50	0.00	53.10	0.00	1.04	0.00	255.92
		2.00	0.00	64.63	0.00	1.04	0.00	257.84
212	COMB23 MIN	0.00	0.00	-63.39	0.00	-1.12	0.00	-2.27
		5.0E-01	0.00	-51.87	0.00	-1.12	0.00	-1.78
		1.00	0.00	-36.92	0.00	-1.12	0.00	-1.29
		1.50	0.00	-26.02	0.00	-1.12	0.00	-18.66
		2.00	0.00	-17.51	0.00	-1.12	0.00	-37.21
212	COMB24	0.00	0.00	-26.00	0.00	-4.430E-02	0.00	221.77
		5.0E-01	0.00	-14.48	0.00	-4.430E-02	0.00	232.04
		1.00	0.00	6.177E-01	0.00	-4.430E-02	0.00	235.65
		1.50	0.00	15.71	0.00	-4.430E-02	0.00	231.42
		2.00	0.00	27.24	0.00	-4.430E-02	0.00	220.53
213	COMB23 MAX	0.00	0.00	196.40	0.00	21.07	0.00	253.86
		7.5E-01	0.00	215.03	0.00	21.07	0.00	158.10
		1.50	0.00	241.68	0.00	21.07	0.00	59.82
		2.25	0.00	268.33	0.00	21.07	0.00	4.20
		3.00	0.00	286.96	0.00	21.07	0.00	5.70
213	COMB23 MIN	0.00	0.00	-2.01	0.00	-13.39	0.00	-36.46
		7.5E-01	0.00	-2.01	0.00	-13.39	0.00	-65.12
		1.50	0.00	-2.01	0.00	-13.39	0.00	-143.61
		2.25	0.00	-2.01	0.00	-13.39	0.00	-335.36
		3.00	0.00	-2.01	0.00	-13.39	0.00	-544.10
213	COMB24	0.00	0.00	157.59	0.00	7.38	0.00	217.31
		7.5E-01	0.00	176.22	0.00	7.38	0.00	92.63
		1.50	0.00	202.87	0.00	7.38	0.00	-49.03
		2.25	0.00	229.53	0.00	7.38	0.00	-211.68
		3.00	0.00	248.16	0.00	7.38	0.00	-391.32
214	COMB23 MAX	0.00	0.00	28.20	0.00	8.21	0.00	84.68
		7.5E-01	0.00	28.20	0.00	8.21	0.00	63.53
		1.50	0.00	28.20	0.00	8.21	0.00	48.17

	2.25	0.00	28.20	0.00	8.21	0.00	81.09
	3.00	0.00	28.20	0.00	8.21	0.00	107.07
214	COMB23 MIN						
	0.00	0.00	-155.48	0.00	-16.66	0.00	-243.02
	7.5E-01	0.00	-138.57	0.00	-16.66	0.00	-132.25
	1.50	0.00	-113.65	0.00	-16.66	0.00	-39.04
	2.25	0.00	-88.72	0.00	-16.66	0.00	-6.502E-01
	3.00	0.00	-71.82	0.00	-16.66	0.00	-3.567E-01
214	COMB24						
	0.00	0.00	-127.16	0.00	-8.33	0.00	-157.88
	7.5E-01	0.00	-110.26	0.00	-8.33	0.00	-68.34
	1.50	0.00	-85.33	0.00	-8.33	0.00	5.51
	2.25	0.00	-60.41	0.00	-8.33	0.00	59.66
	3.00	0.00	-43.51	0.00	-8.33	0.00	98.12
215	COMB23 MAX						
	0.00	0.00	69.86	0.00	14.53	0.00	107.07
	7.5E-01	0.00	84.76	0.00	14.53	0.00	83.39
	1.50	0.00	103.66	0.00	14.53	0.00	56.10
	2.25	0.00	122.57	0.00	14.53	0.00	29.50
	3.00	0.00	137.47	0.00	14.53	0.00	2.36
215	COMB23 MIN						
	0.00	0.00	-8.936E-01	0.00	-7.13	0.00	-3.230E-01
	7.5E-01	0.00	-8.936E-01	0.00	-7.13	0.00	-21.34
	1.50	0.00	-8.936E-01	0.00	-7.13	0.00	-42.70
	2.25	0.00	-8.936E-01	0.00	-7.13	0.00	-114.99
	3.00	0.00	-8.936E-01	0.00	-7.13	0.00	-212.75
215	COMB24						
	0.00	0.00	41.12	0.00	7.08	0.00	98.12
	7.5E-01	0.00	56.01	0.00	7.08	0.00	61.95
	1.50	0.00	74.92	0.00	7.08	0.00	13.10
	2.25	0.00	93.83	0.00	7.08	0.00	-50.43
	3.00	0.00	108.72	0.00	7.08	0.00	-126.64
216	COMB23 MAX						
	0.00	0.00	20.02	0.00	2.40	0.00	45.12
	1.00	0.00	20.02	0.00	2.40	0.00	30.69
	2.00	0.00	20.02	0.00	2.40	0.00	24.63
	3.00	0.00	43.89	0.00	2.40	0.00	21.89
	4.00	0.00	54.05	0.00	2.40	0.00	19.03
216	COMB23 MIN						
	0.00	0.00	-55.49	0.00	-2.12	0.00	-71.51
	1.00	0.00	-45.33	0.00	-2.12	0.00	-21.30
	2.00	0.00	-20.90	0.00	-2.12	0.00	-1.298E-01
	3.00	0.00	-3.80	0.00	-2.12	0.00	-14.94
	4.00	0.00	-5.444E-01	0.00	-2.12	0.00	-58.40
216	COMB24						
	0.00	0.00	-35.30	0.00	1.684E-01	0.00	-26.03
	1.00	0.00	-25.15	0.00	1.684E-01	0.00	5.38
	2.00	0.00	-7.203E-01	0.00	1.684E-01	0.00	19.51
	3.00	0.00	23.71	0.00	1.684E-01	0.00	6.83
	4.00	0.00	33.86	0.00	1.684E-01	0.00	-23.15
225	COMB23 MAX						
	0.00	0.00	22.16	0.00	4.482E-01	0.00	66.48
	1.50	0.00	22.16	0.00	4.482E-01	0.00	48.98
	3.00	0.00	22.48	0.00	4.482E-01	0.00	68.78
	4.50	0.00	84.64	0.00	4.482E-01	0.00	50.84
	6.00	0.00	126.47	0.00	4.482E-01	0.00	8.519E-04
225	COMB23 MIN						
	0.00	0.00	-127.71	0.00	-1.04	0.00	-183.99
	1.50	0.00	-85.88	0.00	-1.04	0.00	-24.09
	3.00	0.00	-23.54	0.00	-1.04	0.00	-1.533E-02
	4.50	0.00	-2.835E-04	0.00	-1.04	0.00	-33.24
	6.00	0.00	-2.835E-04	0.00	-1.04	0.00	-180.29
225	COMB24						
	0.00	0.00	-104.78	0.00	-4.921E-01	0.00	-115.22
	1.50	0.00	-62.96	0.00	-4.921E-01	0.00	14.60
	3.00	0.00	-6.186E-01	0.00	-4.921E-01	0.00	62.80
	4.50	0.00	61.72	0.00	-4.921E-01	0.00	16.45
	6.00	0.00	103.55	0.00	-4.921E-01	0.00	-111.51
243	COMB23 MAX						
	0.00	0.00	22.19	0.00	4.975E-01	0.00	66.56
	1.50	0.00	22.19	0.00	4.975E-01	0.00	42.57
	3.00	0.00	22.45	0.00	4.975E-01	0.00	45.35
	4.50	0.00	64.17	0.00	4.975E-01	0.00	44.29
	6.00	0.00	97.97	0.00	4.975E-01	0.00	11.63
243	COMB23 MIN						
	0.00	0.00	-99.11	0.00	-5.715E-01	0.00	-151.46
	1.50	0.00	-65.31	0.00	-5.715E-01	0.00	-28.47
	3.00	0.00	-23.48	0.00	-5.715E-01	0.00	-9.748E-03
	4.50	0.00	-2.741E-04	0.00	-5.715E-01	0.00	-33.29
	6.00	0.00	-2.741E-04	0.00	-5.715E-01	0.00	-148.06
243	COMB24						
	0.00	0.00	-76.20	0.00	-4.645E-02	0.00	-82.74

	1.50	0.00	-42.40	0.00	-4.645E-02	0.00	8.21
	3.00	0.00	-5.689E-01	0.00	-4.645E-02	0.00	40.44
	4.50	0.00	41.26	0.00	-4.645E-02	0.00	9.92
	6.00	0.00	75.06	0.00	-4.645E-02	0.00	-79.33
258	COMB23	MAX					
	0.00	0.00	23.05	0.00	1.02	0.00	67.81
	1.50	0.00	23.05	0.00	1.02	0.00	47.46
	3.00	0.00	24.74	0.00	1.02	0.00	48.33
	4.50	0.00	66.56	0.00	1.02	0.00	47.62
	6.00	0.00	100.37	0.00	1.02	0.00	14.77
258	COMB23	MIN					
	0.00	0.00	-98.61	0.00	-3.368E-01	0.00	-145.87
	1.50	0.00	-64.80	0.00	-3.368E-01	0.00	-25.08
	3.00	0.00	-23.31	0.00	-3.368E-01	0.00	-1.35
	4.50	0.00	-2.909E-04	0.00	-3.368E-01	0.00	-35.93
	6.00	0.00	-2.909E-04	0.00	-3.368E-01	0.00	-153.95
258	COMB24						
	0.00	0.00	-74.75	0.00	4.677E-01	0.00	-75.70
	1.50	0.00	-40.95	0.00	4.677E-01	0.00	13.08
	3.00	0.00	8.799E-01	0.00	4.677E-01	0.00	43.13
	4.50	0.00	42.71	0.00	4.677E-01	0.00	10.44
	6.00	0.00	76.51	0.00	4.677E-01	0.00	-80.98
316	COMB23	MAX					
	0.00	0.00	23.22	0.00	6.826E-01	0.00	95.28
	2.00	0.00	23.22	0.00	6.826E-01	0.00	83.40
	4.00	0.00	23.72	0.00	6.826E-01	0.00	105.31
	6.00	0.00	84.06	0.00	6.826E-01	0.00	80.10
	8.00	0.00	136.41	0.00	6.826E-01	0.00	2.283E-03
316	COMB23	MIN					
	0.00	0.00	-137.26	0.00	-7.772E-01	0.00	-244.17
	2.00	0.00	-84.90	0.00	-7.772E-01	0.00	-27.36
	4.00	0.00	-24.52	0.00	-7.772E-01	0.00	-7.771E-03
	6.00	0.00	-5.849E-04	0.00	-7.772E-01	0.00	-44.02
	8.00	0.00	-5.849E-04	0.00	-7.772E-01	0.00	-235.79
316	COMB24						
	0.00	0.00	-113.15	0.00	-6.296E-02	0.00	-145.27
	2.00	0.00	-60.80	0.00	-6.296E-02	0.00	32.70
	4.00	0.00	-4.233E-01	0.00	-6.296E-02	0.00	93.92
	6.00	0.00	59.95	0.00	-6.296E-02	0.00	34.39
	8.00	0.00	112.31	0.00	-6.296E-02	0.00	-141.88
337	COMB23	MAX					
	0.00	0.00	17.76	0.00	7.136E-01	0.00	52.33
	1.50	0.00	17.76	0.00	7.136E-01	0.00	30.04
	3.00	0.00	18.89	0.00	7.136E-01	0.00	26.02
	4.50	0.00	44.67	0.00	7.136E-01	0.00	30.56
	6.00	0.00	70.44	0.00	7.136E-01	0.00	13.98
337	COMB23	MIN					
	0.00	0.00	-69.47	0.00	-4.278E-01	0.00	-108.04
	1.50	0.00	-43.69	0.00	-4.278E-01	0.00	-23.90
	3.00	0.00	-18.08	0.00	-4.278E-01	0.00	-9.540E-01
	4.50	0.00	-4.192E-04	0.00	-4.278E-01	0.00	-27.59
	6.00	0.00	-4.192E-04	0.00	-4.278E-01	0.00	-112.96
337	COMB24						
	0.00	0.00	-51.06	0.00	1.753E-01	0.00	-53.83
	1.50	0.00	-25.29	0.00	1.753E-01	0.00	3.43
	3.00	0.00	4.890E-01	0.00	1.753E-01	0.00	22.03
	4.50	0.00	26.26	0.00	1.753E-01	0.00	1.97
	6.00	0.00	52.04	0.00	1.753E-01	0.00	-56.76
338	COMB23	MAX					
	0.00	0.00	24.29	0.00	2.470E-01	0.00	49.04
	1.00	0.00	24.29	0.00	2.470E-01	0.00	25.47
	2.00	0.00	24.29	0.00	2.470E-01	0.00	26.29
	3.00	0.00	56.85	0.00	2.470E-01	0.00	32.66
	4.00	0.00	79.01	0.00	2.470E-01	0.00	23.08
338	COMB23	MIN					
	0.00	0.00	-87.12	0.00	-1.910E-01	0.00	-101.63
	1.00	0.00	-64.96	0.00	-1.910E-01	0.00	-24.53
	2.00	0.00	-28.53	0.00	-1.910E-01	0.00	-1.313E-02
	3.00	0.00	-1.72	0.00	-1.910E-01	0.00	-23.84
	4.00	0.00	-6.276E-01	0.00	-1.910E-01	0.00	-84.51
338	COMB24						
	0.00	0.00	-62.64	0.00	3.635E-02	0.00	-52.21
	1.00	0.00	-40.48	0.00	3.635E-02	0.00	5.359E-01
	2.00	0.00	-4.05	0.00	3.635E-02	0.00	23.99
	3.00	0.00	32.37	0.00	3.635E-02	0.00	8.64
	4.00	0.00	54.53	0.00	3.635E-02	0.00	-36.00
339	COMB23	MAX					
	0.00	0.00	25.26	0.00	8.70	0.00	76.68
	7.5E-01	0.00	25.26	0.00	8.70	0.00	57.74
	1.50	0.00	25.26	0.00	8.70	0.00	59.03
	2.25	0.00	25.26	0.00	8.70	0.00	99.06
	3.00	0.00	25.26	0.00	8.70	0.00	132.22

339	COMB23 MIN						
	0.00	0.00	-159.23	0.00	-9.81	0.00	-230.70
	7.5E-01	0.00	-142.33	0.00	-9.81	0.00	-117.12
	1.50	0.00	-117.40	0.00	-9.81	0.00	-24.72
	2.25	0.00	-92.48	0.00	-9.81	0.00	-6.050E-01
	3.00	0.00	-75.58	0.00	-9.81	0.00	-1.199E-01
339	COMB24						
	0.00	0.00	-133.78	0.00	-9.226E-01	0.00	-153.41
	7.5E-01	0.00	-116.88	0.00	-9.226E-01	0.00	-58.91
	1.50	0.00	-91.95	0.00	-9.226E-01	0.00	19.91
	2.25	0.00	-67.03	0.00	-9.226E-01	0.00	79.02
	3.00	0.00	-50.13	0.00	-9.226E-01	0.00	122.46
340	COMB23 MAX						
	0.00	0.00	86.83	0.00	8.31	0.00	130.64
	7.5E-01	0.00	103.73	0.00	8.31	0.00	87.37
	1.50	0.00	128.66	0.00	8.31	0.00	39.09
	2.25	0.00	153.58	0.00	8.31	0.00	1.61
	3.00	0.00	170.48	0.00	8.31	0.00	2.20
340	COMB23 MIN						
	0.00	0.00	-7.928E-01	0.00	-7.93	0.00	-1.740E-01
	7.5E-01	0.00	-7.928E-01	0.00	-7.93	0.00	-17.95
	1.50	0.00	-7.928E-01	0.00	-7.93	0.00	-36.96
	2.25	0.00	-7.928E-01	0.00	-7.93	0.00	-141.77
	3.00	0.00	-7.928E-01	0.00	-7.93	0.00	-263.80
340	COMB24						
	0.00	0.00	61.25	0.00	3.644E-01	0.00	121.06
	7.5E-01	0.00	78.15	0.00	3.644E-01	0.00	69.29
	1.50	0.00	103.08	0.00	3.644E-01	0.00	1.83
	2.25	0.00	128.00	0.00	3.644E-01	0.00	-85.33
	3.00	0.00	144.91	0.00	3.644E-01	0.00	-188.17
341	COMB23 MAX						
	0.00	0.00	31.91	0.00	13.35	0.00	127.64
	7.5E-01	0.00	31.91	0.00	13.35	0.00	103.71
	1.50	0.00	31.91	0.00	13.35	0.00	79.78
	2.25	0.00	31.91	0.00	13.35	0.00	152.72
	3.00	0.00	31.91	0.00	13.35	0.00	254.02
341	COMB23 MIN						
	0.00	0.00	-281.12	0.00	-28.30	0.00	-517.98
	7.5E-01	0.00	-262.49	0.00	-28.30	0.00	-313.63
	1.50	0.00	-235.83	0.00	-28.30	0.00	-126.26
	2.25	0.00	-209.18	0.00	-28.30	0.00	-1.52
	3.00	0.00	-190.55	0.00	-28.30	0.00	-1.14
341	COMB24						
	0.00	0.00	-249.06	0.00	-14.83	0.00	-389.55
	7.5E-01	0.00	-230.43	0.00	-14.83	0.00	-209.24
	1.50	0.00	-203.77	0.00	-14.83	0.00	-45.91
	2.25	0.00	-177.12	0.00	-14.83	0.00	96.42
	3.00	0.00	-158.49	0.00	-14.83	0.00	221.77
342	COMB23 MAX						
	0.00	0.00	31.88	0.00	4.526E-01	0.00	254.52
	5.0E-01	0.00	31.88	0.00	4.526E-01	0.00	256.79
	1.00	0.00	33.06	0.00	4.526E-01	0.00	260.63
	1.50	0.00	48.15	0.00	4.526E-01	0.00	255.68
	2.00	0.00	59.68	0.00	4.526E-01	0.00	252.42
342	COMB23 MIN						
	0.00	0.00	-57.82	0.00	-6.803E-01	0.00	-1.13
	5.0E-01	0.00	-46.30	0.00	-6.803E-01	0.00	-7.214E-01
	1.00	0.00	-31.41	0.00	-6.803E-01	0.00	-3.152E-01
	1.50	0.00	-20.51	0.00	-6.803E-01	0.00	-15.91
	2.00	0.00	-12.01	0.00	-6.803E-01	0.00	-31.85
342	COMB24						
	0.00	0.00	-25.69	0.00	-1.321E-01	0.00	222.27
	5.0E-01	0.00	-14.17	0.00	-1.321E-01	0.00	232.38
	1.00	0.00	9.276E-01	0.00	-1.321E-01	0.00	235.84
	1.50	0.00	16.02	0.00	-1.321E-01	0.00	231.46
	2.00	0.00	27.55	0.00	-1.321E-01	0.00	220.41
343	COMB23 MAX						
	0.00	0.00	192.54	0.00	26.82	0.00	251.82
	7.5E-01	0.00	211.17	0.00	26.82	0.00	149.21
	1.50	0.00	237.82	0.00	26.82	0.00	44.32
	2.25	0.00	264.48	0.00	26.82	0.00	2.98
	3.00	0.00	283.11	0.00	26.82	0.00	3.82
343	COMB23 MIN						
	0.00	0.00	-1.11	0.00	-12.01	0.00	-31.85
	7.5E-01	0.00	-1.11	0.00	-12.01	0.00	-55.74
	1.50	0.00	-1.11	0.00	-12.01	0.00	-130.93
	2.25	0.00	-1.11	0.00	-12.01	0.00	-319.79
	3.00	0.00	-1.11	0.00	-12.01	0.00	-525.64
343	COMB24						
	0.00	0.00	160.35	0.00	14.61	0.00	219.82
	7.5E-01	0.00	178.98	0.00	14.61	0.00	93.08
	1.50	0.00	205.63	0.00	14.61	0.00	-50.65

	2.25	0.00	232.29	0.00	14.61	0.00	-215.37
	3.00	0.00	250.92	0.00	14.61	0.00	-397.08
344	COMB23	MAX					
	0.00	0.00	25.34	0.00	7.49	0.00	74.37
	7.5E-01	0.00	25.34	0.00	7.49	0.00	55.37
	1.50	0.00	25.34	0.00	7.49	0.00	42.42
	2.25	0.00	25.34	0.00	7.49	0.00	77.09
	3.00	0.00	25.34	0.00	7.49	0.00	106.48
344	COMB23	MIN					
	0.00	0.00	-152.11	0.00	-15.38	0.00	-231.65
	7.5E-01	0.00	-135.21	0.00	-15.38	0.00	-123.40
	1.50	0.00	-110.28	0.00	-15.38	0.00	-32.83
	2.25	0.00	-85.35	0.00	-15.38	0.00	-5.496E-01
	3.00	0.00	-68.45	0.00	-15.38	0.00	-1.63
344	COMB24						
	0.00	0.00	-126.65	0.00	-7.82	0.00	-156.82
	7.5E-01	0.00	-109.75	0.00	-7.82	0.00	-67.67
	1.50	0.00	-84.82	0.00	-7.82	0.00	5.79
	2.25	0.00	-59.89	0.00	-7.82	0.00	59.56
	3.00	0.00	-42.99	0.00	-7.82	0.00	97.64
345	COMB23	MAX					
	0.00	0.00	65.61	0.00	13.70	0.00	106.86
	7.5E-01	0.00	80.51	0.00	13.70	0.00	83.10
	1.50	0.00	99.41	0.00	13.70	0.00	54.04
	2.25	0.00	118.32	0.00	13.70	0.00	25.02
	3.00	0.00	133.22	0.00	13.70	0.00	2.07
345	COMB23	MIN					
	0.00	0.00	-7.607E-01	0.00	-5.87	0.00	-1.59
	7.5E-01	0.00	-7.607E-01	0.00	-5.87	0.00	-20.49
	1.50	0.00	-7.607E-01	0.00	-5.87	0.00	-39.40
	2.25	0.00	-7.607E-01	0.00	-5.87	0.00	-107.21
	3.00	0.00	-7.607E-01	0.00	-5.87	0.00	-201.79
345	COMB24						
	0.00	0.00	40.18	0.00	7.60	0.00	97.97
	7.5E-01	0.00	55.07	0.00	7.60	0.00	62.51
	1.50	0.00	73.98	0.00	7.60	0.00	14.36
	2.25	0.00	92.89	0.00	7.60	0.00	-48.46
	3.00	0.00	107.78	0.00	7.60	0.00	-123.96
354	COMB23	MAX					
	0.00	0.00	18.48	0.00	4.141E-01	0.00	55.47
	1.50	0.00	18.48	0.00	4.141E-01	0.00	40.66
	3.00	0.00	20.06	0.00	4.141E-01	0.00	46.89
	4.50	0.00	61.89	0.00	4.141E-01	0.00	37.85
	6.00	0.00	95.69	0.00	4.141E-01	0.00	1.309E-03
354	COMB23	MIN					
	0.00	0.00	-93.87	0.00	-9.778E-01	0.00	-134.31
	1.50	0.00	-60.06	0.00	-9.778E-01	0.00	-20.29
	3.00	0.00	-18.55	0.00	-9.778E-01	0.00	-3.063E-03
	4.50	0.00	-4.366E-04	0.00	-9.778E-01	0.00	-27.68
	6.00	0.00	-4.366E-04	0.00	-9.778E-01	0.00	-139.70
354	COMB24						
	0.00	0.00	-74.72	0.00	-4.671E-01	0.00	-76.83
	1.50	0.00	-40.92	0.00	-4.671E-01	0.00	11.90
	3.00	0.00	9.109E-01	0.00	-4.671E-01	0.00	41.91
	4.50	0.00	42.74	0.00	-4.671E-01	0.00	9.17
	6.00	0.00	76.54	0.00	-4.671E-01	0.00	-82.30
370	COMB23	MAX					
	0.00	0.00	18.43	0.00	4.479E-01	0.00	55.32
	1.50	0.00	18.43	0.00	4.479E-01	0.00	40.37
	3.00	0.00	20.04	0.00	4.479E-01	0.00	46.64
	4.50	0.00	61.86	0.00	4.479E-01	0.00	37.32
	6.00	0.00	95.67	0.00	4.479E-01	0.00	1.273E-03
370	COMB23	MIN					
	0.00	0.00	-93.69	0.00	-6.536E-01	0.00	-134.06
	1.50	0.00	-59.89	0.00	-6.536E-01	0.00	-20.29
	3.00	0.00	-18.43	0.00	-6.536E-01	0.00	0.00
	4.50	0.00	-4.245E-04	0.00	-6.536E-01	0.00	-27.59
	6.00	0.00	-4.245E-04	0.00	-6.536E-01	0.00	-139.89
370	COMB24						
	0.00	0.00	-74.64	0.00	-1.169E-01	0.00	-76.87
	1.50	0.00	-40.84	0.00	-1.169E-01	0.00	11.75
	3.00	0.00	9.867E-01	0.00	-1.169E-01	0.00	41.64
	4.50	0.00	42.81	0.00	-1.169E-01	0.00	8.79
	6.00	0.00	76.62	0.00	-1.169E-01	0.00	-82.79
385	COMB23	MAX					
	0.00	0.00	19.30	0.00	1.00	0.00	56.37
	1.50	0.00	19.30	0.00	1.00	0.00	43.06
	3.00	0.00	21.53	0.00	1.00	0.00	48.98
	4.50	0.00	63.35	0.00	1.00	0.00	41.66
	6.00	0.00	97.15	0.00	1.00	0.00	2.48
385	COMB23	MIN					
	0.00	0.00	-94.12	0.00	-2.548E-01	0.00	-131.64

	1.50	0.00	-60.32	0.00	-2.548E-01	0.00	-18.03
	3.00	0.00	-19.01	0.00	-2.548E-01	0.00	-1.53
	4.50	0.00	-4.564E-04	0.00	-2.548E-01	0.00	-30.47
	6.00	0.00	-4.564E-04	0.00	-2.548E-01	0.00	-143.91
385	COMB24						
	0.00	0.00	-74.11	0.00	5.454E-01	0.00	-73.19
	1.50	0.00	-40.31	0.00	5.454E-01	0.00	14.63
	3.00	0.00	1.52	0.00	5.454E-01	0.00	43.72
	4.50	0.00	43.35	0.00	5.454E-01	0.00	10.07
	6.00	0.00	77.15	0.00	5.454E-01	0.00	-82.31
424	COMB23 MAX						
	0.00	5.132E-01	1.53	1.24	5.321E-01	3.56	4.67
	7.5E-01	5.132E-01	1.53	1.24	5.321E-01	2.84	3.52
	1.50	5.132E-01	1.53	1.24	5.321E-01	2.70	2.37
	2.25	5.132E-01	1.53	1.24	5.321E-01	3.27	38.12
	3.00	5.132E-01	1.53	1.24	5.321E-01	3.89	86.58
424	COMB23 MIN						
	0.00	-25.83	-85.79	-8.942E-01	-2.07	-4.088E-01	-134.49
	7.5E-01	-25.83	-79.74	-8.942E-01	-2.07	-4.343E-01	-72.42
	1.50	-25.83	-73.69	-8.942E-01	-2.07	-4.599E-01	-14.88
	2.25	-25.83	-67.64	-8.942E-01	-2.07	-7.776E-01	-3.134E-01
	3.00	-25.83	-61.59	-8.942E-01	-2.07	-1.26	-8.298E-01
424	COMB24						
	0.00	-22.50	-73.41	2.018E-01	-1.44	2.48	-114.78
	7.5E-01	-22.50	-68.23	2.018E-01	-1.44	2.33	-61.67
	1.50	-22.50	-63.04	2.018E-01	-1.44	2.17	-12.44
	2.25	-22.50	-57.86	2.018E-01	-1.44	2.02	32.90
	3.00	-22.50	-52.67	2.018E-01	-1.44	1.87	74.34
428	COMB23 MAX						
	0.00	5.132E-01	51.60	1.15	5.321E-01	3.89	86.58
	7.5E-01	5.132E-01	57.64	1.15	5.321E-01	3.03	45.62
	1.50	5.132E-01	63.69	1.15	5.321E-01	2.17	2.38
	2.25	5.132E-01	69.74	1.15	5.321E-01	2.02	4.335E-01
	3.00	5.132E-01	75.79	1.15	5.321E-01	2.09	8.546E-01
428	COMB23 MIN						
	0.00	-25.83	-8.171E-01	-8.057E-01	-2.07	-1.26	-8.298E-01
	7.5E-01	-25.83	-5.615E-01	-8.057E-01	-2.07	-8.190E-01	-1.09
	1.50	-25.83	-5.615E-01	-8.057E-01	-2.07	-5.622E-01	-2.26
	2.25	-25.83	-5.615E-01	-8.057E-01	-2.07	-5.877E-01	-49.92
	3.00	-25.83	-5.615E-01	-8.057E-01	-2.07	-6.133E-01	-104.49
428	COMB24						
	0.00	-22.50	44.35	2.018E-01	-1.44	1.87	74.34
	7.5E-01	-22.50	49.53	2.018E-01	-1.44	1.72	39.14
	1.50	-22.50	54.71	2.018E-01	-1.44	1.57	4.826E-02
	2.25	-22.50	59.90	2.018E-01	-1.44	1.42	-42.93
	3.00	-22.50	65.08	2.018E-01	-1.44	1.27	-89.80
443	COMB23 MAX						
	0.00	0.00	10.80	0.00	3.511E-01	0.00	44.87
	2.00	0.00	10.80	0.00	3.511E-01	0.00	72.82
	4.00	0.00	12.69	0.00	3.511E-01	0.00	132.83
	6.00	0.00	85.07	0.00	3.511E-01	0.00	63.48
	8.00	0.00	156.80	0.00	3.511E-01	0.00	1.645E-03
443	COMB23 MIN						
	0.00	0.00	-153.71	0.00	-2.55	0.00	-208.11
	2.00	0.00	-82.12	0.00	-2.55	0.00	-9.468E-04
	4.00	0.00	-10.22	0.00	-2.55	0.00	-8.275E-05
	6.00	0.00	-4.320E-04	0.00	-2.55	0.00	-19.93
	8.00	0.00	-4.320E-04	0.00	-2.55	0.00	-216.42
443	COMB24						
	0.00	0.00	-135.26	0.00	-1.98	0.00	-161.51
	2.00	0.00	-70.91	0.00	-1.98	0.00	48.66
	4.00	0.00	1.47	0.00	-1.98	0.00	118.10
	6.00	0.00	73.85	0.00	-1.98	0.00	42.78
	8.00	0.00	138.20	0.00	-1.98	0.00	-173.29
464	COMB23 MAX						
	0.00	0.00	8.56	0.00	8.441E-01	0.00	25.08
	1.50	0.00	8.56	0.00	8.441E-01	0.00	16.45
	3.00	0.00	9.59	0.00	8.441E-01	0.00	34.15
	4.50	0.00	44.37	0.00	8.441E-01	0.00	15.50
	6.00	0.00	81.97	0.00	8.441E-01	0.00	8.288E-03
464	COMB23 MIN						
	0.00	0.00	-80.32	0.00	-6.108E-02	0.00	-99.30
	1.50	0.00	-42.90	0.00	-6.108E-02	0.00	-9.47
	3.00	0.00	-8.33	0.00	-6.108E-02	0.00	-5.959E-01
	4.50	0.00	-1.087E-02	0.00	-6.108E-02	0.00	-13.44
	6.00	0.00	-1.087E-02	0.00	-6.108E-02	0.00	-104.94
464	COMB24						
	0.00	0.00	-68.82	0.00	6.064E-01	0.00	-73.35
	1.50	0.00	-34.04	0.00	6.064E-01	0.00	3.79
	3.00	0.00	7.335E-01	0.00	6.064E-01	0.00	28.77
	4.50	0.00	35.51	0.00	6.064E-01	0.00	1.59
	6.00	0.00	70.29	0.00	6.064E-01	0.00	-77.75

465	COMB23	MAX					
		0.00	0.00	17.20	0.00	2.189E-01	0.00 35.07
		1.00	0.00	17.20	0.00	2.189E-01	0.00 24.27
		2.00	0.00	19.77	0.00	2.189E-01	0.00 25.44
		3.00	0.00	56.20	0.00	2.189E-01	0.00 17.95
		4.00	0.00	78.35	0.00	2.189E-01	0.00 5.856E-01
465	COMB23	MIN					
		0.00	0.00	-73.39	0.00	-4.307E-01	0.00 -75.16
		1.00	0.00	-51.23	0.00	-4.307E-01	0.00 -13.50
		2.00	0.00	-15.56	0.00	-4.307E-01	0.00 -3.546E-02
		3.00	0.00	-2.996E-01	0.00	-4.307E-01	0.00 -16.52
		4.00	0.00	-2.996E-01	0.00	-4.307E-01	0.00 -83.74
465	COMB24						
		0.00	0.00	-56.10	0.00	-1.220E-01	0.00 -39.91
		1.00	0.00	-33.94	0.00	-1.220E-01	0.00 6.30
		2.00	0.00	2.48	0.00	-1.220E-01	0.00 23.22
		3.00	0.00	38.91	0.00	-1.220E-01	0.00 1.34
		4.00	0.00	61.07	0.00	-1.220E-01	0.00 -49.84
466	COMB23	MAX					
		0.00	0.00	15.79	0.00	5.70	0.00 50.41
		7.5E-01	0.00	15.79	0.00	5.70	0.00 38.57
		1.50	0.00	15.79	0.00	5.70	0.00 64.68
		2.25	0.00	15.79	0.00	5.70	0.00 109.33
		3.00	0.00	15.79	0.00	5.70	0.00 143.19
466	COMB23	MIN					
		0.00	0.00	-157.54	0.00	-5.94	0.00 -191.34
		7.5E-01	0.00	-136.14	0.00	-5.94	0.00 -80.71
		1.50	0.00	-106.71	0.00	-5.94	0.00 -5.966E-01
		2.25	0.00	-77.29	0.00	-5.94	0.00 -3.226E-01
		3.00	0.00	-55.88	0.00	-5.94	0.00 -4.865E-02
466	COMB24						
		0.00	0.00	-141.64	0.00	-1.561E-01	0.00 -140.59
		7.5E-01	0.00	-120.24	0.00	-1.561E-01	0.00 -41.88
		1.50	0.00	-90.81	0.00	-1.561E-01	0.00 37.77
		2.25	0.00	-61.39	0.00	-1.561E-01	0.00 94.34
		3.00	0.00	-39.99	0.00	-1.561E-01	0.00 131.85
467	COMB23	MAX					
		0.00	0.00	84.59	0.00	4.28	0.00 141.63
		7.5E-01	0.00	105.99	0.00	4.28	0.00 80.28
		1.50	0.00	135.42	0.00	4.28	0.00 16.00
		2.25	0.00	164.85	0.00	4.28	0.00 9.405E-01
		3.00	0.00	188.15	0.00	4.28	0.00 1.28
467	COMB23	MIN					
		0.00	0.00	-4.587E-01	0.00	-4.43	0.00 -9.154E-02
		7.5E-01	0.00	-4.587E-01	0.00	-4.43	0.00 -8.72
		1.50	0.00	-4.587E-01	0.00	-4.43	0.00 -27.34
		2.25	0.00	-4.587E-01	0.00	-4.43	0.00 -140.45
		3.00	0.00	-4.587E-01	0.00	-4.43	0.00 -272.61
467	COMB24						
		0.00	0.00	68.63	0.00	-1.299E-01	0.00 130.48
		7.5E-01	0.00	90.03	0.00	-1.299E-01	0.00 71.48
		1.50	0.00	119.46	0.00	-1.299E-01	0.00 -6.57
		2.25	0.00	148.88	0.00	-1.299E-01	0.00 -107.70
		3.00	0.00	170.28	0.00	-1.299E-01	0.00 -227.89
468	COMB23	MAX					
		0.00	0.00	16.70	0.00	7.40	0.00 66.42
		7.5E-01	0.00	16.70	0.00	7.40	0.00 53.90
		1.50	0.00	16.70	0.00	7.40	0.00 41.38
		2.25	0.00	16.70	0.00	7.40	0.00 126.50
		3.00	0.00	16.70	0.00	7.40	0.00 217.10
468	COMB23	MIN					
		0.00	0.00	-257.12	0.00	-9.87	0.00 -404.21
		7.5E-01	0.00	-230.63	0.00	-9.87	0.00 -225.02
		1.50	0.00	-195.76	0.00	-9.87	0.00 -66.18
		2.25	0.00	-164.38	0.00	-9.87	0.00 -8.375E-01
		3.00	0.00	-141.25	0.00	-9.87	0.00 -6.399E-01
468	COMB24						
		0.00	0.00	-233.04	0.00	-2.40	0.00 -337.36
		7.5E-01	0.00	-209.92	0.00	-2.40	0.00 -170.75
		1.50	0.00	-178.76	0.00	-2.40	0.00 -24.49
		2.25	0.00	-147.61	0.00	-2.40	0.00 97.39
		3.00	0.00	-124.48	0.00	-2.40	0.00 198.92
469	COMB23	MAX					
		0.00	0.00	16.71	0.00	3.652E-01	0.00 216.61
		5.0E-01	0.00	16.71	0.00	3.652E-01	0.00 231.05
		1.00	0.00	17.00	0.00	3.652E-01	0.00 236.20
		1.50	0.00	35.04	0.00	3.652E-01	0.00 230.81
		2.00	0.00	49.56	0.00	3.652E-01	0.00 216.13
469	COMB23	MIN					
		0.00	0.00	-49.37	0.00	-3.176E-01	0.00 -6.303E-01
		5.0E-01	0.00	-34.84	0.00	-3.176E-01	0.00 -4.113E-01
		1.00	0.00	-16.75	0.00	-3.176E-01	0.00 -4.134E-01

	1.50	0.00	-3.54	0.00	-3.176E-01	0.00	-8.77
	2.00	0.00	-4.380E-01	0.00	-3.176E-01	0.00	-17.13
469	COMB24						
	0.00	0.00	-32.52	0.00	2.558E-02	0.00	198.54
	5.0E-01	0.00	-18.00	0.00	2.558E-02	0.00	211.32
	1.00	0.00	9.730E-02	0.00	2.558E-02	0.00	215.95
	1.50	0.00	18.19	0.00	2.558E-02	0.00	211.23
	2.00	0.00	32.72	0.00	2.558E-02	0.00	198.35
470	COMB23 MAX						
	0.00	0.00	141.73	0.00	8.86	0.00	216.53
	7.5E-01	0.00	164.86	0.00	8.86	0.00	126.65
	1.50	0.00	196.50	0.00	8.86	0.00	24.46
	2.25	0.00	231.37	0.00	8.86	0.00	1.58
	3.00	0.00	257.86	0.00	8.86	0.00	2.02
470	COMB23 MIN						
	0.00	0.00	-5.912E-01	0.00	-6.61	0.00	-17.16
	7.5E-01	0.00	-5.912E-01	0.00	-6.61	0.00	-29.65
	1.50	0.00	-5.912E-01	0.00	-6.61	0.00	-67.88
	2.25	0.00	-5.912E-01	0.00	-6.61	0.00	-227.07
	3.00	0.00	-5.912E-01	0.00	-6.61	0.00	-406.62
470	COMB24						
	0.00	0.00	124.91	0.00	2.15	0.00	198.65
	7.5E-01	0.00	148.03	0.00	2.15	0.00	96.80
	1.50	0.00	179.19	0.00	2.15	0.00	-25.41
	2.25	0.00	210.34	0.00	2.15	0.00	-171.98
	3.00	0.00	233.47	0.00	2.15	0.00	-338.92
471	COMB23 MAX						
	0.00	0.00	13.98	0.00	4.20	0.00	40.51
	7.5E-01	0.00	13.98	0.00	4.20	0.00	30.03
	1.50	0.00	13.98	0.00	4.20	0.00	19.54
	2.25	0.00	13.98	0.00	4.20	0.00	71.39
	3.00	0.00	13.98	0.00	4.20	0.00	120.51
471	COMB23 MIN						
	0.00	0.00	-172.29	0.00	-11.17	0.00	-243.20
	7.5E-01	0.00	-147.82	0.00	-11.17	0.00	-124.04
	1.50	0.00	-118.10	0.00	-11.17	0.00	-23.93
	2.25	0.00	-88.67	0.00	-11.17	0.00	-2.612E-01
	3.00	0.00	-67.27	0.00	-11.17	0.00	-1.42
471	COMB24						
	0.00	0.00	-154.89	0.00	-6.91	0.00	-202.48
	7.5E-01	0.00	-133.48	0.00	-6.91	0.00	-93.84
	1.50	0.00	-104.06	0.00	-6.91	0.00	-4.26
	2.25	0.00	-74.63	0.00	-6.91	0.00	62.25
	3.00	0.00	-53.23	0.00	-6.91	0.00	109.70
472	COMB23 MAX						
	0.00	0.00	43.01	0.00	9.06	0.00	120.60
	7.5E-01	0.00	62.40	0.00	9.06	0.00	92.99
	1.50	0.00	85.81	0.00	9.06	0.00	58.77
	2.25	0.00	109.22	0.00	9.06	0.00	14.67
	3.00	0.00	128.61	0.00	9.06	0.00	1.02
472	COMB23 MIN						
	0.00	0.00	-3.672E-01	0.00	-2.77	0.00	-1.39
	7.5E-01	0.00	-3.672E-01	0.00	-2.77	0.00	-11.86
	1.50	0.00	-3.672E-01	0.00	-2.77	0.00	-22.34
	2.25	0.00	-3.672E-01	0.00	-2.77	0.00	-59.56
	3.00	0.00	-3.672E-01	0.00	-2.77	0.00	-149.00
472	COMB24						
	0.00	0.00	28.93	0.00	6.18	0.00	109.79
	7.5E-01	0.00	48.33	0.00	6.18	0.00	81.07
	1.50	0.00	71.73	0.00	6.18	0.00	36.30
	2.25	0.00	95.14	0.00	6.18	0.00	-26.53
	3.00	0.00	114.54	0.00	6.18	0.00	-105.41
481	COMB23 MAX						
	0.00	0.00	8.93	0.00	8.227E-01	0.00	26.82
	1.50	0.00	8.93	0.00	8.227E-01	0.00	30.32
	3.00	0.00	10.96	0.00	8.227E-01	0.00	58.50
	4.50	0.00	61.79	0.00	8.227E-01	0.00	25.14
	6.00	0.00	108.11	0.00	8.227E-01	0.00	9.454E-04
481	COMB23 MIN						
	0.00	0.00	-104.45	0.00	-1.737E-01	0.00	-119.11
	1.50	0.00	-58.36	0.00	-1.737E-01	0.00	-2.16
	3.00	0.00	-8.07	0.00	-1.737E-01	0.00	-1.364E-02
	4.50	0.00	-3.147E-04	0.00	-1.737E-01	0.00	-13.37
	6.00	0.00	-3.147E-04	0.00	-1.737E-01	0.00	-129.35
481	COMB24						
	0.00	0.00	-91.92	0.00	5.303E-01	0.00	-91.35
	1.50	0.00	-49.11	0.00	5.303E-01	0.00	16.43
	3.00	0.00	1.71	0.00	5.303E-01	0.00	51.98
	4.50	0.00	52.54	0.00	5.303E-01	0.00	11.29
	6.00	0.00	95.34	0.00	5.303E-01	0.00	-101.63
497	COMB23 MAX						
	0.00	0.00	8.92	0.00	5.413E-01	0.00	26.79

	1.50	0.00	8.92	0.00	5.413E-01	0.00	27.64
	3.00	0.00	10.33	0.00	5.413E-01	0.00	56.74
	4.50	0.00	61.16	0.00	5.413E-01	0.00	24.21
	6.00	0.00	107.44	0.00	5.413E-01	0.00	9.094E-04
497	COMB23	MIN					
	0.00	0.00	-105.13	0.00	-2.596E-01	0.00	-122.43
	1.50	0.00	-58.89	0.00	-2.596E-01	0.00	-3.87
	3.00	0.00	-8.46	0.00	-2.596E-01	0.00	-7.797E-03
	4.50	0.00	-3.038E-04	0.00	-2.596E-01	0.00	-13.37
	6.00	0.00	-3.038E-04	0.00	-2.596E-01	0.00	-129.19
497	COMB24						
	0.00	0.00	-92.50	0.00	2.156E-01	0.00	-94.82
	1.50	0.00	-49.70	0.00	2.156E-01	0.00	13.83
	3.00	0.00	1.13	0.00	2.156E-01	0.00	50.25
	4.50	0.00	51.96	0.00	2.156E-01	0.00	10.43
	6.00	0.00	94.76	0.00	2.156E-01	0.00	-101.62
512	COMB23	MAX					
	0.00	0.00	9.36	0.00	1.20	0.00	26.99
	1.50	0.00	9.36	0.00	1.20	0.00	31.12
	3.00	0.00	10.52	0.00	1.20	0.00	61.50
	4.50	0.00	61.35	0.00	1.20	0.00	30.92
	6.00	0.00	107.11	0.00	1.20	0.00	3.491E-02
512	COMB23	MIN					
	0.00	0.00	-105.45	0.00	-3.406E-01	0.00	-119.38
	1.50	0.00	-59.70	0.00	-3.406E-01	0.00	-7.153E-01
	3.00	0.00	-9.16	0.00	-3.406E-01	0.00	-1.10
	4.50	0.00	-6.734E-03	0.00	-3.406E-01	0.00	-15.14
	6.00	0.00	-6.734E-03	0.00	-3.406E-01	0.00	-126.56
512	COMB24						
	0.00	0.00	-92.81	0.00	7.944E-01	0.00	-91.42
	1.50	0.00	-50.01	0.00	7.944E-01	0.00	17.70
	3.00	0.00	8.200E-01	0.00	7.944E-01	0.00	54.59
	4.50	0.00	51.65	0.00	7.944E-01	0.00	15.24
	6.00	0.00	94.45	0.00	7.944E-01	0.00	-96.34
549	COMB23	MAX					
	0.00	0.00	14.31	0.00	2.085E-01	0.00	27.69
	1.00	0.00	14.31	0.00	2.085E-01	0.00	22.01
	2.00	0.00	18.31	0.00	2.085E-01	0.00	16.38
	3.00	0.00	36.85	0.00	2.085E-01	0.00	15.94
	4.00	0.00	45.05	0.00	2.085E-01	0.00	10.52
549	COMB23	MIN					
	0.00	0.00	-37.09	0.00	-8.371E-02	0.00	-38.63
	1.00	0.00	-28.90	0.00	-8.371E-02	0.00	-7.28
	2.00	0.00	-11.54	0.00	-8.371E-02	0.00	-9.419E-01
	3.00	0.00	-6.744E-02	0.00	-8.371E-02	0.00	-15.26
	4.00	0.00	-6.744E-02	0.00	-8.371E-02	0.00	-56.43
549	COMB24						
	0.00	0.00	-22.76	0.00	1.139E-01	0.00	-10.91
	1.00	0.00	-14.56	0.00	1.139E-01	0.00	8.62
	2.00	0.00	3.98	0.00	1.139E-01	0.00	14.77
	3.00	0.00	22.52	0.00	1.139E-01	0.00	6.632E-01
	4.00	0.00	30.71	0.00	1.139E-01	0.00	-26.81
561	COMB23	MAX					
	0.00	1.19	1.33	1.23	4.472E-01	2.34	3.95
	7.5E-01	1.19	1.33	1.23	4.472E-01	1.61	2.96
	1.50	1.19	1.33	1.23	4.472E-01	1.35	5.51
	2.25	1.19	1.33	1.23	4.472E-01	1.82	53.17
	3.00	1.19	1.33	1.23	4.472E-01	2.38	97.46
561	COMB23	MIN					
	0.00	-27.32	-80.22	-7.763E-01	-1.606E-01	-5.332E-01	-106.92
	7.5E-01	-27.32	-74.17	-7.763E-01	-1.606E-01	-4.804E-01	-49.02
	1.50	-27.32	-68.13	-7.763E-01	-1.606E-01	-4.276E-01	-2.273E-01
	2.25	-27.32	-62.08	-7.763E-01	-1.606E-01	-7.025E-01	-4.942E-01
	3.00	-27.32	-56.03	-7.763E-01	-1.606E-01	-1.50	-9.535E-01
561	COMB24						
	0.00	-23.97	-68.86	2.421E-01	2.470E-01	1.24	-92.03
	7.5E-01	-23.97	-63.68	2.421E-01	2.470E-01	1.06	-42.32
	1.50	-23.97	-58.50	2.421E-01	2.470E-01	8.812E-01	3.49
	2.25	-23.97	-53.31	2.421E-01	2.470E-01	6.996E-01	45.42
	3.00	-23.97	-48.13	2.421E-01	2.470E-01	5.180E-01	83.46
562	COMB23	MAX					
	0.00	1.19	57.16	1.24	4.472E-01	2.38	97.46
	7.5E-01	1.19	63.21	1.24	4.472E-01	1.45	52.32
	1.50	1.19	69.26	1.24	4.472E-01	5.181E-01	4.46
	2.25	1.19	75.30	1.24	4.472E-01	3.595E-01	4.808E-01
	3.00	1.19	81.35	1.24	4.472E-01	9.275E-01	9.589E-01
562	COMB23	MIN					
	0.00	-27.32	-6.375E-01	-7.912E-01	-1.606E-01	-1.50	-9.535E-01
	7.5E-01	-27.32	-6.375E-01	-7.912E-01	-1.606E-01	-9.092E-01	-1.04
	1.50	-27.32	-6.375E-01	-7.912E-01	-1.606E-01	-3.158E-01	-2.03
	2.25	-27.32	-6.375E-01	-7.912E-01	-1.606E-01	-4.950E-01	-51.56
	3.00	-27.32	-6.375E-01	-7.912E-01	-1.606E-01	-1.40	-110.31

562	COMB24	0.00	-23.97	48.89	2.421E-01	2.470E-01	5.180E-01	83.46
		7.5E-01	-23.97	54.08	2.421E-01	2.470E-01	3.364E-01	44.85
		1.50	-23.97	59.26	2.421E-01	2.470E-01	1.548E-01	2.35
		2.25	-23.97	64.44	2.421E-01	2.470E-01	-2.678E-02	-44.04
		3.00	-23.97	69.63	2.421E-01	2.470E-01	-2.084E-01	-94.31
563	COMB23 MAX	0.00	1.87	1.48	9.491E-01	2.37	2.39	4.35
		7.5E-01	1.87	1.48	9.491E-01	2.37	2.16	3.24
		1.50	1.87	1.48	9.491E-01	2.37	2.17	6.28
		2.25	1.87	1.48	9.491E-01	2.37	2.70	52.98
		3.00	1.87	1.48	9.491E-01	2.37	3.24	96.79
563	COMB23 MIN	0.00	-25.79	-79.59	-7.479E-01	-8.104E-01	-1.02	-105.68
		7.5E-01	-25.79	-73.54	-7.479E-01	-8.104E-01	-8.891E-01	-48.26
		1.50	-25.79	-67.49	-7.479E-01	-8.104E-01	-7.594E-01	-4.986E-03
		2.25	-25.79	-61.44	-7.479E-01	-8.104E-01	-1.01	-4.668E-01
		3.00	-25.79	-55.39	-7.479E-01	-8.104E-01	-1.58	-9.287E-01
563	COMB24	0.00	-22.66	-68.18	1.193E-01	1.36	1.36	-90.36
		7.5E-01	-22.66	-62.99	1.193E-01	1.36	1.27	-41.17
		1.50	-22.66	-57.81	1.193E-01	1.36	1.18	4.13
		2.25	-22.66	-52.63	1.193E-01	1.36	1.09	45.54
		3.00	-22.66	-47.44	1.193E-01	1.36	1.00	83.07
564	COMB23 MAX	0.00	1.87	57.80	1.27	2.37	3.24	96.79
		7.5E-01	1.87	63.84	1.27	2.37	2.28	51.18
		1.50	1.87	69.89	1.27	2.37	1.33	3.26
		2.25	1.87	75.94	1.27	2.37	1.10	4.982E-01
		3.00	1.87	81.99	1.27	2.37	1.87	9.739E-01
564	COMB23 MIN	0.00	-25.79	-6.342E-01	-1.07	-8.104E-01	-1.58	-9.287E-01
		7.5E-01	-25.79	-6.342E-01	-1.07	-8.104E-01	-8.550E-01	-1.20
		1.50	-25.79	-6.342E-01	-1.07	-8.104E-01	-3.140E-01	-2.31
		2.25	-25.79	-6.342E-01	-1.07	-8.104E-01	-2.508E-01	-53.66
		3.00	-25.79	-6.342E-01	-1.07	-8.104E-01	-8.180E-01	-112.88
564	COMB24	0.00	-22.66	49.58	1.193E-01	1.36	1.00	83.07
		7.5E-01	-22.66	54.76	1.193E-01	1.36	9.126E-01	43.94
		1.50	-22.66	59.95	1.193E-01	1.36	8.232E-01	9.240E-01
		2.25	-22.66	65.13	1.193E-01	1.36	7.338E-01	-45.98
		3.00	-22.66	70.31	1.193E-01	1.36	6.443E-01	-96.77
565	COMB23 MAX	0.00	2.46	1.24	2.89	3.32	7.81	3.42
		7.5E-01	2.46	1.24	2.89	3.32	5.64	2.49
		1.50	2.46	1.24	2.89	3.32	4.06	8.07
		2.25	2.46	1.24	2.89	3.32	2.47	59.57
		3.00	2.46	1.24	2.89	3.32	1.02	107.34
565	COMB23 MIN	0.00	-25.10	-84.86	-8.959E-01	-1.67	-2.42	-110.96
		7.5E-01	-25.10	-78.82	-8.959E-01	-1.67	-1.75	-49.58
		1.50	-25.10	-72.77	-8.959E-01	-1.67	-1.08	-2.580E-02
		2.25	-25.10	-66.72	-8.959E-01	-1.67	-9.403E-01	-5.315E-01
		3.00	-25.10	-60.67	-8.959E-01	-1.67	-1.83	-1.04
565	COMB24	0.00	-21.94	-72.52	1.92	9.938E-01	5.29	-94.56
		7.5E-01	-21.94	-67.34	1.92	9.938E-01	3.85	-42.11
		1.50	-21.94	-62.15	1.92	9.938E-01	2.41	6.45
		2.25	-21.94	-56.97	1.92	9.938E-01	9.667E-01	51.12
		3.00	-21.94	-51.79	1.92	9.938E-01	-4.738E-01	91.90
566	COMB23 MAX	0.00	2.46	52.52	4.10	3.32	1.02	107.34
		7.5E-01	2.46	58.57	4.10	3.32	9.348E-01	65.69
		1.50	2.46	64.61	4.10	3.32	1.61	19.50
		2.25	2.46	70.66	4.10	3.32	2.28	2.580E-01
		3.00	2.46	76.71	4.10	3.32	3.23	6.898E-01
566	COMB23 MIN	0.00	-25.10	-8.834E-01	-1.36	-1.67	-1.83	-1.04
		7.5E-01	-25.10	-5.757E-01	-1.36	-1.67	-3.05	-1.24
		1.50	-25.10	-5.757E-01	-1.36	-1.67	-5.26	-2.18
		2.25	-25.10	-5.757E-01	-1.36	-1.67	-8.34	-31.23
		3.00	-25.10	-5.757E-01	-1.36	-1.67	-11.41	-86.50
566	COMB24	0.00	-21.94	45.23	1.92	9.938E-01	-4.738E-01	91.90
		7.5E-01	-21.94	50.42	1.92	9.938E-01	-1.91	56.03
		1.50	-21.94	55.60	1.92	9.938E-01	-3.35	16.28
		2.25	-21.94	60.79	1.92	9.938E-01	-4.80	-27.37
		3.00	-21.94	65.97	1.92	9.938E-01	-6.24	-74.90
596	COMB23 MAX	0.00	5.822E-01	116.91	5.551E-01	2.21	3.16	178.86
		7.5E-01	5.822E-01	124.97	5.551E-01	2.21	4.60	88.15

	1.50	5.822E-01	133.04	5.551E-01	2.21	6.09	2.52
	2.25	5.822E-01	141.10	5.551E-01	2.21	7.82	9.741E-01
	3.00	5.822E-01	149.16	5.551E-01	2.21	10.38	1.84
596	COMB23	MIN					
	0.00	-51.57	-1.16	-3.63	-5.13	-3.48	-1.63
	7.5E-01	-51.57	-1.16	-3.63	-5.13	-1.67	-2.00
	1.50	-51.57	-1.16	-3.63	-5.13	-1.29	-10.80
	2.25	-51.57	-1.16	-3.63	-5.13	-1.64	-111.40
	3.00	-51.57	-1.16	-3.63	-5.13	-2.06	-220.25
596	COMB24						
	0.00	-44.96	100.16	-2.81	-1.93	-1.837E-01	153.07
	7.5E-01	-44.96	107.08	-2.81	-1.93	1.92	75.36
	1.50	-44.96	113.99	-2.81	-1.93	4.03	-7.54
	2.25	-44.96	120.90	-2.81	-1.93	6.14	-95.63
	3.00	-44.96	127.81	-2.81	-1.93	8.24	-188.90
599	COMB23	MAX					
	0.00	5.822E-01	1.45	1.96	2.21	4.04	6.33
	5.0E-01	5.822E-01	1.45	1.96	2.21	3.06	5.61
	1.0E+00	5.822E-01	1.45	1.96	2.21	2.08	4.88
	1.50	5.822E-01	1.45	1.96	2.21	1.55	69.42
	2.00	5.822E-01	1.45	1.96	2.21	1.27	141.63
599	COMB23	MIN					
	0.00	-51.57	-163.23	-5.95	-5.13	-20.69	-163.33
	5.0E-01	-51.57	-157.86	-5.95	-5.13	-17.72	-83.06
	1.0E+00	-51.57	-152.48	-5.95	-5.13	-14.74	-10.19
	1.50	-51.57	-147.10	-5.95	-5.13	-11.77	-6.813E-01
	2.00	-51.57	-141.73	-5.95	-5.13	-10.06	-1.35
599	COMB24						
	0.00	-44.96	-139.96	-2.81	-1.93	-14.23	-140.44
	5.0E-01	-44.96	-135.35	-2.81	-1.93	-12.82	-71.62
	1.0E+00	-44.96	-130.74	-2.81	-1.93	-11.42	-5.10
	1.50	-44.96	-126.13	-2.81	-1.93	-10.01	59.12
	2.00	-44.96	-121.52	-2.81	-1.93	-8.61	121.03
600	COMB23	MAX					
	0.00	5.822E-01	1.45	7.242E-01	2.21	1.27	141.63
	7.5E-01	5.822E-01	1.45	7.242E-01	2.21	8.572E-01	160.01
	1.50	5.822E-01	1.45	7.242E-01	2.21	4.408E-01	172.34
	2.25	5.822E-01	3.31	7.242E-01	2.21	7.979E-01	178.62
	3.00	5.822E-01	9.07	7.242E-01	2.21	3.16	178.86
600	COMB23	MIN					
	0.00	-51.57	-28.54	-3.97	-5.13	-10.06	-1.35
	7.5E-01	-51.57	-20.47	-3.97	-5.13	-7.50	-1.42
	1.50	-51.57	-12.41	-3.97	-5.13	-5.95	-1.49
	2.25	-51.57	-6.42	-3.97	-5.13	-4.72	-1.56
	3.00	-51.57	-6.42	-3.97	-5.13	-3.48	-1.63
600	COMB24						
	0.00	-44.96	-24.50	-2.81	-1.93	-8.61	121.03
	7.5E-01	-44.96	-17.59	-2.81	-1.93	-6.50	136.82
	1.50	-44.96	-10.68	-2.81	-1.93	-4.40	147.42
	2.25	-44.96	-3.77	-2.81	-1.93	-2.29	152.84
	3.00	-44.96	3.14	-2.81	-1.93	-1.837E-01	153.07

Penulangan Balok Induk Arah X (portal 4) Atap Baja

lantai	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak	
It 1	F70	Tump-	300	500	54.09	93.51	700.48776	3206.25	448.875	700.4878	1.427022	2	2	981.7477	981.7477	
		Tump+	300	500	35.02	53.62	379.52925	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
		lap	300	500	19.88	31.07	215.4495	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
	F71-72	Tump-	400	600	81.8	303.65	1938.291	5275	738.5	1938.291	3.948654	4	2	1963.495	981.7477	
		Tump+	400	600	31.95	80.27	461.6775	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
		lap	400	600	56.47	165.92	1009.1406	5275	738.5	1009.1406	2.055804	3	2	1472.622	981.7477	
	F73-75	Tump-	400	800	93.88	535.59	2453.9999	7275	1018.5	2454	4.999248	5	3	2454.369	1472.6216	
		Tump+	400	800	39.12	133.63	565.284	7275	1018.5	1018.5	2.074871	3	2	1472.622	981.7477	
		lap	400	800	59.63	252.65	1112.4107	7275	1018.5	1112.4107	2.266184	3	2	1472.622	981.7477	
	F76-77	Tump-	400	600	74.61	261.65	1652.2157	5275	738.5	1652.2157	3.365866	4	2	1963.495	981.7477	
Tump+		400	600	30.07	75.72	434.5115	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477		
lap		400	600	48.35	128.41	762.38684	5275	738.5	762.3868	1.553122	2	2	981.7477	981.7477		
F78	Tump-	300	500	52.62	89.45	666.5386	3206.25	448.875	448.875	666.538	1.35786	2	2	981.7477	981.7477	
	Tump+	300	500	29.49	45.5	319.59788	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477		
	lap	300	500	18.4	28.85	199.41	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477		
It 2	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak	
		F208	Tump-	300	500	58.62	106.43	809.23401	3206.25	448.875	809.234	1.648558	2	2	981.7477	981.7477
			Tump+	300	500	38.48	58.61	417.027	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477
	lap		300	500	22.64	35.27	245.361	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
	F209-210	Tump-	400	600	76.65	273.35	1731.7076	5275	738.5	1731.7076	3.527806	4	2	1963.495	981.7477	
		Tump+	400	600	35.88	89.81	519.01	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
		lap	400	600	49.23	132.31	787.78354	5275	738.5	787.7835	1.604859	2	2	981.7477	981.7477	
	F211-213	Tump-	400	800	94.61	542.32	2486.483	7275	1018.5	2486.483	5.065422	6	3	2945.243	1472.6216	
		Tump+	400	800	43.742	149.46	634.99948	7275	1018.5	1018.5	2.074871	3	2	1472.622	981.7477	
		lap	400	800	60.76	260.76	1150.2807	7275	1018.5	1150.2807	2.343333	3	2	1472.622	981.7477	
F214-215	Tump-	400	600	70.85	240.62	1509.3114	5275	738.5	1509.3114	3.074744	4	2	1963.495	981.7477		
	Tump+	400	600	33.44	83.87	483.208	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477		
	lap	400	600	43.19	107.01	624.0955	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477		
F216	Tump-	300	500	46.16	72.41	525.49394	3206.25	448.875	448.875	525.4939	1.070527	2	2	981.7477	981.7477	
	Tump+	300	500	28.96	44.71	313.854	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477		

		lap	300	500	18.95	29.67	205.37063	3206.25	448.875	448.875	448.875	0.914441	2	2	981.7477	981.7477
lantai	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak	
It 3	F338	Tump-	300	500	56.07	99.07	747.26218	3206.25	448.875	747.2622	1.52231	2	2	981.7477	981.7477	
		Tump+	300	500	31.33	48.22	339.53888	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
		lap	300	500	20.05	31.35	217.29188	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
	F339-340	Tump-	400	600	74.305	259.94	1640.4479	5275	738.5	1640.4479	3.341893	4	2	1963.495	981.7477	
		Tump+	400	600	29.85	75.19	431.3325	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
		lap	400	600	49.18	132.11	786.33155	5275	738.5	786.3315	1.601901	2	2	981.7477	981.7477	
	F341-343	Tump-	400	800	92.44	522.29	2390.3492	7275	1018.5	2390.3492	4.869579	5	3	2454.369	1472.6216	
		Tump+	400	800	36.49	124.94	527.2805	7275	1018.5	1018.5	2.074871	3	2	1472.622	981.7477	
		lap	400	800	60.75	260.72	1149.9435	7275	1018.5	1149.9435	2.342646	3	2	1472.622	981.7477	
	F344-345	Tump-	400	600	68.54	227.93	1423.9034	5275	738.5	1423.9034	2.900752	3	2	1472.622	981.7477	
		Tump+	400	600	28.89	72.84	417.4605	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
		lap	400	600	43.09	106.84	622.6505	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
lantai	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak	
It 4	F465	Tump-	300	500	50.49	83.68	618.54673	3206.25	448.875	618.5467	1.260093	2	2	981.7477	981.7477	
		Tump+	300	500	21.16	33.03	229.3215	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
		lap	300	500	16.12	25.34	174.7005	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
	F466-467	Tump-	400	600	75.65	267.59	1692.5717	5275	738.5	1692.5717	3.448079	4	2	1963.495	981.7477	
		Tump+	400	600	24.17	61.26	349.2565	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
		lap	400	600	51.53	142.68	855.73377	5275	738.5	855.7338	1.743287	2	2	981.7477	981.7477	
	F468-470	Tump-	400	800	78.94	403.31	1822.5378	7275	1018.5	1822.5378	3.712844	4	2	1963.495	981.7477	
		Tump+	400	800	18.47	64.22	266.8915	7275	1018.5	1018.5	2.074871	3	2	1472.622	981.7477	
		lap	400	800	57.38	236.8	1038.4774	7275	1018.5	1038.4774	2.115569	3	2	1472.622	981.7477	
	F471-472	Tump-	400	600	70.61	239.24	1500.3521	5275	738.5	1500.3521	3.056492	4	2	1963.495	981.7477	
		Tump+	400	600	22.41	56.93	323.8245	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
		lap	400	600	46.55	120.61	711.49573	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
lantai	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak	
atap	F549	Tump-	300	500	35.72	54.63	387.1155	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
		Tump+	300	500	15.89	24.99	172.20788	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
		lap	300	500	13.46	21.25	145.87275	3193.425	448.875	448.875	0.914441	2	2	981.7477	981.7477	

Penulangan Balok Induk Arah Y (portal E) Atap Baja

lantai	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jumlah tul	Tul.tarik	Tul.desak	As tarik	As desak	
lantai It 1	F46	Tump-	400	800	63.2	278.59	1233.7036	7275	1018.5	1233.7036	2.51328	3	2	1472.6216	981.7477	
		Tump+	400	800	30.92	106.36	446.794	7275	1018.5	1018.5	2.074871	3	2	1472.6216	981.7477	
		lap	400	800	33.81	116.04	488.5545	7275	1018.5	1018.5	2.074871	3	2	1472.6216	981.7477	
	F68	Tump-	400	600	56.42	165.7	1007.5382	5275	738.5	738.5	1007.5382	2.05254	3	2	1472.6216	981.7477
		Tump+	400	600	22.59	57.36	326.4255	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	21.73	55.23	313.9985	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F87	Tump-	400	600	56.45	165.83	1008.4995	5275	738.5	738.5	1008.4995	2.054498	3	2	1472.6216	981.7477
		Tump+	400	600	24.03	60.93	347.2335	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	24.13	61.18	348.6785	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F105	Tump-	400	600	54.17	154.96	936.47262	5275	738.5	738.5	936.4726	1.907766	2	2	981.7477	981.7477
		Tump+	400	600	23.98	60.79	346.511	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	20.38	51.91	294.491	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
F120	Tump-	400	600	54.45	156.26	945.20455	5275	738.5	738.5	945.2045	1.925555	2	2	981.7477	981.7477	
	Tump+	400	600	24.78	62.77	358.071	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	lap	400	600	21.83	55.49	315.4435	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
F61	Tump-	400	600	67.29	221.17	1378.464	5275	738.5	738.5	1378.464	2.808184	3	2	1472.6216	981.7477	
	Tump+	400	600	29.66	74.72	428.587	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	lap	400	600	31.31	78.72	452.4295	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
F80	Tump-	400	600	61.52	191	1176.0246	5275	738.5	738.5	1176.0246	2.395778	3	2	1472.6216	981.7477	
	Tump+	400	600	32.83	82.39	474.3935	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	lap	400	600	23.68	60.07	342.176	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
lantai It 2	balok F180	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jumlah tul	Tul.tarik	Tul.desak	As tarik	As desak	
		Tump-	400	800	61.72	267.76	1182.8357	7275	1018.5	1018.5	1182.8357	2.409653	3	2	1472.6216	981.7477
		Tump+	400	800	33.58	115.24	485.231	7275	1018.5	1018.5	1018.5	2.074871	3	2	1472.6216	981.7477
	F202	lap	400	800	28.8	99.27	416.16	7275	1018.5	1018.5	1018.5	2.074871	3	2	1472.6216	981.7477
		Tump-	400	600	54.8	157.92	956.16441	5275	738.5	738.5	956.1644	1.947882	2	2	981.7477	981.7477
		Tump+	400	600	24.99	63.29	361.1055	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F225	lap	400	600	19.01	48.48	274.6945	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
		Tump-	400	600	60.08	183.72	1127.4331	5275	738.5	738.5	1127.4331	2.296788	3	2	1472.6216	981.7477
		Tump+	400	600	26.21	66.28	378.7345	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
	lap	400	600	27.23	68.8	393.4735	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	

	F243	Tump-	400	600	53.37	151.2	911.70134	5275	738.5	911.7013	1.857303	2	2	981.7477	981.7477
		Tump+	400	600	26.24	66.36	379.168	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	17.74	45.32	256.343	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F258	Tump-	400	600	53.78	153.11	924.36377	5275	738.5	924.3638	1.883098	2	2	981.7477	981.7477
		Tump+	400	600	26.75	67.61	386.5375	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	18.96	48.36	273.972	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F199	Tump-	400	600	65.56	211.98	1316.4928	5275	738.5	1316.4928	2.681937	3	2	1472.6216	981.7477
		Tump+	400	600	33.06	82.95	477.717	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	25.75	65.15	372.0875	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F218	Tump-	400	600	65.09	209.5	1299.8429	5275	738.5	1299.8429	2.648018	3	2	1472.6216	981.7477
		Tump+	400	600	35.92	89.82	519.044	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	26.87	67.9	388.2715	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	lantai	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak
	F316	Tump-	400	800	58.11	241.88	1062.2479	7275	1018.5	1061.9209	2.163327	3	2	1472.6216	981.7477
		Tump+	400	800	27.24	94	393.618	7275	1018.5	1018.5	2.074871	3	2	1472.6216	981.7477
		lap	400	800	30.42	104.69	439.569	7275	1018.5	1018.5	2.074871	3	2	1472.6216	981.7477
	F337	Tump-	400	600	44.42	111.59	653.1419	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		Tump+	400	600	20.28	51.63	293.046	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	11.87	30.49	171.5215	5232.8	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F354	Tump-	400	600	50.7	138.88	830.95258	5275	738.5	830.9526	1.692803	2	2	981.7477	981.7477
		Tump+	400	600	21.52	54.73	310.964	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	18.37	46.88	265.4465	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F370	Tump-	400	600	50.74	139.05	832.14016	5275	738.5	831.8432	1.694617	2	2	981.7477	981.7477
		Tump+	400	600	21.46	54.58	310.097	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	18.28	46.66	264.146	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F385	Tump-	400	600	51.52	142.61	855.43347	5275	738.5	855.4335	1.742675	2	2	981.7477	981.7477
		Tump+	400	600	21.88	55.61	316.166	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	19.15	48.83	276.7175	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F330	Tump-	400	600	62.99	198.51	1226.4361	5275	738.5	1226.0905	2.497771	3	2	1472.6216	981.7477
		Tump+	400	600	26.48	66.94	382.636	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	25.73	65.1	371.7985	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F347	Tump-	400	600	61.95	193.17	1190.687	5275	738.5	1190.3452	2.424951	3	2	1472.6216	981.7477
		Tump+	400	600	29.29	73.82	423.2405	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477

Tulangan Balok Induk Arah x (portal 4) Atap Baja

lantai	balok	Tumpuan		Lapangan	
		Tulangan atas	Tulangan bawah	Tulangan atas	Tulangan bawah
lt 1	F70	2	2	2	2
	F71-72	4	3	2	2
	F73-75	5	3	2	3
	F76-77	4	2	2	2
	F78	2	2	2	2
lt 2	F208	2	2	2	2
	F209-210	4	2	2	2
	F211-213	6	3	2	3
	F214-215	4	2	2	2
	F216	2	2	2	2
lt 3	F338	2	2	2	2
	F339-340	4	2	2	2
	F341-343	5	3	2	3
	F344-345	3	2	2	2
lt 4	F465	2	2	2	2
	F466-467	4	2	2	2
	F468-470	4	3	2	3
	F471-472	4	2	2	2
atap	F549	2	2	2	2

Tulangan Balok Induk Arah y (portal E) Atap Baja

lantai	balok	Tumpuan		Lapangan	
		Tulangan atas	Tulangan bawah	Tulangan atas	Tulangan bawah
lt 1	F46	3	3	2	3
	F68	3	2	2	2
	F87	3	2	2	2
	F105	2	2	2	2
	F120	2	2	2	2
	F60	3	2	2	2
	F81	3	2	2	2
	F180	3	3	2	3
lt 2	F202	2	2	2	2
	F225	3	2	2	2
	F243	2	2	2	2
	F258	2	2	2	2
	F199	3	2	2	2
	F218	3	2	2	2
	F316	3	3	2	3
	F337	2	2	2	2
lt 3	F354	2	2	2	2
	F370	2	2	2	2
	F385	2	2	2	2
	F330	3	2	2	2
	F347	3	2	2	2
	F443	3	3	2	3
	F464	2	2	2	2
	F481	2	2	2	2
lt 4	F497	2	2	2	2
	F512	2	2	2	2
	F457	3	2	2	2
	F474	3	2	2	2
	F599-600-596	3	3	2	3
	F424-428	2	2	2	2
	F561-562	2	2	2	2
	F563-564	2	2	2	2
atap	F565-566	2	2	2	2

F561-562	981.7477	981.7477	50.8025	203.084	50.8025	203.084	203.084	253.855	0.002	0.0235	0.0235
F563-564	981.7477	981.7477	50.8025	203.084	50.8025	203.084	203.084	253.855	0.002	0.0235	0.0235
F565-566	981.7477	981.7477	50.8025	203.084	50.8025	203.084	203.084	253.855	0.002	0.0235	0.0235

Gaya Geser Rencana Balok Induk Arah X (portal 4) Atap Baja

Lantai	Balok	d mm	h mm	Ln m	Vg kN	Mkap+ kNm	Mkap- kNm	VE kN	Ve ki kN	Ve ka kN	Ve Terpakai	
											sendi plastis	luar sendi plastis
1	F70	427.5	500	3.2	46.78	230.9117	341.0178	178.727969	225.5079688	131.9479688	213.0089	196.2705
	F71-72	527.5	600	5.2	174.93	419.7826	661.1945	207.880212	382.8102115	32.95021154	347.3196	302.0733
	F73-75	727.5	800	7.2	258	568.4446	1096.032	231.177306	489.1773056	-26.82269444	437.0398	374.5106
	F76-77	527.5	600	5.2	149.4	305.6591	660.1607	185.734577	335.1345769	36.33457692	304.8236	266.1807
	F78	427.5	500	3.2	49.37	230.9117	341.0178	178.727969	228.0979688	129.3579688	214.9069	197.2417
2	F208	427.5	500	3.2	60.29	229.9473	305.7013	167.390188	227.6801875	107.1001875	211.5715	189.9989
	F209-210	527.5	600	5.2	144.24	305.6591	660.1607	185.734577	329.9745769	41.49457692	300.7105	263.4023
	F211-213	727.5	800	7.2	248.11	569.5835	1251.843	252.975903	501.0859028	4.865902778	450.947	390.8148
	F214-215	527.5	600	5.2	126.62	305.6591	660.1607	185.734577	312.3545769	59.11457692	286.6653	253.9146
	F216	427.5	500	3.2	35.85	229.9473	305.7013	167.390188	203.2401875	131.5401875	193.6615	180.8339
3	F338	427.5	500	3.2	61.76	229.9473	305.7013	167.390188	229.1501875	105.6301875	212.6487	190.5502
	F339-340	527.5	600	5.2	144.13	305.6591	660.1607	185.734577	329.8645769	41.60457692	300.6228	263.343
	F341-343	727.5	800	7.2	250.78	568.4446	1096.032	231.177306	481.9573056	-19.60269444	431.2788	370.4995
	F344-345	527.5	600	5.2	125.93	303.5694	550.3333	164.212058	290.1420577	38.28205769	264.5928	232.0205
	F465	427.5	500	3.3	61.97	229.9473	305.7013	162.317758	224.2877576	100.3477576	208.2319	186.7302
4	F466-467	527.5	600	5.3	169.13	305.6591	660.1607	182.230151	351.3601509	13.10015094	317.6937	274.773
	F468-470	727.5	800	7.3	233.36	567.0447	937.9688	206.166233	439.5262329	-27.19376712	393.0141	337.2314
	F471-472	527.5	600	5.3	154.06	305.6591	660.1607	182.230151	336.2901509	28.17015094	305.6235	266.5271
	F549	427.5	500	3.3	31.25	230.9117	341.0178	173.31197	204.5619697	142.0619697	196.4654	185.6226

Gaya Geser Rencana Balok Induk Arah Y (portal E) Atap Baja

Lantai	Balok	d mm	h mm	Ln m	Vg kN	Mkap+ kNm	Mkap- kNm	VE kN	Ve ki kN	Ve ka kN	Ve Terpakai	
											sendi plastis	luar sendi plastis
1	F46	727.5	800	7.2	128.65	540.8062	613.8316	160.366361	289.0163611	31.71636111	263.0183	231.8386
	F68	527.5	600	5.2	92.35	279.7865	459.3848	142.148327	234.4983269	49.79832692	215.7619	191.8753
	F87	527.5	600	5.2	88.52	303.5694	550.3333	164.212058	252.7320577	75.69205769	234.7727	211.8767
	F105	527.5	600	5.2	85.22	277.8995	346.4855	120.074038	205.2940385	34.85403846	188.0042	165.9617
	F120	527.5	600	5.2	86.06	277.8995	346.4855	120.074038	206.1340385	34.01403846	188.6738	166.414
2	F180	727.5	800	7.2	112.92	540.8062	613.8316	160.366361	273.2863611	47.44636111	250.4671	223.0997
	F202	527.5	600	5.2	80.83	277.8995	346.4855	120.074038	200.9040385	39.24403846	184.5049	163.5979
	F225	527.5	600	5.2	104.78	303.5694	550.3333	164.212058	268.9920577	59.43205769	247.7338	220.6321
	F243	527.5	600	5.2	76.19	277.8995	346.4855	120.074038	196.2640385	43.88403846	180.8063	161.0994
	F258	527.5	600	5.2	76.32	277.8995	346.4855	120.074038	196.3940385	43.75403846	180.9099	161.1694
3	F316	727.5	800	7.2	112.8	540.8062	613.8316	160.366361	273.1663611	47.56636111	250.3714	223.033
	F337	527.5	600	5.2	51.87	253.855	253.855	97.6365385	149.5065385	45.76653846	138.9829	125.5665
	F354	527.5	600	5.2	76.53	277.8995	346.4855	120.074038	196.6040385	43.54403846	181.0773	161.2825
	F370	527.5	600	5.2	76.61	277.8995	346.4855	120.074038	196.6840385	43.46403846	181.141	161.3256
	F385	527.5	600	5.2	76.97	277.8995	346.4855	120.074038	197.0440385	43.10403846	181.428	161.5194
4	F443	727.5	800	7.3	139.37	540.8062	613.8316	158.169562	297.5395616	18.79956164	269.761	236.4459
	F464	527.5	600	5.3	69.77	253.855	253.855	95.7943396	165.5643396	26.02433962	151.6762	133.9704
	F481	527.5	600	5.3	95.36	277.8995	346.4855	117.808491	213.1684906	22.44849057	194.1865	169.9866
	F497	527.5	600	5.3	94.79	277.8995	346.4855	117.808491	212.5984906	23.01849057	193.7299	169.6747
	F512	527.5	600	5.3	93.7	277.8995	346.4855	117.808491	211.5084906	24.10849057	192.8569	169.0783
Atap	F599-600-596	727.5	800	7.3	86.83	514.8022	514.8022	141.041699	227.8716986	54.21169863	210.5652	189.8092
	F424-428	527.5	600	5.3	45.84	253.855	253.855	95.7943396	141.6343396	49.95433962	132.5096	120.8766
	F561-562	527.5	600	5.3	44.44	253.855	253.855	95.7943396	140.2343396	51.35433962	131.3883	120.1106
	F563-564	527.5	600	5.3	45.01	253.855	253.855	95.7943396	140.8043396	50.78433962	131.8448	120.4225
	F565-566	527.5	600	5.3	44.98	253.855	253.855	95.7943396	140.7743396	50.81433962	131.8208	120.406

Tulangan Geser Balok Induk arah X (portal 4) Atap Baja

lantai	balok	daerah sendi plastis					daerah luar sendi plastis					
		Ve terpakai (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai	Ve terpakai (kN)	Vc (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai
LT 1	F70	213.0089	387.28891	235.61945	62.41995	3P10-60	196.2705	117.0757	239.77976	235.61945	100.81983	3P-100
	F71-72	347.3196	631.49018	314.15927	62.98208	4P10-60	302.0733	192.61577	356.60842	235.61945	83.647556	3P-80
	F73-75	437.0398	794.61782	235.61945	51.77225	3P10-50	374.5106	265.64544	415.28292	235.61945	99.06296	3P-90
	F76-77	304.8236	554.22473	235.61945	53.82189	3P10-50	266.1807	192.61577	291.34914	235.61945	102.38377	3P-100
	F78	214.9069	390.73982	235.61945	61.86868	3P10-60	197.2417	117.0757	241.54558	235.61945	100.08279	3P-100
LT 2	F208	211.5715	384.67545	235.61945	62.84403	3P10-60	189.9989	117.0757	228.37685	235.61945	105.85379	3P-100
	F209-210	300.7105	546.74636	235.61945	54.55806	3P10-50	263.4023	192.61577	286.29751	235.61945	104.1903	3P-100
	F211-213	450.947	819.90364	235.61945	50.1756	3P10-50	390.8148	265.64544	444.92692	235.61945	92.462725	3P-90
	F214-215	286.6653	521.20964	235.61945	57.23114	3P10-50	253.9146	192.61577	269.04714	235.61945	110.87062	3P-110
	F216	193.6615	352.11182	235.61945	68.6559	3P10-60	180.8339	117.0757	211.71321	235.61945	114.18539	3P-110
LT 3	F338	212.6487	386.634	235.61945	62.52568	3P10-60	190.5502	117.0757	229.37921	235.61945	105.39122	3P-100
	F339-340	300.6228	546.58691	235.61945	54.57398	3P10-50	263.343	192.61577	286.18969	235.61945	104.22955	3P-100
	F341-343	431.2788	784.14327	235.61945	52.46383	3P10-50	370.4995	265.64544	407.99001	235.61945	100.83373	3P-100
	F344-345	264.5928	481.07782	235.61945	62.0054	3P10-60	232.0205	192.61577	229.23969	235.61945	130.12329	3P-130
	F465	208.2319	378.60345	235.61945	63.85191	3P10-60	186.7302	117.0757	222.43376	235.61945	108.68204	3P-100
LT 4	F466-467	317.6937	577.62491	235.61945	51.64151	3P10-50	274.773	192.61577	306.97151	235.61945	97.173261	3P-90
	F468-470	393.0141	714.57109	235.61945	57.57182	3P10-50	337.2314	265.64544	347.50256	235.61945	118.38519	3P-110
	F471-472	305.6235	555.67909	235.61945	53.68102	3P10-50	266.5271	192.61577	291.97896	235.61945	102.16292	3P-100
	F549	196.4654	357.20982	235.61945	67.67607	3P10-60	185.6226	117.0757	220.41994	235.61945	109.67499	3P-100

Tulangan Geser Balok Induk arah Y (portal E) Atap Baja

lantai	balok	daerah sendi plastis						daerah luar sendi plastis					
		Ve terpakai (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai	Ve terpakai (kN)	Vc (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai	
1	F46	263.0183	478.21509	235.61945	86.02647	3P10-80	231.8386	265.64544	155.87929	157.07963	175.9445	2P-170	
	F68	215.7619	392.29436	235.61945	76.03837	3P10-75	191.8753	192.61577	156.24842	157.07963	127.27349	2P-120	
	F87	234.7727	426.85945	235.61945	69.88113	3P10-60	211.8767	192.61577	192.6146	157.07963	103.2439	2P-100	
	F105	188.0042	341.82582	235.61945	87.26498	3P10-80	165.9617	192.61577	109.13278	157.07963	182.22098	2P-180	
	F120	188.6738	343.04327	235.61945	86.95528	3P10-80	166.414	192.61577	109.95514	157.07963	180.85813	2P-180	
2	F180	250.4671	455.39473	235.61945	90.33736	3P10-90	223.0997	265.64544	139.99038	157.07963	195.91421	2P-190	
	F202	184.5049	335.46345	235.61945	88.92004	3P10-80	163.5979	192.61577	104.83496	157.07963	189.69131	2P-180	
	F225	247.7338	450.42509	235.61945	66.22505	3P10-60	220.6321	192.61577	208.53351	157.07963	95.362524	2P-90	
	F243	180.8063	328.73873	235.61945	90.739	3P10-90	161.0994	192.61577	100.29223	157.07963	198.28336	2P-190	
	F258	180.9099	328.92709	235.61945	90.68703	3P10-90	161.1694	192.61577	100.41951	157.07963	198.03206	2P-190	
3	F316	250.3714	455.22073	235.61945	90.37189	3P10-90	223.033	265.64544	139.86911	157.07963	196.08407	2P-190	
	F337	138.9829	252.69618	235.61945	118.0446	3P10-110	125.5665	192.61577	35.686961	157.07963	557.24222	2P-200	
	F354	181.0773	329.23145	235.61945	90.6032	3P10-90	161.2825	192.61577	100.62514	157.07963	197.62736	2P-190	
	F370	181.141	329.34727	235.61945	90.57134	3P10-90	161.3256	192.61577	100.70351	157.07963	197.47358	2P-190	
	F385	181.428	329.86909	235.61945	90.42806	3P10-90	161.5194	192.61577	101.05587	157.07963	196.78502	2P-190	
4	F443	269.761	490.47455	235.61945	83.87623	3P10-80	236.4459	265.64544	164.2562	157.07963	166.9715	2P-160	
	F464	151.6762	275.77491	235.61945	108.1658	3P10-100	133.9704	192.61577	50.966779	157.07963	390.18125	2P-200	
	F481	194.1865	353.06636	235.61945	84.48673	3P10-80	169.9866	192.61577	116.45078	157.07963	170.76984	2P-170	
	F497	193.7299	352.23618	235.61945	84.68586	3P10-80	169.6747	192.61577	115.88369	157.07963	171.60553	2P-170	
	F512	192.8569	350.64891	235.61945	85.0692	3P10-80	169.0783	192.61577	114.79932	157.07963	173.22647	2P-170	
atap	F599-600-596	210.5652	382.84582	157.07963	71.63746	2P10-70	189.8092	265.64544	79.462196	157.07963	345.14656	2P-200	
	F424-428	132.5096	240.92655	157.07963	82.54085	2P10-80	120.8766	192.61577	27.15987	157.07963	732.19354	2P-200	
	F561-562	131.3883	238.88782	157.07963	83.24527	2P10-80	120.1106	192.61577	25.767143	157.07963	771.76897	2P-200	
	F563-564	131.8448	239.71782	157.07963	82.95704	2P10-80	120.4225	192.61577	26.334234	157.07963	755.14942	2P-200	
	F565-566	131.8208	239.67418	157.07963	82.97215	2P10-80	120.406	192.61577	26.304234	157.07963	756.01067	2P-200	

Penulangan Torsi Sengkang Arah X (portal 4) Atap Baja

lantai	Balok	be	bf	bw	hf	h	hw	Pcp	Acp	Tu	syarat 1	diperhitungkan	bh	hh	Ph	Aoh
1	F70	800	250	300	150	500	350	2600	225000	0.3739	6.665494	tidak				
	F71-72	1200	400	400	150	600	450	3600	360000	10.57	12.32376	tidak				
	F73-75	1200	400	400	150	800	650	4000	440000	17.72	16.56861	ya	290	690	1960	200100
	F76-77	1200	400	400	150	600	450	3600	360000	19.96	12.32376	ya	290	490	1560	142100
	F78	800	250	300	150	500	350	2600	225000	1.69	6.665494	tidak				
2	F208	800	250	300	150	500	350	2600	225000	0.1971	6.665494	tidak				
	F209-210	1200	400	400	150	600	450	3600	360000	11.05	12.32376	tidak				
	F211-213	1200	400	400	150	800	650	4000	440000	22.5	16.56861	ya	290	690	1960	200100
	F214-215	1200	400	400	150	600	450	3600	360000	16.63	12.32376	ya	290	490	1560	142100
	F216	800	250	300	150	500	350	2600	225000	2.39	6.665494	tidak				
3	F338	800	250	300	150	500	350	2600	225000	0.2441	6.665494	tidak				
	F339-340	1200	400	400	150	600	450	3600	360000	9.63	12.32376	tidak				
	F341-343	1200	400	400	150	800	650	4000	440000	28.04	16.56861	ya	290	690	1960	200100
	F344-345	1200	400	400	150	600	450	3600	360000	15.29	12.32376	ya	290	490	1560	142100
	F465	800	250	300	150	500	350	2600	225000	0.3876	6.665494	tidak				
4	F466-467	1200	400	400	150	600	450	3600	360000	5.76	12.32376	tidak				
	F468-470	1200	400	400	150	800	650	4000	440000	9.61	16.56861	tidak				
	F471-472	1200	400	400	150	600	450	3600	360000	11.12	12.32376	tidak				
	F549	800	250	300	150	500	350	2600	225000	0.1296	6.665494	tidak				
atap																

Syarat 1 = $\phi \cdot \sqrt{f_c'} \cdot \left(\frac{A_{cp}}{12} \cdot \left(\frac{A_{cp}}{P_{cp}} \right)^2 \right)$ (bila $T_u < \text{syarat 1}$ maka tulangan torsi perlu diperhitungkan)

Daerah sendi plastis																			
Lt.	Balok	Vu	Vc	syarat 2	syarat 3	cek	Tn	At/s	Vs	Av/s	Av gab/s gab	Av gab	s gab	tul	s	Av min 1	Av min 2	cek	
1	F70																		
	F71-72																		
	F73-75	437.039	265.645	1.586	3.423	ok	23.626	0.2894	794.617	4.551	5.12987	314.159	61.24	4P10-60	60	34.2327	33.3333	ok	
	F76-77	304.823	192.615	1.705	3.423	ok	26.613	0.4590	554.22	4.377	5.29583	314.159	59.32	4P10-50	50	28.5272	27.7778	ok	
	F78																		
2	F208																		
	F209-210																		
	F211-213	450.947	265.645	1.679	3.423	ok	30	0.3674	819.903	4.695	5.43082	314.159	57.85	4P10-50	50	28.5272	27.7778	ok	
	F214-215	286.665	192.615	1.554	3.423	ok	22.173	0.3824	521.209	4.117	4.88188	314.159	64.35	4P10-60	60	34.2327	33.3333	ok	
	F216																		
3	F338																		
	F339-340																		
	F341-343	431.278	265.645	1.687	3.423	ok	37.386	0.4579	784.143	4.491	5.40696	314.159	58.1	4P10-50	50	28.5272	27.7778	ok	
	F344-345	264.592	192.615	1.433	3.423	ok	20.386	0.3516	481.077	3.8	4.50325	314.159	69.76	4P10-60	60	34.2327	33.3333	ok	
4	F465																		
	F466-467																		
	F468-470																		
	F471-472																		
	F549																		
atap																			

$$\text{Syarat 2} = \sqrt{\left(\frac{Vu}{bw.d}\right)^2 + \left(\frac{Tu.Ph}{1,7.Ach^2}\right)^2}$$

$$\text{Av min 1} = \frac{75 \cdot \sqrt{fc'} \cdot bw.s}{1200 \cdot f_{yv}}$$

$$\text{Syarat 3} = \phi \cdot \left(\frac{Vc}{bw.d} + \frac{2 \cdot \sqrt{fc'}}{3} \right)$$

$$\text{Av min 2} = \frac{1}{3} \cdot \frac{bw.s}{f_{yv}}$$

Syarat 2 < Syarat 3 maka OK!

Av gabungan > Av min 1 dan Av min 2 maka OK!

Daerah luar sendi plastis																	
Lt.	Balok	Vu	syarat 2	syarat 3	cek	At/s	Vs	Av/s	Av gab/s gab	Av gab	s gab	tul	s	Av min 1	Av min 2	cek	
1	F70																
	F71-72																
	F73-75	374.510	1.384	3.423	ok	0.28939	415.282	2.37848	2.95727	314.159	106.232	4P10-100	100	57.0544	55.5555	ok	
	F76-77	266.180	1.553	3.423	ok	0.4590	291.349	2.30133	3.21940	314.159	97.5830	4P10-90	90	51.3489	50	ok	
	F78																
2	F208																
	F209-210																
	F211-213	390.814	1.491	3.423	ok	0.36746	444.926	2.54826	3.28319	314.159	95.6871	4P10-90	90	51.3489	50	ok	
	F214-215	253.914	1.421	3.423	ok	0.38245	269.047	2.12517	2.89007	314.159	108.702	4P10-100	100	57.0544	55.5555	ok	
	F216																
	F338																
3	F339-340																
	F341-343	370.499	1.507	3.423	ok	0.45794	407.990	2.33671	3.25259	314.159	96.5872	4P10-90	90	51.3489	50	ok	
	F344-345	232.020	1.300	3.423	ok	0.35163	229.239	1.81074	2.51400	314.159	124.963	4P10-120	120	68.4653	66.6666	ok	
4	F465																
	F466-467																
	F468-470																
	F471-472																
atap	F549																

$$\text{Syarat 2} = \sqrt{\left(\frac{Vu}{bw.d}\right)^2 + \left(\frac{Tu.Ph}{1.7.Aoh^2}\right)^2}$$

$$Av \text{ min 1} = \frac{75 \cdot \sqrt{fc'} \cdot bw.s}{1200 \cdot fyv}$$

$$\text{Syarat 3} = \phi \cdot \left(\frac{Vc}{bw.d} + \frac{2 \cdot \sqrt{fc'}}{3} \right)$$

$$Av \text{ min 2} = \frac{1}{3} \cdot \frac{bw.s}{fyv}$$

Syarat 2 < Syarat 3 maka OK!

Av gabungan > Av min 1 dan Av min 2 maka OK!

Penulangan Torsi Sengkang Arah Y (portal E) Atap Baja																
lantai	Bbalok	be	bf	bw	hf	h	hw	Pcp	Acp	Tu	syarat 1	diperhitungkan	bh	hh	Ph	Aoh
1	F46	800	400	400	150	800	650	3200	380000	1.68	15.4474878	tidak				
	F68	800	400	400	150	600	450	2800	300000	0.532	11.0033549	tidak				
	F87	1200	400	400	150	600	450	3600	360000	0.6543	12.3237575	tidak				
	F105	800	400	400	150	600	450	2800	300000	0.4361	11.0033549	tidak				
	F120	800	400	400	150	600	450	2800	300000	1.02	11.0033549	tidak				
2	F180	800	400	400	150	800	650	3200	380000	1.93	15.4474878	tidak				
	F202	800	400	400	150	600	450	2800	300000	1.24	11.0033549	tidak				
	F225	1200	400	400	150	600	450	3600	360000	1.02	12.3237575	tidak				
	F243	800	400	400	150	600	450	2800	300000	0.5679	11.0033549	tidak				
	F258	800	400	400	150	600	450	2800	300000	1	11.0033549	tidak				
3	F316	800	400	400	150	800	650	3200	380000	0.7514	15.4474878	tidak				
	F337	400	0	400	150	600	450	2000	240000	0.6938	9.85900604	tidak				
	F354	800	400	400	150	600	450	2800	300000	0.9509	11.0033549	tidak				
	F370	800	400	400	150	600	450	2800	300000	0.6237	11.0033549	tidak				
	F385	800	400	400	150	600	450	2800	300000	0.9769	11.0033549	tidak				
4	F443	800	400	400	150	800	650	3200	380000	2.66	15.4474878	tidak				
	F464	400	0	400	150	600	450	2000	240000	0.8481	9.85900604	tidak				
	F481	800	400	400	150	600	450	2800	300000	0.8006	11.0033549	tidak				
	F497	800	400	400	150	600	450	2800	300000	0.5276	11.0033549	tidak				
	F512	800	400	400	150	600	450	2800	300000	1.26	11.0033549	tidak				
atap	F599-600-596	400	0	400	150	800	650	2400	320000	5.14	14.6059349	tidak				
	F424-428	400	0	400	150	600	450	2000	240000	2.07	9.85900604	tidak				
	F561-562	400	0	400	150	600	450	2000	240000	0.4439	9.85900604	tidak				
	F563-564	400	0	400	150	600	450	2000	240000	2.39	9.85900604	tidak				
	F565-566	400	0	400	150	600	450	2000	240000	3.28	9.85900604	tidak				

Syarat 1 = $\phi \cdot \frac{\sqrt{f_c'}}{12} \cdot \left(\frac{A_{cp}}{P_{cp}} \right)^2$ (bila $T_u < \text{syarat 1}$ maka tulangan torsi perlu diperhitungkan)

Penulangan Longitudinal Tambahan Arah X (portal 4) Atap Baja

lantai	balok	At/s	Ph	Acp	bw	Al	Al min	Al yg diambil	tamb tul	Tumpuan (awal)			As bawah
										As atas	As bawah	As atas	
1	F73-75	0.2894	1960	440000	400	340.3344	2170.0607	2170.0607	542.515	2454.369	1472.6216	981.7477	1472.622
	F76-77	0.459	1560	360000	400	429.6558	1624.3038	1624.3038	406.076	1963.495	981.7477	981.7477	981.7477
2	F211-213	0.3675	1960	440000	400	432.1365	2078.2586	2078.2586	519.565	2945.243	1472.6216	981.7477	1472.622
	F214-215	0.3825	1560	360000	400	357.9751	1695.9845	1695.9845	423.996	1963.495	981.7477	981.7477	981.7477
3	F341-343	0.4579	1960	440000	400	538.5386	1971.8564	1971.8564	492.964	2454.369	1472.6216	981.7477	1472.622
	F344-345	0.3516	1560	360000	400	329.1304	1724.8292	1724.8292	431.207	1472.622	981.7477	981.7477	981.7477

Tumpuan (akhir)			lapangan (akhir)			Jumlah tulangan tumpuan			Jumlah tulangan lapangan		
As atas	As bawah	As ki/ka	As atas	As bawah	As ki/ka	As atas	As bawah	As ki/ka	As atas	As bawah	As ki/ka
2996.884	2015.137	542.5152	1524.263	2015.137	542.5152	7D25	5D25	2D25	4D25	5D25	2D25
2369.571	1387.824	406.076	1387.824	1387.824	406.076	5D25	3D25	1D25	3D25	3D25	1D25
3464.808	1992.186	519.5647	1501.312	1992.186	519.5647	8D25	5D25	2D25	4D25	5D25	2D25
2387.492	1405.744	423.9961	1405.744	1405.744	423.9961	5D25	3D25	1D25	3D25	3D25	1D25
2947.333	1965.586	492.9641	1474.712	1965.586	492.9641	7D25	5D25	2D25	4D25	5D25	2D25
1903.829	1412.955	431.2073	1412.955	1412.955	431.2073	4D25	3D25	1D25	3D25	3D25	1D25

Penulangan Balok Induk Arah X (portal 4) Atap Beton

lantai	balok	momen	b	h	C	MuI	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak	
It 1	F70	Tump-	300	500	53.94	93.08	696.99297	3206.25	448.875	696.993	1.419902	2	2	981.7477	981.7477	
		Tump+	300	500	35.15	53.79	380.93813	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
		lap	300	500	19.73	30.87	213.82388	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
	F71-72	Tump-	400	600	81.98	304.69	1945.6607	5275	738.5	1945.6607	3.963667	4	2	1963.4954	981.7477	
		Tump+	400	600	32.09	80.6	463.7005	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
		lap	400	600	56.48	165.97	1009.4612	5275	738.5	1009.4612	2.056457	3	2	1472.6216	981.7477	
	F73-75	Tump-	400	800	93.95	536.17	2457.1085	7275	1018.5	1018.5	2457.1085	5.00558	6	3	2945.2431	1472.6216
		Tump+	400	800	39.29	134.18	567.7405	7275	1018.5	1018.5	1113.0767	2.267541	3	2	1472.6216	981.7477
		lap	400	800	59.65	252.75	1113.0767	7275	1018.5	1018.5	1113.0767	2.267541	3	2	1472.6216	981.7477
	F76-77	Tump-	400	600	74.81	262.79	1659.949	5275	738.5	738.5	1659.949	3.38162	4	2	1963.4954	981.7477
Tump+		400	600	30.2	76.03	436.39	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	lap	400	600	48.36	128.44	762.67354	5275	738.5	738.5	762.6735	1.553706	2	2	981.7477	981.7477	
F78	Tump-	300	500	52.43	88.9	662.19961	3206.25	448.875	448.875	662.1996	1.349022	2	2	981.7477	981.7477	
	Tump+	300	500	29.63	45.71	321.11513	3206.25	448.875	448.875	448.875	0.914441	2	2	981.7477	981.7477	
	lap	300	500	18.26	28.63	197.89275	3206.25	448.875	448.875	448.875	0.914441	2	2	981.7477	981.7477	
lantai It 2	F208	momen	b	h	C <td>MuI <td>As butuh</td> <td>As max</td> <td>As min</td> <td>As pakai</td> <td>jmlh tul</td> <td>Tul.tarik</td> <td>Tul.desak</td> <td>As tarik</td> <td>As desak</td> </td>	MuI <td>As butuh</td> <td>As max</td> <td>As min</td> <td>As pakai</td> <td>jmlh tul</td> <td>Tul.tarik</td> <td>Tul.desak</td> <td>As tarik</td> <td>As desak</td>	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak	
		Tump-	300	500	59.21	108.14	823.84522	3206.25	448.875	823.8452	1.678324	2	2	981.7477	981.7477	
	Tump+	300	500	38.87	59.16	421.25363	3206.25	448.875	448.875	448.875	0.914441	2	2	981.7477	981.7477	
		lap	300	500	23.22	36.14	251.64675	3206.25	448.875	448.875	0.914441	2	2	981.7477	981.7477	
	F209-210	Tump-	400	600	77.06	275.7	1747.8467	5275	738.5	738.5	1747.8467	3.560684	4	2	1963.4954	981.7477
		Tump+	400	600	36.3	90.74	524.535	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	49.26	132.41	788.65526	5275	738.5	788.6553	1.606635	2	2	981.7477	981.7477	
	F211-213	Tump-	400	800	94.8	544.1	2494.9612	7275	1018.5	1018.5	2494.9612	5.082693	6	3	2945.2431	1472.6216
		Tump+	400	800	44	150.92	641.87839	7275	1018.5	1018.5	1018.5	2.074871	3	2	1472.6216	981.7477
		lap	400	800	60.75	260.68	1149.9435	7275	1018.5	1018.5	1149.9435	2.342646	3	2	1472.6216	981.7477
F214-215	Tump-	400	600	71.29	243.02	1525.7879	5275	738.5	738.5	1525.7879	3.10831	4	2	1963.4954	981.7477	
	Tump+	400	600	33.8	84.68	488.41	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	lap	400	600	43.2	107.07	624.24	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477	
F216	Tump-	300	500	45.82	71.51	518.44977	3206.25	448.875	448.875	518.44977	1.055756	2	2	981.7477	981.7477	
	Tump+	300	500	29.25	45.12	316.99688	3206.25	448.875	448.875	448.875	0.914441	2	2	981.7477	981.7477	

Penulangan Balok Induk Arah Y (portal E) Atap Beton

lantai	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak
It 1	F46	Tump-	400	800	63.09	277.74	1229.8948	7275	1018.5	1229.8948	2.50552	3	2	1472.6216	981.7477
		Tun+	400	800	30.84	106.09	445.638	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
	F68	lap	400	800	33.83	116.08	488.8435	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
		Tump-	400	600	56.36	165.37	1005.6167	5275	738.5	1005.6167	2.04862	3	2	1472.6216	981.7477
	F87	Tun+	400	600	22.53	57.22	325.5585	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	21.73	55.24	313.9985	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F105	Tump-	400	600	56.43	165.71	1007.8586	5275	738.5	1007.8586	2.05319	3	2	1472.6216	981.7477
		Tun+	400	600	23.97	60.78	346.3665	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F120	lap	400	600	24.13	61.18	348.6785	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		Tump-	400	600	54.15	154.82	935.85014	5275	738.5	935.8501	1.90649	2	2	981.7477	981.7477
F61	Tun+	400	600	23.91	60.64	345.4995	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	lap	400	600	20.39	51.91	294.6355	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
F80	Tump-	400	600	54.38	155.89	943.01857	5275	738.5	943.0186	1.92110	2	2	981.7477	981.7477	
	Tun+	400	600	24.71	62.61	357.0595	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
F61	lap	400	600	21.83	55.5	315.4435	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	Tump-	400	600	60.84	187.55	1152.9803	5275	738.5	1152.9803	2.34883	3	2	1472.6216	981.7477	
F80	Tun+	400	600	35.24	88.18	509.218	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
	lap	400	600	24.76	62.72	357.782	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
F202	Tump-	400	600	61.64	191.61	1180.1094	5275	738.5	1180.1094	2.40409	3	2	1472.6216	981.7477	
	Tun+	400	600	33.02	82.85	477.139	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
It 2	balok	lap	400	600	23.68	60.07	342.176	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak
F180	Tump-	400	800	61.98	269.59	1191.7125	7275	1018.5	1018.5	1191.7125	2.42773	3	2	1472.6216	981.7477
	Tun+	400	800	33.68	115.57	486.676	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477	
F225	lap	400	800	28.78	99.17	415.871	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477	
	Tump-	400	600	54.96	158.64	961.19122	5275	738.5	738.5	961.1912	1.95812	2	2	981.7477	981.7477
F225	Tun+	400	600	25.07	63.49	362.2615	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
	lap	400	600	19.04	48.54	275.128	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477	
F225	Tump-	400	600	60.14	183.99	1129.4419	5275	738.5	738.5	1129.4419	2.30088	3	2	1472.6216	981.7477
	Tun+	400	600	26.29	66.48	379.8905	5275	738.5	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	27.23	68.78	393.4735	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477

		lap	400	600	26.79	67.7	387.1155	5275	738.5	738.5	738.5	1.50446	2	981.7477	981.7477
	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak
lt 4	F443	Tump-	400	800	54.41	216.42	943.95517	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
		Tump+	400	800	20.99	72.82	303.3055	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
		lap	400	800	38.88	132.83	561.816	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
	F464	Tump-	400	600	42.28	104.94	610.946	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		Tump+	400	600	9.73	25.08	140.5985	5211.7	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	13.31	34.15	192.3295	5232.8	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F481	Tump-	400	600	48.57	129.35	768.70445	5275	738.5	768.7045	1.56599	2	2	981.7477	981.7477
		Tump+	400	600	11.79	30.32	170.3655	5232.8	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	23.05	58.5	333.0725	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F497	Tump-	400	600	48.53	129.19	767.55422	5275	738.5	767.5542	1.56364	2	2	981.7477	981.7477
		Tump+	400	600	10.74	27.64	155.193	5211.7	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	22.34	56.74	322.813	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F512	Tump-	400	600	47.93	126.56	750.38466	5275	738.5	750.3847	1.52867	2	2	981.7477	981.7477
		Tump+	400	600	12.11	31.12	174.9895	5232.8	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	24.26	61.5	350.557	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F457	Tump-	400	600	61.56	191.2	1177.3856	5275	738.5	1177.3856	2.39855	3	2	1472.6216	981.7477
		Tump+	400	600	16.27	41.62	235.1015	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	28.55	72	412.5475	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F474	Tump-	400	600	59.49	180.75	1107.753	5275	738.5	1107.753	2.25669	3	2	1472.6216	981.7477
		Tump+	400	600	18.47	47.14	266.8915	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	31.35	78.82	453.0075	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
lantai	balok	momen	b	h	C	Mu1	As butuh	As max	As min	As pakai	jmlh tul	Tul.tarik	Tul.desak	As tarik	As desak
atap	F599-600-596	Tump-	400	800	54.97	220.25	961.50574	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
		Tump+	400	800	41.55	141.63	600.3975	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
		lap	400	800	48.62	178.86	770.14321	7275	1018.5	1018.5	2.07487	3	2	1472.6216	981.7477
	F424-428	Tump-	400	600	49.72	134.49	802.07019	5275	738.5	802.0702	1.63396	2	2	981.7477	981.7477
		Tump+	400	600	1.8	4.67	26.01	5148.4	738.5	738.5	1.50446	2	2	981.7477	981.7477
		lap	400	600	34.57	86.58	499.5365	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	F561-562	Tump-	400	600	44.11	110.31	644.82055	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
		Tump+	400	600	2.12	5.51	30.634	5148.4	738.5	738.5	1.50446	2	2	981.7477	981.7477

	lap	400	600	39.12	97.46	565.284	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
F563-564	Tump-	400	600	44.73	112.88	661.50711	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	Tump+	400	600	2.42	6.28	34.969	5148.4	738.5	738.5	1.50446	2	2	981.7477	981.7477
	lap	400	600	38.84	96.79	561.238	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
F565-566	Tump-	400	600	44.27	110.96	649.10995	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477
	Tump+	400	600	7.55	19.5	109.0975	5190.6	738.5	738.5	1.50446	2	2	981.7477	981.7477
	lap	400	600	43.3	107.34	625.685	5275	738.5	738.5	1.50446	2	2	981.7477	981.7477

Tulangan Balok Induk Arah x (portal 4) Atap Beton

lantai	balok	Tumpuan		Lapangan	
		Tulangan atas	Tulangan bawah	Tulangan atas	Tulangan bawah
lt 1	F70	2	2	2	2
	F71-72	4	3	2	2
	F73-75	6	3	2	3
	F76-77	4	2	2	2
	F78	2	2	2	2
lt 2	F208	2	2	2	2
	F209-210	4	2	2	2
	F211-213	6	3	2	3
	F214-215	4	2	2	2
	F216	2	2	2	2
lt 3	F338	2	2	2	2
	F339-340	4	2	2	2
	F341-343	5	3	2	3
	F344-345	3	2	2	2
lt 4	F465	2	2	2	2
	F466-467	4	2	2	2
	F468-470	4	3	2	3
	F471-472	4	2	2	2
atap	F549	2	2	2	2

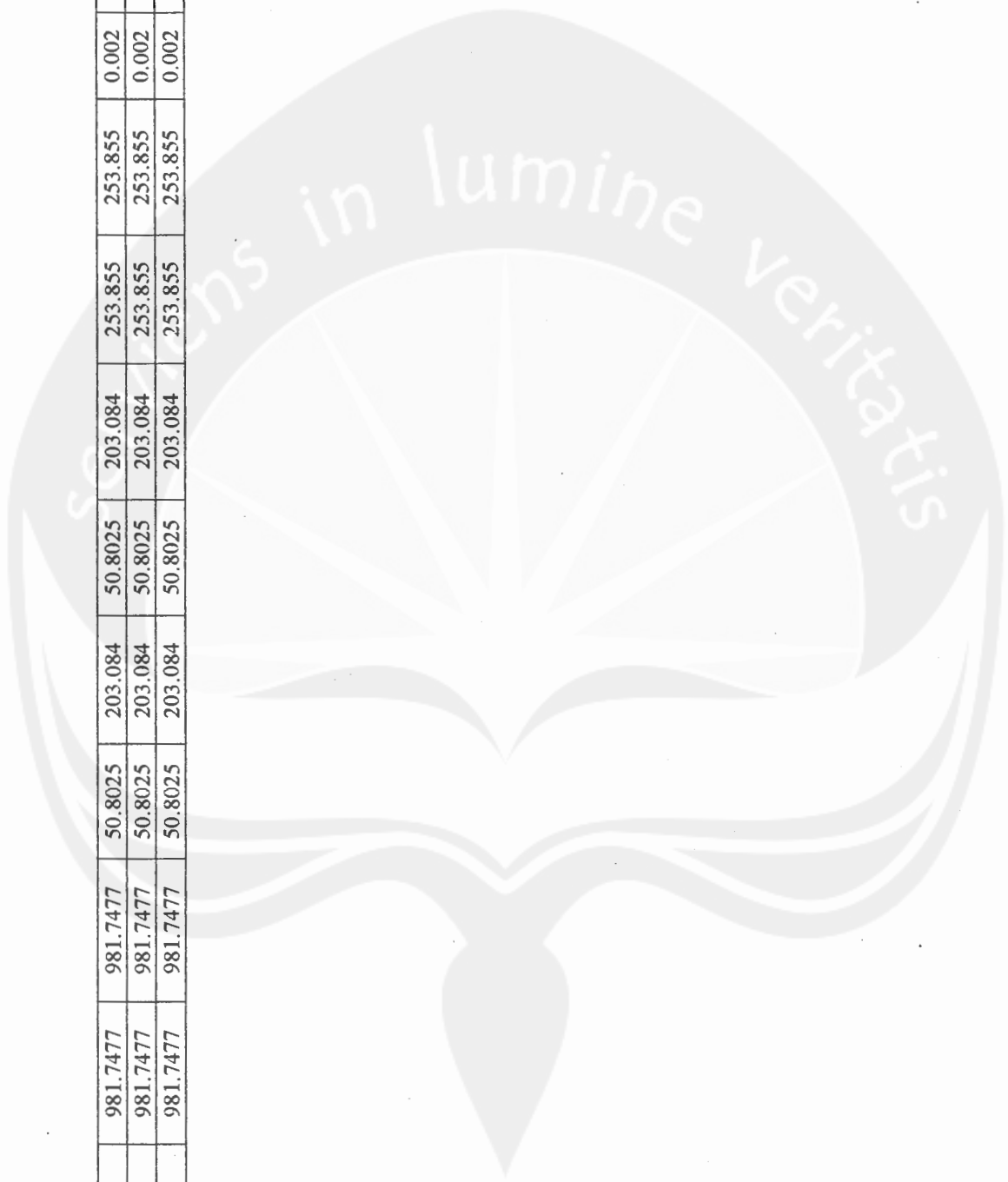
Tulangan Balok Induk Arah y (portal E) Atap Beton

lantai	balok	Tumpuan		Lapangan	
		Tulangan atas	Tulangan bawah	Tulangan atas	Tulangan bawah
lt 1	F46	3	3	2	3
	F68	3	2	2	2
	F87	3	2	2	2
	F105	2	2	2	2
	F120	2	2	2	2
	F60	3	2	2	2
	F81	3	2	2	2
	F180	3	3	2	3
lt 2	F202	2	2	2	2
	F225	3	2	2	2
	F243	2	2	2	2
	F258	2	2	2	2
	F199	3	2	2	2
	F218	3	2	2	2
	F316	3	3	2	3
	F337	2	2	2	2
lt 3	F354	2	2	2	2
	F370	2	2	2	2
	F385	2	2	2	2
	F330	3	2	2	2
	F347	3	2	2	2
	F443	3	3	2	3
	F464	2	2	2	2
	F481	2	2	2	2
lt 4	F497	2	2	2	2
	F512	2	2	2	2
	F457	3	2	2	2
	F474	3	2	2	2
	F599-600-596	3	3	2	3
	F424-428	2	2	2	2
	F561-562	2	2	2	2
	F563-564	2	2	2	2
atap	F565-566	2	2	2	2

Momen Kapasitas Balok Induk Arah x (portal 4) Atap Beton

Lantai	Balok	As atas	As bawah	a+	Mn+	a-	Mn-	Mpr+	Mpr-	ey	es+	es-
1	F70	1785.9955	981.7477	43.0618	184.7294	77.5631	272.8142	230.9117	341.0178	0.002	0.0223	0.011
	F71-72	2767.7432	1472.6216	43.19	335.826	84.8375	528.9556	419.7826	661.1945	0.002	0.0281	0.0128
	F73-75	3749.4909	1472.6216	45.6694	455.6668	109.2685	1001.4744	569.5835	1251.834	0.002	0.0376	0.014
	F76-77	2767.7432	981.7477	40.9837	244.5273	90.2306	528.1286	305.6591	660.1607	0.002	0.0298	0.0119
2	F78	1785.9955	981.7477	43.0618	184.7294	77.5631	272.8142	230.9117	341.0178	0.002	0.0223	0.011
	F208	1584.9335	981.7477	41.9733	183.9578	71.8836	244.5611	229.9473	305.7013	0.002	0.023	0.0121
	F209-210	2767.7432	981.7477	40.9837	244.5273	90.2306	528.1286	305.6591	660.1607	0.002	0.0298	0.0119
	F211-213	3749.4909	1472.6216	45.6694	455.6668	109.269	1001.474	569.5835	1251.843	0.002	0.0376	0.014
3	F214-215	2767.7432	981.7477	40.9837	244.5273	90.2306	528.1286	305.6591	660.1607	0.002	0.0298	0.0119
	F216	1584.9335	981.7477	41.9733	183.9578	71.8836	244.5611	229.9473	305.7013	0.002	0.023	0.0121
	F338	1584.9335	981.7477	41.9733	183.9578	71.8836	244.5611	229.9473	305.7013	0.002	0.023	0.0121
	F339-340	2767.7432	981.7477	40.9837	244.5273	90.2306	528.1286	305.6591	660.1607	0.002	0.0298	0.0119
4	F341-343	3258.6171	1472.6216	44.5305	454.7557	96.4891	876.8254	568.4446	1096.032	0.002	0.0387	0.0162
	F344-345	2276.8694	981.7477	39.2099	242.8555	77.4746	440.2666	303.5694	550.3333	0.002	0.0313	0.0143
	F465	1584.9335	981.7477	41.9733	183.9578	71.8836	244.5611	229.9473	305.7013	0.002	0.023	0.0121
	F466-467	2767.7432	981.7477	40.9837	244.5273	90.2306	528.1286	305.6591	660.1607	0.002	0.0298	0.0119
atap	F468-470	2767.7432	1472.6216	43.19	453.6358	84.8375	750.3751	567.0447	937.9688	0.002	0.04	0.0188
	F471-472	2767.7432	981.7477	40.9837	244.5273	90.2306	528.1286	305.6591	660.1607	0.002	0.0298	0.0119
	F549	1785.9955	981.7477	43.0618	184.7294	77.5631	272.8142	230.9117	341.0178	0.002	0.0223	0.011

F561-562	981.7477	981.7477	50.8025	203.084	50.8025	203.084	253.855	253.855	0.002	0.0235	0.0235
F563-564	981.7477	981.7477	50.8025	203.084	50.8025	203.084	253.855	253.855	0.002	0.0235	0.0235
F565-566	981.7477	981.7477	50.8025	203.084	50.8025	203.084	253.855	253.855	0.002	0.0235	0.0235



Gaya Geser Rencana Balok Induk Arah X (portal 4) Atap Beton

Lantai	Balok	d mm	h mm	Ln m	Vg kN	Mkap+ kNm	Mkap- kNm	VE kN	Ve ki kN	Ve ka kN	Ve Terpakai	
											sendi plastis	luar sendi plastis
1	F70	427.5	500	3.2	46.47	230.9117	341.0178	178.727969	225.1979688	132.2579688	212.7818	196.1542
	F71-72	527.5	600	5.2	175.17	419.7826	661.1945	207.880212	383.0502115	32.71021154	347.5109	302.2025
	F73-75	727.5	800	7.2	258	569.5835	1251.843	252.975903	510.9759028	-5.024097222	458.8384	396.3092
	F76-77	527.5	600	5.2	149.68	305.6591	660.1607	185.734577	335.4145769	36.05457692	305.0468	266.3315
	F78	427.5	500	3.2	49	230.9117	341.0178	178.727969	227.7279688	129.7279688	214.6358	197.103
2	F208	427.5	500	3.2	60.86	229.9473	305.7013	167.390188	228.2501875	106.5301875	211.9892	190.2127
	F209-210	527.5	600	5.2	144.73	305.6591	660.1607	185.734577	330.4645769	41.00457692	301.1011	263.6661
	F211-213	727.5	800	7.2	248.16	569.5835	1251.843	252.975903	501.1359028	4.815902778	450.9869	390.8426
	F214-215	527.5	600	5.2	127.16	305.6591	660.1607	185.734577	312.8945769	58.57457692	287.0958	254.2053
	F216	427.5	500	3.2	35.3	229.9473	305.7013	167.390188	202.6901875	132.0901875	193.2585	180.6277
3	F338	427.5	500	3.2	62.64	229.9473	305.7013	167.390188	230.0301875	104.7501875	213.2936	190.8802
	F339-340	527.5	600	5.2	144.91	305.6591	660.1607	185.734577	330.6445769	40.82457692	301.2446	263.763
	F341-343	727.5	800	7.2	250.92	568.4446	1096.032	231.177306	482.0973056	-19.74269444	431.3906	370.5773
	F344-345	527.5	600	5.2	126.65	303.5694	550.3333	164.212038	290.8620577	37.56205769	265.1667	232.4082
	F465	427.5	500	3.3	61.07	229.9473	305.7013	162.317758	223.3877576	101.2477576	207.5651	186.3756
4	F466-467	527.5	600	5.3	170.28	305.6591	660.1607	182.230151	352.5101509	11.95015094	318.6148	275.4022
	F468-470	727.5	800	7.3	233.47	567.0447	937.9688	206.166233	439.6362329	-27.30376712	393.1021	337.2932
	F471-472	527.5	600	5.3	154.89	305.6591	660.1607	182.230151	337.1201509	27.34015094	306.2883	266.9813
	F549	427.5	500	3.3	30.71	230.9117	341.0178	173.31197	204.0219697	142.6019697	196.0653	185.4098

Gaya Geser Rencana Balok Induk Arah Y (portal E) Atap Beton

Lantai	Balok	d mm	h mm	Ln m	Vg kN	Mkap+ kNm	Mkap- kNm	VE kN	Veki kN	Veka kN	Ve Terpakai	
											sendi plastis	luar sendi plastis
1	F46	727.5	800	7.2	128.5	540.8062	613.8316	160.366361	288.8663611	31.86636111	262.8987	231.7553
	F68	527.5	600	5.2	92.28	279.7865	459.3848	142.148327	234.4283269	49.86832692	215.7061	191.8376
	F87	527.5	600	5.2	88.52	303.5694	550.3333	164.212058	252.7320577	75.69205769	234.7727	211.8767
	F105	527.5	600	5.2	85.22	277.8995	346.4855	120.074038	205.2940385	34.85403846	188.0042	165.9617
	F120	527.5	600	5.2	85.98	277.8995	346.4855	120.074038	206.0540385	34.09403846	188.61	166.371
2	F180	727.5	800	7.2	112.87	540.8062	613.8316	160.366361	273.2363611	47.49636111	250.4272	223.0719
	F202	527.5	600	5.2	81	277.8995	346.4855	120.074038	201.0740385	39.07403846	184.6404	163.6894
	F225	527.5	600	5.2	104.78	303.5694	550.3333	164.212058	268.9920577	59.43205769	247.7338	220.6321
	F243	527.5	600	5.2	76.2	277.8995	346.4855	120.074038	196.2740385	43.87403846	180.8142	161.1048
	F258	527.5	600	5.2	76.51	277.8995	346.4855	120.074038	196.5840385	43.56403846	181.0613	161.2717
3	F316	727.5	800	7.2	113.15	540.8062	613.8316	160.366361	273.5163611	47.21636111	250.6506	223.2275
	F337	527.5	600	5.2	52.04	253.855	253.855	97.6365385	149.6765385	45.59653846	139.1184	125.6581
	F354	527.5	600	5.2	76.54	277.8995	346.4855	120.074038	196.6140385	43.53403846	181.0853	161.2879
	F370	527.5	600	5.2	76.62	277.8995	346.4855	120.074038	196.6940385	43.45403846	181.149	161.331
	F385	527.5	600	5.2	77.15	277.8995	346.4855	120.074038	197.2240385	42.92403846	181.5715	161.6163
4	F443	727.5	800	7.3	138.2	540.8062	613.8316	158.169562	296.3695616	19.96956164	268.8242	235.7887
	F464	527.5	600	5.3	70.29	253.855	253.855	95.7943396	166.0843396	25.50433962	152.0927	134.2549
	F481	527.5	600	5.3	95.34	277.8995	346.4855	117.808491	213.1484906	22.46849057	194.1704	169.9757
	F497	527.5	600	5.3	94.76	277.8995	346.4855	117.808491	212.5684906	23.04849057	193.7059	169.6583
	F512	527.5	600	5.3	94.45	277.8995	346.4855	117.808491	212.2584906	23.35849057	193.4576	169.4887
Atap	F599-600-596	727.5	800	7.3	139.96	514.8022	514.8022	141.041699	281.0016986	1.08169863	253.1056	219.6494
	F424-428	527.5	600	5.3	73.41	253.855	253.855	95.7943396	169.2043396	22.38433962	154.5916	135.9621
	F561-562	527.5	600	5.3	69.63	253.855	253.855	95.7943396	165.4243396	26.16433962	151.564	133.8938
	F563-564	527.5	600	5.3	70.31	253.855	253.855	95.7943396	166.1043396	25.48433962	152.1087	134.2658
	F565-566	527.5	600	5.3	72.52	253.855	253.855	95.7943396	168.3143396	23.27433962	153.8788	135.4751

Tulangan Geser Balok Induk arah X (portal 4) Atap Beton

lantai	balok	daerah sendi plastis					daerah luar sendi plastis					
		Ve terpakai (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai	Ve terpakai (kN)	Vc (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai
LT 1	F70	212.7818	386.876	235.61945	62.48657	3P10-60	196.1542	117.0757	239.5683	235.61945	100.90882	3P-100
	F71-72	347.5109	631.838	314.15927	62.94741	4P10-60	302.2025	192.61577	356.84332	235.61945	83.592491	3P-80
	F73-75	458.8384	834.25164	314.15927	65.75019	4P10-60	396.3092	265.64544	454.91674	235.61945	90.432275	3P-90
	F76-77	305.0468	554.63055	235.61945	53.78251	3P10-50	266.3315	192.61577	291.62332	235.61945	102.2875	3P-100
	F78	214.6358	390.24691	235.61945	61.94682	3P10-60	197.103	117.0757	241.29339	235.61945	100.18739	3P-100
LT 2	F208	211.9892	385.43491	235.61945	62.7202	3P10-60	190.2127	117.0757	228.76558	235.61945	105.67392	3P-100
	F209-210	301.1011	547.45655	235.61945	54.48729	3P10-50	263.6661	192.61577	286.77714	235.61945	104.01604	3P-100
	F211-213	450.9869	819.97618	235.61945	50.17116	3P10-50	390.8426	265.64544	444.97747	235.61945	92.452222	3P-90
	F214-215	287.0958	521.99236	235.61945	57.14532	3P10-50	254.2053	192.61577	269.57569	235.61945	110.65324	3P-110
	F216	193.2585	351.37909	235.61945	68.79907	3P10-60	180.6277	117.0757	211.3383	235.61945	114.38795	3P-110
LT 3	F338	213.2936	387.80655	235.61945	62.33664	3P10-60	190.8802	117.0757	229.97921	235.61945	105.11626	3P-100
	F339-340	301.2446	547.71745	235.61945	54.46133	3P10-50	263.763	192.61577	286.95332	235.61945	103.95218	3P-100
	F341-343	431.3906	784.34655	235.61945	52.45023	3P10-50	370.5773	265.64544	408.13147	235.61945	100.79878	3P-100
	F344-345	265.1667	482.12127	235.61945	61.8712	3P10-60	232.4082	192.61577	229.9446	235.61945	129.72439	3P-120
LT 4	F465	207.5651	377.39109	235.61945	64.05704	3P10-60	186.3756	117.0757	221.78903	235.61945	108.99798	3P-100
	F466-467	318.6148	579.29964	235.61945	51.49222	3P10-50	275.4022	192.61577	308.11551	235.61945	96.812467	3P-90
	F468-470	393.1021	714.73109	235.61945	57.55893	3P10-50	337.2932	265.64544	347.61492	235.61945	118.34692	3P-110
	F471-472	306.2883	556.88782	235.61945	53.56451	3P10-50	266.9813	192.61577	292.80478	235.61945	101.87478	3P-100
Atap	F549	196.0653	356.48236	235.61945	67.81417	3P10-60	185.4098	117.0757	220.03303	235.61945	109.86785	3P-100

Tulangan Geser Balok Induk arah Y (portal E) Atap Beton

lantai	balok	daerah sendi plastis						daerah luar sendi plastis					
		Ve terpakai (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai	Ve terpakai (kN)	Vc (kN)	Vs (kN)	Av (mm ²)	s (mm)	Tulangan terpakai	
1	F46	262.8987	477.99764	235.61945	86.06561	3P10-80	231.7553	265.64544	155.72783	157.07963	176.11562	2P-170	
	F68	215.7061	392.19291	235.61945	76.05804	3P10-75	191.8376	192.61577	156.17987	157.07963	127.32935	2P-120	
	F87	234.7727	426.85945	235.61945	69.88113	3P10-60	211.8767	192.61577	192.6146	157.07963	103.2439	2P-100	
	F105	188.0042	341.82582	235.61945	87.26498	3P10-80	165.9617	192.61577	109.13278	157.07963	182.22098	2P-180	
	F120	188.61	342.92727	235.61945	86.98469	3P10-80	166.371	192.61577	109.87696	157.07963	180.98682	2P-180	
2	F180	250.4272	455.32218	235.61945	90.35175	3P10-90	223.0719	265.64544	139.93983	157.07963	195.98497	2P-190	
	F202	184.6404	335.70982	235.61945	88.85478	3P10-80	163.6894	192.61577	105.00132	157.07963	189.39077	2P-180	
	F225	247.7338	450.42509	235.61945	66.22505	3P10-60	220.6321	192.61577	208.53351	157.07963	95.362524	2P-90	
	F243	180.8142	328.75309	235.61945	90.73503	3P10-90	161.1048	192.61577	100.30205	157.07963	198.26395	2P-190	
	F258	181.0613	329.20236	235.61945	90.6112	3P10-90	161.2717	192.61577	100.60551	157.07963	197.66593	2P-190	
3	F316	250.6506	455.72836	235.61945	90.27122	3P10-90	223.2275	265.64544	140.22274	157.07963	195.58956	2P-190	
	F337	139.1184	252.94255	235.61945	117.9296	3P10-110	125.6581	192.61577	35.853507	157.07963	554.65374	2P-200	
	F354	181.0853	329.246	235.61945	90.59919	3P10-90	161.2879	192.61577	100.63496	157.07963	197.60808	2P-190	
	F370	181.149	329.36182	235.61945	90.56734	3P10-90	161.331	192.61577	100.71332	157.07963	197.45432	2P-190	
	F385	181.5715	330.13	235.61945	90.35659	3P10-90	161.6163	192.61577	101.23205	157.07963	196.44254	2P-190	
4	F443	268.8242	488.77127	235.61945	84.16852	3P10-80	235.7887	265.64544	163.06129	157.07963	168.19507	2P-160	
	F464	152.0927	276.53218	235.61945	107.8696	3P10-100	134.2549	192.61577	51.484052	157.07963	386.261	2P-200	
	F481	194.1704	353.03709	235.61945	84.49373	3P10-80	169.9757	192.61577	116.43096	157.07963	170.79891	2P-170	
	F497	193.7059	352.19255	235.61945	84.69635	3P10-80	169.6583	192.61577	115.85387	157.07963	171.64969	2P-170	
	F512	193.4576	351.74109	235.61945	84.80505	3P10-80	169.4887	192.61577	115.54551	157.07963	172.10779	2P-170	
atap	F599-600-596	253.1056	460.192	235.61945	89.39563	3P10-80	219.6494	265.64544	133.71711	157.07963	205.10543	2P-200	
	F424-428	154.5916	281.07564	235.61945	106.126	3P10-100	135.9621	192.61577	54.588052	157.07963	364.29733	2P-200	
	F561-562	151.564	275.57091	235.61945	108.2459	3P10-100	133.8938	192.61577	50.827507	157.07963	391.25038	2P-200	
	F563-564	152.1087	276.56127	235.61945	107.8583	3P10-100	134.2658	192.61577	51.50387	157.07963	386.11237	2P-200	
	F565-566	153.8788	279.77964	235.61945	106.6176	3P10-100	135.4751	192.61577	53.702598	157.07963	370.3039	2P-200	

Penulangan Torsi Sengkang Arah X (portal 4) Atap Beton

lantai	Balok	be	bf	bw	hf	h	hw	Pcp	Acp	Tu	syarat 1	diperhitungkan	bh	hh	Ph	Aoh
1	F70	800	250	300	150	500	350	2600	225000	0.3714	6.665493864	tidak				
	F71-72	1200	400	400	150	600	450	3600	360000	10.62	12.32375754	tidak	290	690	1960	200100
	F73-75	1200	400	400	150	800	650	4000	440000	17.78	16.56860736	ya	290	490	1560	142100
	F76-77	1200	400	400	150	600	450	3600	360000	19.96	12.32375754	ya				
2	F78	800	250	300	150	500	350	2600	225000	1.69	6.665493864	tidak				
	F208	800	250	300	150	500	350	2600	225000	0.1944	6.665493864	tidak				
	F209-210	1200	400	400	150	600	450	3600	360000	11.16	12.32375754	tidak				
	F211-213	1200	400	400	150	800	650	4000	440000	22.64	16.56860736	ya	290	690	1960	200100
3	F214-215	1200	400	400	150	600	450	3600	360000	16.66	12.32375754	ya	290	490	1560	142100
	F216	800	250	300	150	500	350	2600	225000	2.4	6.665493864	tidak				
	F338	800	250	300	150	500	350	2600	225000	0.247	6.665493864	tidak				
	F339-340	1200	400	400	150	600	450	3600	360000	9.81	12.32375754	tidak				
4	F341-343	1200	400	400	150	800	650	4000	440000	28.3	16.56860736	ya	290	690	1960	200100
	F344-345	1200	400	400	150	600	450	3600	360000	15.38	12.32375754	ya	290	490	1560	142100
	F465	800	250	300	150	500	350	2600	225000	0.4307	6.665493864	tidak				
	F466-467	1200	400	400	150	600	450	3600	360000	5.94	12.32375754	tidak				
atap	F468-470	1200	400	400	150	800	650	4000	440000	9.87	16.56860736	tidak				
	F471-472	1200	400	400	150	600	450	3600	360000	11.17	12.32375754	tidak				
	F549	800	250	300	150	500	350	2600	225000	0.8371	6.665493864	tidak				

Syarat 1 = $\phi \cdot \frac{\sqrt{f_c'}}{12} \cdot \left(\frac{Acp}{Pcp} \right)^2$ (bila $Tu < \text{syarat 1}$ maka tulangan torsi perlu diperhitungkan)

Daerah sendi plastis																			
Lt.	Balok	Vu	Vc	syarat 2	syarat 3	cek	Tn	At/s	Vs	Av/s	Av gab/s gab	Av gab	s gab	tul	s	Av min 1	Av min 2	cek	
1	F70																		
	F71-72																		
	F73-75	458.838	265.645	1.657	3.423	ok	23.7066	0.29037	834.251	4.778	5.35882	314.159	58.62	4P10-50	50	28.5272	27.7777	ok	
	F76-77	305.046	192.615	1.706	3.423	ok	26.6133	0.45903	554.630	4.380	5.29903	314.159	59.28	4P10-50	50	28.5272	27.7777	ok	
	F78																		
2	F208																		
	F209-210																		
	F211-213	450.986	265.645	1.681	3.423	ok	30.1866	0.36974	819.976	4.696	5.43581	314.159	57.79	4P10-50	50	28.5272	27.7777	ok	
	F214-215	287.095	192.615	1.557	3.423	ok	22.2133	0.38314	521.992	4.123	4.88944	314.159	64.25	4P10-60	60	34.2326	33.3333	ok	
	F216																		
3	F338																		
	F339-340																		
	F341-343	431.390	265.645	1.691	3.423	ok	37.7333	0.46218	784.346	4.492	5.41662	314.159	57.99	4P10-50	50	28.5272	27.7777	ok	
	F344-345	265.166	192.615	1.438	3.423	ok	20.5066	0.35370	482.121	3.808	4.51563	314.159	69.57	4P10-60	60	34.2326	33.3333	ok	
4	F465																		
	F466-467																		
	F468-470																		
	F471-472																		
atap	F549																		

$$\text{Syarat 2} = \sqrt{\left(\frac{Vu}{bw.d}\right)^2 + \left(\frac{Tu.Ph}{1.7.Aoh^2}\right)^2}$$

$$\text{Syarat 3} = \phi \left[\frac{Vc}{bw.d} + \frac{2 \cdot \sqrt{fc'}}{3} \right]$$

$$\text{Av min 1} = \frac{75 \cdot \sqrt{fc'} \cdot bw.s}{1200} \cdot \frac{bw.s}{fyv}$$

$$\text{Av min 2} = \frac{1}{3} \cdot \frac{bw.s}{fyv}$$

Syarat 2 < Syarat 3 maka OK!

Av gabungan > Av min 1 dan Av min 2 maka OK!

Daerah luar sendi plastis																	
Lt.	Balok	Vu	syarat 2	syarat 3	cek	At/s	Vs	Av/s	Av gab/s gab	Av gab	s gab	tul	s	Av min 1	Av min 2	cek	
1	F70																
	F71-72																
	F73-75	396.309	1.454	3.423	ok	0.29037	454.916	2.60547	3.18623	314.159	98.5989	4P10-90	90	51.3489	50	ok	
	F76-77	266.331	1.554	3.423	ok	0.45903	291.623	2.30350	3.22157	314.159	97.5174	4P10-90	90	51.3489	50	ok	
	F78																
2	F208																
	F209-210																
	F211-213	390.842	1.49	3.423	ok	0.36974	444.977	2.54855	3.28805	314.159	95.5456	4P10-90	90	51.3489	50	ok	
	F214-215	254.205	1.422	3.423	ok	0.38314	269.575	2.12934	2.89563	314.159	108.494	4P10-100	100	57.0544	55.5555	ok	
	F216																
	F338																
3	F339-340																
	F341-343	370.577	1.511	3.423	ok	0.46218	408.131	2.33752	3.26189	314.159	96.3118	4P10-90	90	51.3489	50	ok	
	F344-345	232.408	1.30	3.423	ok	0.35370	229.944	1.81630	2.52371	314.159	124.482	4P10-120	120	68.4653	66.6666	ok	
4	F465																
	F466-467																
	F468-470																
	F471-472																
atap	F549																

$$\text{Syarat 2} = \sqrt{\left(\frac{Vu}{bw.d}\right)^2 + \left(\frac{Tu.Ph}{1.7.Aoh^2}\right)^2}$$

$$\text{Av min 1} = \frac{75 \cdot \sqrt{fc'} \cdot bw.s}{1200 \cdot f_{yv}}$$

$$\text{Syarat 3} = \phi \cdot \left(\frac{Vc}{bw.d} + \frac{2 \cdot \sqrt{fc'}}{3} \right)$$

$$\text{Av min 2} = \frac{1}{3} \cdot \frac{bw.s}{f_{yv}}$$

Syarat 2 < Syarat 3 maka OK!

Av gabungan > Av min 1 dan Av min 2 maka OK!

Penulangan Torsi Senggang Arah Y (portal E) Atap Beton

lantai	Bbalok	bc	bf	bw	hf	h	hw	Pcp	Acp	Tu	syarat 1	diperhitungkan	bh	hh	Ph	Aoh
1	F46	800	400	400	150	800	650	3200	380000	1.69	15.44748775	tidak				
	F68	800	400	400	150	600	450	2800	300000	0.5476	11.00335495	tidak				
	F87	1200	400	400	150	600	450	3600	360000	0.6692	12.32375754	tidak				
	F105	800	400	400	150	600	450	2800	300000	1.02	11.00335495	tidak				
	F120	800	400	400	150	600	450	2800	300000	1.04	11.00335495	tidak				
2	F180	800	400	400	150	800	650	3200	380000	1.97	15.44748775	tidak				
	F202	800	400	400	150	600	450	2800	300000	1.26	11.00335495	tidak				
	F225	1200	400	400	150	600	450	3600	360000	1.04	12.32375754	tidak				
	F243	800	400	400	150	600	450	2800	300000	0.5715	11.00335495	tidak				
	F258	800	400	400	150	600	450	2800	300000	1.02	11.00335495	tidak				
3	F316	800	400	400	150	800	650	3200	380000	0.7772	15.44748775	tidak				
	F337	400	0	400	150	600	450	2000	240000	0.7136	9.859006035	tidak				
	F354	800	400	400	150	600	450	2800	300000	0.9778	11.00335495	tidak				
	F370	800	400	400	150	600	450	2800	300000	0.6536	11.00335495	tidak				
	F385	800	400	400	150	600	450	2800	300000	1	11.00335495	tidak				
4	F443	800	400	400	150	800	650	3200	380000	2.55	15.44748775	tidak				
	F464	400	0	400	150	600	450	2000	240000	0.8441	9.859006035	tidak				
	F481	800	400	400	150	600	450	2800	300000	0.8227	11.00335495	tidak				
	F497	800	400	400	150	600	450	2800	300000	0.5413	11.00335495	tidak				
	F512	800	400	400	150	600	450	2800	300000	1.2	11.00335495	tidak				
atap	F599-600-596	400	0	400	150	800	650	2400	320000	5.13	14.60593487	tidak				
	F424-428	400	0	400	150	600	450	2000	240000	2.07	9.859006035	tidak				
	F561-562	400	0	400	150	600	450	2000	240000	0.4472	9.859006035	tidak				
	F563-564	400	0	400	150	600	450	2000	240000	2.37	9.859006035	tidak				
	F565-566	400	0	400	150	600	450	2000	240000	3.32	9.859006035	tidak				

Syarat 1 = $\phi \cdot \sqrt{f_c} \cdot \left(\frac{A_{cp}}{12} \cdot \left(\frac{P_{cp}}{P_{cp}} \right)^2 \right)$ (bila $T_u < \text{syarat 1}$ maka tulangan torsi perlu diperhitungkan)

Penulangan Longitudinal Tambahan Arah X (portal 4) Atap Beton

lantai	balok	At/s	Ph	Acp	bw	Al	Al min	Al yg diambil	tamb tul	Tumpuan (awal)			lapangan (awal)		
										As atas	As bawah	As bawah	As atas	As bawah	As bawah
1	F73-75	0.290378	1960	440000	400	341.48453	2168.9105	2168.9105	542.515	2945.2431	1472.6216	1472.6216	981.7477	1472.6216	981.7477
	F76-77	0.459034	1560	360000	400	429.65582	1624.3038	1624.3038	406.076	1963.4954	981.7477	981.7477	981.7477	981.7477	981.7477
2	F211-213	0.36975	1960	440000	400	434.826	2075.5691	2075.5691	519.565	2945.2431	1472.6216	1472.6216	981.7477	1472.6216	981.7477
	F214-215	0.383142	1560	360000	400	358.62091	1695.3387	1695.3387	423.996	1963.4954	981.7477	981.7477	981.7477	981.7477	981.7477
3	F341-343	0.462187	1960	440000	400	543.53191	1966.8631	1966.8631	492.964	2454.3693	1472.6216	1472.6216	981.7477	1472.6216	981.7477
	F344-345	0.353705	1560	360000	400	331.06788	1722.8917	1722.8917	431.207	1472.6216	981.7477	981.7477	981.7477	981.7477	981.7477

As atas	Tumpuan (akhir)			lapangan (akhir)			Jumlah tulangan tumpuan			Jumlah tulangan lapangan		
	As bawah	As ki/ka	As ki/ka	As atas	As bawah	As ki/ka	As atas	As bawah	As ki/ka	As atas	As bawah	As ki/ka
3487.4707	2014.8492	542.22763	542.22763	1523.9753	2014.8492	542.22763	8D25	5D25	2D25	4D25	5D25	2D25
2369.5714	1387.8237	406.07595	406.07595	1387.8237	1387.8237	406.07595	5D25	3D25	1D25	3D25	3D25	1D25
3464.1354	1991.5139	518.89228	518.89228	1500.64	1991.5139	518.89228	8D25	5D25	2D25	4D25	5D25	2D25
2387.3301	1405.5824	423.83468	423.83468	1405.5824	1405.5824	423.83468	5D25	3D25	1D25	3D25	3D25	1D25
2946.0851	1964.3374	491.71578	491.71578	1473.4635	1964.3374	491.71578	7D25	5D25	2D25	4D25	5D25	2D25
1903.3445	1412.4706	430.72293	430.72293	1412.4706	1412.4706	430.72293	4D25	3D25	1D25	3D25	3D25	1D25

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UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD	DL	1.4000	STATIC (DEAD)	COMB1
		BS	1.4000	STATIC (DEAD)	
COMB2	ADD	DL	1.2000	STATIC (DEAD)	COMB2
		BS	1.2000	STATIC (DEAD)	
		LL	1.6000	STATIC (LIVE)	
		HUJAN	0.5000	STATIC (OTHER)	
COMB3	ADD	DL	1.2000	STATIC (DEAD)	COMB3
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	0.5000	STATIC (OTHER)	
		ANGIN	1.6000	STATIC (WIND)	
COMB4	ADD	DL	1.2000	STATIC (DEAD)	COMB4
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	0.5000	STATIC (OTHER)	
		ANGIN	-1.6000	STATIC (WIND)	
COMB5	ADD	DL	0.9000	STATIC (DEAD)	COMB5
		BS	0.9000	STATIC (DEAD)	
		ANGIN	1.6000	STATIC (WIND)	
COMB6	ADD	DL	0.9000	STATIC (DEAD)	COMB6
		BS	0.9000	STATIC (DEAD)	
		ANGIN	-1.6000	STATIC (WIND)	
COMB7	ADD	DL	1.2000	STATIC (DEAD)	COMB7
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB8	ADD	DL	1.2000	STATIC (DEAD)	COMB8
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB9	ADD	DL	1.2000	STATIC (DEAD)	COMB9
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB10	ADD	DL	1.2000	STATIC (DEAD)	COMB10
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB11	ADD	DL	1.2000	STATIC (DEAD)	COMB11
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB12	ADD	DL	1.2000	STATIC (DEAD)	COMB12
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB13	ADD				COMB13

		DL	1.2000	STATIC (DEAD)	
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB14	ADD				COMB14
		DL	1.2000	STATIC (DEAD)	
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB15	ADD				COMB15
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB16	ADD				COMB16
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB17	ADD				COMB17
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB18	ADD				COMB18
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB19	ADD				COMB19
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB20	ADD				COMB20
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB21	ADD				COMB21
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB22	ADD				COMB22
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB23	ENVE				COMB23
		COMB1	1.0000	COMBO	
		COMB2	1.0000	COMBO	
		COMB3	1.0000	COMBO	
		COMB4	1.0000	COMBO	
		COMB5	1.0000	COMBO	
		COMB6	1.0000	COMBO	
		COMB7	1.0000	COMBO	
		COMB8	1.0000	COMBO	
		COMB9	1.0000	COMBO	
		COMB10	1.0000	COMBO	
		COMB11	1.0000	COMBO	
		COMB12	1.0000	COMBO	
		COMB13	1.0000	COMBO	
		COMB14	1.0000	COMBO	
		COMB15	1.0000	COMBO	
		COMB16	1.0000	COMBO	
		COMB17	1.0000	COMBO	
		COMB18	1.0000	COMBO	
		COMB19	1.0000	COMBO	
		COMB20	1.0000	COMBO	
		COMB21	1.0000	COMBO	
		COMB22	1.0000	COMBO	
		DL	1.0000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	1.0000	STATIC (OTHER)	
		BS	1.0000	STATIC (DEAD)	

ANGIN 1.0000 STATIC(WIND)
 EX 1.0000 STATIC(QUAKE)
 EY 1.0000 STATIC(QUAKE)

COMB24 ADD COMB24
 DL 1.2000 STATIC(DEAD)
 BS 1.2000 STATIC(DEAD)
 LL 1.0000 STATIC(LIVE)

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UAJY

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
13	DL	0.00	-1251.01	-16.30	5.62	6.618E-02	7.36	-19.20
		2.00	-1251.01	-16.30	5.62	6.618E-02	-3.88	13.39
		4.00	-1251.01	-16.30	5.62	6.618E-02	-15.11	45.99
13	LL	0.00	-107.32	-2.10	2.240E-01	-1.093E-02	8.885E-01	-2.61
		2.00	-107.32	-2.10	2.240E-01	-1.093E-02	4.405E-01	1.59
		4.00	-107.32	-2.10	2.240E-01	-1.093E-02	-7.406E-03	5.79
13	HUJAN	0.00	-5.87	7.128E-03	1.508E-04	-1.137E-04	1.232E-03	3.199E-03
		2.00	-5.87	7.128E-03	1.508E-04	-1.137E-04	9.308E-04	-1.106E-02
		4.00	-5.87	7.128E-03	1.508E-04	-1.137E-04	6.291E-04	-2.531E-02
13	BS	0.00	-510.46	-2.79	2.342E-01	1.934E-02	4.353E-01	-3.30
		2.00	-510.46	-2.79	2.342E-01	1.934E-02	-3.309E-02	2.28
		4.00	-510.46	-2.79	2.342E-01	1.934E-02	-5.015E-01	7.86
13	ANGIN	0.00	-3.87	1.64	-4.885E-02	1.898E-02	-1.856E-01	6.25
		2.00	-3.87	1.64	-4.885E-02	1.898E-02	-8.790E-02	2.97
		4.00	-3.87	1.64	-4.885E-02	1.898E-02	9.804E-03	-3.127E-01
13	EX	0.00	-13.67	63.00	-4.91	1.70	-17.22	226.31
		2.00	-13.67	63.00	-4.91	1.70	-7.41	100.32
		4.00	-13.67	63.00	-4.91	1.70	2.41	-25.68
13	EY	0.00	3.19	-1.30	73.81	-2.22	251.73	-5.09
		2.00	3.19	-1.30	73.81	-2.22	104.11	-2.49
		4.00	3.19	-1.30	73.81	-2.22	-43.51	1.114E-01
13	COMB1	0.00	-2466.05	-26.72	8.19	1.197E-01	10.91	-31.51
		2.00	-2466.05	-26.72	8.19	1.197E-01	-5.47	21.94
		4.00	-2466.05	-26.72	8.19	1.197E-01	-21.86	75.38
13	COMB2	0.00	-2288.40	-26.26	7.38	8.509E-02	10.77	-31.18
		2.00	-2288.40	-26.26	7.38	8.509E-02	-3.99	21.35
		4.00	-2288.40	-26.26	7.38	8.509E-02	-18.75	73.87
13	COMB3	0.00	-2230.20	-22.38	7.17	1.220E-01	9.94	-19.62
		2.00	-2230.20	-22.38	7.17	1.220E-01	-4.39	25.14
		4.00	-2230.20	-22.38	7.17	1.220E-01	-18.73	69.90
13	COMB4	0.00	-2217.82	-27.63	7.32	6.127E-02	10.54	-39.61
		2.00	-2217.82	-27.63	7.32	6.127E-02	-4.11	15.64
		4.00	-2217.82	-27.63	7.32	6.127E-02	-18.76	70.90
13	COMB5	0.00	-1591.51	-14.55	5.19	1.073E-01	6.72	-10.26
		2.00	-1591.51	-14.55	5.19	1.073E-01	-3.66	18.85
		4.00	-1591.51	-14.55	5.19	1.073E-01	-14.04	47.96
13	COMB6	0.00	-1579.13	-19.80	5.34	4.660E-02	7.31	-30.25
		2.00	-1579.13	-19.80	5.34	4.660E-02	-3.38	9.36
		4.00	-1579.13	-19.80	5.34	4.660E-02	-14.07	48.96
13	COMB7	0.00	-2233.78	37.60	24.48	1.12	68.54	195.17
		2.00	-2233.78	37.60	24.48	1.12	19.57	119.97
		4.00	-2233.78	37.60	24.48	1.12	-29.39	44.76
13	COMB8	0.00	-2235.70	38.38	-19.80	2.45	-82.50	198.23
		2.00	-2235.70	38.38	-19.80	2.45	-42.89	121.46
		4.00	-2235.70	38.38	-19.80	2.45	-3.28	44.69
13	COMB9	0.00	-2206.45	-88.40	34.29	-2.27	102.98	-257.46
		2.00	-2206.45	-88.40	34.29	-2.27	34.39	-80.67
		4.00	-2206.45	-88.40	34.29	-2.27	-34.20	96.13
13	COMB10	0.00	-2208.36	-87.61	-9.99	-9.361E-01	-48.06	-254.40
		2.00	-2208.36	-87.61	-9.99	-9.361E-01	-28.08	-79.17
		4.00	-2208.36	-87.61	-9.99	-9.361E-01	-8.10	96.06

13	COMB11	0.00	-2221.98	-7.41	79.58	-1.62	256.80	33.19
		2.00	-2221.98	-7.41	79.58	-1.62	97.64	48.00
		4.00	-2221.98	-7.41	79.58	-1.62	-61.53	62.82
13	COMB12	0.00	-2213.78	-45.21	82.53	-2.64	267.13	-102.60
		2.00	-2213.78	-45.21	82.53	-2.64	102.08	-12.19
		4.00	-2213.78	-45.21	82.53	-2.64	-62.97	78.23
13	COMB13	0.00	-2228.37	-4.81	-68.04	2.82	-246.66	43.37
		2.00	-2228.37	-4.81	-68.04	2.82	-110.59	52.98
		4.00	-2228.37	-4.81	-68.04	2.82	25.49	62.59
13	COMB14	0.00	-2220.17	-42.60	-65.09	1.81	-236.32	-92.42
		2.00	-2220.17	-42.60	-65.09	1.81	-106.14	-7.21
		4.00	-2220.17	-42.60	-65.09	1.81	24.04	78.00
13	COMB15	0.00	-1598.02	45.43	22.50	1.10	65.31	204.53
		2.00	-1598.02	45.43	22.50	1.10	20.31	113.67
		4.00	-1598.02	45.43	22.50	1.10	-24.70	22.81
13	COMB16	0.00	-1599.94	46.21	-21.78	2.44	-85.73	207.59
		2.00	-1599.94	46.21	-21.78	2.44	-42.16	115.17
		4.00	-1599.94	46.21	-21.78	2.44	1.41	22.75
13	COMB17	0.00	-1570.69	-80.57	32.32	-2.29	99.75	-248.10
		2.00	-1570.69	-80.57	32.32	-2.29	35.12	-86.96
		4.00	-1570.69	-80.57	32.32	-2.29	-29.51	74.18
13	COMB18	0.00	-1572.61	-79.79	-11.97	-9.508E-01	-51.28	-245.04
		2.00	-1572.61	-79.79	-11.97	-9.508E-01	-27.34	-85.46
		4.00	-1572.61	-79.79	-11.97	-9.508E-01	-3.41	74.11
13	COMB19	0.00	-1586.22	4.197E-01	77.60	-1.64	253.57	42.55
		2.00	-1586.22	4.197E-01	77.60	-1.64	98.37	41.71
		4.00	-1586.22	4.197E-01	77.60	-1.64	-56.83	40.87
13	COMB20	0.00	-1578.02	-37.38	80.55	-2.66	263.91	-93.24
		2.00	-1578.02	-37.38	80.55	-2.66	102.81	-18.48
		4.00	-1578.02	-37.38	80.55	-2.66	-58.28	56.28
13	COMB21	0.00	-1592.61	3.02	-70.01	2.81	-249.88	52.73
		2.00	-1592.61	3.02	-70.01	2.81	-109.85	46.69
		4.00	-1592.61	3.02	-70.01	2.81	30.18	40.65
13	COMB22	0.00	-1584.41	-34.78	-67.07	1.79	-239.55	-83.05
		2.00	-1584.41	-34.78	-67.07	1.79	-105.41	-13.50
		4.00	-1584.41	-34.78	-67.07	1.79	28.73	56.05
13	COMB23 MAX	0.00	3.19	63.00	82.53	2.82	267.13	226.31
		2.00	3.19	63.00	82.53	2.82	104.11	121.46
		4.00	3.19	63.00	82.53	2.82	30.18	96.13
13	COMB23 MIN	0.00	-2466.05	-88.40	-70.01	-2.66	-249.88	-257.46
		2.00	-2466.05	-88.40	-70.01	-2.66	-110.59	-86.96
		4.00	-2466.05	-88.40	-70.01	-2.66	-62.97	-25.68
13	COMB24	0.00	-2221.07	-25.01	7.25	9.170E-02	10.24	-29.62
		2.00	-2221.07	-25.01	7.25	9.170E-02	-4.25	20.40
		4.00	-2221.07	-25.01	7.25	9.170E-02	-18.74	70.41
147	DL	0.00	-977.15	-24.25	3.54	8.590E-02	10.92	-54.69
		2.00	-977.15	-24.25	3.54	8.590E-02	3.85	-6.19
		4.00	-977.15	-24.25	3.54	8.590E-02	-3.22	42.31
147	LL	0.00	-71.26	-3.03	2.664E-01	-4.429E-02	6.521E-01	-7.02
		2.00	-71.26	-3.03	2.664E-01	-4.429E-02	1.193E-01	-9.576E-01
		4.00	-71.26	-3.03	2.664E-01	-4.429E-02	-4.135E-01	5.11
147	HUJAN	0.00	-5.89	9.537E-03	7.685E-04	-3.662E-04	2.387E-03	1.626E-02
		2.00	-5.89	9.537E-03	7.685E-04	-3.662E-04	8.503E-04	-2.819E-03
		4.00	-5.89	9.537E-03	7.685E-04	-3.662E-04	-6.868E-04	-2.189E-02
147	BS	0.00	-398.48	-5.27	-2.683E-01	1.794E-02	-9.935E-01	-10.73
		2.00	-398.48	-5.27	-2.683E-01	1.794E-02	-4.568E-01	-2.022E-01
		4.00	-398.48	-5.27	-2.683E-01	1.794E-02	7.982E-02	10.33
147	ANGIN	0.00	-3.90	1.34	-5.328E-02	3.716E-02	-1.352E-01	3.60
		2.00	-3.90	1.34	-5.328E-02	3.716E-02	-2.861E-02	9.203E-01
		4.00	-3.90	1.34	-5.328E-02	3.716E-02	7.795E-02	-1.76
147	EX	0.00	-13.35	48.30	-4.35	2.89	-9.72	108.12
		2.00	-13.35	48.30	-4.35	2.89	-1.02	11.52
		4.00	-13.35	48.30	-4.35	2.89	7.67	-85.07
147	EY	0.00	2.00	-1.40	59.94	-3.98	128.81	-3.14
		2.00	2.00	-1.40	59.94	-3.98	8.93	-3.321E-01
		4.00	2.00	-1.40	59.94	-3.98	-110.94	2.47

147	COMB1	0.00	-1925.87	-41.32	4.57	1.454E-01	13.90	-91.60
		2.00	-1925.87	-41.32	4.57	1.454E-01	4.75	-8.95
		4.00	-1925.87	-41.32	4.57	1.454E-01	-4.40	73.70
147	COMB2	0.00	-1767.72	-40.27	4.35	5.356E-02	12.96	-89.74
		2.00	-1767.72	-40.27	4.35	5.356E-02	4.26	-9.20
		4.00	-1767.72	-40.27	4.35	5.356E-02	-4.43	71.33
147	COMB3	0.00	-1731.20	-36.30	4.10	1.396E-01	12.35	-79.76
		2.00	-1731.20	-36.30	4.10	1.396E-01	4.15	-7.16
		4.00	-1731.20	-36.30	4.10	1.396E-01	-4.06	65.45
147	COMB4	0.00	-1718.72	-40.59	4.27	2.068E-02	12.78	-91.29
		2.00	-1718.72	-40.59	4.27	2.068E-02	4.24	-10.10
		4.00	-1718.72	-40.59	4.27	2.068E-02	-4.31	71.09
147	COMB5	0.00	-1244.30	-24.42	2.85	1.529E-01	8.72	-53.12
		2.00	-1244.30	-24.42	2.85	1.529E-01	3.01	-4.28
		4.00	-1244.30	-24.42	2.85	1.529E-01	-2.70	44.56
147	COMB6	0.00	-1231.82	-28.71	3.03	3.400E-02	9.15	-64.65
		2.00	-1231.82	-28.71	3.03	3.400E-02	3.10	-7.22
		4.00	-1231.82	-28.71	3.03	3.400E-02	-2.95	50.20
147	COMB7	0.00	-1734.77	9.43	17.82	1.78	41.48	21.65
		2.00	-1734.77	9.43	17.82	1.78	5.85	2.80
		4.00	-1734.77	9.43	17.82	1.78	-29.79	-16.06
147	COMB8	0.00	-1735.97	10.27	-18.14	4.17	-35.80	23.53
		2.00	-1735.97	10.27	-18.14	4.17	4.853E-01	3.00
		4.00	-1735.97	10.27	-18.14	4.17	36.77	-17.54
147	COMB9	0.00	-1708.06	-87.17	26.52	-4.01	60.93	-194.60
		2.00	-1708.06	-87.17	26.52	-4.01	7.90	-20.25
		4.00	-1708.06	-87.17	26.52	-4.01	-45.14	154.09
147	COMB10	0.00	-1709.26	-86.33	-9.45	-1.62	-16.36	-192.71
		2.00	-1709.26	-86.33	-9.45	-1.62	2.53	-20.05
		4.00	-1709.26	-86.33	-9.45	-1.62	21.43	152.61
147	COMB11	0.00	-1724.02	-25.36	62.82	-3.03	138.46	-56.23
		2.00	-1724.02	-25.36	62.82	-3.03	12.82	-5.50
		4.00	-1724.02	-25.36	62.82	-3.03	-112.82	45.23
147	COMB12	0.00	-1716.01	-54.34	65.43	-4.77	144.29	-121.11
		2.00	-1716.01	-54.34	65.43	-4.77	13.43	-12.42
		4.00	-1716.01	-54.34	65.43	-4.77	-117.43	96.27
147	COMB13	0.00	-1728.02	-22.56	-57.06	4.93	-119.16	-49.96
		2.00	-1728.02	-22.56	-57.06	4.93	-5.05	-4.84
		4.00	-1728.02	-22.56	-57.06	4.93	109.06	40.28
147	COMB14	0.00	-1720.00	-51.54	-54.45	3.19	-113.33	-114.83
		2.00	-1720.00	-51.54	-54.45	3.19	-4.44	-11.75
		4.00	-1720.00	-51.54	-54.45	3.19	104.46	91.33
147	COMB15	0.00	-1250.82	21.31	16.57	1.79	37.85	48.30
		2.00	-1250.82	21.31	16.57	1.79	4.71	5.67
		4.00	-1250.82	21.31	16.57	1.79	-28.44	-36.95
147	COMB16	0.00	-1252.02	22.15	-19.39	4.18	-39.43	50.18
		2.00	-1252.02	22.15	-19.39	4.18	-6.519E-01	5.87
		4.00	-1252.02	22.15	-19.39	4.18	38.13	-38.44
147	COMB17	0.00	-1224.11	-75.29	25.27	-3.99	57.30	-167.95
		2.00	-1224.11	-75.29	25.27	-3.99	6.76	-17.38
		4.00	-1224.11	-75.29	25.27	-3.99	-43.78	133.20
147	COMB18	0.00	-1225.31	-74.44	-10.69	-1.61	-19.99	-166.07
		2.00	-1225.31	-74.44	-10.69	-1.61	1.40	-17.18
		4.00	-1225.31	-74.44	-10.69	-1.61	22.78	131.71
147	COMB19	0.00	-1240.07	-13.48	61.57	-3.02	134.83	-29.58
		2.00	-1240.07	-13.48	61.57	-3.02	11.68	-2.63
		4.00	-1240.07	-13.48	61.57	-3.02	-111.47	24.33
147	COMB20	0.00	-1232.06	-42.46	64.18	-4.75	140.66	-94.46
		2.00	-1232.06	-42.46	64.18	-4.75	12.30	-9.54
		4.00	-1232.06	-42.46	64.18	-4.75	-116.07	75.37
147	COMB21	0.00	-1244.06	-10.67	-58.30	4.94	-122.79	-23.31
		2.00	-1244.06	-10.67	-58.30	4.94	-6.19	-1.96
		4.00	-1244.06	-10.67	-58.30	4.94	110.42	19.38
147	COMB22	0.00	-1236.05	-39.65	-55.69	3.21	-116.96	-88.18
		2.00	-1236.05	-39.65	-55.69	3.21	-5.57	-8.88
		4.00	-1236.05	-39.65	-55.69	3.21	105.81	70.43

147	COMB23	MAX						
		0.00	2.00	48.30	65.43	4.94	144.29	108.12
		2.00	2.00	48.30	65.43	4.94	13.43	11.52
		4.00	2.00	48.30	65.43	4.94	110.42	154.09
147	COMB23	MIN						
		0.00	-1925.87	-87.17	-58.30	-4.77	-122.79	-194.60
		2.00	-1925.87	-87.17	-58.30	-4.77	-6.19	-20.25
		4.00	-1925.87	-87.17	-58.30	-4.77	-117.43	-85.07
147	COMB24							
		0.00	-1722.01	-38.45	4.19	8.032E-02	12.56	-85.53
		2.00	-1722.01	-38.45	4.19	8.032E-02	4.19	-8.63
		4.00	-1722.01	-38.45	4.19	8.032E-02	-4.18	68.28
150	DL							
		0.00	-614.65	16.98	-4.42	5.988E-02	-7.17	36.75
		2.00	-614.65	16.98	-4.42	5.988E-02	1.68	2.79
		4.00	-614.65	16.98	-4.42	5.988E-02	10.52	-31.17
150	LL							
		0.00	-33.09	1.30	-1.23	-3.087E-02	-2.94	2.91
		2.00	-33.09	1.30	-1.23	-3.087E-02	-4.758E-01	3.072E-01
		4.00	-33.09	1.30	-1.23	-3.087E-02	1.99	-2.29
150	HUJAN							
		0.00	9.375E-03	-2.668E-03	-3.392E-04	-2.553E-04	-9.933E-04	-8.121E-03
		2.00	9.375E-03	-2.668E-03	-3.392E-04	-2.553E-04	-3.148E-04	-2.785E-03
		4.00	9.375E-03	-2.668E-03	-3.392E-04	-2.553E-04	3.637E-04	2.551E-03
150	BS							
		0.00	-312.37	4.90	-2.436E-01	1.251E-02	-7.789E-01	10.26
		2.00	-312.37	4.90	-2.436E-01	1.251E-02	-2.917E-01	4.529E-01
		4.00	-312.37	4.90	-2.436E-01	1.251E-02	1.955E-01	-9.35
150	ANGIN							
		0.00	-9.726E-01	1.08	5.223E-02	2.591E-02	1.244E-01	2.80
		2.00	-9.726E-01	1.08	5.223E-02	2.591E-02	1.997E-02	6.321E-01
		4.00	-9.726E-01	1.08	5.223E-02	2.591E-02	-8.448E-02	-1.53
150	EX							
		0.00	-46.26	41.39	4.28	2.02	9.33	88.89
		2.00	-46.26	41.39	4.28	2.02	7.692E-01	6.12
		4.00	-46.26	41.39	4.28	2.02	-7.79	-76.65
150	EY							
		0.00	2.97	-1.20	40.77	-2.77	85.39	-2.60
		2.00	2.97	-1.20	40.77	-2.77	3.85	-2.077E-01
		4.00	2.97	-1.20	40.77	-2.77	-77.68	2.19
150	COMB1							
		0.00	-1297.83	30.63	-6.53	1.013E-01	-11.13	65.81
		2.00	-1297.83	30.63	-6.53	1.013E-01	1.94	4.54
		4.00	-1297.83	30.63	-6.53	1.013E-01	15.01	-56.73
150	COMB2							
		0.00	-1165.36	28.34	-7.57	3.734E-02	-14.24	61.05
		2.00	-1165.36	28.34	-7.57	3.734E-02	9.007E-01	4.38
		4.00	-1165.36	28.34	-7.57	3.734E-02	16.04	-52.29
150	COMB3							
		0.00	-1147.06	29.29	-6.75	9.731E-02	-12.28	63.78
		2.00	-1147.06	29.29	-6.75	9.731E-02	1.22	5.21
		4.00	-1147.06	29.29	-6.75	9.731E-02	14.71	-53.37
150	COMB4							
		0.00	-1143.95	25.83	-6.92	1.441E-02	-12.68	54.83
		2.00	-1143.95	25.83	-6.92	1.441E-02	1.15	3.18
		4.00	-1143.95	25.83	-6.92	1.441E-02	14.98	-48.47
150	COMB5							
		0.00	-835.87	21.42	-4.12	1.066E-01	-6.96	46.78
		2.00	-835.87	21.42	-4.12	1.066E-01	1.28	3.93
		4.00	-835.87	21.42	-4.12	1.066E-01	9.51	-38.92
150	COMB6							
		0.00	-832.76	17.96	-4.28	2.370E-02	-7.35	37.83
		2.00	-832.76	17.96	-4.28	2.370E-02	1.21	1.91
		4.00	-832.76	17.96	-4.28	2.370E-02	9.78	-34.02
150	COMB7							
		0.00	-1190.88	68.58	9.68	1.24	22.47	147.42
		2.00	-1190.88	68.58	9.68	1.24	3.11	10.26
		4.00	-1190.88	68.58	9.68	1.24	-16.25	-126.91
150	COMB8							
		0.00	<u>-1192.66</u>	69.30	-14.78	2.91	-28.76	<u>148.99</u>
		2.00	-1192.66	69.30	-14.78	2.91	7.996E-01	10.38
		4.00	-1192.66	69.30	-14.78	2.91	<u>30.36</u>	-128.23
150	COMB9							
		0.00	-1098.37	-14.19	1.12	-2.79	3.81	-30.36
		2.00	-1098.37	-14.19	1.12	-2.79	1.57	-1.99
		4.00	-1098.37	-14.19	1.12	-2.79	-6.620E-01	26.39
150	COMB10							
		0.00	-1100.15	-13.47	-23.34	-1.13	-47.42	-28.80
		2.00	-1100.15	-13.47	-23.34	-1.13	-7.388E-01	-1.86
		4.00	-1100.15	-13.47	-23.34	-1.13	45.95	25.08
150	COMB11							
		0.00	-1156.42	38.77	35.22	-2.11	75.71	83.37
		2.00	-1156.42	38.77	35.22	-2.11	5.27	5.83
		4.00	-1156.42	38.77	35.22	-2.11	-65.17	-71.72
150	COMB12							
		0.00	-1128.67	13.94	32.65	-3.32	70.11	30.04
		2.00	-1128.67	13.94	32.65	-3.32	4.81	2.15
		4.00	-1128.67	13.94	32.65	-3.32	-60.49	-25.73

150	COMB13	0.00	-1162.35	41.17	-46.31	3.44	-95.06	88.58
		2.00	-1162.35	41.17	-46.31	3.44	-2.44	6.24
		4.00	-1162.35	41.17	-46.31	3.44	90.19	-76.10
150	COMB14	0.00	-1134.60	16.34	-48.88	2.23	-100.66	35.25
		2.00	-1134.60	16.34	-48.88	2.23	-2.90	2.57
		4.00	-1134.60	16.34	-48.88	2.23	94.87	-30.11
150	COMB15	0.00	-879.68	60.72	12.31	1.25	27.79	130.42
		2.00	-879.68	60.72	12.31	1.25	3.17	8.98
		4.00	-879.68	60.72	12.31	1.25	-21.45	-112.46
150	COMB16	0.00	-881.46	61.44	-12.15	2.91	-23.44	131.98
		2.00	-881.46	61.44	-12.15	2.91	8.599E-01	9.10
		4.00	-881.46	61.44	-12.15	2.91	25.16	-113.78
150	COMB17	0.00	-787.17	-22.05	3.75	-2.78	9.13	-47.37
		2.00	-787.17	-22.05	3.75	-2.78	1.63	-3.27
		4.00	-787.17	-22.05	3.75	-2.78	-5.86	40.84
150	COMB18	0.00	-788.95	-21.33	-20.71	-1.12	-42.10	-45.81
		2.00	-788.95	-21.33	-20.71	-1.12	-6.785E-01	-3.14
		4.00	-788.95	-21.33	-20.71	-1.12	40.74	39.53
150	COMB19	0.00	-845.23	30.91	37.85	-2.10	81.03	66.37
		2.00	-845.23	30.91	37.85	-2.10	5.33	4.55
		4.00	-845.23	30.91	37.85	-2.10	-70.37	-57.28
150	COMB20	0.00	-817.48	6.08	35.28	-3.31	75.43	13.03
		2.00	-817.48	6.08	35.28	-3.31	4.87	8.730E-01
		4.00	-817.48	6.08	35.28	-3.31	-65.69	-11.28
150	COMB21	0.00	-851.16	33.31	-43.68	3.44	-89.74	71.58
		2.00	-851.16	33.31	-43.68	3.44	-2.38	4.96
		4.00	-851.16	33.31	-43.68	3.44	84.99	-61.65
150	COMB22	0.00	-823.41	8.48	-46.25	2.23	-95.34	18.24
		2.00	-823.41	8.48	-46.25	2.23	-2.84	1.29
		4.00	-823.41	8.48	-46.25	2.23	89.66	-15.66
150	COMB23 MAX	0.00	2.97	69.30	40.77	3.44	85.39	148.99
		2.00	2.97	69.30	40.77	3.44	5.33	10.38
		4.00	2.97	69.30	40.77	3.44	94.87	40.84
150	COMB23 MIN	0.00	-1297.83	-22.05	-48.88	-3.32	-100.66	-47.37
		2.00	-1297.83	-22.05	-48.88	-3.32	-2.90	-3.27
		4.00	-1297.83	-22.05	-48.88	-3.32	-77.68	-128.23
150	COMB24	0.00	-1145.51	27.56	-6.83	5.599E-02	-12.48	59.31
		2.00	-1145.51	27.56	-6.83	5.599E-02	1.19	4.20
		4.00	-1145.51	27.56	-6.83	5.599E-02	14.85	-50.92

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UAJY

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD	DL	1.4000	STATIC (DEAD)	COMB1
		BS	1.4000	STATIC (DEAD)	
COMB2	ADD	DL	1.2000	STATIC (DEAD)	COMB2
		BS	1.2000	STATIC (DEAD)	
		LL	1.6000	STATIC (LIVE)	
		HUJAN	0.5000	STATIC (OTHER)	
COMB3	ADD	DL	1.2000	STATIC (DEAD)	COMB3
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	0.5000	STATIC (OTHER)	
		ANGIN	1.6000	STATIC (WIND)	
COMB4	ADD	DL	1.2000	STATIC (DEAD)	COMB4
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	0.5000	STATIC (OTHER)	
		ANGIN	-1.6000	STATIC (WIND)	
COMB5	ADD	DL	0.9000	STATIC (DEAD)	COMB5
		BS	0.9000	STATIC (DEAD)	
		ANGIN	1.6000	STATIC (WIND)	
COMB6	ADD	DL	0.9000	STATIC (DEAD)	COMB6
		BS	0.9000	STATIC (DEAD)	
		ANGIN	-1.6000	STATIC (WIND)	
COMB7	ADD	DL	1.2000	STATIC (DEAD)	COMB7
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB8	ADD	DL	1.2000	STATIC (DEAD)	COMB8
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB9	ADD	DL	1.2000	STATIC (DEAD)	COMB9
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB10	ADD	DL	1.2000	STATIC (DEAD)	COMB10
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB11	ADD	DL	1.2000	STATIC (DEAD)	COMB11
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB12	ADD	DL	1.2000	STATIC (DEAD)	COMB12
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB13	ADD	DL	1.2000	STATIC (DEAD)	COMB13

		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB14	ADD				COMB14
		DL	1.2000	STATIC (DEAD)	
		BS	1.2000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB15	ADD				COMB15
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB16	ADD				COMB16
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB17	ADD				COMB17
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	0.3000	STATIC (QUAKE)	
COMB18	ADD				COMB18
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EX	-1.0000	STATIC (QUAKE)	
		EY	-0.3000	STATIC (QUAKE)	
COMB19	ADD				COMB19
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB20	ADD				COMB20
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB21	ADD				COMB21
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	0.3000	STATIC (QUAKE)	
COMB22	ADD				COMB22
		DL	0.9000	STATIC (DEAD)	
		BS	0.9000	STATIC (DEAD)	
		EY	-1.0000	STATIC (QUAKE)	
		EX	-0.3000	STATIC (QUAKE)	
COMB23	ENVE				COMB23
		COMB1	1.0000	COMBO	
		COMB2	1.0000	COMBO	
		COMB3	1.0000	COMBO	
		COMB4	1.0000	COMBO	
		COMB5	1.0000	COMBO	
		COMB6	1.0000	COMBO	
		COMB7	1.0000	COMBO	
		COMB8	1.0000	COMBO	
		COMB9	1.0000	COMBO	
		COMB10	1.0000	COMBO	
		COMB11	1.0000	COMBO	
		COMB12	1.0000	COMBO	
		COMB13	1.0000	COMBO	
		COMB14	1.0000	COMBO	
		COMB15	1.0000	COMBO	
		COMB16	1.0000	COMBO	
		COMB17	1.0000	COMBO	
		COMB18	1.0000	COMBO	
		COMB19	1.0000	COMBO	
		COMB20	1.0000	COMBO	
		COMB21	1.0000	COMBO	
		COMB22	1.0000	COMBO	
		DL	1.0000	STATIC (DEAD)	
		LL	1.0000	STATIC (LIVE)	
		HUJAN	1.0000	STATIC (OTHER)	
		BS	1.0000	STATIC (DEAD)	
		ANGIN	1.0000	STATIC (WIND)	

EX 1.0000 STATIC (QUAKE)
EY 1.0000 STATIC (QUAKE)

COMB24 ADD

COMB24

DL 1.2000 STATIC (DEAD)
BS 1.2000 STATIC (DEAD)
LL 1.0000 STATIC (LIVE)

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UAJY

FRAME ELEMENT FORCES

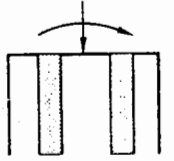
FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
13	DL	0.00	-1330.80	-16.29	5.65	6.537E-02	7.42	-19.17
		2.00	-1330.80	-16.29	5.65	6.537E-02	-3.87	13.41
		4.00	-1330.80	-16.29	5.65	6.537E-02	-15.16	45.98
13	LL	0.00	-107.32	-2.10	2.240E-01	-1.093E-02	8.885E-01	-2.61
		2.00	-107.32	-2.10	2.240E-01	-1.093E-02	4.405E-01	1.59
		4.00	-107.32	-2.10	2.240E-01	-1.093E-02	-7.406E-03	5.79
13	HUJAN	0.00	-5.87	7.128E-03	1.508E-04	-1.137E-04	1.232E-03	3.199E-03
		2.00	-5.87	7.128E-03	1.508E-04	-1.137E-04	9.308E-04	-1.106E-02
		4.00	-5.87	7.128E-03	1.508E-04	-1.137E-04	6.291E-04	-2.531E-02
13	BS	0.00	-510.46	-2.79	2.342E-01	1.934E-02	4.353E-01	-3.30
		2.00	-510.46	-2.79	2.342E-01	1.934E-02	-3.309E-02	2.28
		4.00	-510.46	-2.79	2.342E-01	1.934E-02	-5.015E-01	7.86
13	ANGIN	0.00	-3.87	1.64	-4.885E-02	1.898E-02	-1.856E-01	6.25
		2.00	-3.87	1.64	-4.885E-02	1.898E-02	-8.790E-02	2.97
		4.00	-3.87	1.64	-4.885E-02	1.898E-02	9.804E-03	-3.127E-01
13	EX	0.00	-15.20	62.99	-4.96	1.72	-17.43	226.69
		2.00	-15.20	62.99	-4.96	1.72	-7.52	100.71
		4.00	-15.20	62.99	-4.96	1.72	2.39	-25.26
13	EY	0.00	3.26	-1.35	73.93	-2.31	252.57	-5.28
		2.00	3.26	-1.35	73.93	-2.31	104.70	-2.58
		4.00	3.26	-1.35	73.93	-2.31	-43.17	1.171E-01
13	COMB1	0.00	-2577.76	-26.71	8.23	1.186E-01	11.00	-31.46
		2.00	-2577.76	-26.71	8.23	1.186E-01	-5.46	21.96
		4.00	-2577.76	-26.71	8.23	1.186E-01	-21.93	75.38
13	COMB2	0.00	-2384.16	-26.25	7.42	8.412E-02	10.85	-31.14
		2.00	-2384.16	-26.25	7.42	8.412E-02	-3.98	21.36
		4.00	-2384.16	-26.25	7.42	8.412E-02	-18.81	73.87
13	COMB3	0.00	-2325.96	-22.37	7.20	1.210E-01	10.02	-19.58
		2.00	-2325.96	-22.37	7.20	1.210E-01	-4.38	25.16
		4.00	-2325.96	-22.37	7.20	1.210E-01	-18.79	69.89
13	COMB4	0.00	-2313.58	-27.61	7.36	6.030E-02	10.62	-39.57
		2.00	-2313.58	-27.61	7.36	6.030E-02	-4.10	15.66
		4.00	-2313.58	-27.61	7.36	6.030E-02	-18.82	70.89
13	COMB5	0.00	-1663.32	-14.55	5.21	1.066E-01	6.78	-10.23
		2.00	-1663.32	-14.55	5.21	1.066E-01	-3.65	18.86
		4.00	-1663.32	-14.55	5.21	1.066E-01	-14.08	47.96
13	COMB6	0.00	-1650.94	-19.79	5.37	4.587E-02	7.37	-30.22
		2.00	-1650.94	-19.79	5.37	4.587E-02	-3.37	9.37
		4.00	-1650.94	-19.79	5.37	4.587E-02	-14.11	48.96
13	COMB7	0.00	-2331.05	37.59	24.51	1.12	68.66	195.53
		2.00	-2331.05	37.59	24.51	1.12	19.65	120.35
		4.00	-2331.05	37.59	24.51	1.12	-29.36	45.18
13	COMB8	0.00	-2333.01	38.40	-19.86	2.50	-82.88	198.70
		2.00	-2333.01	38.40	-19.86	2.50	-43.17	121.90
		4.00	-2333.01	38.40	-19.86	2.50	-3.46	45.11
13	COMB9	0.00	-2300.65	-88.39	34.42	-2.32	103.52	-257.85
		2.00	-2300.65	-88.39	34.42	-2.32	34.68	-81.08
		4.00	-2300.65	-88.39	34.42	-2.32	-34.15	95.70
13	COMB10	0.00	-2302.61	-87.58	-9.94	-9.349E-01	-48.02	-254.68
		2.00	-2302.61	-87.58	-9.94	-9.349E-01	-28.14	-79.53
		4.00	-2302.61	-87.58	-9.94	-9.349E-01	-8.25	95.63
13	COMB11	0.00	-2318.13	-7.45	79.73	-1.70	257.66	33.15

	2.00	-2318.13	-7.45	79.73	-1.70	98.20	48.05		
	4.00	-2318.13	-7.45	79.73	-1.70	-61.26	62.94		
13	COMB12	0.00	-2309.00	-45.24	82.70	-2.73	268.12	-102.86	
	2.00	-2309.00	-45.24	82.70	-2.73	102.71	-12.38		
	4.00	-2309.00	-45.24	82.70	-2.73	-62.69	78.10		
13	COMB13	0.00	-2324.65	-4.75	-68.14	2.91	-247.48	43.71	
	2.00	-2324.65	-4.75	-68.14	2.91	-111.20	53.21		
	4.00	-2324.65	-4.75	-68.14	2.91	25.08	62.71		
13	COMB14	0.00	-2315.53	-42.54	-65.17	1.88	-237.02	-92.30	
	2.00	-2315.53	-42.54	-65.17	1.88	-106.69	-7.22		
	4.00	-2315.53	-42.54	-65.17	1.88	23.65	77.86		
13	COMB15	0.00	-1671.36	45.41	22.52	1.10	65.41	204.88	
	2.00	-1671.36	45.41	22.52	1.10	20.38	114.06		
	4.00	-1671.36	45.41	22.52	1.10	-24.66	23.23		
13	COMB16	0.00	-1673.31	46.22	-21.84	2.49	-86.13	208.05	
	2.00	-1673.31	46.22	-21.84	2.49	-42.44	115.60		
	4.00	-1673.31	46.22	-21.84	2.49	1.25	23.16		
13	COMB17	0.00	-1640.95	-80.56	32.43	-2.33	100.27	-248.50	
	2.00	-1640.95	-80.56	32.43	-2.33	35.42	-87.37		
	4.00	-1640.95	-80.56	32.43	-2.33	-29.44	73.75		
13	COMB18	0.00	-1642.91	-79.75	-11.93	-9.494E-01	-51.27	-245.33	
	2.00	-1642.91	-79.75	-11.93	-9.494E-01	-27.40	-85.82		
	4.00	-1642.91	-79.75	-11.93	-9.494E-01	-3.54	73.68		
13	COMB19	0.00	-1658.43	3.773E-01	77.74	-1.71	254.41	42.50	
	2.00	-1658.43	3.773E-01	77.74	-1.71	98.93	41.75		
	4.00	-1658.43	3.773E-01	77.74	-1.71	-56.55	40.99		
13	COMB20	0.00	-1649.31	-37.42	80.71	-2.75	264.87	-93.51	
	2.00	-1649.31	-37.42	80.71	-2.75	103.44	-18.68		
	4.00	-1649.31	-37.42	80.71	-2.75	-57.99	56.15		
13	COMB21	0.00	-1664.96	3.08	-70.13	2.90	-250.72	53.06	
	2.00	-1664.96	3.08	-70.13	2.90	-110.47	46.91		
	4.00	-1664.96	3.08	-70.13	2.90	29.79	40.76		
13	COMB22	0.00	-1655.84	-34.72	-67.15	1.87	-240.27	-82.95	
	2.00	-1655.84	-34.72	-67.15	1.87	-105.96	-13.52		
	4.00	-1655.84	-34.72	-67.15	1.87	28.35	55.92		
13	COMB23	MAX	0.00	3.26	62.99	82.70	2.91	268.12	226.69
	2.00	3.26	62.99	82.70	2.91	104.70	121.90		
	4.00	3.26	62.99	82.70	2.91	29.79	95.70		
13	COMB23	MIN	0.00	-2577.76	-88.39	-70.13	-2.75	-250.72	-257.85
	2.00	-2577.76	-88.39	-70.13	-2.75	-111.20	-87.37		
	4.00	-2577.76	-88.39	-70.13	-2.75	-62.69	-25.26		
13	COMB24	0.00	-2316.83	-24.99	7.28	9.073E-02	10.32	-29.58	
	2.00	-2316.83	-24.99	7.28	9.073E-02	-4.24	20.41		
	4.00	-2316.83	-24.99	7.28	9.073E-02	-18.81	70.40		
147	DL	0.00	-1057.24	-24.30	3.59	8.446E-02	11.06	-54.67	
	2.00	-1057.24	-24.30	3.59	8.446E-02	3.88	-6.07		
	4.00	-1057.24	-24.30	3.59	8.446E-02	-3.29	42.53		
147	LL	0.00	-71.26	-3.03	2.664E-01	-4.429E-02	6.521E-01	-7.02	
	2.00	-71.26	-3.03	2.664E-01	-4.429E-02	1.193E-01	-9.576E-01		
	4.00	-71.26	-3.03	2.664E-01	-4.429E-02	-4.135E-01	5.11		
147	HUJAN	0.00	-5.89	9.537E-03	7.685E-04	-3.662E-04	2.387E-03	1.626E-02	
	2.00	-5.89	9.537E-03	7.685E-04	-3.662E-04	8.503E-04	-2.819E-03		
	4.00	-5.89	9.537E-03	7.685E-04	-3.662E-04	-6.868E-04	-2.189E-02		
147	BS	0.00	-398.48	-5.27	-2.683E-01	1.794E-02	-9.935E-01	-10.73	
	2.00	-398.48	-5.27	-2.683E-01	1.794E-02	-4.568E-01	-2.022E-01		
	4.00	-398.48	-5.27	-2.683E-01	1.794E-02	7.982E-02	10.33		
147	ANGIN	0.00	-3.90	1.34	-5.328E-02	3.716E-02	-1.352E-01	3.60	
	2.00	-3.90	1.34	-5.328E-02	3.716E-02	-2.861E-02	9.203E-01		
	4.00	-3.90	1.34	-5.328E-02	3.716E-02	7.795E-02	-1.76		
147	EX	0.00	-14.91	48.39	-4.42	2.94	-9.91	109.05	
	2.00	-14.91	48.39	-4.42	2.94	-1.08	12.27		
	4.00	-14.91	48.39	-4.42	2.94	7.75	-84.51		
147	EY	0.00	2.06	-1.45	60.22	-4.13	130.12	-3.25	
	2.00	2.06	-1.45	60.22	-4.13	9.68	-3.596E-01		
	4.00	2.06	-1.45	60.22	-4.13	-110.76	2.53		
147	COMB1	0.00	-2038.00	-41.39	4.65	1.434E-01	14.09	-91.56	

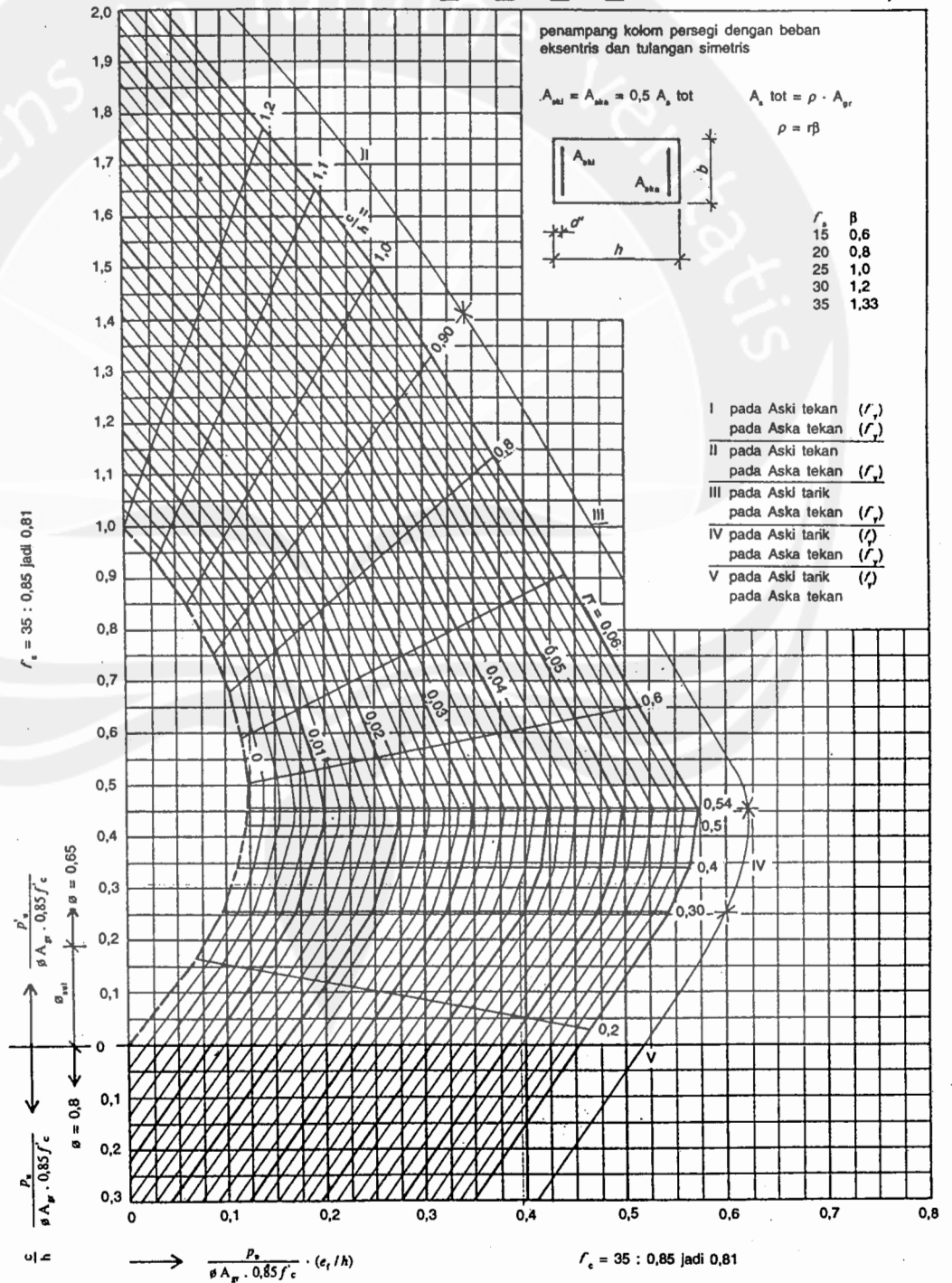
	2.00	-2038.00	-41.39	4.65	1.434E-01	4.79	-8.78
	4.00	-2038.00	-41.39	4.65	1.434E-01	-4.50	74.00
147	COMB2	0.00	-1863.83	-40.32	4.41	5.184E-02	-89.70
	2.00	-1863.83	-40.32	4.41	5.184E-02	4.30	-9.06
	4.00	-1863.83	-40.32	4.41	5.184E-02	-4.52	71.59
147	COMB3	0.00	-1827.31	-36.36	4.16	1.379E-01	-79.73
	2.00	-1827.31	-36.36	4.16	1.379E-01	4.18	-7.01
	4.00	-1827.31	-36.36	4.16	1.379E-01	-4.15	65.70
147	COMB4	0.00	-1814.83	-40.65	4.34	1.895E-02	-91.26
	2.00	-1814.83	-40.65	4.34	1.895E-02	4.27	-9.96
	4.00	-1814.83	-40.65	4.34	1.895E-02	-4.40	71.34
147	COMB5	0.00	-1316.38	-24.46	2.90	1.516E-01	-53.10
	2.00	-1316.38	-24.46	2.90	1.516E-01	3.04	-4.17
	4.00	-1316.38	-24.46	2.90	1.516E-01	-2.77	44.75
147	COMB6	0.00	-1303.91	-28.75	3.07	3.270E-02	-64.62
	2.00	-1303.91	-28.75	3.07	3.270E-02	3.13	-7.12
	4.00	-1303.91	-28.75	3.07	3.270E-02	-3.02	50.39
147	COMB7	0.00	-1832.41	9.45	17.90	1.78	22.58
	2.00	-1832.41	9.45	17.90	1.78	6.05	3.68
	4.00	-1832.41	9.45	17.90	1.78	-29.75	-15.21
147	COMB8	0.00	-1833.65	10.32	-18.23	4.26	24.53
	2.00	-1833.65	10.32	-18.23	4.26	2.422E-01	3.90
	4.00	-1833.65	10.32	-18.23	4.26	36.71	-16.73
147	COMB9	0.00	-1802.59	-87.33	26.73	-4.10	-195.53
	2.00	-1802.59	-87.33	26.73	-4.10	8.21	-20.86
	4.00	-1802.59	-87.33	26.73	-4.10	-45.25	153.80
147	COMB10	0.00	-1803.83	-86.46	-9.40	-1.62	-193.58
	2.00	-1803.83	-86.46	-9.40	-1.62	2.41	-20.65
	4.00	-1803.83	-86.46	-9.40	-1.62	21.21	152.28
147	COMB11	0.00	-1820.53	-25.44	63.15	-3.17	-56.04
	2.00	-1820.53	-25.44	63.15	-3.17	13.58	-5.16
	4.00	-1820.53	-25.44	63.15	-3.17	-112.71	45.71
147	COMB12	0.00	-1811.59	-54.47	65.80	-4.94	-121.47
	2.00	-1811.59	-54.47	65.80	-4.94	14.23	-12.53
	4.00	-1811.59	-54.47	65.80	-4.94	-117.36	96.42
147	COMB13	0.00	-1824.66	-22.55	-57.30	5.09	-49.53
	2.00	-1824.66	-22.55	-57.30	5.09	-5.78	-4.44
	4.00	-1824.66	-22.55	-57.30	5.09	108.82	40.65
147	COMB14	0.00	-1815.71	-51.58	-54.65	3.33	-114.97
	2.00	-1815.71	-51.58	-54.65	3.33	-5.13	-11.81
	4.00	-1815.71	-51.58	-54.65	3.33	104.17	91.35
147	COMB15	0.00	-1324.44	21.35	16.64	1.80	49.22
	2.00	-1324.44	21.35	16.64	1.80	4.90	6.52
	4.00	-1324.44	21.35	16.64	1.80	-28.37	-36.18
147	COMB16	0.00	-1325.67	22.22	-19.49	4.27	51.17
	2.00	-1325.67	22.22	-19.49	4.27	-9.042E-01	6.74
	4.00	-1325.67	22.22	-19.49	4.27	38.08	-37.70
147	COMB17	0.00	-1294.62	-75.43	25.47	-4.09	-168.89
	2.00	-1294.62	-75.43	25.47	-4.09	7.07	-18.03
	4.00	-1294.62	-75.43	25.47	-4.09	-43.87	132.84
147	COMB18	0.00	-1295.85	-74.56	-10.66	-1.61	-166.94
	2.00	-1295.85	-74.56	-10.66	-1.61	1.26	-17.81
	4.00	-1295.85	-74.56	-10.66	-1.61	22.59	131.32
147	COMB19	0.00	-1312.55	-13.54	61.88	-3.16	-29.39
	2.00	-1312.55	-13.54	61.88	-3.16	12.44	-2.32
	4.00	-1312.55	-13.54	61.88	-3.16	-111.33	24.75
147	COMB20	0.00	-1303.61	-42.57	64.53	-4.92	-94.83
	2.00	-1303.61	-42.57	64.53	-4.92	13.09	-9.69
	4.00	-1303.61	-42.57	64.53	-4.92	-115.98	75.45
147	COMB21	0.00	-1316.68	-10.65	-58.56	5.11	-22.89
	2.00	-1316.68	-10.65	-58.56	5.11	-6.92	-1.60
	4.00	-1316.68	-10.65	-58.56	5.11	110.19	19.69
147	COMB22	0.00	-1307.73	-39.68	-55.91	3.34	-88.33
	2.00	-1307.73	-39.68	-55.91	3.34	-6.27	-8.97
	4.00	-1307.73	-39.68	-55.91	3.34	105.54	70.39
147	COMB23 MAX	0.00	2.06	48.39	65.80	5.11	109.05

	2.00	2.06	48.39	65.80	5.11	14.23	12.27
	4.00	2.06	48.39	65.80	5.11	110.19	153.80
147	COMB23	MIN					
	0.00	-2038.00	-87.33	-58.56	-4.94	-124.04	-195.53
	2.00	-2038.00	-87.33	-58.56	-4.94	-6.92	-20.86
	4.00	-2038.00	-87.33	-58.56	-4.94	-117.36	-84.51
147	COMB24						
	0.00	-1818.12	-38.51	4.25	7.860E-02	12.73	-85.50
	2.00	-1818.12	-38.51	4.25	7.860E-02	4.23	-8.48
	4.00	-1818.12	-38.51	4.25	7.860E-02	-4.27	68.53
150	DL						
	0.00	-694.06	16.96	-4.34	5.888E-02	-7.03	36.76
	2.00	-694.06	16.96	-4.34	5.888E-02	1.66	2.83
	4.00	-694.06	16.96	-4.34	5.888E-02	10.35	-31.10
150	LL						
	0.00	-33.09	1.30	-1.23	-3.087E-02	-2.94	2.91
	2.00	-33.09	1.30	-1.23	-3.087E-02	-4.758E-01	3.072E-01
	4.00	-33.09	1.30	-1.23	-3.087E-02	1.99	-2.29
150	HUJAN						
	0.00	9.375E-03	-2.668E-03	-3.392E-04	-2.553E-04	-9.933E-04	-8.121E-03
	2.00	9.375E-03	-2.668E-03	-3.392E-04	-2.553E-04	-3.148E-04	-2.785E-03
	4.00	9.375E-03	-2.668E-03	-3.392E-04	-2.553E-04	3.637E-04	2.551E-03
150	BS						
	0.00	-312.37	4.90	-2.436E-01	1.251E-02	-7.789E-01	10.26
	2.00	-312.37	4.90	-2.436E-01	1.251E-02	-2.917E-01	4.529E-01
	4.00	-312.37	4.90	-2.436E-01	1.251E-02	1.955E-01	-9.35
150	ANGIN						
	0.00	-9.726E-01	1.08	5.223E-02	2.591E-02	1.244E-01	2.80
	2.00	-9.726E-01	1.08	5.223E-02	2.591E-02	1.997E-02	6.321E-01
	4.00	-9.726E-01	1.08	5.223E-02	2.591E-02	-8.448E-02	-1.53
150	EX						
	0.00	-47.37	41.57	4.35	2.05	9.50	89.62
	2.00	-47.37	41.57	4.35	2.05	8.106E-01	6.49
	4.00	-47.37	41.57	4.35	2.05	-7.88	-76.65
150	EY						
	0.00	3.07	-1.24	40.68	-2.88	85.47	-2.70
	2.00	3.07	-1.24	40.68	-2.88	4.10	-2.226E-01
	4.00	3.07	-1.24	40.68	-2.88	-77.26	2.25
150	COMB1						
	0.00	-1409.00	30.61	-6.42	9.994E-02	-10.93	65.82
	2.00	-1409.00	30.61	-6.42	9.994E-02	1.91	4.60
	4.00	-1409.00	30.61	-6.42	9.994E-02	14.76	-56.63
150	COMB2						
	0.00	-1260.65	28.32	-7.48	3.614E-02	-14.07	61.06
	2.00	-1260.65	28.32	-7.48	3.614E-02	8.800E-01	4.43
	4.00	-1260.65	28.32	-7.48	3.614E-02	15.83	-52.20
150	COMB3						
	0.00	-1242.35	29.27	-6.65	9.611E-02	-12.11	63.79
	2.00	-1242.35	29.27	-6.65	9.611E-02	1.20	5.26
	4.00	-1242.35	29.27	-6.65	9.611E-02	14.50	-53.28
150	COMB4						
	0.00	-1239.24	25.81	-6.82	1.321E-02	-12.51	54.85
	2.00	-1239.24	25.81	-6.82	1.321E-02	1.13	3.23
	4.00	-1239.24	25.81	-6.82	1.321E-02	14.77	-48.38
150	COMB5						
	0.00	-907.34	21.41	-4.05	1.057E-01	-6.83	46.78
	2.00	-907.34	21.41	-4.05	1.057E-01	1.26	3.97
	4.00	-907.34	21.41	-4.05	1.057E-01	9.36	-38.85
150	COMB6						
	0.00	-904.23	17.95	-4.21	2.280E-02	-7.23	37.84
	2.00	-904.23	17.95	-4.21	2.280E-02	1.20	1.94
	4.00	-904.23	17.95	-4.21	2.280E-02	9.63	-33.95
150	COMB7						
	0.00	-1287.24	68.74	9.81	1.24	22.83	148.14
	2.00	-1287.24	68.74	9.81	1.24	3.21	10.67
	4.00	-1287.24	68.74	9.81	1.24	-16.42	-126.81
150	COMB8						
	0.00	-1289.08	69.48	-14.60	2.97	-28.45	149.76
	2.00	-1289.08	69.48	-14.60	2.97	7.448E-01	10.80
	4.00	-1289.08	69.48	-14.60	2.97	29.94	-128.16
150	COMB9						
	0.00	-1192.51	-14.40	1.12	-2.86	3.83	-31.11
	2.00	-1192.51	-14.40	1.12	-2.86	1.59	-2.31
	4.00	-1192.51	-14.40	1.12	-2.86	-6.564E-01	26.50
150	COMB10						
	0.00	-1194.35	-13.66	-23.29	-1.13	-47.45	-29.49
	2.00	-1194.35	-13.66	-23.29	-1.13	-8.764E-01	-2.17
	4.00	-1194.35	-13.66	-23.29	-1.13	45.70	25.15
150	COMB11						
	0.00	-1251.94	38.77	35.25	-2.21	76.01	83.51
	2.00	-1251.94	38.77	35.25	-2.21	5.51	5.97
	4.00	-1251.94	38.77	35.25	-2.21	-64.98	-71.57
150	COMB12						
	0.00	-1223.52	13.83	32.64	-3.44	70.31	29.74
	2.00	-1223.52	13.83	32.64	-3.44	5.03	2.08
	4.00	-1223.52	13.83	32.64	-3.44	-60.25	-25.58
150	COMB13						
	0.00	-1258.08	41.25	-46.11	3.55	-94.92	88.91

	2.00	-1258.08	41.25	-46.11	3.55	-2.70	6.42		
	4.00	-1258.08	41.25	-46.11	3.55	89.53	-76.07		
150	COMB14	0.00	-1229.66	16.30	-48.72	2.32	-100.63	35.13	
		2.00	-1229.66	16.30	-48.72	2.32	-3.18	2.52	
		4.00	-1229.66	16.30	-48.72	2.32	94.26	-30.08	
150	COMB15	0.00	-952.23	60.88	12.42	1.25	28.11	131.13	
		2.00	-952.23	60.88	12.42	1.25	3.27	9.37	
		4.00	-952.23	60.88	12.42	1.25	-21.57	-112.38	
150	COMB16	0.00	-954.07	61.62	-11.99	2.98	-23.17	132.74	
		2.00	-954.07	61.62	-11.99	2.98	8.102E-01	9.51	
		4.00	-954.07	61.62	-11.99	2.98	24.79	-113.73	
150	COMB17	0.00	-857.50	-22.26	3.73	-2.85	9.11	-48.12	
		2.00	-857.50	-22.26	3.73	-2.85	1.65	-3.60	
		4.00	-857.50	-22.26	3.73	-2.85	-5.81	40.92	
150	COMB18	0.00	-859.34	-21.52	-20.68	-1.12	-42.17	-46.50	
		2.00	-859.34	-21.52	-20.68	-1.12	-8.110E-01	-3.47	
		4.00	-859.34	-21.52	-20.68	-1.12	40.55	39.57	
150	COMB19	0.00	-916.93	30.91	37.86	-2.20	81.29	66.50	
		2.00	-916.93	30.91	37.86	-2.20	5.58	4.68	
		4.00	-916.93	30.91	37.86	-2.20	-70.13	-57.15	
150	COMB20	0.00	-888.51	5.97	35.25	-3.43	75.59	12.73	
		2.00	-888.51	5.97	35.25	-3.43	5.09	7.858E-01	
		4.00	-888.51	5.97	35.25	-3.43	-65.40	-11.16	
150	COMB21	0.00	-923.06	33.39	-43.51	3.56	-89.64	71.89	
		2.00	-923.06	33.39	-43.51	3.56	-2.63	5.12	
		4.00	-923.06	33.39	-43.51	3.56	84.38	-61.65	
150	COMB22	0.00	-894.64	8.44	-46.11	2.33	-95.35	18.12	
		2.00	-894.64	8.44	-46.11	2.33	-3.12	1.23	
		4.00	-894.64	8.44	-46.11	2.33	89.11	-15.66	
150	COMB23	MAX	0.00	3.07	69.48	40.68	3.56	85.47	149.76
			2.00	3.07	69.48	40.68	3.56	5.58	10.80
			4.00	3.07	69.48	40.68	3.56	94.26	40.92
150	COMB23	MIN	0.00	-1409.00	-22.26	-48.72	-3.44	-100.63	-48.12
			2.00	-1409.00	-22.26	-48.72	-3.44	-3.18	-3.60
			4.00	-1409.00	-22.26	-48.72	-3.44	-77.26	-128.16
150	COMB24	0.00	-1240.80	27.54	-6.74	5.479E-02	-12.31	59.32	
		2.00	-1240.80	27.54	-6.74	5.479E-02	1.17	4.25	
		4.00	-1240.80	27.54	-6.74	5.479E-02	14.64	-50.83	

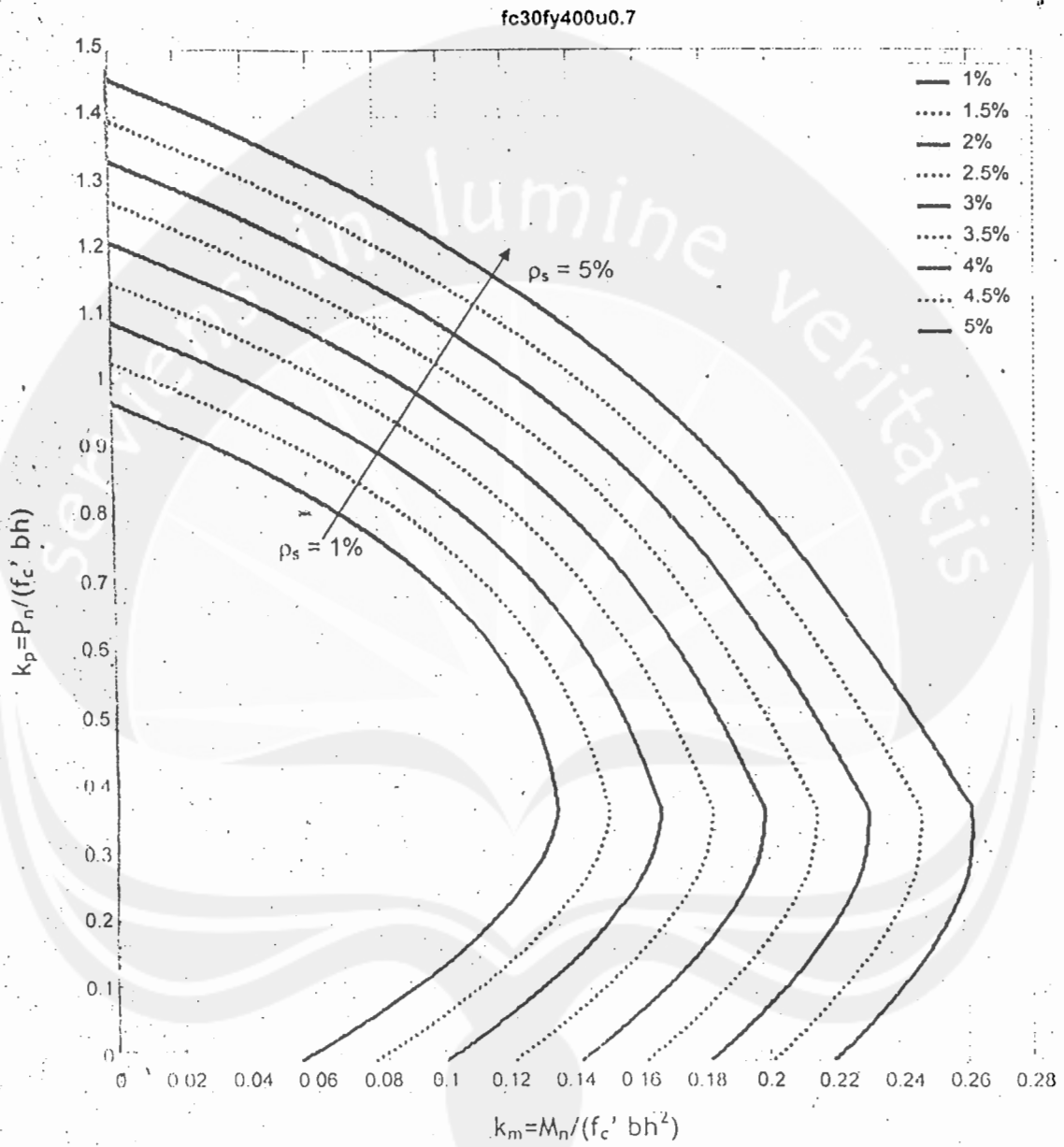


15_20_25_30_35 / 400 $d'/h = 0,10$



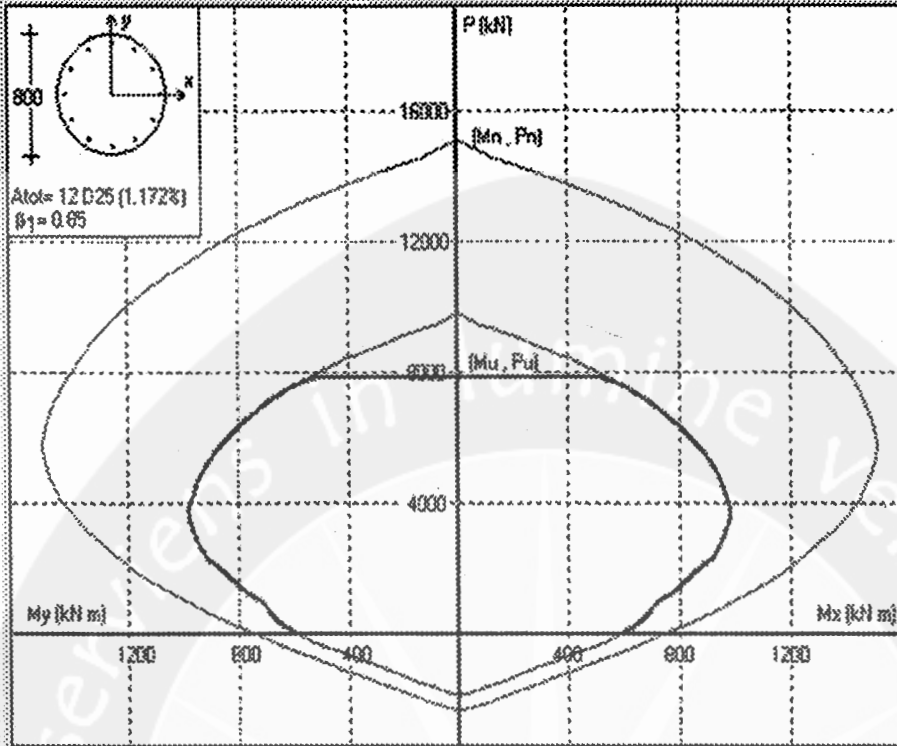
Gambar 6.2.a

Non-dimensional Interaction Diagram
Four Faces



IKOLAT 2000

Hak cipta © 2001, Haryanto Yoso Wigroho



Kode Kolom :

Mutu Bahan

Mutu beton f'_c (MPa) = 30

Mutu baja f_y (MPa) = 400

Modulus baja E_s (MPa) = 200000

Penampang Kolom

Diameter kolom D (mm) = 800

Selubung beton d_s (mm) = 50

Diameter tulangan (mm) = 25

Jumlah total tulangan = 12
(kelipatan 4)

Faktor Reduksi

sengkang biasa $\phi = 0.65$

sengkang spiral $\phi = 0.70$

analisis 1m3 beton campuran 1:2:3				
satuan	upah/bahan	harga upah	harga bahan	jumlah harga
1 m3	adukan beton K350		Rp 360,800	Rp 360,800
0.3 org	mandor	Rp 29,640		Rp 8,892
0.05 org	kepala tukang batu	Rp 31,200		Rp 1,560
0.5 org	tukang batu	Rp 29,640		Rp 14,820
6 org	pekerja	Rp 21,840		Rp 131,040
1 m3	sewa alat pompa			Rp 24,200
1 m3	sewa alat vibrator			Rp 4,400
total				Rp 545,712

pekerjaan tulangan besi D25 per 125 kg				
satuan	upah/bahan	harga upah	harga bahan	jumlah harga
125 kg	besi D25		Rp 6,760	Rp 845,000
2 kg	kawat bendrat		Rp 7,280	Rp 14,560
3 org	kepala tukang besi	Rp 31,200		Rp 93,600
9 org	tukang besi	Rp 29,640		Rp 266,760
9 org	pekerja	Rp 21,840		Rp 196,560
total				Rp 1,416,480
per 1 kg				Rp 11,332

pekerjaan tulangan besi P10 per 125 kg				
satuan	upah/bahan	harga upah	harga bahan	jumlah harga
125 kg	besi P10		Rp 6,240	Rp 780,000
2 kg	kawat bendrat		Rp 7,280	Rp 14,560
3 org	kepala tukang besi	Rp 31,200		Rp 93,600
9 org	tukang besi	Rp 29,640		Rp 266,760
9 org	pekerja	Rp 21,840		Rp 196,560
total				Rp 1,351,480
per 1 kg				Rp 10,812

pekerjaan 10m2 cetakan beton untuk 1m3 beton bertulang				
satuan	upah/bahan	harga upah	harga bahan	jumlah harga
0.4 m3	kayu cetakan		Rp 2,860,000	Rp 1,144,000
4 kg	paku		Rp 9,360	Rp 37,440
0.1 org	mandor	Rp 29,640		Rp 2,964
0.5 org	kepala tukang kayu	Rp 33,280		Rp 16,640
5 org	tukang kayu	Rp 32,240		Rp 161,200
2 org	pekerja	Rp 21,840		Rp 43,680
4 org	tukang bongkar cetakan	Rp 21,840		Rp 87,360
total				Rp 1,493,284
per 1 m2				149,328.40

1 kg baja profil				
satuan	upah/bahan	harga upah	harga bahan	jumlah harga
1 kg	baja profil		Rp 13,000	Rp 13,000

Atap kuda baja

Rincian	volume/satuan	harga satuan	jumlah
baja profil WF350	3264 kg	Rp 13,000	Rp 42,432,000
			Rp 42,432,000

Analisis balok 40/80 bentang 8 m akibat atap baja

Rincian	volume/satuan	harga satuan	jumlah
Campuran beton	2.56 m3	Rp 545,712	Rp 1,397,023
besi D25	416.875 kg	Rp 11,332	Rp 4,724,028
besi P10	197.2 kg	Rp 10,812	Rp 2,132,126
bekisting	19.84 m2	Rp 149,328	Rp 2,962,675
			Rp 11,215,852

Analisis kolom lingkaran 800 tinggi 4 m akibat atap baja

Rincian	volume/satuan	harga satuan	jumlah
Campuran beton	2.0106 m3	Rp 545,712	Rp 1,097,209
besi D25	171.1 kg	Rp 11,332	Rp 1,938,905
besi P10	73.225 kg	Rp 10,812	Rp 791,709
bekisting	11.0584 m2	Rp 149,328	Rp 1,651,333
			Rp 5,479,156

Atap kuda beton 40/65

Rincian	volume/satuan	harga satuan	jumlah
Campuran beton	6.24 m3	Rp 545,712	Rp 3,405,243
besi D25	854.05 kg	Rp 11,332	Rp 9,678,095
besi P10	151.525 kg	Rp 10,812	Rp 1,638,288
bekisting	51.44 m2	Rp 149,328	Rp 7,681,453
			Rp 22,403,079

Analisis balok 40/80 bentang 8 m akibat atap beton

Rincian	volume/satuan	harga satuan	jumlah
Campuran beton	2.56 m3	Rp 545,712	Rp 1,397,023
besi D25	432.825 kg	Rp 11,332	Rp 4,904,773
besi P10	224.025 kg	Rp 10,812	Rp 2,422,158
bekisting	19.84 m2	Rp 149,328	Rp 2,962,675
			Rp 11,686,629

Analisis kolom lingkaran 800 tinggi 4 m akibat atap beton

Rincian	volume/satuan	harga satuan	jumlah
Campuran beton	2.0106 m3	Rp 545,712	Rp 1,097,209
besi D25	171.1 kg	Rp 11,332	Rp 1,938,905
besi P10	73.225 kg	Rp 10,812	Rp 791,709
bekisting	11.0584 m2	Rp 149,328	Rp 1,651,333
			Rp 5,479,156



PT Jaya Readymix

Plant I : Jl. Raya Solo KM 12, Desa Tirtomartani, Kec. Kalasan, Kab. Sleman

Telepon (0274) 4 9 6 4 9 0, Facsimile (0274) 4 9 6 4 8 9

Plant II : Jl. Ringroad Selatan, Desa Wirokerten, Kec. Banguntapan , Kab. Bantul

Telepon (0274) 7 4 9 3 7 4 4, 7 4 9 3 1 1 0 Facsimile (0274) 7 4 9 3 1 6 9

BERLAKU MULAI : 01 JANUARI 2005

MUTU	SLUMP	HARGA / M ³
B0	10 ± 2	Rp. 242.000,00
K100	10 ± 2	Rp. 262.000,00
K125	10 ± 2	Rp. 266.000,00
K150	10 ± 2	Rp. 272.000,00
K175	10 ± 2	Rp. 277.000,00
K200	10 ± 2	Rp. 282.000,00
K225	10 ± 2	Rp. 287.000,00
K250	10 ± 2	Rp. 293.000,00
K275	10 ± 2	Rp. 302.000,00
K300	10 ± 2	Rp. 313.000,00
K325	8 ± 2	Rp. 322.000,00
K350	8 ± 2	Rp. 328.000,00
K375	8 ± 2	Rp. 334.000,00
K400	8 ± 2	Rp. 342.000,00
K425	8 ± 2	Rp. 350.000,00
K450	8 ± 2	Rp. 361.000,00
K475	8 ± 2	Rp. 370.000,00
K500	8 ± 2	Rp. 387.000,00

- Harga tersebut belum termasuk PPN 10 %
- Harga tersebut tidak mengikat sewaktu – waktu dapat berubah sesuai dengan perubahan harga material / BBM dll.
- Sewa alat pompa Rp. 1.100.000,00 / maksimal volume cor 50 m³
- Sewa alat Vibrator Rp. 200.000,00 (termasuk operator)



JAYA

Semarang Plant : Jl. Industri Barot III Kav. I LiK Bugangan Baru - Semarang Phone : (024) 6581853, 6581856 Fax : (024) 6581857
 Yogya Plant : Jl. Raya Solo Km. 12, Tirtomartani Kalasan - Sleman Phone : (0274) 496490 Fax. (0274) 496489
 Solo Plant : Jl. Raya Telukan Km. 7, Grogol - Sukoharjo Phone : (0271) 620839

BOF





DAFTAR HARGA BAHAN BANGUNAN DAN UPAH TENAGA KERJA

No.	JENIS BAHAN	Stn	KOTA SEMARANG	KAB. DEMAK	KAB. PURWODADI	KAB. SEMARANG	KOTA SALATIGA	KAB. KENDAL
1	2	3	4	5	6	7	8	9
1.	Pasir Ungu	m3	41,600	52,000	46,000	46,800	49,400	49,400
2.	Pasir Pasang	m3	46,800	83,200	72,800	72,800	78,000	72,800
3.	Pasir Beton	m3	83,200	104,000	93,600	93,600	93,600	98,800
4.	Sirtu	m3	46,800	52,000	49,400	49,400	52,000	52,000
5.	Batu Beton 0,5 x 1	m3	124,800	130,000	98,800	98,800	104,000	109,200
6.	Batu Beton 1 x 2	m3	114,400	104,000	93,600	93,600	98,800	98,800
7.	Batu Beton 2 x 3	m3	104,000	93,600	80,400	80,400	93,600	93,600
8.	Batu Kali	m3	67,600	72,800	67,600	67,600	67,600	67,600
9.	Batu Pecah 5/7	m3	93,600	93,600	78,000	78,000	78,000	80,600
10.	Batu Pecah 10/15	m3	88,400	78,000	72,800	72,800	72,800	78,000
11.	Paving Abu-abu	m3	23,400	23,400	21,840	21,840	23,920	22,880
12.	Paving Berwarna	m3	26,000	26,000	23,920	23,920	27,040	24,960
13.	Batubola	bh	208	208	198	198	260	260
14.	Dataco	bh	2,340	2,600	2,600	2,600	2,340	2,600
15.	Semen PC 40kg/ Zak	zak	22,360	22,080	23,400	23,400	23,400	23,400
16.	Semen PC 50kg/ Zak	zak	27,560	29,120	30,160	30,160	29,120	29,120
17.	Semen Putih 40kg/ Zak	zak	52,000	54,080	53,040	53,040	5,512	54,080
18.	Semen Putih 50kg/ Zak	zak	65,000	64,480	63,440	63,440	65,520	64,480
19.	Semen Berwarna	zak	1,664	1,820	1,820	1,820	2,080	1,820
20.	Kapur Pasang	m3	104,000	114,400	101,400	101,400	109,200	104,000
21.	Kapur Silih	kg	1,820	2,080	1,820	1,820	2,080	1,820
22.	Desi Beton Polos	kg	6,240	5,720	5,200	5,200	5,720	5,200
23.	Desi Beton Ujir	kg	6,760	6,240	5,720	5,720	6,240	5,720
24.	Kwani Dendrat	kg	7,280	7,800	7,800	7,800	7,800	7,800
25.	Ubin Abu-abu 20x20cm	bh	780	780	728	728	832	832
26.	Ubin Abu-abu 15x20cm	bh	780	780	728	728	832	832
27.	Ubin Berwarna 20x20cm	bh	832	832	832	832	936	884
28.	Ubin Ubin Berwarna 15x20cm	bh	832	832	832	832	936	884
29.	Ubin Walol 20x20cm	bh	832	936	884	884	988	936
30.	Keramik 30x30cm	m2	36,400	33,280	32,240	32,240	36,400	33,280
31.	Plin Keramik 10x30cm	m2	30,160	27,040	26,000	26,000	30,160	27,040
32.	Proselin 11x11cm	bh	468	520	416	416	468	468
33.	Kayu Jati	m3	7,280,000	7,488,000	7,020,000	7,020,000	6,760,000	6,552,000
34.	Papan Kayu Jati	m3	7,800,000	7,800,000	7,280,000	7,280,000	7,020,000	6,864,000
35.	Balok Kayu Kamper	m3	2,600,000	2,496,000	2,600,000	2,496,000	2,704,000	2,704,000
36.	Papan Kayu Kamper	m3	2,860,000	2,808,000	2,808,000	2,704,000	2,912,000	2,912,000
37.	Kayu Kamper 4/6cm	btg	24,960	23,920	24,960	23,920	26,000	26,000
38.	Kayu Kamper 5/7cm	btg	36,400	35,360	36,400	35,360	37,960	37,960
39.	Kayu Kamper 6/10cm	btg	62,400	60,320	62,400	60,320	65,000	65,000
40.	Kayu Kamper 8/12cm	btg	99,840	95,680	99,840	95,680	104,000	104,000
41.	Papan Kayu Kamper 0,02x0,2x4	lbr	45,760	44,720	44,720	43,160	46,800	46,800
42.	Papan Kayu Kamper 0,03x0,2x4	lbr	68,640	67,600	67,600	65,000	70,200	69,680
43.	Balok Kayu Kruing	m3	1,716,000	2,808,000	2,704,000	2,392,000	2,080,000	1,976,000
44.	Papan Kayu Kruing	m3	2,340,000	3,120,000	2,912,000	2,600,000	2,392,000	2,496,000
45.	Kayu Kruing 4/6cm	btg	25,480	27,040	26,000	22,880	19,760	18,720
46.	Kayu Kruing 5/7cm	btg	36,920	39,520	37,440	33,280	29,120	27,560
47.	Kayu Kruing 6/10cm	btg	65,520	67,600	64,480	57,200	49,920	47,320
48.	Kayu Kruing 8/12cm	btg	100,880	107,640	101,000	91,520	80,080	75,920
49.	Papan Kayu Kruing 0,02x0,2x4	lbr	48,360	49,920	46,800	41,600	38,480	40,040
50.	Papan Kayu Kruing 0,03x0,2x4	lbr	72,800	74,880	69,680	62,400	57,200	59,800
51.	Balok Kayu Bongkro	m3	2,184,000	2,496,000	2,600,000	2,392,000	2,600,000	2,600,000
52.	Papan Kayu Bongkro	m3	2,340,000	2,704,000	2,860,000	2,704,000	2,860,000	2,860,000
53.	Kayu Bongkro 4/6cm	btg	23,920	23,920	24,960	22,880	24,960	24,960
54.	Kayu Bongkro 5/7cm	btg	34,840	34,840	36,400	33,200	36,400	36,400
55.	Kayu Bongkro 6/10cm	btg	59,800	59,800	62,400	57,200	62,400	62,400
56.	Kayu Bongkro 8/12cm	btg	92,560	95,680	99,840	91,520	99,840	99,840
57.	Papan Kayu Bongkro 0,02x0,2x4	lbr	42,120	43,160	45,760	43,880	45,760	45,760
58.	Papan Kayu Bongkro 0,03x0,2x4	lbr	63,960	65,000	68,640	64,480	68,640	68,640
59.	Balok Kayu Meranti	m3	1,560,000	2,496,000	2,020,000	2,000,000	1,976,000	2,054,000
60.	Papan Kayu Meranti	m3	1,820,000	2,808,000	2,288,000	2,288,000	2,184,000	2,184,000
61.	Kayu Meranti 4/6cm	btg	21,320	23,920	19,760	19,760	18,720	19,760
62.	Kayu Meranti 5/7cm	btg	29,120	34,840	29,880	29,120	27,560	28,600
63.	Kayu Meranti 6/10cm	btg	49,920	59,800	46,880	49,920	47,320	49,400
64.	Kayu Meranti 8/12cm	btg	80,080	95,680	78,000	79,560	75,920	79,040
65.	Papan Kayu Meranti 0,02x0,2x4	lbr	40,560	44,720	36,400	36,400	34,840	34,840
66.	Papan Kayu Meranti 0,03x0,2x4	lbr	62,400	67,080	55,120	55,120	52,520	52,520
67.	Kayu Taliun	m3	1,315,600	1,300,000	1,352,000	1,326,000	1,279,200	1,352,000
68.	Kayu Colokan	m3	416,000	686,400	702,000	728,000	686,400	702,000
69.	Papan Kayu (Bowplank)	m3	1,144,000	962,000	967,200	988,000	962,000	956,800
70.	Papan Bekising	m3	338,000	790,400	806,000	754,000	790,400	806,000



No.	JENIS BAHAN	Stn	KOTA SEMARANG	KAB. DEMAK	KAB. PURWODADI	KAB. SEMARANG	KOTA SALATIGA	KAB. KENDHAK
1	2	3	4	5	6	7	8	9
71.	Papan Lisplank	m3	1,924,000	1,976,000	2,080,000	1,716,000	1,872,000	1,872,000
72.	Balok Kayu Kuda-kuda	m3	2,288,000	2,496,000	2,600,000	2,340,000	2,496,000	2,600,000
73.	Kayu Doken	btg	28,600	31,200	26,000	28,600	31,200	26,000
74.	Kayu Rangka Plafond	m3	1,612,000	1,560,000	1,664,000	1,456,000	1,352,000	1,300,000
75.	Kayu Rangka Atap	m2	28,600	29,2120	29,120	26,000	30,160	28,600
76.	Kayu Reng 0,2x0,3x4m Kalimantan	m	5,720	5,200	4,680	4,680	5,720	5,200
77.	Kayu Reng 0,2x0,5x4m Kalimantan	m	10,400	7,800	57,200	7,280	8,320	7,280
78.	List Eternit	bh	3,640	4,680	4,160	4,160	5,200	5,200
79.	Genteng Flam	bh	780	780	780	676	728	780
80.	Karpus Genteng Flam	bh	2,080	2,600	2,080	2,080	2,600	2,600
81.	Genteng Kodok	bh	780	884	832	832	936	884
82.	Kerpus Genteng Kodok	bh	2,080	1,560	1,560	1,560	2,080	2,080
83.	Genteng Belon	bh	2,860	2,600	2,600	2,600	2,600	2,600
84.	Karpus Genteng Belon	bh	3,120	3,120	3,120	3,640	3,640	3,640
85.	Genteng Keramik	bh	3,640	3,640	3,640	4,160	4,160	4,160
86.	Kerpus Genteng Keramik	bh	4,680	4,680	4,680	5,200	5,200	5,200
87.	Genteng Kaca	bh	5,200	5,200	5,200	5,720	5,720	5,720
88.	Asbes Gelombang Besar	lbr	46,800	47,320	48,360	48,880	47,840	48,360
89.	Kerpus Asbes Gelombang Besar	lbr	36,400	33,800	33,800	34,320	34,320	34,320
90.	Asbes Gelombang Kecil	lbr	43,160	42,640	42,640	43,160	43,680	43,160
91.	Kerpus Asbes Gelombang Kecil	lbr	26,000	29,120	30,160	29,640	30,160	30,160
92.	Nok Kerpus Asbes Gelombang Besar	lbr	32,760	31,200	31,200	32,240	32,240	32,240
93.	Nok Kerpus Gelombang Kecil	lbr	26,000	26,000	26,000	27,040	27,040	27,040
94.	Seng Gelombang BJLS 30	lbr	36,400	36,400	36,400	36,920	37,440	36,920
95.	Seng Gelombang BJLS 20	lbr	31,200	31,200	31,200	31,720	32,240	31,720
96.	Seng Plat BJLS 30	lbr	33,800	34,320	34,320	34,840	35,360	34,840
97.	Seng Plat BJLS 20	lbr	31,200	29,640	30,160	31,200	30,160	31,200
98.	Atap Sirap	lbr	1,040	832	780	780	780	780
99.	Eternit Asbes 1x3m	lbr	32,760	34,320	33,280	33,280	35,360	34,320
100.	Acustic 30x60	lbr	19,760	21,840	20,800	20,800	22,880	21,840
101.	Multiplaks 4mm	lbr	39,000	43,680	42,640	43,680	45,760	43,680
102.	Multiplaks 6mm	lbr	44,200	54,080	53,040	54,080	56,150	54,080
103.	Multiplaks 9mm	lbr	54,600	64,580	63,440	65,520	67,600	64,580
104.	Teakwood	lbr	52,000	48,880	47,840	49,400	52,000	48,880
105.	Lem Abon	kg	26,000	29,120	28,080	28,080	30,160	28,080
106.	Paku Kayu	kg	9,360	9,360	8,320	8,840	9,880	9,360
107.	Paku Seng	kg	15,600	17,680	16,640	17,680	19,240	17,680
108.	Paku Asbes	bh	312	364	312	364	312	364
109.	Paku Kañ	bh	312	260	312	364	312	260
110.	Paku Sumbat	bh	312	364	312	364	312	364
111.	Paku Sekrup	bh	312	364	312	364	312	364
112.	Paku Reng	kg	15,600	8,320	8,320	8,840	10,920	8,320
113.	Basi Bougel/ Baut (Kuda-kuda)	kg	10,400	17,680	16,640	15,600	17,580	17,680
114.	Engsel Lokal	bh	6,240	5,200	5,200	4,680	6,760	5,200
115.	Engsel Luar	bh	26,000	28,080	27,040	27,040	29,120	28,080
116.	Grendel Lokal	bh	15,600	6,240	4,680	4,680	6,760	6,240
117.	Grendel Luar	bh	41,600	26,000	23,920	22,880	24,960	26,000
118.	Kunci-kunci lokal	bh	36,400	31,200	29,120	28,080	30,160	31,200
119.	Kunci-kunci luar	bh	59,800	65,520	64,480	66,560	68,640	65,520
120.	Hak Angin	bh	5,200	7,280	6,760	6,760	8,840	7,280
121.	Espangnolot	bh	7,800	7,280	6,760	8,080	8,840	7,280
122.	NACa (Kerangka dan Daun)	m2	79,040	81,120	80,600	48,880	82,160	81,120
123.	Kaca Bening Uk. 3mm	m2	48,880	49,920	49,400	52,000	50,960	49,920
124.	KAcA Bening Uk. 5mm	m2	52,000	53,040	52,000	56,160	54,080	53,040
125.	Kaca Raybend Uk. 3mm	m2	54,080	55,120	54,080	75,920	58,240	55,120
126.	Kaca Raybend Uk. 5mm	m2	74,880	75,920	74,880	49,920	78,000	75,920
127.	Kaca Duram 3mm	m2	47,840	49,920	48,880	56,160	52,000	49,920
128.	Kaca Duram 5mm	m2	54,080	56,160	55,120	68,400	58,240	56,160
129.	Bak Mandi Fibro	bh	161,200	166,400	164,320	166,400	171,600	166,400
130.	Bak Mandi Teraso	bh	80,600	85,800	83,200	83,720	88,920	85,800
131.	Bak Mandi Porselin	bh	528,840	520,000	494,000	465,920	523,120	520,000
132.	Wastafel Traso	bh	119,600	124,800	124,800	119,600	124,800	124,800
133.	Wastafel Keramik	bh	275,600	280,800	278,200	277,680	282,880	280,800
134.	Kloset Jongkok Teraso	bh	31,200	36,400	33,800	33,280	38,480	36,400
135.	Kloset Duduk Teraso	bh	67,600	72,800	70,200	72,800	78,000	72,800
136.	Kloset Jongkok Keramik	bh	67,600	72,800	70,200	70,720	75,920	72,800
137.	Kloset Duduk Keramik	bh	182,000	187,200	184,600	187,200	192,400	187,200
138.	Kloset Monoblok Lokal	bh	468,000	473,200	470,600	478,400	483,600	473,200
139.	Urinoir Keramik	bh	280,800	286,000	283,400	291,200	291,200	286,000
140.	Bak Cuci Piring Teraso	bh	119,600	124,800	122,200	124,800	130,000	124,800
141.	Bak Cuci Piring Logam	bh	218,400	223,600	221,000	234,000	239,200	223,600
142.	Stop Kran	bh	18,200	19,760	18,720	19,760	20,800	19,760
143.	Kran Ledeng	bh	13,000	14,560	13,520	14,560	15,600	14,560
144.	Pipa PVC 1/2"	btg	12,480	13,520	13,000	14,040	15,080	13,520



KAB. KENDAL	No.	JENIS BAHAN	Stn	KOTA SEMARANG	KAB. DEMAK	KAB. PURWODADI	KAB. SEMARANG	KOTA SALATIGA	KAB. KENDAL
9	1	2	3	4	5	6	7	8	9
1,872,000	145.	Pipa PVC 3/4"	btg	13,520	18,720	18,200	19,420	20,200	19,760
2,600,000	146.	Pipa PVC 1"	btg	14,560	24,960	23,920	24,960	28,000	28,000
28,000	147.	Pipa PVC 1 1/2"	btg	20,800	37,440	36,920	37,960	39,000	38,400
1,300,000	148.	Pipa PVC 2"	btg	41,600	45,240	44,720	45,760	46,800	46,280
28,000	149.	Pipa PVC 4"	btg	83,200	63,440	62,920	63,960	65,000	64,480
5,760	150.	Pipa Leding 1/2"	btg	31,200	30,150	29,120	30,160	31,200	30,700
7,680	151.	Pipa Leding 3/4"	btg	36,400	37,440	36,920	37,960	39,000	38,500
8,200	152.	Pipa Leding 1"	btg	52,000	53,040	52,520	53,560	54,600	54,100
7,680	153.	Pipa Leding 1 1/2"	btg	67,600	69,680	69,160	70,200	71,240	70,750
2,600	154.	Buis Beton o 10cm	bh	23,400	16,640	16,120	17,160	18,200	17,700
600	155.	Buis Beton o 20cm	bh	20,800	21,840	21,320	22,360	23,400	22,900
2,600	156.	Buis Beton o 30cm	bh	26,000	27,040	26,520	27,560	28,600	28,100
3,600	157.	Buis Beton o 40cm	bh	33,800	34,840	34,320	35,360	36,400	35,900
4,160	158.	Buis Beton o 50cm	bh	41,600	42,640	42,120	43,160	44,200	43,700
5,200	159.	Buis Beton o 60cm	bi	78,000	79,040	78,520	79,560	80,600	80,500
5,760	160.	Buis Beton U 10cm	bi	15,600	16,640	16,120	17,160	18,200	17,700
48,000	161.	Buis Beton U 20cm	bh	20,800	21,840	21,320	22,360	23,400	22,900
34,200	162.	Buis Beton U 30cm	bh	26,000	27,040	26,520	27,560	28,600	28,100
43,800	163.	Buis Beton U 40cm	bh	33,800	34,840	34,320	35,360	36,400	35,900
51,200	164.	Buis Beton U 50cm	bh	41,600	42,640	42,120	43,160	44,200	43,700
33,200	165.	Buis Beton U 60cm	bh	78,000	79,040	78,520	79,560	80,600	80,100
28,000	166.	Bak Air Fiber Glass Isi 500 Ltr	bh	390,000	397,280	395,200	405,600	413,400	410,800
39,000	167.	Bak Air Fiber Glass Isi 1000 Ltr	bh	624,000	634,400	629,200	639,600	647,400	644,800
33,800	168.	Pompa Tangan Terpasang	bh	468,000	520,000	478,400	494,000	501,800	525,200
36,400	169.	Pompa Mesin	bh	270,400	322,400	390,000	296,400	304,200	301,600
31,200	170.	Stop Kontak + Instalasi	bh	460,800	49,920	49,400	46,800	52,000	49,400
34,200	171.	Trik Lampu + Instalasi	bh	46,800	49,920	49,400	46,800	52,000	49,400
21,120	172.	Stop Kontak	bh	16,640	15,600	15,600	13,000	18,200	15,600
44,760	173.	Sehakelar	bh	15,600	16,120	16,120	13,520	18,720	16,650
55,200	174.	Zekering Kasi Lokal 1 Grup	bh	23,920	31,200	31,200	28,600	33,800	31,200
66,800	175.	Zekering Kasi Lokal 2 Grup	bh	33,800	45,240	45,240	42,640	47,840	45,800
50,800	176.	Zekering Kasi Lokal 3 Grup	bh	57,200	65,000	65,000	62,400	67,600	65,000
23,800	177.	Cat Tembok	kg	9,880	10,400	9,880	9,880	10,920	10,400
8,800	178.	Plamur Tembok	kg	9,360	8,840	8,320	8,320	9,360	8,850
18,200	179.	Cat Kayu Mengkilap	kg	26,000	29,120	28,600	28,600	29,640	29,150
9,360	180.	Dempul Kayu	kg	9,360	10,400	9,880	9,880	10,920	10,400
9,360	181.	Cat Meni	kg	9,360	8,840	8,320	8,320	9,360	8,850
9,360	182.	Cat Kayu Dasar	kg	9,360	9,360	8,840	8,840	9,880	9,400
9,360	183.	Cat Besi	kg	18,200	18,720	18,200	18,200	19,240	18,750
16,800	184.	Minyak Col	kg	7,800	7,280	6,760	6,760	7,800	7,300
9,360	185.	Plamir Kayu	kg	9,360	9,360	8,840	8,840	9,880	9,400
20,800	186.	Residu/ Teer	lir	7,280	8,320	7,800	7,800	8,840	8,350
5,760	187.	Kawat Duri	rol	46,800	43,680	42,120	42,120	43,160	42,650
24,000	188.	Kawat Harmonika	m2	20,800	19,760	19,240	19,240	20,280	19,750
29,600	189.	Kawat Kayu/ Kasa Besi	m2	15,600	16,640	16,120	16,120	17,160	16,650
67,200	190.	Kawat Hyamuk/ Kasa Plastik	m2	13,520	14,040	13,520	13,520	14,560	14,050
7,680	191.	Roster (Beton)	bh	3,640	4,680	4,160	4,160	5,200	4,700
7,680	192.	Roster (Tanah)	bh	2,080	3,120	3,120	2,600	3,640	3,150
61,200	193.	Formika	lbr	36,400	38,480	36,920	36,920	37,960	37,450
45,200	194.	Tripteks 3mm	lbr	31,200	31,200	30,160	30,680	31,720	31,200
55,200	195.	Tripteks 5mm	lbr	36,400	37,440	35,360	34,840	35,880	35,400
57,200	196.	Tripteks 9mm	lbr	46,800	47,840	45,760	45,240	46,280	45,800
60,800	197.	Harpteks	lbr	20,800	21,840	21,320	21,320	22,360	21,900
57,200	198.	Eternit Poles	lbr	3,120	3,640	3,120	3,120	4,160	3,700
169,200	199.	Eternit Kembang	lbr	3,640	4,160	3,640	3,640	4,680	4,200
169,200	200.	Ijuk	kg	9,360	10,400	9,880	9,880	10,920	10,400
512,000	201.	Meja Dapur	bh	559,000	540,800	507,520	499,720	542,880	516,300
122,400	202.	Ampolas	lbr	2,600	3,120	3,120	3,120	3,640	3,150
280,000	203.	Sirak	kg	2,600	3,120	3,120	3,120	3,640	3,150
7,680	204.	Batu Apung	bh	4,160	4,680	5,720	4,680	4,680	5,700
7,680	205.	Splius	lir	4,160	4,680	4,680	4,680	5,200	6,200
18,200	206.	Reservoir Air Baja 1m3	bh	2,184,000	2,288,000	2,184,000	2,236,000	2,392,000	2,288,000
48,000	207.	Sepi tank + Rembesan 1m3	m3	2,479,360	2,517,320	2,442,440	2,396,000	2,604,680	2,555,300
280,000	208.	Sepi tank + Rembesan 2m3	m3	4,948,320	5,034,640	4,884,880	4,792,320	5,209,360	5,110,500
280,000	209.	Sepi tank + Rembesan 4m3	m3	9,917,440	10,069,280	9,769,760	9,584,640	10,418,720	10,221,100
280,000	210.	Sepi tank + Rembesan 6m3	m3	14,876,160	15,103,920	14,654,640	14,376,960	15,628,080	15,331,700
280,000	211.	Sepi tank + Rembesan 10m3	m3	24,793,600	25,173,200	24,424,400	23,33,160	26,046,800	25,552,800
10,400	212.	Stul Werk	m2	397,800	357,760	321,880	315,120	353,600	332,800
10,400	213.	Rabat Beton	m3	446,160	435,760	417,040	410,800	432,120	427,450



No.	JENIS BAHAN	Sn	KOTA SEMARANG	KAB. DEMAK	KAB. PURWODADI	KAB. SEMARANG	KOTA SALATIGA	KAB. KENDAL
1	2	3	4	5	6	7	8	9
UPAH TENAGA KERJA								
1.	MANDOR	HARI	29,640	27,040	24,960	22,880	26,000	24,960
2.	KEPALA TUKANG GALI TANAH	HARI	29,640	27,040	24,960	22,880	26,000	24,960
3.	TUKANG GALI TANAH	HARI	21,840	19,760	17,680	17,680	19,750	18,750
4.	KEPALA TUKANG BATU	HARI	31,200	28,600	26,520	24,440	27,560	26,520
5.	TUKANG BATU	HARI	29,640	27,040	24,960	22,880	26,000	24,960
6.	LADEN TUKANG BATU	HARI	21,840	19,760	17,680	17,680	19,800	18,750
7.	KEPALA TUKANG BATU	HARI	33,280	29,640	27,560	25,480	28,600	27,560
8.	TUKANG KAYU	HARI	32,240	27,040	24,960	22,880	28,000	24,960
9.	LADEN TUKANG KAYU	HARI	21,840	19,760	17,680	17,680	19,800	18,750
10.	KEPALA TUKANG BESI	HARI	31,200	28,600	26,520	24,440	27,700	26,520
11.	TUKANG BESI	HARI	29,640	27,040	24,960	22,880	26,000	24,960
12.	LADEN TUKANG BESI	HARI	21,840	19,760	17,680	17,680	19,800	18,750
13.	KEPALA TUKANG CAT	HARI	31,200	28,600	26,520	24,440	27,600	26,520
14.	TUKANG CAT	HARI	29,640	27,040	24,960	22,880	26,000	24,960
15.	LADEN TUKANG CAT	HARI	21,840	19,760	17,680	17,680	19,769	18,750
16.	MASINIS WALES	HARI	40,040	28,600	26,960	24,440	27,560	26,520
17.	PEMBANTU MASINIS WALES	HARI	23,920	27,040	24,960	22,880	26,000	24,960
18.	MEKANIK	HARI	29,640	27,040	24,960	22,880	26,000	24,960
19.	TUKANG MASAK ASPAL	HARI	21,840	19,760	17,680	17,680	19,750	18,750
20.	PEKERJA	HARI	21,840	19,760	17,680	17,680	19,750	18,750
21.	PENJAGA MALAM	HARI	21,840	19,760	17,680	17,680	19,750	18,750
BIAYA BANGUNAN GEDUNG NEGARA DAN RUMAH DINAS								
1.	GEDUNG BERTINGKAT KELAS A		2,041	1,781	1,985	1,806	1,884	1,884
2.	GEDUNG BERTINGKAT KELAS B		1,822	1,590	1,772	1,613	1,682	1,682
3.	GEDUNG BERTINGKAT KELAS C		1,306	1,193	1,329	1,210	1,261	1,261
4.	GEDUNG TIDAK BERTINGKAT KELAS A		1,746	1,524	1,698	1,546	1,612	1,612
5.	GEDUNG TIDAK BERTINGKAT KELAS B		1,559	1,361	1,516	1,380	1,439	1,439
6.	GEDUNG TIDAK BERTINGKAT KELAS C		1,169	1,020	1,137	1,035	1,079	1,079
7.	RUMAH DINAS TYPE 250 M2		1,288	1,130	1,239	1,115	1,116	1,116
8.	RUMAH DINAS TYPE 120 M2		1,193	1,046	1,147	1,033	1,033	1,033
9.	RUMAH DINAS TYPE 70/ 50/ 36 M2		1,144	994	1,090	981	981	981



Uraian Pekerjaan Analisa/ Satuan	No.	Uraian Pekerjaan Analisa/ Satuan
<p>I. PEKERJAAN TANAH DAN PERSIAPAN</p> <p>Pagar sementara dari seng gelombang per 1m panjang, tinggi 2m, pondasi setempat. SK SNI T-01-1991-03</p> <p>5.000 m³ kayu bulat</p> <p>0.3720 zak pc</p> <p>0.3500 m³ pasir pasang</p> <p>0.0600 kg paku</p> <p>0.4500 kg meni</p> <p>1.2000 lbr seng gelombang</p> <p>0.0400 mandor</p> <p>0.0200 kepala tukang kayu</p> <p>0.2000 tukang kayu</p> <p>0.4000 pekerja</p> <p>Pembuatan pintu pagar sementara dari kayu per 1m². SK SNI T-01-1991-03</p> <p>0.2500 m³ kayu</p> <p>0.2500 kg paku</p> <p>0.4000 kg meni</p> <p>3.0000 bh engsel</p> <p>1.0000 bh kunci</p> <p>0.0100 mandor</p> <p>0.0300 kepala tukang kayu</p> <p>0.3000 tukang kayu</p> <p>0.1000 pekerja</p> <p>Membersihkan lahan per 1m². SK SNI T-01-1991-03</p> <p>0.0050 mandor</p> <p>0.0500 kepala tukang kayu</p> <p>0.0500 tukang kayu</p> <p>0.0500 pekerja</p> <p>Pemasangan bouplank per 1m³. SK SNI T-01-1991-03</p> <p>0.0040 m³ kayu</p> <p>0.0200 kg paku</p> <p>0.0050 mandor</p> <p>0.0500 kepala tukang kayu</p> <p>0.0500 tukang kayu</p> <p>0.0500 pekerja</p> <p>Galian tanah biasa sedalam 1m, per m³. SK SNI T-01-1991-03</p> <p>0.0400 mandor</p> <p>0.4000 pekerja</p> <p>Galian tanah keras sedalam 1m, per m³. SK SNI T-01-1991-03</p> <p>0.0620 mandor</p> <p>0.6250 pekerja</p> <p>Galian tanah lumpur sedalam 1m, per m³. SK SNI T-01-1991-03</p> <p>0.0830 mandor</p> <p>0.8330 pekerja</p> <p>Tanah diangkut sejauh 150m, per m³. SK SNI T-01-1991-03</p> <p>0.0500 mandor</p> <p>0.5160 pekerja</p> <p>Mengurus tanah kembali per m³. SK SNI T-01-1991-03</p> <p>0.0190 mandor</p> <p>0.1920 pekerja</p> <p>Tanah diratakan dan dipadatkan per m³. SK SNI T-01-1991-03</p> <p>0.0500 mandor</p> <p>0.5000 pekerja</p> <p>Urugan tanah padas untuk badan jalan/ berm per m³. SK SNI T-01-1991-03</p> <p>1.2000 m³ tanah padas</p> <p>0.0100 mandor</p> <p>0.0300 pekerja</p> <p>Urugan pasir per m³. SK SNI T-01-1991-03</p> <p>1.3000 m³ pasir urug</p> <p>0.0600 mandor</p> <p>0.3000 kepala tukang batu</p> <p>0.3000 tukang batu</p> <p>0.6000 pekerja</p>		<p>I. PEKERJAAN PASANGAN</p> <p>1. Pasang Batu kosong tebal 20cm per 1 m³. SK SNI T-02-1991-03</p> <p>1.2000 m³ batu belah</p> <p>0.0780 mandor</p> <p>0.0390 kepala tukang batu</p> <p>0.3900 tukang batu</p> <p>0.7810 pekerja</p> <p>2. Pasang Batu Belah/batu Kali dgn 1 Pc : 2 Ps/ m³. SK SNI T-02-1991-03</p> <p>1.2000 m³ batu belah</p> <p>5.3250 zak pc</p> <p>0.3400 m³ pasir pasang</p> <p>0.1500 mandor</p> <p>0.0600 kepala tukang batu</p> <p>0.6000 tukang batu</p> <p>1.5000 pekerja</p> <p>3. Pasang Batu Belah dengan 1 Pc : 3 Ps per m³. SK SNI T-02-1991-03</p> <p>1.2000 m³ Batu belah</p> <p>4.0500 zak pc</p> <p>0.4300 m³ pasir pasang</p> <p>0.1500 mandor</p> <p>0.0600 kepala tukang batu</p> <p>0.6000 tukang batu</p> <p>1.5000 pekerja</p> <p>4. Pasang Batu Belah dengan 1 Pc : 5 Ps per m³. SK SNI T-02-1991-03</p> <p>1.2000 m³ Batu belah</p> <p>2.3500 zak pc</p> <p>0.4500 m³ pasir pasang</p> <p>0.1500 mandor</p> <p>0.0600 kepala tukang batu</p> <p>0.6000 tukang batu</p> <p>1.5000 pekerja</p> <p>5. Pasang Batu Belah dengan 1 Pc : 3Kp : 10 Ps. SK SNI T-02-1991-03</p> <p>1.2000 m³ Batu belah</p> <p>1.2300 zak pc</p> <p>0.1200 m³ kapur</p> <p>0.4100 m³ pasir pasang</p> <p>0.1500 mandor</p> <p>0.0500 kepala tukang batu</p> <p>0.6000 tukang batu</p> <p>1.5000 pekerja</p> <p>6. Pasang Batu Bata dengan 1 Pc : 2 Ps/m² tebal 1 bata. SK SNI T-03-1991-03</p> <p>160.000 bh batu bata</p> <p>1.3300 zak pc</p> <p>0.0850 m³ pasir pasang</p> <p>0.0960 mandor</p> <p>0.0320 kepala tukang batu</p> <p>0.3200 tukang batu</p> <p>0.9600 pekerja</p> <p>7. Pasang Batu Bata dengan 1 Pc : 4 Ps/m² tebal 1 bata. SK SNI T-03-1991-03</p> <p>160.000 bh Batu bata</p> <p>0.8130 zak pc</p> <p>0.1040 m³ pasir pasang</p> <p>0.0960 mandor</p> <p>0.0320 kepala tukang batu</p> <p>0.3200 tukang batu</p> <p>0.9600 pekerja</p> <p>8. Pasang Batu Bata dengan 1 Pc : 3Kp : 10 Ps/ m² tebal 1 bata. SK SNI T-03-1991-03</p> <p>160.000 bh batu bata</p> <p>0.0290 zak pc</p> <p>0.0290 m³ kapur</p> <p>0.0950 m³ pasir pasang</p> <p>0.0960 mandor</p> <p>0.0320 kepala tukang batu</p> <p>0.3200 tukang batu</p> <p>1.9600 pekerja</p>



No.	Uraian Pekerjaan Analisa/ Satuan	No.	Uraian Pekerjaan Analisa/ Satuan
9.	Pasang Batu bata dg 1 Pc : 2 Ps/m ² tebal 1/2 bata. SK SNI T-03-1991-03 80.000 bh batu bata 0.6500 zak pc 0.0420 m ³ pasir pasang 0.0480 mandor 0.0160 kepala tukang batu 0.1600 tukang batu 0.4800 pekerja	17.	Membuat bronjong dari kawat di galvano untuk diisi dengan batu be 3m ³ untuk kawat 4mm (G.5b) 45.0000 kg kawat 3.0000 m ³ batu belah 0.0800 mandor 1.8000 kepala tukang batu 2.2000 tukang batu 4.5000 pekerja
10.	Pasang Batu Bata dg 1Pc : 4Ps/m ² tebal 1/2 bata. SK SNI T-03-1991-03 80.000 bh batu.bata 0.4000 zak pc 0.0510 m ³ pasir pasang 0.0480 mandor 0.0160 kepala tukang batu 0.1600 tukang batu 0.4800 pekerja	18.	Membuat bronjong dari kawat di galvano untuk diisi dengan batu be 3m ³ untuk kawat 5mm (G.5c) 79.0000 kg kawat 3.0000 m ³ batu belah 0.0800 mandor 2.0000 kepala tukang batu 2.5000 tukang batu 4.5000 pekerja
11.	Pasang Batu Bata dg 1Pc : 3Kp : 10Ps/m ² tebal 1/2 bata. SK SNI T-03-1991-03 80.000 bh batu bata 0.0145 zak pc 0.0046 m ³ kapur 0.0140 m ³ pasir pasang 0.0480 mandor 0.0160 kepala tukang batu 0.1600 tukang batu 1.4800 pekerja	II. PEKERJAAN BETON	
12.	Pasang Dinding Conblock dg 1 Pc : 5Ps/m ² . SK SNI T-03-1991-03 13.0000 bh conblock 0.1300 zak pc 0.0220 m ³ pasir pasang 0.6000 kg besi beton 0.0480 mandor 0.0160 kepala tukang batu 0.1600 tukang batu 0.4800 pekerja	1.	Pek. Beton dg 1Pc : 2 1/2 Ps : 2 1/2Kt/m ³ . BOW - G.41.a 8.1400 zak pc 0.8100 m ³ kerikil 0.4900 m ³ pasir beton 0.3000 mandor 0.1000 kepala tukang batu 1.0000 tukang batu 0.0000 pekerja
13.	Lantai tegel 20x20 dg 1 Kp : 3Ps/m ² . BOW - G.69 1.0000 m ² tegel 0.0030 m ³ kapur 0.0280 m ³ pasir pasang 0.0120 mandor 0.0080 kepala tukang batu 0.0800 tukang batu 0.2400 pekerja	2.	Pek. Beton dg 1Pc : 2 Ps : 4Kt/m ³ . BOW - G.42 5.9700 zak pc 0.9600 m ³ kerikil 0.4000 m ³ pasir beton 0.3000 mandor 0.1000 kepala tukang batu 1.0000 tukang batu 6.0000 pekerja
14.	Lantai tegel 20x20 dg 1Pc : 2Kp : 3Ps/m ² . BOW - G.59a 1.0000 m ² tegel 0.0200 zak pc 0.0160 m ³ kapur 0.0320 m ³ pasir pasang 0.0250 mandor 0.0250 kepala tukang batu 0.2500 tukang batu 0.5000 pekerja	3.	Pek. Beton dg 1Pc : 2 Ps : 3Kt/m ³ . BOW - G.41 6.8000 zak pc 0.8200 m ³ kerikil 0.5400 m ³ pasir beton 0.3000 mandor 0.1000 kepala tukang batu 1.0000 tukang batu 6.0000 pekerja
15.	Pasang tegel pini 15x20 atau 10x20 dg 1Pc : 2Ps/m ² BOW - G.69.a 5.0000 m ² tegel 0.0250 zak pc 0.0020 m ³ pasir pasang 0.0100 mandor 0.0100 kepala tukang batu 0.0100 tukang batu 0.2000 pekerja	4.	Pek. Beton dg 1Pc : 3 Ps : 5Kt/m ³ . BOW - G.44 4.2400 zak pc 1.0000 m ³ kerikil 0.5000 m ³ pasir beton 0.3000 mandor 0.0500 kepala tukang batu 0.5000 tukang batu 6.0000 pekerja
16.	Membuat bronjong dari kawat di galvano untuk diisi dengan batu belah tlap 3m ³ untuk kawat 3mm (G.5a) 25.0000 kg kawat 3.0000 m ³ batu belah 0.0800 mandor 1.6000 kepala tukang batu 2.2000 tukang batu 4.5000 pekerja	5.	Pekerjaan tulangan besi - BOW 125.0000 kg besi 2.0000 kg kawat besi 3.0000 kepala tukang besi 9.0000 tukang batu 9.0000 pekerja Tulangan 100 kg = 4/5 x A Tulangan 110 kg = 1.10 (4/5 x A)
		6.	1 m ² tulangan jaring2 baja, diameter 4-15 BOW 1.4000 kg jaring2 baja 1.0000 kg upah
		7.	Pekerjaan 10m ² celakan beton untuk 1 m ³ beton bertulang BOW 0.4000 m ³ kayu cetakan 4.0000 kg paku 0.1000 mandor 0.5000 kepala tukang kayu 5.0000 tukang kayu 2.0000 pekerja