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1 • Design Introduction

I. Name of Project: Shanghai Pudong Airport Aviation Filling Station Office Building

II. Structure type: Tow-floor brick & concrete structure

III. Foundation type: R.C. Strip foundation

IV. Aseismic intensity: 7

V. Site soil type: IV

VI. Soil endurance: $R=90\text{KPa}/\text{m}^2$ VII. Structure importance parameter: $R_0=1.0$

VIII. Foundation load-bearing layer elevation: 4.90

IX. Materials: column -- C25 beam board -- C25

wall: clay brick 240mm (5.40KN/m²)

X. Load:

1. Living load:	roof	1.50KN/m ²
	floor	1.50 KN/m ²

2. Static load:

floor

eiling	0.30KN/m ²
structure layer (100mm)	2.50KN/m ²
<u>floor (floor1)</u>	<u>2.20 KN/m²</u>
total	5.00 KN/m ²

roof

eiling	0.30KN/m ²
structure layer (100mm)	2.50KN/m ²
<u>roof (roof 1)</u>	<u>3.90KN/m²</u>
total	6.70 KN/m ²

XI. Selection of main members

1. Main beam (L=7200mm)

bxh=250x600

bxh=250x550

Main beam (L=5100mm)

bxh=250x550

2. Board thickness: h=100mm

XII. Design basis

1. Current national architecture & structure standards and codes;
2. Shanghai City's << Base Foundation Design Codes >> DBJ08--11--89;
3. Shanghai City's << Base Treatment Technical Codes >> DBJ08--40--94;
4. Shanghai City's << Building Aseismic Design Standards >> DBJ08--09--92;
5. << Shanghai Pudong Airport Oil Depot Rock & Soil Investigation Immediate Report >> made by

China Aviation Industry Investigation & Design Institute;

XIII. Computer programs

China Building Science Research Institute CAD Engineering Department

PMCAD CAD, structure plan CAD; August, 1996

PK Structural calculation & construction drawing making of R.C. Frame, framed bent and continuous beam; August, 1996

JCCAD Independent foundation & strip foundation design; August, 1996

XIV. Conclusion:

It is concluded from calculation above, the integral strength and deformation of structure meet the design requirements, the geometric dimensions also meet the requirements of strength and deformation regulated by Codes. The primary data of structural model, major calculation results, combining results of main internal forces of each member, structural layout, internal force drawing, reinforcing results of major members refer the next page, based on which construction drawings are made.

2 • Primary data document Hys pm (For PMCAD)

C---NST MST NAXIS NYS KCL KBE KDK MLOD ALIVE MXD MYD BLKD
DWS BLP

-3, 3, 26, -1, 4, 7, 0, 3, 1.00, 1, 1, 0.00, 1.00, 100.0

C---(HLA(i),i=1,NST)

5.000, 3.300, 2.700,

C---(MSH(i),i=1,MST)

1, 2, 3,

C---((XY(I,J),J=1,2),I=1,NJ)

1,	-13.651,	1.366
2,	-13.651,	6.466
3,	-13.651,	8.566
4,	-13.651,	13.666
5,	-10.051,	1.366
6,	-10.051,	6.466
7,	-10.051,	8.566
8,	-10.051,	13.666
9,	-6.451,	1.366
10,	-6.451,	6.466
11,	-6.451,	8.566
12,	-6.451,	13.666
13,	-2.851,	1.366
14,	-2.851,	6.466
15,	-2.851,	8.566
16,	-2.851,	13.666
17,	0.749,	-0.134
18,	0.749,	1.366
19,	0.749,	4.566
20,	0.749,	6.466
21,	0.749,	8.566
22,	0.749,	13.666
23,	4.349,	-0.134
24,	4.349,	1.366
25,	4.349,	4.566
26,	4.349,	6.466
27,	4.349,	8.566
28,	4.349,	13.666
29,	7.949,	0.154
30,	7.949,	1.366
31,	7.949,	6.466
32,	7.949,	8.566
33,	7.949,	13.666
34,	11.549,	-2.788

35,	11.549,	-0.438
36,	11.549,	1.366
37,	11.549,	6.466
38,	11.549,	8.566
39,	11.549,	13.666
40,	13.501,	-0.593
41,	13.499,	1.366
42,	15.149,	-0.634
43,	15.149,	1.366
44,	15.149,	6.466
45,	15.149,	8.566
46,	15.149,	13.666
47,	15.149,	32.666
48,	16.797,	-0.593
49,	16.799,	1.366
50,	18.749,	-2.851
51,	18.749,	-0.438
52,	18.749,	1.366
53,	18.749,	6.466
54,	18.749,	8.566
55,	18.749,	13.666
56,	22.349,	0.154
57,	22.349,	1.366
58,	22.349,	6.466
59,	22.349,	8.566
60,	22.349,	13.666
61,	25.949,	-0.134
62,	25.949,	1.366
63,	25.949,	4.566
64,	25.949,	6.466
65,	25.949,	8.566
66,	25.949,	13.666
67,	29.549,	-0.134
68,	29.549,	1.366
69,	29.549,	4.566
70,	29.549,	6.466
71,	29.549,	8.566
72,	29.549,	13.666
73,	33.149,	1.366
74,	33.149,	6.466
75,	33.149,	8.566
76,	33.149,	13.666
77,	36.749,	1.366
78,	36.749,	6.466

79,	36.749,	8.566
80,	36.749,	13.666
81,	40.349,	1.366
82,	40.349,	6.466
83,	40.349,	8.566
84,	40.349,	13.666
85,	43.949,	1.366
86,	43.949,	6.466
87,	43.949,	8.566
88,	43.949,	13.666

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C---((AXIS(I),I=1,NAXIS)

1,	4,	1,	2,	3,	4,						
2,	4,	5,	6,	7,	8,						
3,	4,	9,	10,	11,	12,						
4,	4,	13,	14,	15,	16,						
5,	6,	17,	18,	19,	20,	21,	22,				
6,	6,	23,	24,	25,	26,	27,	28,				
7,	5,	29,	30,	31,	32,	33,					
8,	6,	34,	35,	36,	37,	38,	39,				
9,	5,	42,	43,	44,	45,	46,					
10,	6,	50,	51,	52,	53,	54,	55,				
11,	5,	56,	57,	58,	59,	60,					
12,	6,	61,	62,	63,	64,	65,	66,				
13,	6,	67,	68,	69,	70,	71,	72,				
14,	4,	73,	74,	75,	76,						
15,	4,	77,	78,	79,	80,						
16,	4,	81,	82,	83,	84,						
17,	4,	85,	86,	87,	88,						
18,	19,	1,	5,	9,	13,	18,	24,	30,	36,	41,	43,
		49,	52,	57,	62,	68,	73,	77,	81,	85,	
19,	17,	4,	8,	12,	16,	22,	28,	33,	39,	46,	55,
		60,	66,	72,	76,	80,	84,	88,			
20,	17,	3,	7,	11,	15,	21,	27,	32,	38,	45,	54,
		59,	65,	71,	75,	79,	83,	87,			
21,	17,	2,	6,	10,	14,	20,	26,	31,	37,	44,	53,
		58,	64,	70,	74,	78,	82,	86,			
22,	4,	17,	23,	61,	67,						
23,	4,	19,	25,	63,	69,						
24,	2,	48,	49,								
25,	2,	40,	41,								
26,	2,	34,	50,								

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C---(CL(i),i=1,KCL)

1.000, 6.000, 0.400, 0.400,
 1.000, 6.000, 0.240, 0.240,
 3.000, 6.000, 0.400,
 1.000, 6.000, 0.300, 0.240,

C---(BE(i),i=1,KBE)

1.000, 6.000, 0.250, 0.600,
 1.000, 6.000, 0.250, 0.550,
 1.000, 6.000, 0.250, 0.500,
 1.000, 6.000, 0.250, 0.400,
 1.000, 6.000, 0.240, 0.240,
 1.000, 6.000, 0.250, 0.870,
 1.000, 6.000, 0.250, -0.870, -0.010,

C---((HSLD(i,j),j=1,3),i=1,MLOD)

1.000, 5.000, 1.500,
 2.000, 6.700, 1.500,
 3.000, 6.700, 0.700,

C---QUE JEI DIAN

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C=====C

C LAYER 1

C=====C

C---BHOU RWB BHC IC ICC IG

0.100, 20.0, 0.015, 20.0, 20.0, 2

C---((AXIS(I),I=1,NAXIS)

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 2, 4, 5, 6, 7, 8,
 3, 4, 9, 10, 11, 12,
 4, 4, 13, 14, 15, 16,
 5, 6, 17, 18, 19, 20, 21, 22,
 6, 6, 23, 24, 25, 26, 27, 28,
 7, 5, 29, 30, 31, 32, 33,
 8, 6, 34, 35, 36, 37, 38, 39,
 9, 5, 42, 43, 44, 45, 46,
 10, 6, 50, 51, 52, 53, 54, 55,
 11, 5, 56, 57, 58, 59, 60,
 12, 6, 61, 62, 63, 64, 65, 66,
 13, 6, 67, 68, 69, 70, 71, 72,
 14, 4, 73, 74, 75, 76,
 15, 4, 77, 78, 79, 80,
 16, 4, 81, 82, 83, 84,
 17, 4, 85, 86, 87, 88,
 18, 19, 1, 5, 9, 13, 18, 24, 30, 36, 41, 43,
 49, 52, 57, 62, 68, 73, 77, 81, 85,
 19, 17, 4, 8, 12, 16, 22, 28, 33, 39, 46, 55,

		60,	66,	72,	76,	80,	84,	88,			
20,	17,	3,	7,	11,	15,	21,	27,	32,	38,	45,	54,
		59,	65,	71,	75,	79,	83,	87,			
21,	17,	2,	6,	10,	14,	20,	26,	31,	37,	44,	53,
		58,	64,	70,	74,	78,	82,	86,			
22,	4,	17,	23,	61,	67,						
23,	4,	19,	25,	63,	69,						
24,	2,	48,	49,								
25,	2,	40,	41,								
26,	2,	34,	50,								

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C--- ZHU ---

1801,	2,	0.000,	0.000
1803,	2,	0.000,	0.000
1808,	1,	0.000,	0.000
1812,	1,	0.000,	0.000
1817,	2,	0.000,	0.000
1819,	2,	0.000,	0.000
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1911,	2,	0.000,	0.000
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1917,	2,	0.000,	0.000
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2011,	2,	0.000,	0.000
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2015,	2,	0.000,	0.000
2017,	2,	0.000,	0.000
2101,	2,	0.000,	0.000
2103,	2,	0.000,	0.000
210507,	2,	0.000,	0.000
2108,	1,	0.000,	0.000
2110,	1,	0.000,	0.000
211113,	2,	0.000,	0.000
2115,	2,	0.000,	0.000
2117,	2,	0.000,	0.000
220104,	2,	0.000,	0.000
260102,	3,	0.000,	0.000

10000029,	2,	0.000,	0.000,	0
10000035,	2,	0.000,	0.000,	0
10000051,	2,	0.000,	0.000,	0
10000056,	2,	0.000,	0.000,	0
10000048,	4,	0.000,	0.000,	0
10000040,	4,	0.000,	0.000,	0

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C--- LIANG ---

801,	4,	0.000
902,	3,	0.000
1001,	4,	0.000
1003,	3,	0.000
180811,	2,	0.000
2105,	4,	0.000
210809,	1,	0.000
2112,	4,	0.000
2301,	4,	0.000
2303,	4,	0.000
2601,	3,	0.000
10042048,	7,	0.000
10048051,	7,	0.000
10035040,	7,	0.000
10040042,	7,	0.000

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C--- QIANG ---

10103,	0.240,	0.000
201,	0.240,	0.000
203,	0.240,	0.000
301,	0.240,	0.000
303,	0.240,	0.000
401,	0.240,	0.000
403,	0.240,	0.000
50103,	0.240,	0.000
505,	0.240,	0.000
60103,	0.240,	0.000
605,	0.240,	0.000
70102,	0.240,	0.000
704,	0.240,	0.000
80203,	0.240,	0.000
805,	0.240,	0.000
904,	0.240,	0.000
1002,	0.240,	0.000
1005,	0.240,	0.000
110102,	0.240,	0.000

1104,	0.240,	0.000	
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1205,	0.240,	0.000	
130103,	0.240,	0.000	
1305,	0.240,	0.000	
1401,	0.240,	0.000	
1403,	0.240,	0.000	
1501,	0.240,	0.000	
1503,	0.240,	0.000	
1601,	0.240,	0.000	
1603,	0.240,	0.000	
170103,	0.240,	0.000	
180104,	0.240,	0.000	
1806,	0.240,	0.000	
1813,	0.240,	0.000	
181518,	0.240,	0.000	
190116,	0.240,	0.000	
200116,	0.240,	0.000	
210104,	0.240,	0.000	
210607,	0.240,	0.000	
211011,	0.240,	0.000	
211316,	0.240,	0.000	
2201,	0.240,	0.000	
2203,	0.240,	0.000	
10029035,	-0.240,	-0.050,	0.000
10051056,	-0.240,	-0.050,	0.000

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C--- DONG KOU ---

0

C=====C

C LAYER 2

C=====C

C--BHOU RWB BHC IC ICC IG

0.100, 20.0, 0.015, 20.0, 20.0, 2

C---((AXIS(I),I=1,NAXIS)

1,	4,	1,	2,	3,	4,		
2,	4,	5,	6,	7,	8,		
3,	4,	9,	10,	11,	12,		
4,	4,	13,	14,	15,	16,		
5,	6,	17,	18,	19,	20,	21,	22,
6,	6,	23,	24,	25,	26,	27,	28,
7,	5,	29,	30,	31,	32,	33,	
8,	5,	35,	36,	37,	38,	39,	
9,	5,	42,	43,	44,	45,	46,	

10,	5,	51,	52,	53,	54,	55,						
11,	5,	56,	57,	58,	59,	60,						
12,	6,	61,	62,	63,	64,	65,	66,					
13,	6,	67,	68,	69,	70,	71,	72,					
14,	4,	73,	74,	75,	76,							
15,	4,	77,	78,	79,	80,							
16,	4,	81,	82,	83,	84,							
17,	4,	85,	86,	87,	88,							
18,	17,	1,	5,	9,	13,	18,	24,	30,	36,	43,	52,	
		57,	62,	68,	73,	77,	81,	85,				
19,	17,	4,	8,	12,	16,	22,	28,	33,	39,	46,	55,	
		60,	66,	72,	76,	80,	84,	88,				
20,	17,	3,	7,	11,	15,	21,	27,	32,	38,	45,	54,	
		59,	65,	71,	75,	79,	83,	87,				
21,	17,	2,	6,	10,	14,	20,	26,	31,	37,	44,	53,	
		58,	64,	70,	74,	78,	82,	86,				
22,	4,	17,	23,	61,	67,							
23,	4,	19,	25,	63,	69,							

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C--- ZHU ---

1801,	2,	0.000,	0.000
1803,	2,	0.000,	0.000
1808,	1,	0.000,	0.000
1810,	1,	0.000,	0.000
1815,	2,	0.000,	0.000
1817,	2,	0.000,	0.000
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1903,	2,	0.000,	0.000
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1907,	2,	0.000,	0.000
1911,	2,	0.000,	0.000
1913,	2,	0.000,	0.000
1915,	2,	0.000,	0.000
1917,	2,	0.000,	0.000
2001,	2,	0.000,	0.000
2003,	2,	0.000,	0.000
2005,	2,	0.000,	0.000
2007,	2,	0.000,	0.000
2011,	2,	0.000,	0.000
2013,	2,	0.000,	0.000
2015,	2,	0.000,	0.000
2017,	2,	0.000,	0.000
2101,	2,	0.000,	0.000
2103,	2,	0.000,	0.000

210507,	2,	0.000,	0.000	
2108,	1,	0.000,	0.000	
2110,	1,	0.000,	0.000	
211113,	2,	0.000,	0.000	
2115,	2,	0.000,	0.000	
2117,	2,	0.000,	0.000	
220104,	2,	0.000,	0.000	
10000029,	2,	0.000,	0.000,	0
10000056,	2,	0.000,	0.000,	0
10000051,	2,	0.000,	0.000,	0
10000035,	2,	0.000,	0.000,	0

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C--- LIANG ---

80102,	3,	0.000	
902,	3,	0.000	
904,	3,	0.000	
100102,	3,	0.000	
180809,	2,	0.000	
2105,	4,	0.000	
210809,	2,	0.000	
2112,	4,	0.000	
2301,	4,	0.000	
2303,	4,	0.000	

0

C--- QIANG ---

10103,	0.240,	0.000	
201,	0.240,	0.000	
203,	0.240,	0.000	
301,	0.240,	0.000	
303,	0.240,	0.000	
401,	0.240,	0.000	
403,	0.240,	0.000	
50103,	0.240,	0.000	
505,	0.240,	0.000	
60103,	0.240,	0.000	
605,	0.240,	0.000	
70102,	0.240,	0.000	
704,	0.240,	0.000	
804,	0.240,	0.000	
1004,	0.240,	0.000	
110102,	0.240,	0.000	
1104,	0.240,	0.000	
120103,	0.240,	0.000	
1205,	0.240,	0.000	

130103,	0.240,	0.000	
1305,	0.240,	0.000	
1401,	0.240,	0.000	
1403,	0.240,	0.000	
1501,	0.240,	0.000	
1503,	0.240,	0.000	
1601,	0.240,	0.000	
1603,	0.240,	0.000	
170103,	0.240,	0.000	
180104,	0.240,	0.000	
1806,	0.240,	0.000	
1811,	0.240,	0.000	
181316,	0.240,	0.000	
190116,	0.240,	0.000	
200116,	0.240,	0.000	
210104,	0.240,	0.000	
210607,	0.240,	0.000	
211011,	0.240,	0.000	
211316,	0.240,	0.000	
2201,	0.240,	0.000	
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10029035,	-0.240,	-0.050,	0.000
10051055,	-0.240,	-0.050,	0.000
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0

C--- DONG KOU ---

0

C=====C

C LAYER 3

C=====C

C---BHOU RWB BHC IC ICC IG

0.100, 20.0, 0.015, 20.0, 20.0, 2

C---((AXIS(I),I=1,NAXIS)

1,	4,	1,	2,	3,	4,		
2,	4,	5,	6,	7,	8,		
3,	4,	9,	10,	11,	12,		
4,	4,	13,	14,	15,	16,		
5,	6,	17,	18,	19,	20,	21,	22,
6,	6,	23,	24,	25,	26,	27,	28,
7,	5,	29,	30,	31,	32,	33,	
8,	5,	35,	36,	37,	38,	39,	
9,	5,	42,	43,	44,	45,	46,	
10,	5,	51,	52,	53,	54,	55,	

11, 5, 56, 57, 58, 59, 60,
 12, 6, 61, 62, 63, 64, 65, 66,
 13, 6, 67, 68, 69, 70, 71, 72,
 14, 4, 73, 74, 75, 76,
 15, 4, 77, 78, 79, 80,
 16, 4, 81, 82, 83, 84,
 17, 4, 85, 86, 87, 88,
 18, 17, 1, 5, 9, 13, 18, 24, 30, 36, 43, 52,
 57, 62, 68, 73, 77, 81, 85,
 19, 17, 4, 8, 12, 16, 22, 28, 33, 39, 46, 55,
 60, 66, 72, 76, 80, 84, 88,
 20, 17, 3, 7, 11, 15, 21, 27, 32, 38, 45, 54,
 59, 65, 71, 75, 79, 83, 87,
 21, 17, 2, 6, 10, 14, 20, 26, 31, 37, 44, 53,
 58, 64, 70, 74, 78, 82, 86,
 22, 4, 17, 23, 61, 67,
 23, 4, 19, 25, 63, 69,

0

C--- ZHU ---

210506, 2, 0.000, 0.000
 211213, 2, 0.000, 0.000
 220104, 2, 0.000, 0.000

0

C--- LIANG ---

0

C--- QIANG ---

50103, 0.240, 0.000
 60103, 0.240, 0.000
 120103, 0.240, 0.000
 130103, 0.240, 0.000
 2105, 0.240, 0.000
 2112, 0.240, 0.000
 2201, 0.240, 0.000
 2203, 0.240, 0.000

0

C--- DONG KOU ---

0

C=====C

C---KZDJ NV IB IY INF CC
 2, 3, 7, 2.00, 0, 1.00

EOF

1 ,2 ,3 ,4 ,5 ,6 ,7 ,8 ,9 ,: ,; ,< ,
 = ,> ,? ,@ ,A ,A ,D ,C ,B , ,al ,

END

4 • Structure analysis of Beam (L1 ~ 5) result document

#####

***** PK11.EXE *****

DATA: 6/28/1997

OUTPUT DATA

30 19 6 0 19 9 1 0 5 20 20 2 0

0

.90 1.00

0

OUTPUT DATA

(1) .00 -2.00 (2) .00 .00 (3) .00 2.00 (4) 7.20 -2.00

(5) 7.20 .00 (6) 7.20 2.00 (7) .00 3.00 (8) .00 5.00

(9) .00 7.00 (10) 7.20 3.00 (11) 7.20 5.00 (12) 7.20 7.00

(13) .00 8.00 (14) .00 10.00 (15) 5.10 8.00 (16) 5.10 10.00

(17) 7.20 8.00 (18) 7.20 10.00 (19) .00 13.00 (20) .00 15.00

(21) .00 17.00 (22) 5.10 13.00 (23) 5.10 15.00 (24) 5.10 17.00

(25) .00 18.00 (26) .00 20.00 (27) .00 22.00 (28) 3.60 18.00

(29) 3.60 20.00 (30) 3.60 22.00

OUTPUT DATA

(1) 1 2 (2) 2 3 (3) 4 5 (4) 5 6 (5) 7 8

(6) 8 9 (7) 10 11 (8) 11 12 (9) 13 14 (10) 15 16

(11) 17 18 (12) 19 20 (13) 20 21 (14) 22 23 (15) 23 24

(16) 25 26 (17) 26 27 (18) 28 29 (19) 29 30

(1) 2 5 (2) 8 11 (3) 14 16 (4) 16 18 (5) 20 23

(6) 26 29

OUTPUT DATA

(1) 1111 (2) 3111 (3) 4111 (4) 6111 (5) 7111

(6) 9111 (7) 10111 (8) 12111 (9) 13111 (10) 15111

(11) 17111 (12) 19111 (13) 21111 (14) 22111 (15) 24111

(16) 25111 (17) 27111 (18) 28111 (19) 30111

OUTPUT DATA

(1) 1.00 (2) 1.00 (3) 1.00 (4) 1.00 (5) 1.00 (6) 1.00 (7) 1.00

(8) 1.00 (9) 1.00 (10) 1.00 (11) 1.00 (12) 1.00 (13) 1.00 (14) 1.00

(15) 1.00 (16) 1.00 (17) 1.00 (18) 1.00 (19) 1.00

OUTPUT DATA

(1) .00 (2) .00 (3) .00 (4) .00 (5) .00 (6) .00 (7) .00

(8) .00 (9) .00 (10) .00 (11) .00 (12) .00 (13) .00 (14) .00

(15) .00 (16) .00 (17) .00 (18) .00 (19) .00 (20) .00 (21) .00
 (22) .00 (23) .00 (24) .00 (25) .00 (26) .00 (27) .00 (28) .00
 (29) .00 (30) .00

OUTPUT DATA

(1)	1.00	.25	.55	.00	.00	.00
(2)	1.00	.25	.60	.00	.00	.00
(3)	1.00	.25	.50	.00	.00	.00
(4)	1.00	.24	.24	.00	.00	.00
(5)	1.00	.25	.40	.00	.00	.00
(6)	1.00	-.40	.40	.00	.00	.00
(7)	1.00	-.50	.25	.00	.00	.00
(8)	1.00	-.50	.24	.00	.00	.00
(9)	1.00	-.24	.24	.00	.00	.00

OUTPUT DATA

(1)6 (2)6 (3)6 (4)6 (5)6 (6)6 (7)6 (8)6 (9)7
 (10)7 (11)8 (12)6 (13)6 (14)6 (15)6 (16)9 (17)9 (18)9
 (19)9
 (1)1 (2)2 (3)3 (4)4 (5)3 (6)5

HQQ= 87

STIF COMPUTE

DEAD COMPUTE

JOINT LOAD: JR XM XN
 0

COLUMN LOAD: JC KL P X KX
 0

BEAM	LOAD:	NE	LI	KL	P	X	PI	XI
		1	5	2	7.40	3.60		
				10	9.00	.00	.00	1.80
				4	37.30	3.60		
				3	7.40	3.60		
				10	9.00	3.60	.00	1.80
		1	5	2	8.20	3.60		
				4	45.10	3.60		
				10	9.00	.00	.00	1.80
				3	8.20	3.60		
				10	9.00	3.60	.00	1.80
		1	2	1	3.10	.00		
				6	18.00	1.80		
		1	2	1	1.40	.00		
				6	10.50	1.05		

1	2	1	8.90	.00
		6	9.00	1.80
1	3	1	7.00	.00
		4	7.00	3.60
		6	4.80	.95

****DEAD LOAD****

STIF COMPUTE
LIVE COMPUTE

JOINT LOAD: JR XM XN
0

COLUMN LOAD: JC KL P X KX
0

BEAM	LOAD:	NE	LI	KL	P	X	PI	XI
1	5			2	1.60	3.60		
				10	3.60	.00	.00	1.80
				4	11.70	3.60		
				3	1.60	3.60		
				10	3.60	3.60	.00	1.80
1	5			2	1.30	3.60		
				4	13.70	3.60		
				10	3.60	.00	.00	1.80
				3	1.30	3.60		
				10	3.60	3.60	.00	1.80
1	1			6	7.20	1.80		
1	1			6	3.20	1.05		
1	2			6	3.60	1.80		
				1	2.30	.00		
1	3			1	1.30	.00		
				4	1.70	3.60		
				6	1.40	.95		

COMBI COMPUTE

****COMBINATION AND REINFORCEMENT****

COLUMN 1 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1	As=	0.	M=	-.11	N=	36.89
NO 1	As=	0.	M=	-.21	N=	-36.89
	GG=	320.				

COLUMN 2 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.21 N= -36.89
 NO 1 As= 0. M= -.11 N= 36.89
 GG= 320.

COLUMN 3 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .11 N= 36.89
 NO 1 As= 0. M= .21 N= -36.89
 GG= 320.

COLUMN 4 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .21 N= -36.89
 NO 1 As= 0. M= .11 N= 36.89
 GG= 320.

COLUMN 5 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.09 N= 40.96
 NO 1 As= 0. M= -.19 N= -40.96
 GG= 320.

COLUMN 6 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.19 N= -40.96
 NO 1 As= 0. M= -.09 N= 40.96
 GG= 320.

COLUMN 7 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .09 N= 40.96
 NO 1 As= 0. M= .19 N= -40.96
 GG= 320.

COLUMN 8 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .19 N= -40.96
 NO 1 As= 0. M= .09 N= 40.96
 GG= 320.

COLUMN 9 (B= .500, H= .250, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.03 N= 41.58

NO 1 As= 0. M= -.07 N= -41.58
GG= 250.

COLUMN 10 (B= .500, H= .250, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .04 N= 65.67
NO 1 As= 0. M= .07 N= -65.67
GG= 250.

COLUMN 11 (B= .500, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .00 N= -.24
NO 1 As= 0. M= -.01 N= .24
GG= 240.

COLUMN 12 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.04 N= 22.53
NO 1 As= 0. M= -.08 N= -22.53
GG= 320.

COLUMN 13 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.08 N= -22.53
NO 1 As= 0. M= -.04 N= 22.53
GG= 320.

COLUMN 14 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .04 N= 22.53
NO 1 As= 0. M= .08 N= -22.53
GG= 320.

COLUMN 15 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .08 N= -22.53
NO 1 As= 0. M= .04 N= 22.53
GG= 320.

COLUMN 16 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.02 N= 11.38
NO 1 As= 0. M= -.04 N= -11.38
GG= 115.

COLUMN 17 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.04 N= -11.38
 NO 1 As= 0. M= -.02 N= 11.38
 GG= 115.

COLUMN 18 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .02 N= 15.58
 NO 1 As= 0. M= .04 N= -15.58
 GG= 115.

COLUMN 19 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .04 N= -15.58
 NO 1 As= 0. M= .02 N= 15.58
 GG= 115.

BEAM 1 (B= .250, H= .550, L= 7.20)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-107.88	-185.69	-232.91	-185.69	-107.88	.00
As(1)=	206.	735.	1368.	1822.	1368.	735.	206.
As(2)=	206.	0.	1472.	1988.	1472.	0.	206.

TOP

SECTION	1	2	3	4	5	6	7
M=	.52	.00	.00	.00	.00	.00	.52
As(1)=	206.	0.	0.	0.	0.	0.	206.
As(2)=	206.	0.	0.	0.	0.	0.	206.

VI= 99.11 NO 1 Vr= 99.11 NO 3 As(3)= 206. Umaxb= .013 Umact=.002
 Asv/s= .06

BEAM 2 (B= .250, H= .600, L= 7.20)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-117.20	-203.47	-258.38	-203.47	-117.20	.00
As(1)=	225.	721.	1341.	1798.	1341.	721.	225.
As(2)=	225.	0.	0.	1934.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	.44	.00	.00	.00	.00	.00	.44
As(1)=	225.	0.	0.	0.	0.	0.	225.

As(2)= 225. 0. 0. 0. 0. 0. 225.

VI= 107.14 NO 1 Vr= 107.14 NO 3 As(3)= 225. Umaxb= .012 Umaxt= .001
Asv/s= .05

BEAM 3 (B= .250, H= .500, L= 5.10)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-45.76	-78.10	-87.38	-71.09	-31.73	.00
As(1)=	188.	331.	583.	659.	527.	226.	188.
As(2)=	188.	0.	0.	0.	0.	0.	188.

TOP

SECTION	1	2	3	4	5	6	7
M=	.09	.00	.00	.00	.00	.00	22.22
As(1)=	188.	0.	0.	0.	0.	0.	188.
As(2)=	188.	0.	0.	0.	0.	0.	188.

VI= 56.94 NO 1 Vr= 66.58 NO 3 As(3)= 188. Umaxb= .005 Umaxt= .002
Asv/s= .00

BEAM 4 (B= .240, H= .240, L= 2.10)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	.00	.00	-.49	-.65	-.02
As(1)=	86.	0.	0.	0.	8.	10.	86.
As(2)=	86.	0.	0.	0.	0.	0.	86.

TOP

SECTION	1	2	3	4	5	6	7
M=	22.13	14.78	9.25	4.95	2.23	.75	.00
As(1)=	392.	251.	152.	80.	35.	12.	86.
As(2)=	392.	0.	0.	0.	0.	0.	86.

VI= 22.45 NO 1 Vr= -2.72 NO 2 As(3)= 86. Umaxb= .002 Umaxt= .007
Asv/s= .00

BEAM 5 (B= .250, H= .500, L= 5.10)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-46.22	-77.19	-87.94	-77.19	-46.22	.00
As(1)=	188.	334.	576.	663.	576.	334.	188.
As(2)=	188.	0.	0.	0.	0.	0.	188.

TOP

SECTION	1	2	3	4	5	6	7
M=	.20	.00	.00	.00	.00	.00	.20

As(1)= 188. 0. 0. 0. 0. 0. 188.
 As(2)= 188. 0. 0. 0. 0. 0. 188.

VI= 61.58 NO 1 Vr= 61.58 NO 3 As(3)= 188. Umaxb= .005 Umaxt= .002
 Asv/s= .00

BEAM 6 (B= .250, H= .400, L= 3.60)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-14.95	-24.58	-27.81	-24.58	-14.95	.00
As(1)=	150.	135.	225.	256.	225.	135.	150.
As(2)=	150.	0.	0.	0.	0.	0.	150.

TOP

SECTION	1	2	3	4	5	6	7
M=	.09	.00	.00	.00	.00	.00	.09
As(1)=	150.	0.	0.	0.	0.	0.	150.
As(2)=	150.	0.	0.	0.	0.	0.	150.

VI= 28.63 NO 1 Vr= 39.40 NO 3 As(3)= 150. Umaxb= .003 Umaxt= .002
 Asv/s= .00

PK1 COMPUTE END

4 • Structure analysis of Beam (L6 ~ 10) result document

#####

***** PK11.EXE *****

DATA: 6/28/1997

OUTPUT DATA

28 15 8 0 15 8 1 0 4 25 25 2 0

0

.90 1.00

0

OUTPUT DATA

(1) .00 -2.00 (2) .00 .00 (3) 7.20 -2.00 (4) 7.20 .00

(5) .00 3.00 (6) .00 5.00 (7) 7.20 3.00 (8) 7.20 5.00

(9) .00 8.00 (10) .00 10.00 (11) 1.81 8.00 (12) 1.81 10.00

(13) 6.91 8.00 (14) 6.91 10.00 (15) .00 13.00 (16) .00 15.00

(17) 5.10 13.00 (18) 5.10 15.00 (19) 7.20 13.00 (20) 7.20 15.00

(21) 12.30 13.00 (22) 12.30 15.00 (23) .00 18.00 (24) .00 20.00

(25) .00 22.00 (26) 3.60 18.00 (27) 3.60 20.00 (28) 3.60 22.00

OUTPUT DATA

(1) 1 2 (2) 3 4 (3) 5 6 (4) 7 8 (5) 9 10

(6) 11 12 (7) 13 14 (8) 15 16 (9) 17 18 (10) 19 20

(11) 21 22 (12) 23 24 (13) 24 25 (14) 26 27 (15) 27 28

(1) 2 4 (2) 6 8 (3) 10 12 (4) 12 14 (5) 16 18

(6) 18 20 (7) 20 22 (8) 24 27

OUTPUT DATA

(1) 1111 (2) 3111 (3) 5111 (4) 7111 (5) 9111

(6) 11111 (7) 13111 (8) 15111 (9) 17111 (10) 19111

(11) 21111 (12) 23111 (13) 25111 (14) 26111 (15) 28111

OUTPUT DATA

(1) 1.00 (2) 1.00 (3) 1.00 (4) 1.00 (5) 1.00 (6) 1.00 (7) 1.00

(8) 1.00 (9) 1.00 (10) 1.00 (11) 1.00 (12) 1.00 (13) 1.00 (14) 1.00

(15) 1.00

OUTPUT DATA

(1) .00 (2) .00 (3) .00 (4) .00 (5) .00 (6) .00 (7) .00

(8) .00 (9) .00 (10) .00 (11) .00 (12) .00 (13) .00 (14) .00

(15) .00 (16) .00 (17) .00 (18) .00 (19) .00 (20) .00 (21) .00

(22) .00 (23) .00 (24) .00 (25) .00 (26) .00 (27) .00 (28) .00

OUTPUT DATA

(1)	1.00	.30	.55	.00	.00	.00
(2)	1.00	.25	.50	.00	.00	.00
(3)	1.00	.24	.24	.00	.00	.00
(4)	1.00	.25	.40	.00	.00	.00
(5)	1.00	-.40	.40	.00	.00	.00
(6)	1.00	-.24	.24	.00	.00	.00
(7)	1.00	-.50	.25	.00	.00	.00
(8)	1.00	-.50	.24	.00	.00	.00

OUTPUT DATA

(1)5 (2)5 (3)5 (4)5 (5)6 (6)5 (7)5 (8)7 (9)7
 (10)8 (11)8 (12)6 (13)6 (14)6 (15)6
 (1)1 (2)1 (3)2 (4)2 (5)2 (6)3 (7)2 (8)4

IIQQ= 111

STIF COMPUTE

DEAD COMPUTE

JOINT LOAD: JR XM XN
 0

COLUMN LOAD: JC KL P X KX
 0

BEAM LOAD: NE LI KL P X P1 X1

1	5	2	8.50	3.60		
		10	12.10	.00	.00	1.80
		4	48.00	3.60		
		3	8.50	3.60		
		10	12.10	3.60	.00	1.80
1	5	2	9.40	3.60		
		4	56.50	3.60		
		10	12.10	.00	.00	1.80
		3	9.40	3.60		
		10	12.10	3.60	.00	1.80
1	1	1	16.00	.00		
1	2	1	10.90	.00		
		6	12.10	1.80		
1	2	1	3.10	.00		
		6	24.10	1.80		
1	2	1	1.40	.00		
		6	14.10	1.05		
1	2	1	3.10	.00		
		6	24.10	1.80		
1	3	1	8.50	.00		

4 8.90 3.60
6 6.40 .95

****DEAD LOAD****

STIF COMPUTE
LIVE COMPUTE

JOINT LOAD:	JR	XM	XN				
	0						
COLUMN LOAD:	JC	KL	P	X	KX		
	0						
BEAM LOAD:	NE	LI	KL	P	X	P1	X1
	1	5	2	1.10	3.60		
			10	2.70	.00	.00	1.80
			4	8.90	3.60		
			3	1.10	3.60		
			10	2.70	3.60	.00	1.80
	1	5	2	1.30	3.60		
			4	10.50	3.60		
			10	2.70	.00	.00	1.80
			3	1.30	3.60		
			10	2.70	3.60	.00	1.80
	1	1	1	2.90	.00		
	1	2	1	1.70	.00		
			6	2.70	1.80		
	1	1	6	5.40	1.80		
	1	1	6	3.20	1.05		
	1	1	6	5.40	1.80		
	1	3	1	1.30	.00		
			4	1.70	3.60		
			6	1.40	.95		

EART COMPUTE
COMBI COMPUTE

****COMBINATION AND REINFORCEMENT****

COLUMN 1 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.11 N= 91.66
NO 1 As= 0. M= -.22 N= -91.66
GG= 400.

COLUMN 2 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .11 N= 91.66
 NO 1 As= 0. M= .22 N= -91.66
 GG= 400.

COLUMN 3 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.12 N= 100.64
 NO 1 As= 0. M= -.25 N= -100.64
 GG= 400.

COLUMN 4 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .12 N= 100.64
 NO 1 As= 0. M= .25 N= -100.64
 GG= 400.

COLUMN 5 (B= .240 H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.01 N= -16.53
 NO 1 As= 0. M= .00 N= 16.53
 GG= 144.

COLUMN 6 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.02 N= 120.48
 NO 1 As= 0. M= -.04 N= -120.48
 GG= 400.

COLUMN 7 (B= .400, H= .400, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .02 N= 45.33
 NO 1 As= 0. M= .05 N= -45.33
 GG= 400.

COLUMN 8 (B= .500, H= .250, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.05 N= 53.96
 NO 1 As= 0. M= -.10 N= -53.96
 GG= 312.

COLUMN 9 (B= .500, H= .250, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .05 N= 71.10

NO 1 As= 0. M= .09 N= -71.10
GG= 312.

COLUMN 10 (B= .500, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.05 N= 71.10
NO 1 As= 0. M= -.09 N= -71.10
GG= 300.

COLUMN 11 (B= .500, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .05 N= 53.96
NO 1 As= 0. M= .10 N= -53.96
GG= 300.

COLUMN 12 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.02 N= 14.27
NO 1 As= 0. M= -.05 N= -14.27
GG= 144.

COLUMN 13 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= -.05 N= -14.27
NO 1 As= 0. M= -.02 N= 14.27
GG= 144.

COLUMN 14 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .02 N= 19.61
NO 1 As= 0. M= .05 N= -19.61
GG= 144.

COLUMN 15 (B= .240, H= .240, Lx= 2.00, Ly= 2.00)

NO 1 As= 0. M= .05 N= -19.61
NO 1 As= 0. M= .02 N= 19.61
GG= 144.

BEAM 1 (B= .300, H= .550, L= 7.20)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-120.66	-207.82	-261.23	-207.82	-120.66	.00
As(1)=	413.	804.	1460.	1906.	1460.	804.	413.

As(2)= 413. 0. 0. 2047. 0. 0. 413.

TOP

SECTION 1 2 3 4 5 6 7

M= .24 .00 .00 .00 .00 .00 .24

As(1)= 413. 0. 0. 0. 0. 0. 413.

As(2)= 413. 0. 0. 0. 0. 0. 413.

VI= 110.23 NO 1 Vr= 110.23 NO 3 As(3)= 413. Umaxb=.012 Umact=.003

Asv's= .00

BEAM 2 (B= .300, H= .550, L= 7.20)

BOTTOM

SECTION 1 2 3 4 5 6 7

M= .00 -132.99 -230.55 -292.41 -230.55 -132.99 .00

As(1)= 413. 892. 1645. 2187. 1645. 892. 413.

As(2)= 413. 0. 1760. 2360. 1760. 0. 413.

TOP

SECTION 1 2 3 4 5 6 7

M= .27 .00 .00 .00 .00 .00 .27

As(1)= 413. 0. 0. 0. 0. 0. 413.

As(2)= 413. 0. 0. 0. 0. 0. 413.

VI= 121.35 NO 1 Vr= 121.35 NO 3 As(3)= 413. Umaxb=.013 Umact=.003

Asv's= .00

BEAM 3 (B= .250, H= .500, L= 1.81)

BOTTOM

SECTION 1 2 3 4 5 6 7

M= .00 .00 .00 .00 .00 .00 .00

As(1)= 313. 0. 0. 0. 0. 0. 313.

As(2)= 313. 0. 0. 0. 0. 0. 313.

TOP

SECTION 1 2 3 4 5 6 7

M= .00 6.71 15.16 25.34 37.26 50.92 66.73

As(1)= 313. 47. 106. 179. 265. 367. 486.

As(2)= 313. 0. 0. 0. 0. 0. 486.

VI= -20.09 NO 1 Vr= 62.07 NO 3 As(3)= 313. Umaxb=.002 Umact=.004

Asv's= .00

BEAM 4 (B= .250, H= .500, L= 5.10)

BOTTOM

SECTION 1 2 3 4 5 6 7

M= .00 .00 -43.43 -66.67 -65.53 -41.44 .00

As(1)= 313. 0. 311. 486. 477. 296. 313.
 As(2)= 313. 0. 0. 0. 0. 0. 313.

TOP

SECTION	1	2	3	4	5	6	7
M=	66.77	3.06	.00	.00	.00	.00	.06
As(1)=	487.	21.	0.	0.	0.	0.	313.
As(2)=	487.	0.	0.	0.	0.	0.	313.

VI= 84.15 NO 1 Vr= 55.17 NO 3 As(3)= 313. Umaxb= .004 Umxt= .004
 Asv/s= .00

BEAM 5 (B= .250, H= .500, L= 5.10)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-52.78	-90.55	-102.15	-84.72	-41.14	.00
As(1)=	313.	380.	673.	767.	627.	294.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	.11	.00	.00	.00	.00	.00	19.99
As(1)=	313.	0.	0.	0.	0.	0.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

VI= 65.87 NO 1 Vr= 74.01 NO 3 As(3)= 313. Umaxb= .006 Umxt= .002
 Asv/s= .00

BEAM 6 (B= .240, H= .240, L= 2.10)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	.00	.00	.00	.00	.00
As(1)=	144.	0.	0.	0.	0.	0.	144.
As(2)=	144.	0.	0.	0.	0.	0.	144.

TOP

SECTION	1	2	3	4	5	6	7
M=	19.89	13.97	11.36	10.33	11.36	13.97	19.88
As(1)=	340.	232.	187.	169.	187.	232.	340.
As(2)=	340.	0.	0.	0.	0.	0.	340.

VI= 16.08 NO 1 Vr= 16.07 NO 3 As(3)= 144. Umaxb= .002 Umxt= .006
 Asv/s= .00

BEAM 7 (B= .250, H= .500, L= 5.10)

BOTTOM

SECTION	1	2	3	4	5	6	7
---------	---	---	---	---	---	---	---

M= .00 -41.14 -84.73 -102.16 -90.55 -52.78 .00
 As(1)= 313. 294. 627. 767. 673. 380. 313.
 As(2)= 313. 0. 0. 0. 0. 0. 313.

TOP

SECTION	1	2	3	4	5	6	7
M=	19.98	.00	.00	.00	.00	.00	.11
As(1)=	313.	0.	0.	0.	0.	0.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

VI= 74.01 NO 1 Vr= 65.87 NO 3 As(3)= 313. Umaxb=.006 Umaxt=.002
 Asw/s= .00

BEAM 8 (B= .250, H= .400, L= 3.60)

BOTTOM

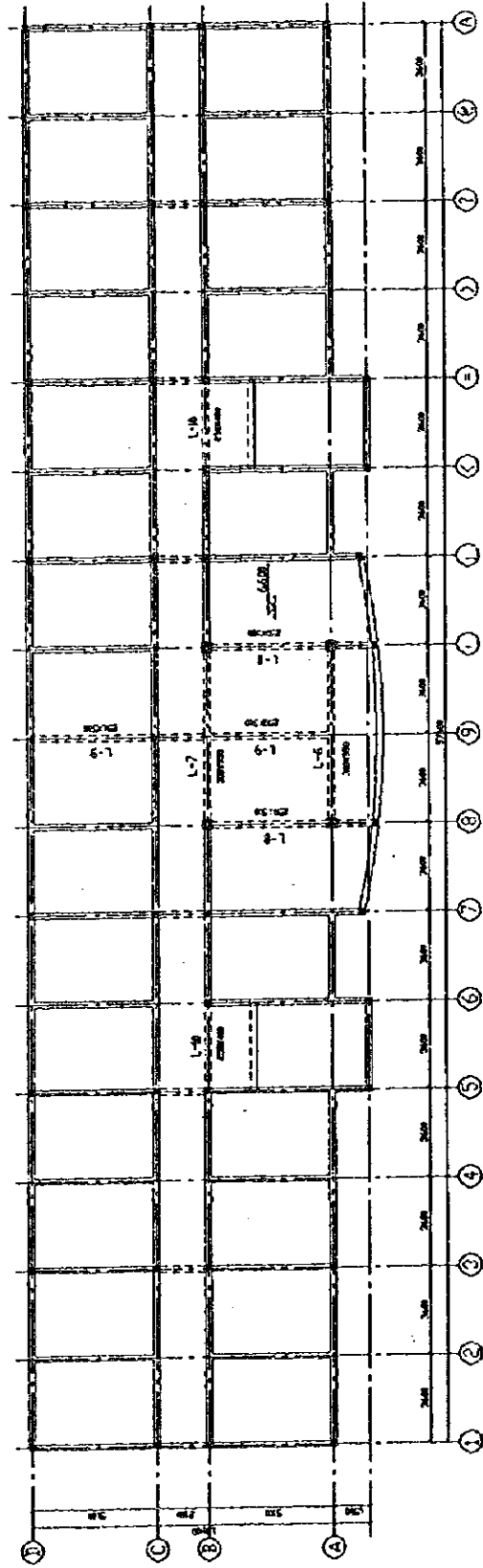
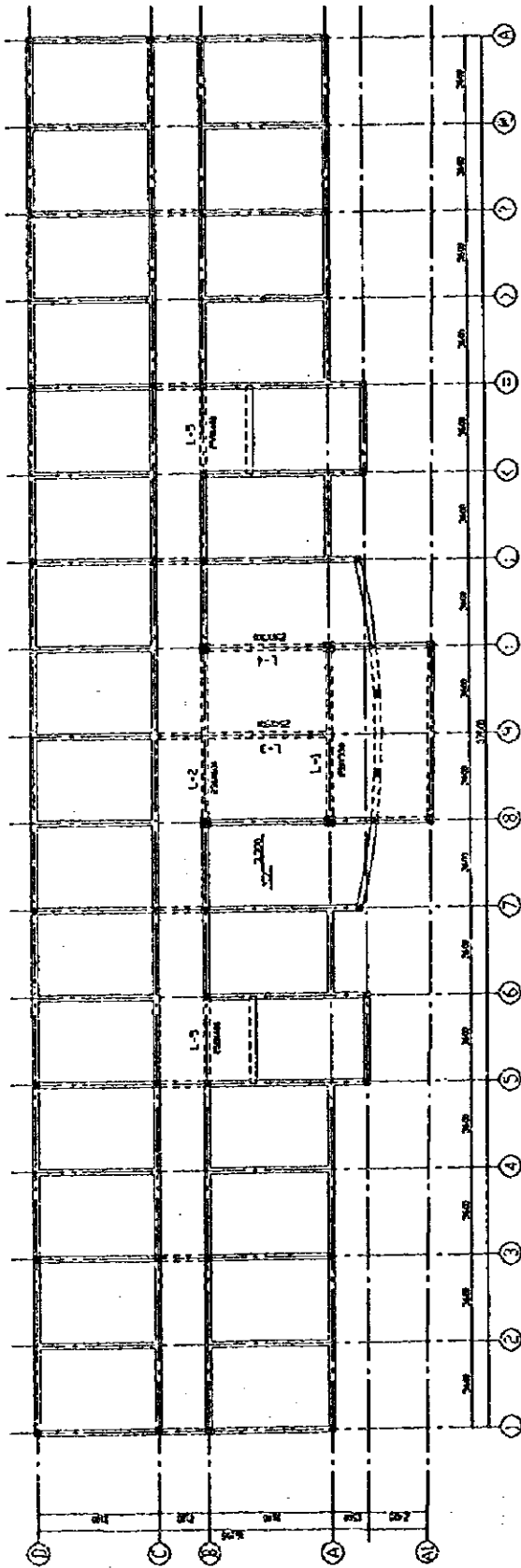
SECTION	1	2	3	4	5	6	7
M=	.00	-18.01	-29.63	-33.53	-29.63	-18.01	.00
As(1)=	250.	162.	271.	308.	271.	162.	250.
As(2)=	250.	0.	0.	0.	0.	0.	250.

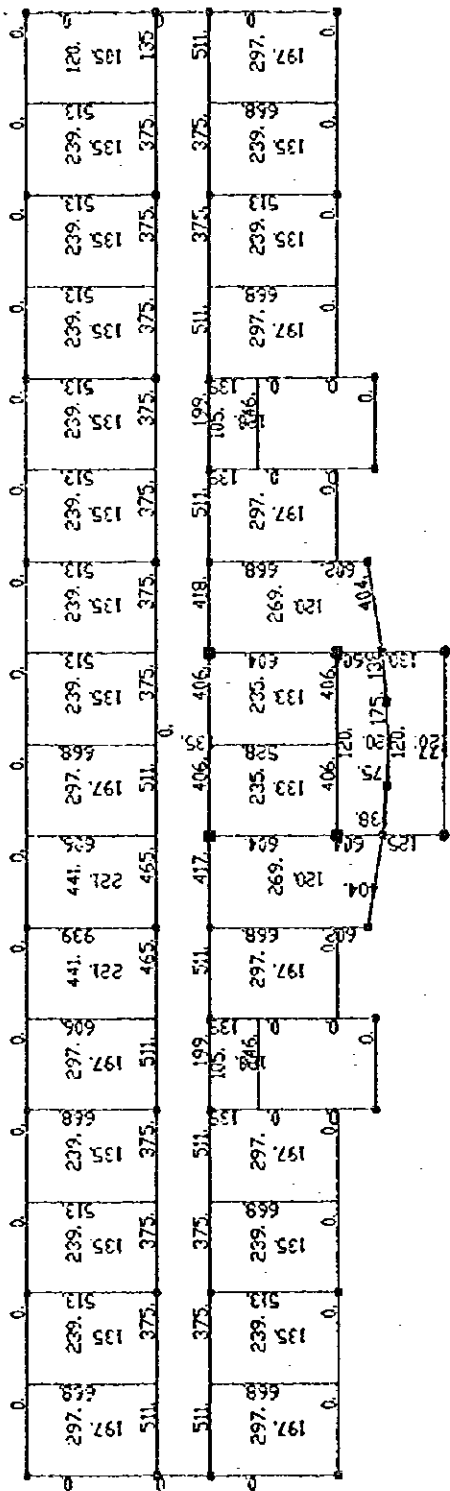
TOP

SECTION	1	2	3	4	5	6	7
M=	.11	.00	.00	.00	.00	.00	.11
As(1)=	250.	0.	0.	0.	0.	0.	250.
As(2)=	250.	0.	0.	0.	0.	0.	250.

VI= 34.41 NO 1 Vr= 47.47 NO 3 As(3)= 250. Umaxb=.003 Umaxt=.002
 Asw/s= .00

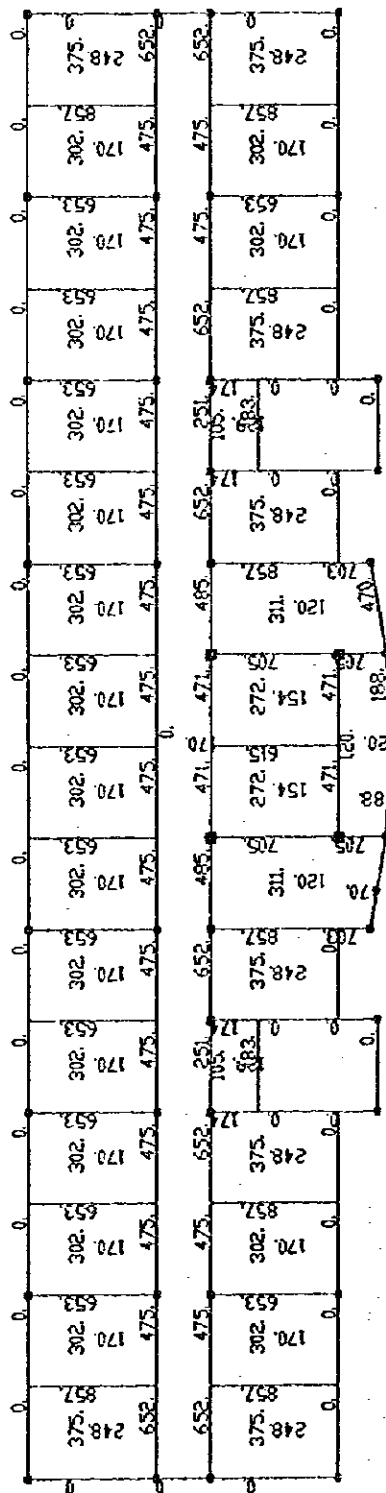
PK1 COMPUTE END





1st FLOOR CAST-IN-SITU BOARD
CALCULATION REINFORCEMENT

(UNIT: mm/m; steel grade: I; concrete: C25)



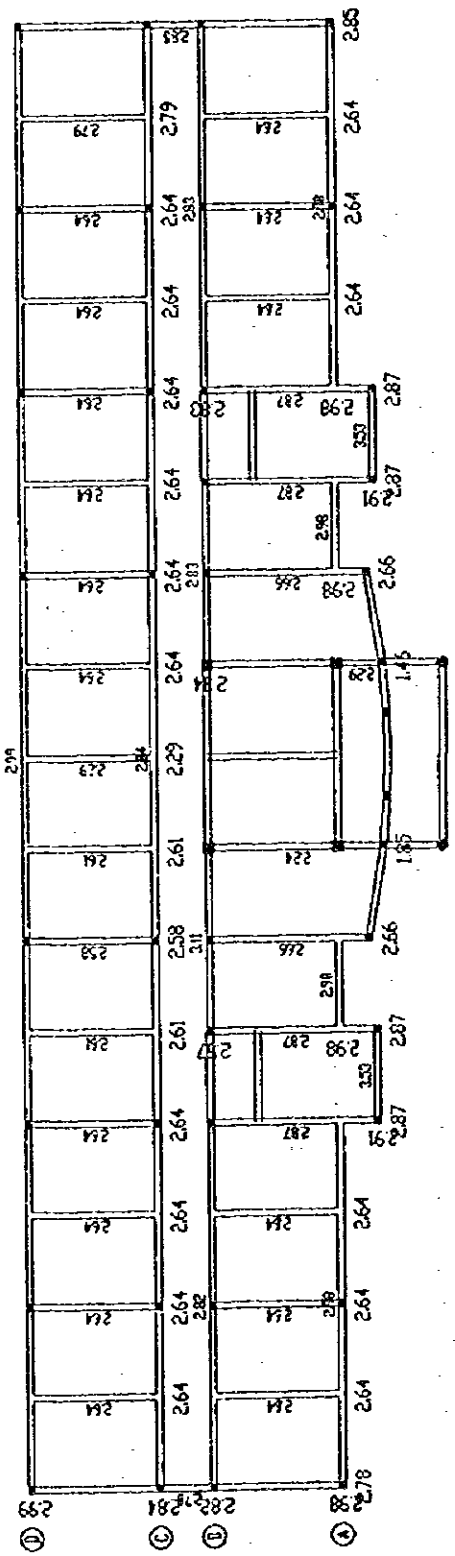
1st FLOOR CAST-IN-SITU BOARD
CALCULATION REINFORCEMENT

(UNIT: mm/m; steel grade: I; concrete: C25)

(Ground)

(Ground)

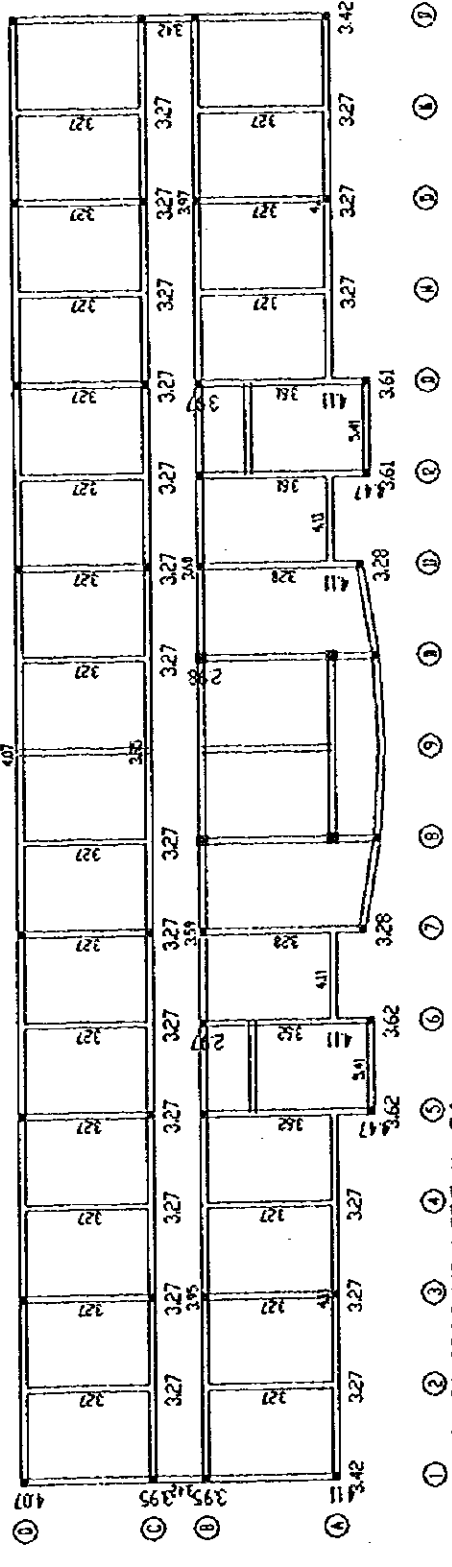
(Ground)



① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭

G1=13445.5 F1=695.0 V1=1850.5 LD=7.0 GD=2.0 M=5.0

1st FLOOR ASEISMIC CALCULATION RESULT
 (RATIO BETWEEN RESISTANCE AND AFFECTION,
 FIGUR IN BRACKET IS AREA OF REINFORCEMENT)

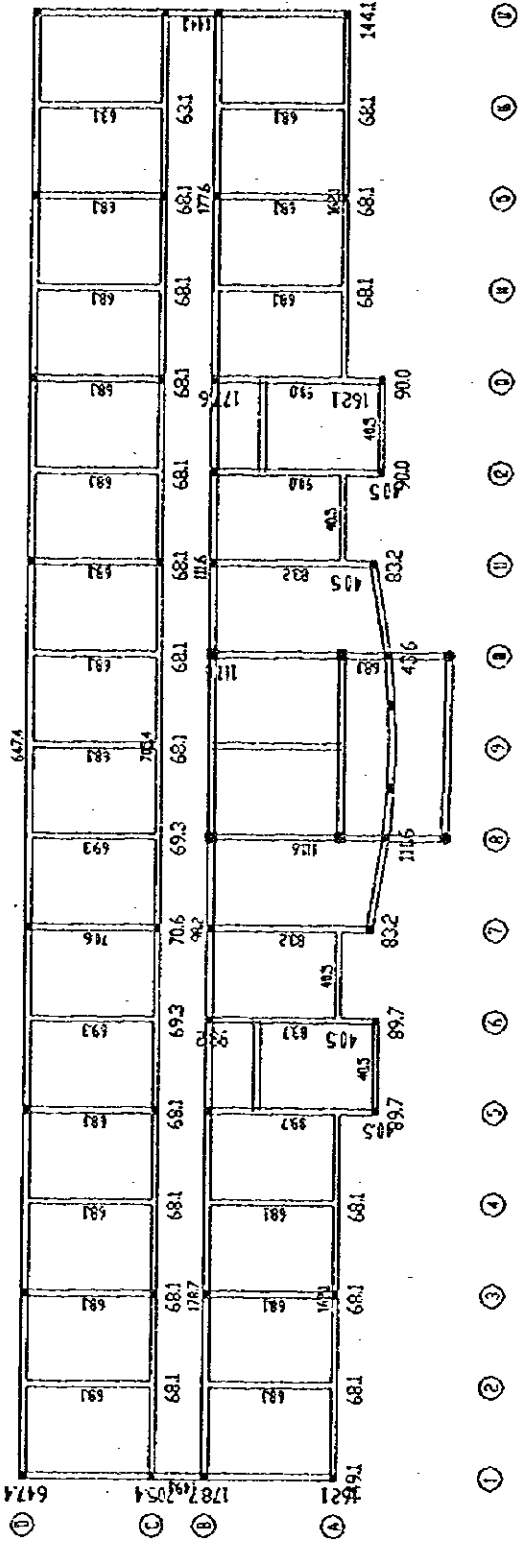


① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭

G2=10211.8 F2=876.2 V2=1155.5 M=5.0

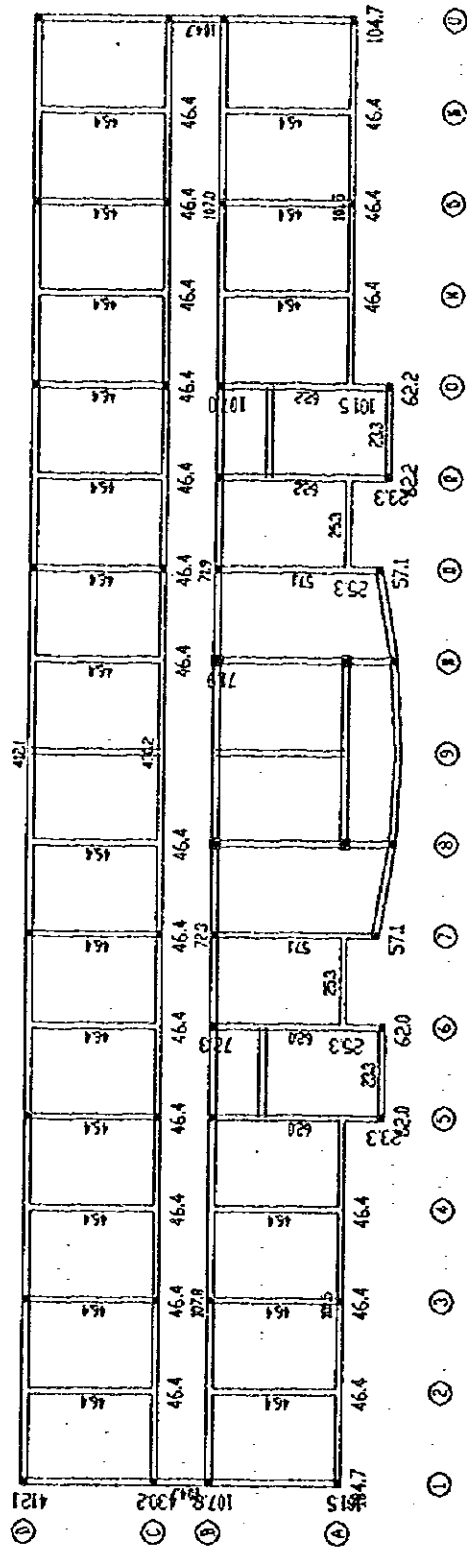
1st FLOOR ASEISMIC CALCULATION RESULT
 (RATIO BETWEEN RESISTANCE AND AFFECTION,
 FIGUR IN BRACKET IS AREA OF REINFORCEMENT)

乙 层抗震计算结果 (剪力与震效之比 括号内为抗震面积)



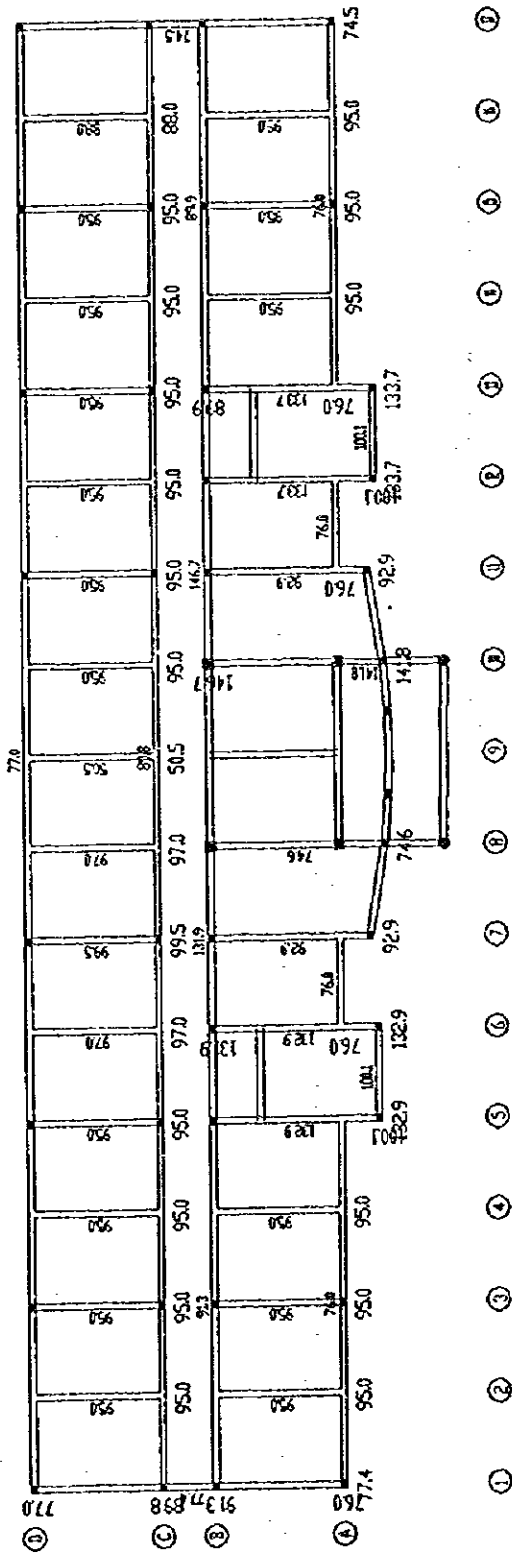
1st EARTHQUAKE SHEAR FORCE DESIGN VALUE DRAWING (kN)

1 层地震剪力设计值图 (kN)

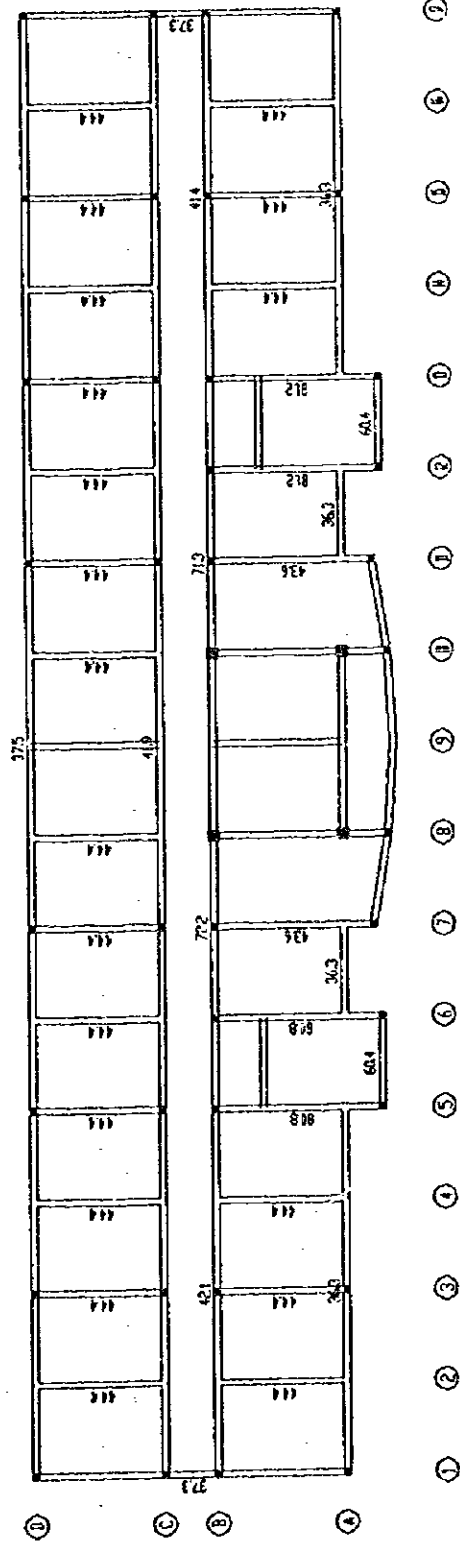


1st EARTHQUAKE SHEAR FORCE DESIGN VALUE DRAWING (kN)

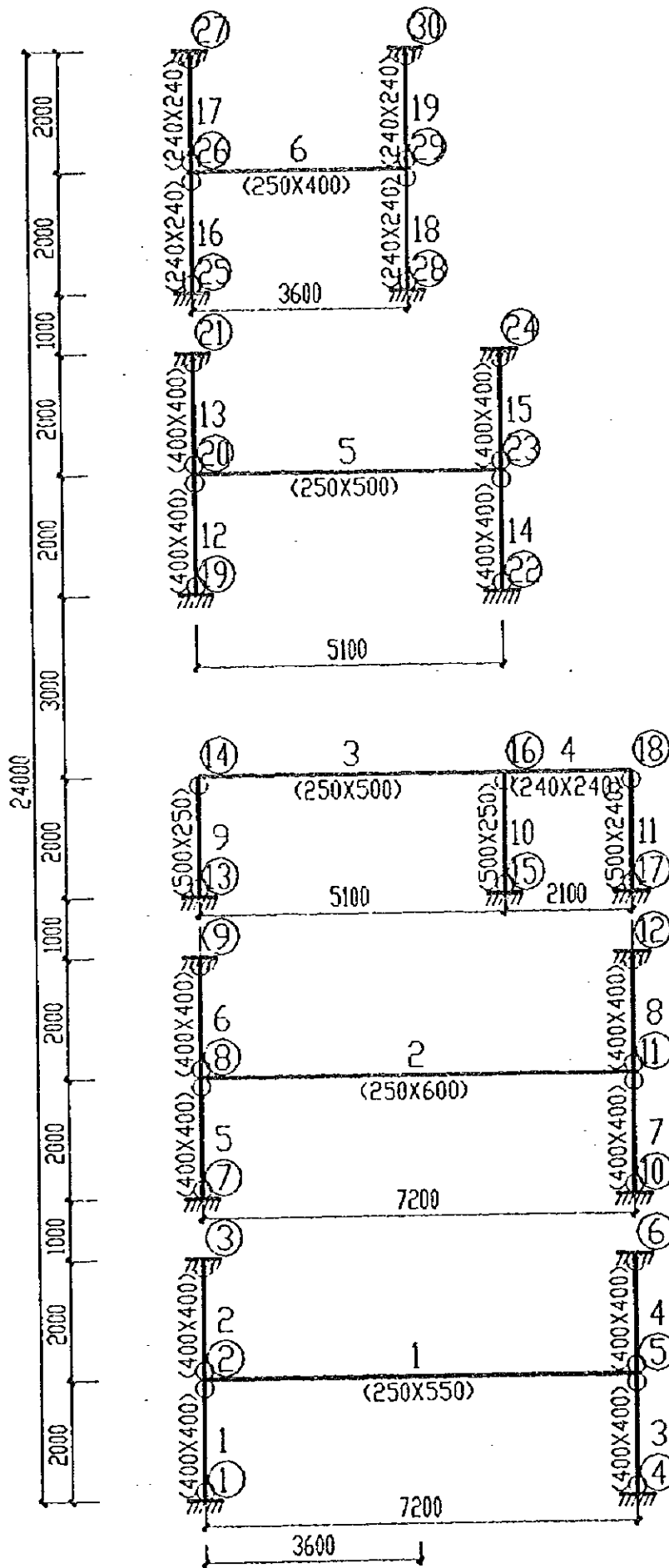
2 层地震剪力设计值图 (kN)



1st FLOOR WALL AXIAL FORCE DESIGN VALUE DRAWING (KN/M)
 1 层墙轴力设计值图 (KN/M)

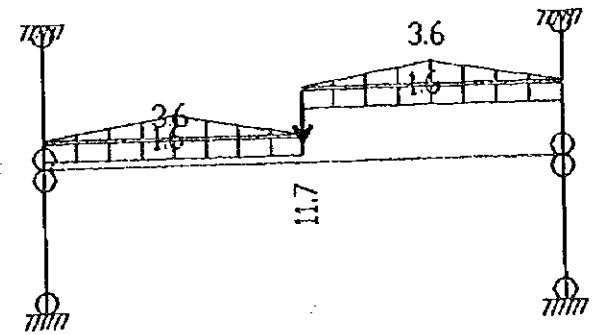
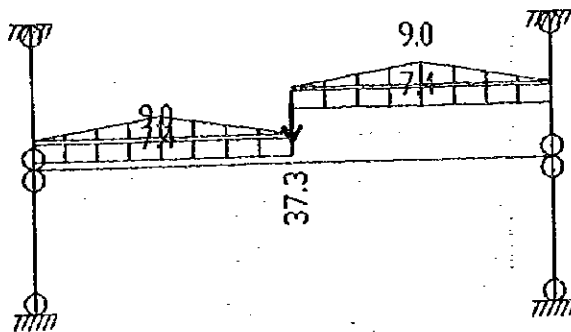
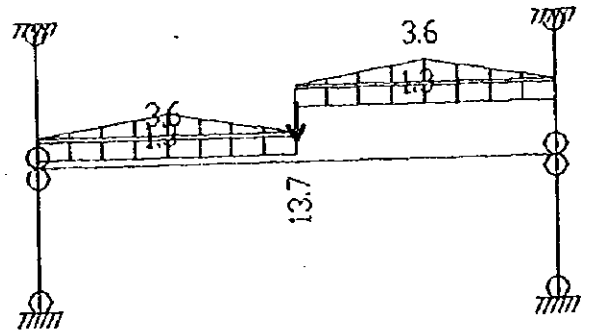
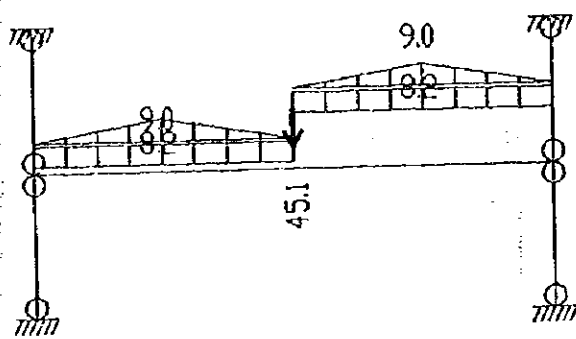
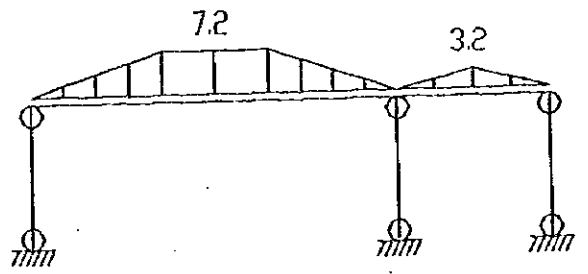
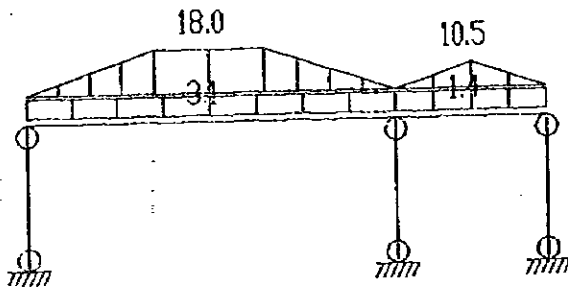
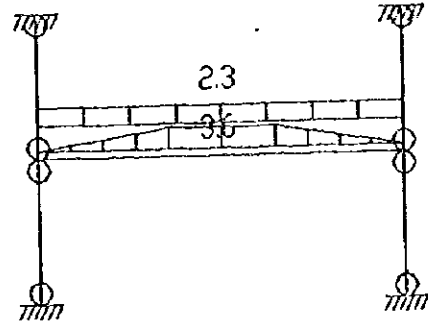
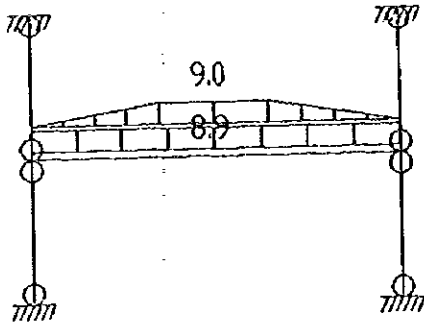
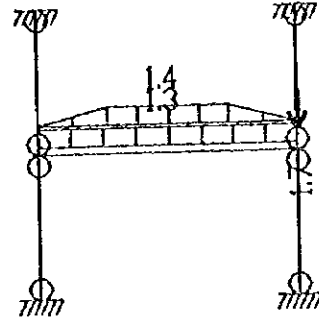
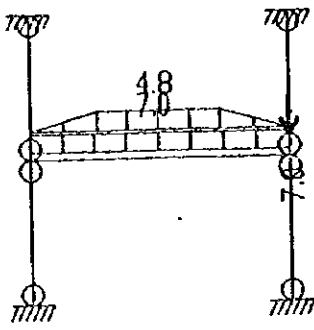


2nd FLOOR WALL AXIAL FORCE DESIGN VALUE DRAWING (KN/M)
 2 层墙轴力设计值图 (KN/M)



L1~5 FRAME ELEVATION DRAWING

框架立面图

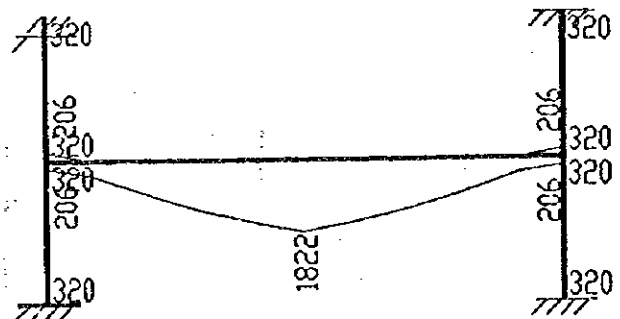
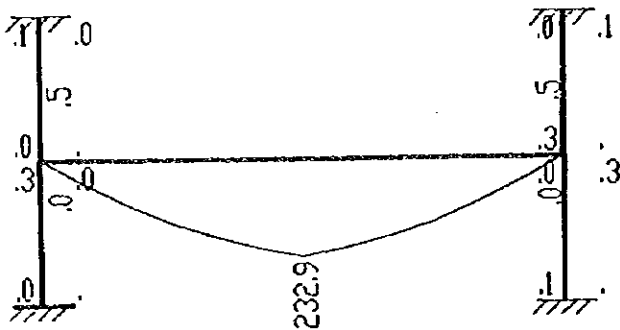
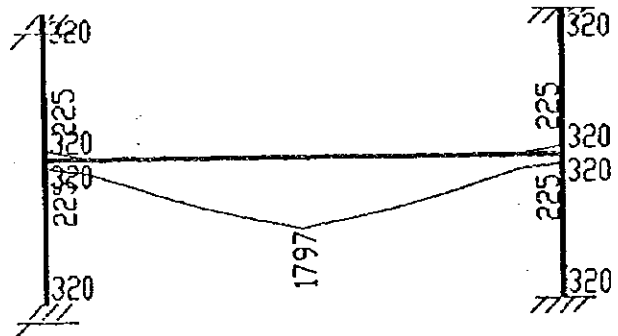
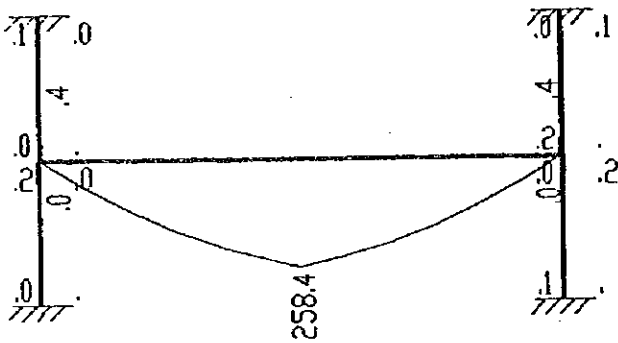
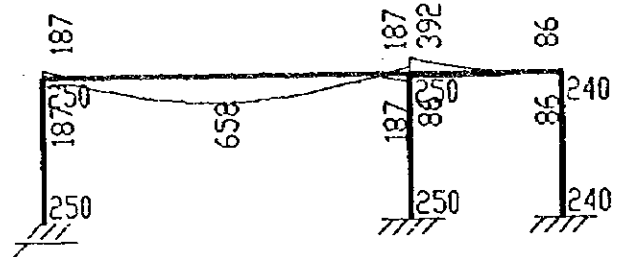
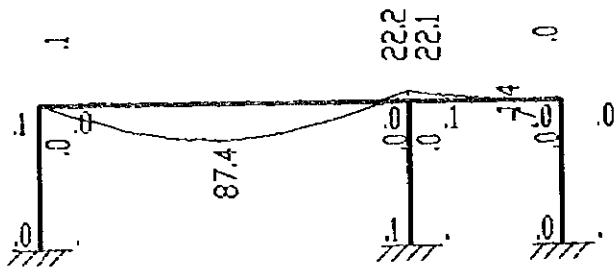
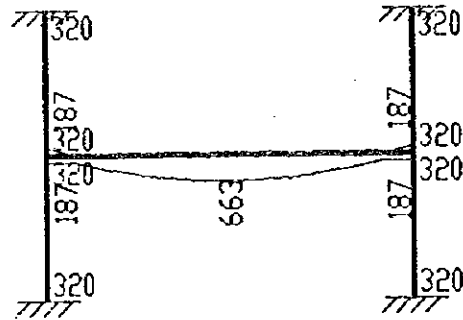
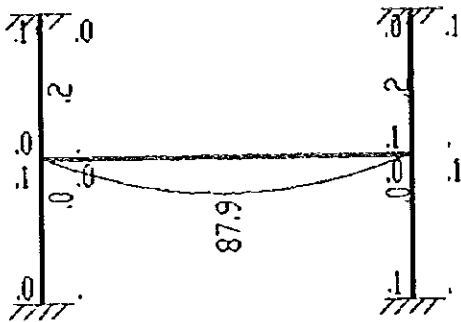
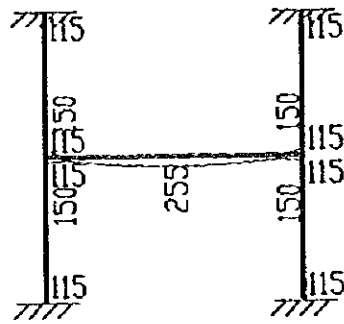
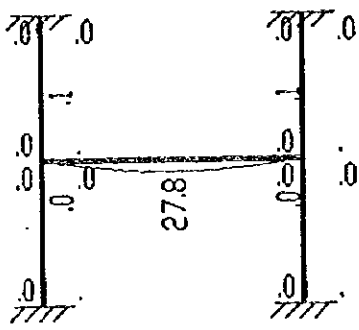


L1~5 CONSTANT LOAD DRAWING

恒载图

L1~5 LIVING LOAD DRAWING

活载图



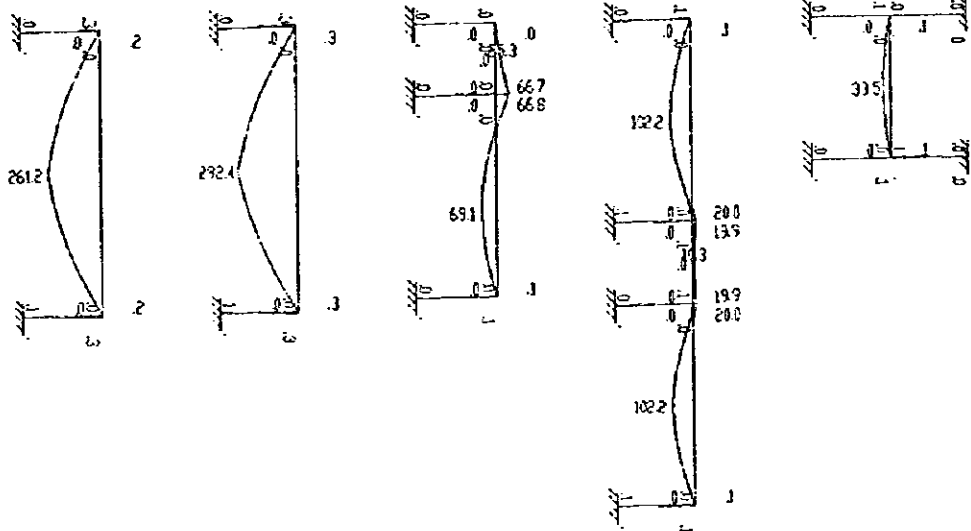
L1~5
BENDING MOMENT OUTLINE (KN-M)

弯矩包络图

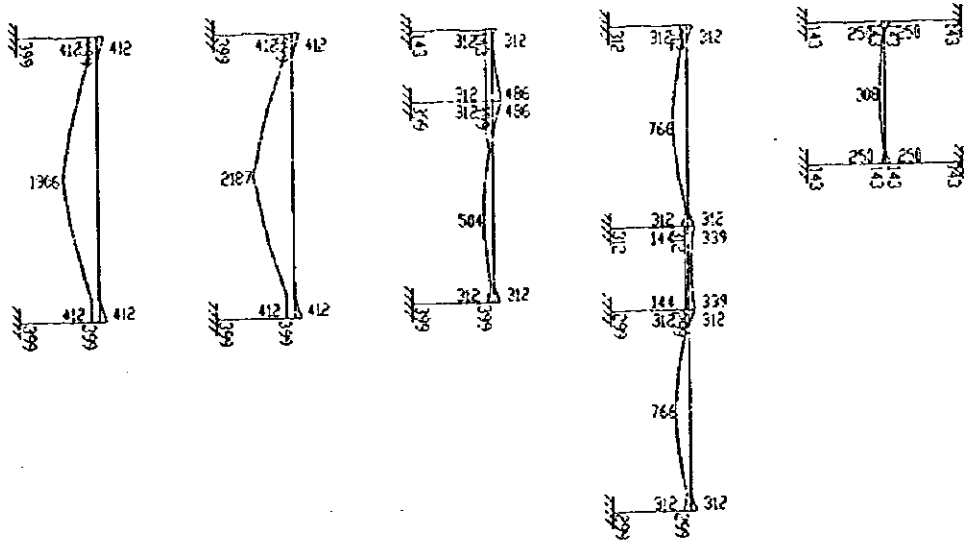
L1~5
REINFORCEMENT OUTLINE (MM²)

配筋包络图

LG-10 BENDING MOMENT OUTLINE (SKIN-M) 弯矩包络图



LG-10 REINFORCEMENT OUTLINE (SKIN-M) 配筋包络图





CONTENTS

1 • Design Introduction	p2
2 • Primary data document St.pm (For PMCAD)	p 4
3 • Beam (L1 ~ 5) data document	p 9
4 • Structure analysys of Beam (L1 ~ 5) result document	p13
5 • Beam (L6 ~ 10) data document	p 23
6 • Structure analysys of Beam (L6 ~ 10) result document	p26
7 • Figures 附图	

Calculation Book 15 April, 1997

1. Design Introduction

I. Name of Project: Shanghai Pudong Airport Oil Depot ,Dining Room, Bath Room

II. Structure type: one-floor brick & concrete structure

III. Foundation type: R.C. Strip foundation

IV. Aseismic intensity: 7

V. Site soil type: IV

VI. Soil endurance: $R=110\text{KPa/m}^2$

VII. Structure importance parameter: $R_0=1.0$

VIII. Foundation load-bearing layer elevation:

IX. Materials: column -- C25 beam board -- C25
wall: clay brick 240mm (5.40KN/m²)

X. Load:

1. Living load:	roof	0.70KN/m ²
2. Static load:	roof	ceiling 0.30KN/m ²
		structure layer (100mm) 2.50KN/m ²
		roof (roof 1) 2.00KN/m ²
		<hr/> total 4.80KN/m ²

XI. Selection of main members

1. R . C . column 350x350mm

2. Main beam (L=6900mm)

bxh=250x500

(L=5400mm)

bxh=200x450

3. Board thickness: h=100mm

XII. Design basis

1. Current national architecture & structure standards and codes;

2. Shanghai City's << Base Foundation Design Codes >> DBJ08--11--89;

3. Shanghai City's << Base Treatment Technical Codes >> DBJ08--40--94;

4. Shanghai City's << Building Aseismic Design Standards >> DBJ08--09--92;

5. << Shanghai Pudong Airport Oil Depot Rock & Soil Investigation Immediate Report >> made
by China Aviation Industry Investigation & Design Institute;

XIII. Computer programs

China Building Science Research Institute CAD Engineering Department

PMCAD CAD, structure plan CAD; August, 1996

- PK Structural calculation & construction drawing making of R.C. Frame, framed bent and continuous beam; August, 1996
- JCCAD Independent foundation & strip foundation design; August, 1996

XIV. Conclusion:

It is concluded from calculation above, the integral strength and deformation of structure meet the design requirements, the geometric dimensions also meet the requirements of strength and deformation regulated by Codes. The primary data of structural model, major calculation results, combining results of main internal forces of each member, structural layout, internal force drawing, reinforcing results of major members refer the next page, based on which construction drawings are made.

2 • Primary data document st.pm (For PMCAD)

C---NST MST NAXIS NYS KCL KBE KDK MLOD ALIVE MXD MYD BLKD DWS
BLP

-1, 1, 19, -1, 2, 2, 6, 1,1.00, 1, 1,0.00,1.00,50.0

C---(HLA(i),i=1,NST)

4.800,

C---(MSH(i),i=1,MST)

1,

C---(XY(I,J),J=1,2),I=1,NJ)

1,	0.000,	0.000
2,	0.000,	5.400
3,	0.000,	10.800
4,	3.600,	0.000
5,	3.600,	1.200
6,	3.600,	5.400
7,	3.600,	10.800
8,	6.900,	0.000
9,	6.900,	1.200
10,	6.900,	5.400
11,	6.900,	10.800
12,	10.200,	0.000
13,	10.200,	1.200
14,	10.200,	5.400
15,	10.200,	10.800
16,	13.800,	0.000
17,	13.800,	5.400
18,	13.800,	10.800
19,	13.800,	16.200
20,	13.800,	21.600
21,	13.800,	23.550
22,	17.250,	23.550
23,	17.250,	27.000
24,	20.700,	0.000
25,	20.700,	5.400
26,	20.700,	8.100
27,	20.700,	10.800
28,	20.700,	16.200
29,	20.700,	21.600
30,	20.700,	27.000

31,	27.600,	0.000
32,	27.600,	2.700
33,	27.600,	5.400
34,	27.600,	8.100
35,	27.600,	10.800
36,	27.600,	16.200
37,	27.600,	21.600
38,	27.600,	27.000
39,	29.700,	5.400
40,	29.700,	8.100
41,	29.700,	10.800
42,	31.050,	0.000
43,	31.050,	2.700
44,	31.050,	5.400
45,	31.050,	18.150
46,	31.050,	21.600
47,	31.050,	27.000
48,	34.500,	5.400
49,	34.500,	8.100
50,	34.500,	10.800
51,	34.500,	16.200
52,	34.500,	18.150
53,	34.500,	21.600
54,	34.500,	27.000

0

C---((AXIS(I),I=1,NAXIS)

1,	3,	1,	2,	3,							
2,	4,	4,	5,	6,	7,						
3,	4,	8,	9,	10,	11,						
4,	4,	12,	13,	14,	15,						
5,	6,	16,	17,	18,	19,	20,	21,				
6,	7,	24,	25,	26,	27,	28,	29,	30,			
7,	8,	31,	32,	33,	34,	35,	36,	37,	38,		
8,	6,	42,	43,	44,	45,	46,	47,				
9,	8,	1,	4,	8,	12,	16,	24,	31,	42,		
10,	7,	48,	49,	50,	51,	52,	53,	54,			
11,	10,	2,	6,	10,	14,	17,	25,	33,	39,	44,	48,
12,	3,	39,	40,	41,							
13,	9,	3,	7,	11,	15,	18,	27,	35,	41,	50,	
14,	4,	19,	28,	36,	51,						
15,	5,	20,	29,	37,	46,	53,					
16,	5,	23,	30,	38,	47,	54,					
17,	3,	5,	9,	13,							
18,	4,	26,	34,	40,	49,						

19, 2, 32, 43,
0

C---(CL(i),i=1,KCL)

1.000, 6.000, 0.350, 0.350,
1.000, 6.000, 0.240, 0.240,

C---(BE(i),i=1,KBE)

1.000, 6.000, 0.250, 0.500,
1.000, 6.000, 0.200, 0.450,

C---((QDK(i,j),j=1,2),i=1,KDK)

0.900, 2.700, 0.900, 1.800, 3.000, 1.800, 1.500, 2.700,
1.500, 1.800, 4.500, 2.700,

C---((HSLD(i,j),j=1,3),i=1,MLOD)

1.000, 5.300, 0.700,

C---QUE JEI DIAN

0

=====C
C LAYER 1
=====C

C---BHOU RWB BHC IC ICC IG

0.080, 20.0, 0.015, 30.0, 30.0, 2

C---((AXIS(I),I=1,NAXIS)

1, 3, 1, 2, 3,
2, 4, 4, 5, 6, 7,
3, 4, 8, 9, 10, 11,
4, 4, 12, 13, 14, 15,
5, 6, 16, 17, 18, 19, 20, 21,
6, 7, 24, 25, 26, 27, 28, 29, 30,
7, 8, 31, 32, 33, 34, 35, 36, 37, 38,
8, 6, 42, 43, 44, 45, 46, 47,
9, 8, 1, 4, 8, 12, 16, 24, 31, 42,
10, 7, 48, 49, 50, 51, 52, 53, 54,
11, 10, 2, 6, 10, 14, 17, 25, 33, 39, 44, 48,
12, 3, 39, 40, 41,
13, 9, 3, 7, 11, 15, 18, 27, 35, 41, 50,
14, 4, 19, 28, 36, 51,
15, 5, 20, 29, 37, 46, 53,
16, 5, 23, 30, 38, 47, 54,
17, 3, 5, 9, 13,
18, 4, 26, 34, 40, 49,
19, 2, 32, 43,

0

C--- ZHU ---

901, 2, 0.000, 0.000
903, 2, 0.000, 0.000

905,	2,	0.000,	0.000
908,	2,	0.000,	0.000
1106,	1,	0.000,	0.000
110910,	2,	0.000,	0.000
1301,	2,	0.000,	0.000
1305,	2,	0.000,	0.000
130607,	1,	0.000,	0.000
1309,	2,	0.000,	0.000
140203,	1,	0.000,	0.000
150203,	1,	0.000,	0.000
1505,	1,	0.055,	0.000
160304,	2,	0.000,	0.000
1605,	1,	0.055,	-0.055
1801,	2,	0.000,	0.000

0

C--- LIANG ---

20203,	2,	0.000	
303,	2,	0.000	
60106,	2,	0.000	
70507,	2,	0.000	
100506,	1,	0.000	
110506,	1,	0.000	
140103,	1,	0.000	
150104,	1,	0.000	
1604,	1,	0.000	

0

C--- QIANG ---

10102,	0.240,	0.000	
201,	0.240,	0.000	
30102,	0.240,	0.000	
40103,	0.240,	0.000	
50105,	0.240,	0.000	
603,	0.240,	0.000	
70104,	0.240,	0.000	
80102,	0.240,	0.000	
805,	0.240,	0.000	
90107,	0.240,	0.000	
100104,	0.240,	0.000	
110104,	0.240,	0.000	
110709,	0.240,	0.000	
120102,	0.240,	0.000	
130108,	0.240,	0.000	
160103,	0.240,	0.000	
170102,	0.240,	0.000	

1801,	0.240,	0.000	
1803,	0.240,	0.000	
1901,	0.240,	0.000	
10021023,	-0.240,	1.010,	0.000
10046052,	-0.240,	1.010,	0.000

0

C--- DONG KOU ---

402,	1,	3.000,	0.000
503,	3,	1.200,	0.900
504,	4,	1.950,	0.000
70103,	1,	0.900,	0.000
80102,	2,	0.900,	0.900
805,	6,	0.450,	0.000
901,	3,	0.300,	0.900
90203,	1,	1.200,	0.000
904,	3,	0.300,	0.900
905,	3,	1.950,	0.900
906,	4,	2.700,	0.000
100102,	2,	0.900,	0.900
1003,	3,	1.200,	0.900
1101,	1,	1.350,	0.000
1104,	1,	1.350,	0.000
120102,	1,	0.900,	0.000
1301,	5,	1.050,	0.900
130203,	5,	0.900,	0.900
1304,	5,	1.050,	0.900
1306,	6,	1.200,	0.000
1307,	1,	0.600,	0.000
1602,	3,	1.950,	0.900
170102,	1,	1.200,	0.000
1801,	1,	3.000,	0.000
10021023,	3,	1.210,	0.900
10046052,	3,	1.210,	0.900

0

C-----C

C---KZDJ NV IB IY INF CC

4, 1, 7, -4.00, 0, 1.00

EOF

1 , ,2 , ,3 ,4 ,5 ,6 ,A ,7 ,B , ,

C ,D ,E ,F , , , ,

END

3 • Beam (L1 ~ 5) date document

C _____ zong xin xi

44,22, 17, 0,22, 5, 1, 0, 4,
30, 30, 2, 0, 0, .90, 1.00, 0,

C _____ jie dian zuo bia

.000, -2.000,	.000, .000,	4.200, -2.000,
4.200, .000,	9.600, -2.000,	9.600, .000,
.000, 3.000,	.000, 5.000,	5.400, 3.000,
5.400, 5.000,	10.800, 3.000,	10.800, 5.000,
16.200, 3.000,	16.200, 5.000,	21.600, 3.000,
21.600, 5.000,	27.000, 3.000,	27.000, 5.000,
.000, 8.000,	.000, 10.000,	5.400, 8.000,
5.400, 10.000,	10.800, 8.000,	10.800, 10.000,
16.200, 8.000,	16.200, 10.000,	21.600, 8.000,
21.600, 10.000,	27.000, 8.000,	27.000, 10.000,
.000, 13.000,	.000, 15.000,	5.400, 13.000,
5.400, 15.000,	10.800, 13.000,	10.800, 15.000,
16.200, 13.000,	16.200, 15.000,	.000, 18.000,
.000, 20.000,	5.400, 18.000,	5.400, 20.000,
10.800, 18.000,	10.800, 20.000,	

C _____ zhu guan lian hao

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,
13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,
25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36,
37, 38, 39, 40, 41, 42, 43, 44,

C _____ liang guan lian hao

2, 4, 4, 6, 8, 10, 10, 12, 12, 14, 14, 16,
16, 18, 20, 22, 22, 24, 24, 26, 26, 28, 28, 30,
32, 34, 34, 36, 36, 38, 40, 42, 42, 44,

C _____ yue su xin xi

1111, 3111, 5111, 7111, 9111, 11111,
13111, 15111, 17111, 19111, 21111, 23111,
25111, 27111, 29111, 31111, 33111, 35111,
37111, 39111, 41111, 43111,

C _____ zhu ji suan chang du xi su

0,

C _____ zhu jie dian pian xin

0,

C _____ biao zhun jie mian

1, .20, .45,

1, -.50, .24,

1, -.50, .25,

1, -.35, .35,

1, -.24, .24,

C _____ zhu jie mian hao

2, 2, 2, 2, 3, 2, 3, 3, 2, 2,

4, 4, 4, 4, 2, 4, 4, 4, 5, 2,

3, 3,

C _____ liang jie mian hao

1, 1, 1, 1, 1, 1, 1, 1, 1, 1,

1, 1, 1, 1, 1, 1, 1,

CCC _____ jie dian (jing) he zai

0,

CCC _____ zhu jian (jing) he zai

0,

CCC _____ liang jian (jing) he zai

1, 2, 1, 8.6,

6, 8.7, 1.65,

1, 2, 1, 2.3,

6, 18.3, 1.65,

1, 2, 1, 2.3,

6, 18.3, 1.73,

1, 2, 1, 2.3,

6, 18.3, 1.73,

1, 2, 1, 2.3,

6, 18.3, 1.73,

1, 2, 1, 2.3,

6, 18.3, 1.72,

1, 2, 1, 6.7,

6, 9.4, 1.73,

1, 2, 1, 2.3,

6, 18.3, 1.72,

1, 2, 1, 2.3,

C 10, 7.2, .0, 1.35,

6, 18.3, 1.72,

1, 2, 1, 2.3,
 6, 18.3, 1.72,
 1, 2, 1, 2.3,
 6, 18.3, 1.72,
 1, 2, 1, 2.3,
 6, 18.6, 1.72,
 1, 2, 1, 2.3,
 6, 18.3, 1.73,
 1, 2, 1, 2.3,
 6, 18.6, 1.72,
 1, 2, 1, 2.3,
 6, 18.3, 1.73,
 1, 2, 1, 2.3,
 6, 18.3, 1.72,
 1, 2, 1, 6.7,
 6, 9.4, 1.72,
 CCC _____ jie dian (huo) he zai
 0,
 CCC _____ zhu jian (huo) he zai
 0,
 CCC _____ liang jian (huo) he zai
 1, 2, 6, 1.2, 1.65,
 1, .8,
 1, 1, 6, 2.4, 1.65,
 1, 1, 6, 2.4, 1.73,
 1, 1, 6, 2.4, 1.73,
 1, 1, 6, 2.4, 1.73,
 1, 1, 6, 2.4, 1.72,
 1, 2, 6, 1.2, 1.73,
 1, .6,
 1, 1, 6, 2.4, 1.72,
 1, 1, 6, 2.4, 1.72,
 C 10, .9, .0, 1.35,
 1, 1, 6, 2.4, 1.72,
 1, 1, 6, 2.4, 1.72,
 1, 1, 6, 2.5, 1.72,
 1, 1, 6, 2.4, 1.73,
 1, 1, 6, 2.5, 1.72,
 1, 1, 6, 2.4, 1.73,
 1, 1, 6, 2.4, 1.72,
 1, 2, 1, .6,
 6, 1.2, 1.72,
 C _____ di zhen can shu
 1, 5, 2.0, 0, 0, 1.0, 0,

4 • Structure analysis of Beam (L1 ~ 5) result document

L1 ~ 5 结构分析结果文件

II

***** PK11.EXE *****

DATA: 6/17/1997

OUTPUT DATA

44 22 17 0 22 5 1 0 4 30 30 2 0 0
 .90 1.00
 0

OUTPUT DATA

(1) .00-2.00 (2) .00 .00 (3) 4.20-2.00 (4) 4.20 .00
 (5) 9.60-2.00 (6) 9.60 .00 (7) .00 3.00 (8) .00 5.00
 (9) 5.40 3.00 (10) 5.40 5.00 (11) 10.80 3.00 (12) 10.80 5.00
 (13) 16.20 3.00 (14) 16.20 5.00 (15) 21.60 3.00 (16) 21.60 5.00
 (17) 27.00 3.00 (18) 27.00 5.00 (19) .00 8.00 (20) .00 10.00
 (21) 5.40 8.00 (22) 5.40 10.00 (23) 10.80 8.00 (24) 10.80 10.00
 (25) 16.20 8.00 (26) 16.20 10.00 (27) 21.60 8.00 (28) 21.60 10.00
 (29) 27.00 8.00 (30) 27.00 10.00 (31) .00 13.00 (32) .00 15.00
 (33) 5.40 13.00 (34) 5.40 15.00 (35) 10.80 13.00 (36) 10.80 15.00
 (37) 16.20 13.00 (38) 16.20 15.00 (39) .00 18.00 (40) .00 20.00
 (41) 5.40 18.00 (42) 5.40 20.00 (43) 10.80 18.00 (44) 10.80 20.00

OUTPUT DATA

(1) 1 2 (2) 3 4 (3) 5 6 (4) 7 8 (5) 9 10
 (6) 11 12 (7) 13 14 (8) 15 16 (9) 17 18 (10) 19 20
 (11) 21 22 (12) 23 24 (13) 25 26 (14) 27 28 (15) 29 30
 (16) 31 32 (17) 33 34 (18) 35 36 (19) 37 38 (20) 39 40
 (21) 41 42 (22) 43 44
 (1) 2 4 (2) 4 6 (3) 8 10 (4) 10 12 (5) 12 14
 (6) 14 16 (7) 16 18 (8) 20 22 (9) 22 24 (10) 24 26
 (11) 26 28 (12) 28 30 (13) 32 34 (14) 34 36 (15) 36 38
 (16) 40 42 (17) 42 44

OUTPUT DATA

(1) 1111 (2) 3111 (3) 5111 (4) 7111 (5) 9111
 (6) 11111 (7) 13111 (8) 15111 (9) 17111 (10) 19111
 (11) 21111 (12) 23111 (13) 25111 (14) 27111 (15) 29111
 (16) 31111 (17) 33111 (18) 35111 (19) 37111 (20) 39111

(21) 41111 (22) 43111

OUTPUT DATA

(1)1.00 (2)1.00 (3)1.00 (4)1.00 (5)1.00 (6)1.00 (7)1.00
 (8)1.00 (9)1.00 (10)1.00 (11)1.00 (12)1.00 (13)1.00 (14)1.00
 (15)1.00 (16)1.00 (17)1.00 (18)1.00 (19)1.00 (20)1.00 (21)1.00
 (22)1.00

OUTPUT DATA

(1) .00 (2) .00 (3) .00 (4) .00 (5) .00 (6) .00 (7) .00
 (8) .00 (9) .00 (10) .00 (11) .00 (12) .00 (13) .00 (14) .00
 (15) .00 (16) .00 (17) .00 (18) .00 (19) .00 (20) .00 (21) .00
 (22) .00 (23) .00 (24) .00 (25) .00 (26) .00 (27) .00 (28) .00
 (29) .00 (30) .00 (31) .00 (32) .00 (33) .00 (34) .00 (35) .00
 (36) .00 (37) .00 (38) .00 (39) .00 (40) .00 (41) .00 (42) .00
 (43) .00 (44) .00

OUTPUT DATA

(1)	1.00	.20	.45	.00	.00	.00
(2)	1.00	-.50	.24	.00	.00	.00
(3)	1.00	-.50	.25	.00	.00	.00
(4)	1.00	-.35	.35	.00	.00	.00
(5)	1.00	-.24	.24	.00	.00	.00

OUTPUT DATA

(1)2 (2)2 (3)2 (4)2 (5)3 (6)2 (7)3 (8)3 (9)2
 (10)2 (11)4 (12)4 (13)4 (14)4 (15)2 (16)4 (17)4 (18)4
 (19)5 (20)2 (21)3 (22)3
 (1)1 (2)1 (3)1 (4)1 (5)1 (6)1 (7)1 (8)1 (9)1
 (10)1 (11)1 (12)1 (13)1 (14)1 (15)1 (16)1 (17)1

IIQQ= 219

STIF COMPUTE

DEAD COMPUTE

JOINT LOAD: JR XM XN
 0

COLUMN LOAD: JC KL P X KX
 0

BEAM	LOAD:	NE	LI	KL	P	X	PI	XI
		1	2	1	8.60	.00		
				6	8.70	1.65		
		1	2	1	2.30	.00		
				6	18.30	1.65		

1	2	1	2.30	.00
		6	18.30	1.73
1	2	1	2.30	.00
		6	18.30	1.73
1	2	1	2.30	.00
		6	18.30	1.73
1	2	1	2.30	.00
		6	18.30	1.72
1	2	1	6.70	.00
		6	9.40	1.73
1	2	1	2.30	.00
		6	18.30	1.72
1	2	1	2.30	.00
		6	18.30	1.72
1	2	1	2.30	.00
		6	18.30	1.72
1	2	1	2.30	.00
		6	18.60	1.72
1	2	1	2.30	.00
		6	18.30	1.73
1	2	1	2.30	.00
		6	18.60	1.72
1	2	1	2.30	.00
		6	18.30	1.73
1	2	1	2.30	.00
		6	18.30	1.72
1	2	1	6.70	.00
		6	9.40	1.72

****DEAD LOAD****

STIF COMPUTE

LIVE COMPUTE

JOINT LOAD: JR XM XN
0

COLUMN LOAD: JC KL P X KX
0

BEAM LOAD: NE LI KL P X PI XI
1 2 6 1.20 1.65
1 1 .80 .00
1 1 6 2.40 1.65

1	1	6	2.40	1.73
1	1	6	2.40	1.73
1	1	6	2.40	1.73
1	1	6	2.40	1.72
1	2	6	1.20	1.73
		1	.60	.00
1	1	6	2.40	1.72
1	1	6	2.40	1.72
1	1	6	2.40	1.72
1	1	6	2.40	1.72
1	1	6	2.50	1.72
1	1	6	2.40	1.73
1	1	6	2.50	1.72
1	1	6	2.40	1.73
1	1	6	2.40	1.72
1	2	1	.60	.00
		6	1.20	1.72

EART COMPUTE
COMBI COMPUTE

****COMBINATION AND REINFORCEMENT****

BEAM 1 (B= .200, H= .450, L= 4.20)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-14.89	-21.68	-17.94	-2.81	.00	.00
As(1)=	225.	117.	172.	142.	22.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	.03	.00	.00	.00	4.11	28.50	62.17
As(1)=	225.	0.	0.	0.	32.	227.	513.
As(2)=	225.	0.	0.	0.	0.	0.	513.

VI= 24.41 NO 1 Vr= 55.92 NO 3 As(3)= 225. Umaxb= .003 Umaxt= .006
Asv/s= .00

BEAM 2 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-39.34	-60.73	-59.37	-36.34	.00
As(1)=	225.	0.	317.	500.	488.	292.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	62.23	6.51	.00	.00	.00	.00	.10
As(1)=	514.	51.	0.	0.	0.	0.	225.
As(2)=	514.	0.	0.	0.	0.	0.	225.

VI= 67.71 NO 1 Vr= 42.57 NO 3 As(3)= 225. Umaxb=.006 Umaxt=.006
Asv/s= .00

BEAM 3 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-35.24	-57.68	-58.77	-37.12	.00	.00
As(1)=	225.	283.	474.	483.	299.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	.11	.00	.00	.00	.00	11.17	66.63
As(1)=	225.	0.	0.	0.	0.	88.	552.
As(2)=	225.	0.	0.	0.	0.	0.	552.

VI= 41.22 NO 1 Vr= 67.60 NO 3 As(3)= 225. Umaxb=.006 Umaxt=.006
Asv/s= .00

BEAM 4 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-21.92	-35.95	-27.23	.00	.00
As(1)=	225.	0.	174.	289.	217.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	66.60	18.77	.00	.00	.00	8.08	50.93
As(1)=	552.	148.	0.	0.	0.	63.	415.
As(2)=	552.	0.	0.	0.	0.	0.	415.

VI= 58.46 NO 1 Vr= 51.95 NO 3 As(3)= 225. Umaxb=.003 Umaxt=.006
Asv/s= .00

BEAM 5 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-31.77	-42.72	-30.93	.00	.00
As(1)=	225.	0.	254.	346.	247.	0.	225.

As(2)= 225. 0. 0. 0. 0. 0. 225.

TOP

SECTION 1 2 3 4 5 6 7

M= 50.94 5.85 .00 .00 .00 7.32 53.21

As(1)= 415. 46. 0. 0. 0. 57. 435.

As(2)= 415. 0. 0. 0. 0. 0. 435.

VI= 54.75 NO 1 Vr= 55.72 NO 3 As(3)= 225. Umaxb=.004 Umaxt=.005

Asv/s= .00

BEAM 6 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION 1 2 3 4 5 6 7

M= .00 .00 -28.01 -38.14 -25.53 .00 .00

As(1)= 225. 0. 223. 307. 203. 0. 225.

As(2)= 225. 0. 0. 0. 0. 0. 225.

TOP

SECTION 1 2 3 4 5 6 7

M= 53.20 8.87 .00 .00 .00 13.03 59.34

As(1)= 435. 70. 0. 0. 0. 102. 488.

As(2)= 435. 0. 0. 0. 0. 0. 488.

VI= 53.84 NO 1 Vr= 56.59 NO 3 As(3)= 225. Umaxb=.003 Umaxt=.005

Asv/s= .00

BEAM 7 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION 1 2 3 4 5 6 7

M= .00 .00 -27.94 -45.85 -46.07 -29.32 .00

As(1)= 225. 0. 223. 372. 374. 234. 225.

As(2)= 225. 0. 0. 0. 0. 0. 225.

TOP

SECTION 1 2 3 4 5 6 7

M= 59.35 12.10 .00 .00 .00 .00 .09

As(1)= 488. 95. 0. 0. 0. 0. 225.

As(2)= 488. 0. 0. 0. 0. 0. 225.

VI= 59.95 NO 1 Vr= 36.56 NO 3 As(3)= 225. Umaxb=.004 Umaxt=.005

Asv/s= .00

BEAM 8 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION 1 2 3 4 5 6 7

M= .00 -35.34 -57.83 -58.93 -37.28 .00 .00

As(1)=	225.	284.	475.	485.	300.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.
TOP							
SECTION	1	2	3	4	5	6	7
M=	.11	.00	.00	.00	.00	11.07	66.63
As(1)=	225.	0.	0.	0.	0.	87.	552.
As(2)=	225.	0.	0.	0.	0.	0.	552.
VI=	41.35	NO 1	Vr=	67.73	NO 3	As(3)=	225.
Asv/s=	.00					Umaxb=	.006
						Umaxt=	.006

BEAM 9 (B= .200, H= .450, L= 5.40)

BOTTOM							
SECTION	1	2	3	4	5	6	7
M=	.00	.00	-21.87	-35.80	-26.99	.00	.00
As(1)=	225.	0.	173.	288.	215.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.
TOP							
SECTION	1	2	3	4	5	6	7
M=	66.61	18.77	.00	.00	.00	8.55	51.61
As(1)=	552.	148.	0.	0.	0.	67.	421.
As(2)=	552.	0.	0.	0.	0.	0.	421.

VI=	58.47	NO 1	Vr=	52.22	NO 3	As(3)=	225.
Asv/s=	.00					Umaxb=	.003
						Umaxt=	.006

BEAM 10 (B= .200, H= .450, L= 5.40)

BOTTOM							
SECTION	1	2	3	4	5	6	7
M=	.00	.00	-32.16	-43.58	-32.25	-.01	.00
As(1)=	225.	0.	258.	353.	258.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.
TOP							
SECTION	1	2	3	4	5	6	7
M=	51.62	5.96	.00	.00	.00	5.84	51.43
As(1)=	421.	47.	0.	0.	0.	46.	420.
As(2)=	421.	0.	0.	0.	0.	0.	420.

VI=	55.45	NO 1	Vr=	55.36	NO 3	As(3)=	225.
Asv/s=	.00					Umaxb=	.004
						Umaxt=	.005

BEAM 11 (B= .200, H= .450, L= 5.40)

BOTTOM							
SECTION	1	2	3	4	5	6	7

M=	.00	.00	-26.93	-35.63	-21.58	.00	.00
As(1)=	225.	0.	215.	286.	171.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	51.42	8.46	.00	.00	.00	19.34	67.34
As(1)=	420.	66.	0.	0.	0.	153.	559.
As(2)=	420.	0.	0.	0.	0.	0.	559.

VI= 52.07 NO 1 Vr= 58.66 NO 3 As(3)= 225. Umaxb=.003 Umaxt=.006
Asv/s= .00

BEAM 12 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-38.16	-60.13	-58.96	-36.01	.00
As(1)=	225.	0.	307.	495.	485.	289.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	67.37	10.95	.00	.00	.00	.00	.11
As(1)=	559.	86.	0.	0.	0.	0.	225.
As(2)=	559.	0.	0.	0.	0.	0.	225.

VI= 68.80 NO 1 Vr= 42.12 NO 3 As(3)= 225. Umaxb=.006 Umaxt=.006
Asv/s= .00

BEAM 13 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-35.69	-58.60	-60.15	-38.96	.00	.00
As(1)=	225.	287.	482.	495.	314.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	.11	.00	.00	.00	.00	9.02	64.03
As(1)=	225.	0.	0.	0.	0.	71.	529.
As(2)=	225.	0.	0.	0.	0.	0.	529.

VI= 41.79 NO 1 Vr= 67.07 NO 3 As(3)= 225. Umaxb=.006 Umaxt=.006
Asv/s= .00

BEAM 14 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-20.71	-32.29	-20.71	.00	.00
As(1)=	225.	0.	164.	259.	164.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	63.99	18.02	.00	.00	.00	18.02	64.00
As(1)=	529.	142.	0.	0.	0.	142.	529.
As(2)=	529.	0.	0.	0.	0.	0.	529.

VI= 56.20 NO 1 Vr= 56.20 NO 3 As(3)= 225. Umaxb=.003 Umaxt=.006
Asv/s= .00

BEAM 15 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-38.95	-60.14	-58.59	-35.69	.00
As(1)=	225.	0.	314.	495.	482.	287.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	64.03	9.02	.00	.00	.00	.00	.11
As(1)=	529.	71.	0.	0.	0.	0.	225.
As(2)=	529.	0.	0.	0.	0.	0.	225.

VI= 67.07 NO 1 Vr= 41.79 NO 3 As(3)= 225. Umaxb=.006 Umaxt=.006
Asv/s= .00

BEAM 16 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-34.40	-55.94	-56.08	-33.48	.00	.00
As(1)=	225.	276.	459.	460.	268.	0.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	.10	.00	.00	.00	.00	15.07	71.11
As(1)=	225.	0.	0.	0.	0.	119.	592.
As(2)=	225.	0.	0.	0.	0.	0.	592.

VI= 40.18 NO 1 Vr= 68.65 NO 3 As(3)= 225. Umaxb=.005 Umaxt=.007
Asv/s= .00

BEAM 17 (B= .200, H= .450, L= 5.40)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-19.98	-39.91	-42.14	-27.38	.00
As(1)=	225.	0.	158.	322.	341.	218.	225.
As(2)=	225.	0.	0.	0.	0.	0.	225.

TOP

SECTION	1	2	3	4	5	6	7
M=	71.09	22.04	.00	.00	.00	.00	.07
As(1)=	592.	175.	0.	0.	0.	0.	225.
As(2)=	592.	0.	0.	0.	0.	0.	225.

VI= 62.44 NO 1 Vr= 34.15 NO 3 As(3)= 225. Umaxb=.004 Umaxt=.007
 Asv/s= .00

PK1 COMPUTE END

5 • Beam (L6 ~ 10) data document(L6 ~ 10 数据文件)

C _____ zong xin xi

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C _____ jie dian zuo bia

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 13.800, 20.000,

C _____ zhu guan lian hao

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25, 26, 27, 28, 29, 30, 31, 32, 33, 34,

C ____ liang guan lian hao

2, 4, 4, 6, 8, 10, 12, 14, 14, 16, 16, 18,
18, 20, 22, 24, 24, 26, 26, 28, 30, 32, 32, 34,

C ____ yue su xin xi

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25111, 27111, 29111, 31111, 33111,

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C ____ zhu jie dian pian xin

0,

C ____ biao zhun jie mian

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1, -.35, .35,

1, -.24, .24,

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2, 3, 3, 2, 2, 3, 2,

C ____ liang jie mian hao

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1, 1,

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0,

CCC ____ zhu jian (jing) he zai

0,

CCC ____ liang jian (jing) he zai

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1, 2, 1, 11.1,

6, 9.1, 1.73,

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1, 2, 1, 12.3,

4, 79.3, 3.45,

1, 3, 1, 3.1,
 6, 18.6, 1.72,
 4, 35.4, 3.45,
 1, 2, 1, 6.3,
 6, 9.1, 1.73,
 1, 2, 1, 12.3,
 4, 79.3, 3.45,
 1, 2, 1, 12.3,
 4, 79.3, 3.45,
 1, 2, 1, 12.3,
 4, 75.0, 3.45,
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 4, 79.3, 3.45,
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 4, 52.4, 3.45,
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 CCC _____ zhu jian (huo) he zai
 0,
 CCC _____ liang jian (huo) he zai
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 1, 2, 4, 8.9, 3.45,
 1, 1.2,
 1, 2, 6, 2.5, 1.72,
 4, 3.9, 3.45,
 1, 2, 6, 1.2, 1.73,
 1, .4,
 1, 2, 4, 8.9, 3.45,
 1, 1.2,
 1, 2, 4, 8.9, 3.45,
 1, 1.2,
 1, 2, 4, 8.3, 3.45,
 1, 1.2,
 1, 2, 4, 8.9, 3.45,
 1, 1.2,
 1, 2, 4, 5.7, 3.45,
 1, 1.2,
 C _____ di zhen can shu

1, 5, 2.0, 0, 0, 1.0, 0,

88888

C _____ zhou xian pian xin

.000, .000, .055, .000, .055, .000, .000, .000, .000, .055,
.000, .000, .000, .000, .000, .000, .000,

C _____ zhi zhuo xin xi

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C _____ ci liang xin xi

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3 ,4 ,5 ,7 ,3 ,4 ,5 ,
L-9 ,L-10 ,L-6 ,L-7 ,L-8 ,

END

6 • Structure analysys of Beam (L6 ~ 10) result document
 L6 ~ 10 结构分析结果文件

***** PK11.EXE *****
 DATA: 6/17/1997

OUTPUT DATA

34 17 12 0 17 4 1 0 4 30 30 2 0 0
 .90 1.00
 0

OUTPUT DATA

(1) .00 -2.00 (2) .00 .00 (3) 3.45 -2.00 (4) 3.45 .00
 (5) 8.80 -2.00 (6) 8.80 .00 (7) .00 3.00 (8) .00 5.00
 (9) 3.39 3.00 (10) 3.39 5.00 (11) .00 8.00 (12) .00 10.00
 (13) 6.90 8.00 (14) 6.90 10.00 (15) 13.80 8.00 (16) 13.80 10.00
 (17) 17.25 8.00 (18) 17.25 10.00 (19) 20.65 8.00 (20) 20.65 10.00
 (21) .00 13.00 (22) .00 15.00 (23) 6.90 13.00 (24) 6.90 15.00
 (25) 13.80 13.00 (26) 13.80 15.00 (27) 20.70 13.00 (28) 20.70 15.00
 (29) .00 18.00 (30) .00 20.00 (31) 6.90 18.00 (32) 6.90 20.00
 (33) 13.80 18.00 (34) 13.80 20.00

OUTPUT DATA

(1) 1 2 (2) 3 4 (3) 5 6 (4) 7 8 (5) 9 10
 (6) 11 12 (7) 13 14 (8) 15 16 (9) 17 18 (10) 19 20
 (11) 21 22 (12) 23 24 (13) 25 26 (14) 27 28 (15) 29 30
 (16) 31 32 (17) 33 34
 (1) 2 4 (2) 4 6 (3) 8 10 (4) 12 14 (5) 14 16
 (6) 16 18 (7) 18 20 (8) 22 24 (9) 24 26 (10) 26 28
 (11) 30 32 (12) 32 34

OUTPUT DATA

(1) 1111 (2) 3111 (3) 5111 (4) 7111 (5) 9111
 (6) 11111 (7) 13111 (8) 15111 (9) 17111 (10) 19111
 (11) 21111 (12) 23111 (13) 25111 (14) 27111 (15) 29111
 (16) 31111 (17) 33111

OUTPUT DATA

(1) 1.00 (2) 1.00 (3) 1.00 (4) 1.00 (5) 1.00 (6) 1.00 (7) 1.00

(8)1.00 (9)1.00 (10)1.00 (11)1.00 (12)1.00 (13)1.00 (14)1.00
 (15)1.00 (16)1.00 (17)1.00

OUTPUT DATA

(1) .00 (2) .00 (3) .00 (4) .00 (5) .00 (6) .00 (7) .00
 (8) .00 (9) .00 (10) .00 (11) .00 (12) .00 (13) .00 (14) .00
 (15) .00 (16) .00 (17) .00 (18) .00 (19) .00 (20) .00 (21) .00
 (22) .00 (23) .00 (24) .00 (25) .00 (26) .00 (27) .00 (28) .00
 (29) .00 (30) .00 (31) .00 (32) .00 (33) .00 (34) .00

OUTPUT DATA

(1)	1.00	.25	.50	.00	.00	.00
(2)	1.00	-.50	.24	.00	.00	.00
(3)	1.00	-.35	.35	.00	.00	.00
(4)	1.00	-.24	.24	.00	.00	.00

OUTPUT DATA

(1)2 (2)3 (3)3 (4)4 (5)3 (6)2 (7)3 (8)3 (9)2
 (10)3 (11)2 (12)3 (13)3 (14)2 (15)2 (16)3 (17)2
 (1)1 (2)1 (3)1 (4)1 (5)1 (6)1 (7)1 (8)1 (9)1
 (10)1 (11)1 (12)1

IIQQ= 159

STIF COMPUTE

DEAD COMPUTE

JOINT LOAD: JR XM XN
 0

COLUMN LOAD: JC KL P X KX
 0

BEAM	LOAD:	NE	LI	KL	P	X	PI	XI
	1	1	1	14.20	.00			
	1	2	1	11.10	.00			
			6	9.10	1.73			
	1	2	1	11.10	.00			
			6	9.10	1.73			
	1	2	1	12.30	.00			
			4	75.00	3.45			
	1	2	1	12.30	.00			
			4	79.30	3.45			
	1	3	1	3.10	.00			
			6	18.60	1.72			
			4	35.40	3.45			
	1	2	1	6.30	.00			

		6	9.10	1.73
1	2	1	12.30	.00
		4	79.30	3.45
1	2	1	12.30	.00
		4	79.30	3.45
1	2	1	12.30	.00
		4	75.00	3.45
1	2	1	12.30	.00
		4	79.30	3.45
1	2	1	12.10	.00
		4	52.40	3.45

****DEAD LOAD****

STIF COMPUTE
LIVE COMPUTE

JOINT LOAD: JR XM XN
0

COLUMN LOAD: JC KL P X KX
0

BEAM LOAD:

NE	LI	KL	P	X	PI	XI
1	1	1	1.50	.00		
1	2	1	1.00	.00		
		6	1.20	1.73		
1	2	1	1.00	.00		
		6	1.20	1.73		
1	2	4	8.30	3.45		
		1	1.20	.00		
1	2	4	8.90	3.45		
		1	1.20	.00		
1	2	6	2.50	1.72		
		4	3.90	3.45		
1	2	6	1.20	1.73		
		1	.40	.00		
1	2	4	8.90	3.45		
		1	1.20	.00		
1	2	4	8.90	3.45		
		1	1.20	.00		
1	2	4	8.30	3.45		
		1	1.20	.00		
1	2	4	8.90	3.45		
		1	1.20	.00		
1	2	4	5.70	3.45		

1 1.20 .00

EART COMPUTE
COMBI COMPUTE

****COMBINATION AND REINFORCEMENT****

BEAM 1 (B= .250, H= .500, L= 3.45)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-6.88	-7.44	-1.82	.00	.00	.00
As(1)=	313.	48.	52.	13.	0.	0.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	.01	.00	.00	3.60	16.06	34.16	58.98
As(1)=	313.	0.	0.	25.	112.	242.	424.
As(2)=	313.	0.	0.	0.	0.	0.	424.

Vi= 15.76 NO 1 Vr= 52.01 NO 3 As(3)= 313. Umaxb=.002 Umaxt=.003
Asv/s= .00

BEAM 2 (B= .250, H= .500, L= 5.35)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-4.3	-41.79	-62.28	-61.09	-38.93	.00
As(1)=	313.	3.	297.	448.	439.	276.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	59.02	1.44	.00	.00	.00	.00	.06
As(1)=	424.	10.	0.	0.	0.	0.	313.
As(2)=	424.	0.	0.	0.	0.	0.	313.

Vi= 74.37 NO 1 Vr= 50.08 NO 3 As(3)= 313. Umaxb=.004 Umaxt=.003
Asv/s= .00

BEAM 3 (B= .250, H= .500, L= 3.39)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-17.47	-28.94	-33.05	-28.94	-17.47	.00
As(1)=	313.	122.	204.	234.	204.	122.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	.03	.00	.00	.00	.00	.00	.03
As(1)=	313.	0.	0.	0.	0.	0.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

VI= 35.48 NO 1 Vr= 35.48 NO 3 As(3)= 313. Umaxb=.002 Umaxt=.002
 Asv/s= .00

BEAM 4 (B= .250, H= .500, L= 6.90)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-82.75	-143.95	-183.40	-84.25	.00	.00
As(1)=	313.	603.	1096.	1440.	615.	0.	313.
As(2)=	313.	0.	0.	1550.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	.19	.00	.00	.00	.00	45.85	187.93
As(1)=	313.	0.	0.	0.	0.	327.	1481.
As(2)=	313.	0.	0.	0.	0.	0.	1595.

VI= 78.68 NO 1 Vr= 137.76 NO 3 As(3)= 313. Umaxb=.012 Umaxt=.012
 Asv/s= .11

BEAM 5 (B= .250, H= .500, L= 6.90)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-63.09	-149.83	-91.06	-10.97	.00
As(1)=	313.	0.	454.	1145.	668.	77.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	187.89	58.36	.00	.00	.00	.00	92.74
As(1)=	1481.	419.	0.	0.	0.	0.	681.
As(2)=	1595.	0.	0.	0.	0.	0.	681.

VI= 126.69 NO 1 Vr= 97.22 NO 3 As(3)= 313. Umaxb=.009 Umaxt=.012
 Asv/s= .03

BEAM 6 (B= .250, H= .500, L= 3.45)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	.00	.00	.00	-.04	-2.44
As(1)=	313.	0.	0.	0.	0.	0.	313.

As(2)=	313.	0.	0.	0.	0.	0.	313.
TOP							
SECTION	1	2	3	4	5	6	7
M=	92.66	62.45	36.97	17.66	6.16	.82	4.58
As(1)=	680.	450.	262.	124.	43.	6.	313.
As(2)=	680.	0.	0.	0.	0.	0.	313.

VI= 58.81 NO 1 Vr= 54.02 NO 3 As(3)= 313. Umaxb=.002 Umaxt=.005
Asv/s= .00

BEAM 7 (B= .250, H= .500, L= 3.40)

BOTTOM							
SECTION	1	2	3	4	5	6	7
M=	-2.44	-12.89	-21.05	-23.96	-20.76	-12.32	.00
As(1)=	313.	90.	148.	169.	146.	86.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

TOP							
SECTION	1	2	3	4	5	6	7
M=	4.57	.00	.00	.00	.00	.00	.03
As(1)=	313.	0.	0.	0.	0.	0.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.

VI= 25.76 NO 1 Vr= 24.22 NO 3 As(3)= 313. Umaxb=.002 Umaxt=.002
Asv/s= .00

BEAM 8 (B= .250, H= .500, L= 6.90)

BOTTOM							
SECTION	1	2	3	4	5	6	7
M=	.00	-89.01	-156.50	-202.26	-102.50	.00	.00
As(1)=	313.	652.	1203.	1613.	757.	0.	313.
As(2)=	313.	0.	1289.	1742.	0.	0.	313.

TOP							
SECTION	1	2	3	4	5	6	7
M=	.23	.00	.00	.00	.00	31.57	174.57
As(1)=	313.	0.	0.	0.	0.	223.	1361.
As(2)=	313.	0.	0.	0.	0.	0.	1462.

VI= 84.44 NO 1 Vr= 138.60 NO 3 As(3)= 313. Umaxb=.013 Umaxt=.011
Asv/s= .11

BEAM 9 (B= .250, H= .500, L= 6.90)

BOTTOM							
SECTION	1	2	3	4	5	6	7
M=	.00	.00	-50.05	-123.47	-51.38	.00	.00

As(1)= 313. 0. 358. 926. 367. 0. 313.
 As(2)= 313. 0. 0. 0. 0. 0. 313.

TOP

SECTION	1	2	3	4	5	6	7
M=	174.49	57.84	.00	.00	.00	54.74	169.97
As(1)=	1360.	415.	0.	0.	0.	392.	1320.
As(2)=	1462.	0.	0.	0.	0.	0.	1418.

VI= 113.68 NO 1 Vr= 112.29 NO 3 As(3)= 313. Umaxb=.007 Umaxt=.011
 Asv/s= .00

BEAM 10 (B= .250, H= .500, L= 6.90)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	.00	-98.71	-194.24	-151.16	-86.34	.00
As(1)=	313.	0.	728.	1539.	1157.	631.	313.
As(2)=	313.	0.	0.	1659.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	170.04	31.20	.00	.00	.00	.00	.23
As(1)=	1321.	220.	0.	0.	0.	0.	313.
As(2)=	1418.	0.	0.	0.	0.	0.	313.

VI= 134.88 NO 1 Vr= 82.19 NO 3 As(3)= 313. Umaxb=.012 Umaxt=.011
 Asv/s= .09

BEAM 11 (B= .250, H= .500, L= 6.90)

BOTTOM

SECTION	1	2	3	4	5	6	7
M=	.00	-85.72	-149.90	-192.33	-89.26	.00	.00
As(1)=	313.	626.	1146.	1521.	654.	0.	313.
As(2)=	313.	0.	0.	1640.	0.	0.	313.

TOP

SECTION	1	2	3	4	5	6	7
M=	.20	.00	.00	.00	.00	46.08	191.21
As(1)=	313.	0.	0.	0.	0.	328.	1511.
As(2)=	313.	0.	0.	0.	0.	0.	1628.

VI= 81.24 NO 1 Vr= 141.29 NO 3 As(3)= 313. Umaxb=.012 Umaxt=.012
 Asv/s= .13

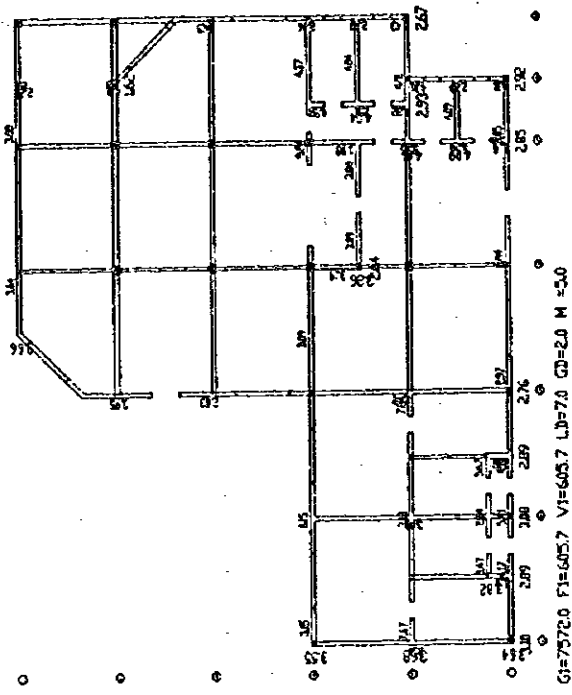
BEAM 12 (B= .250, H= .500, L= 6.90)

BOTTOM

SECTION	1	2	3	4	5	6	7
---------	---	---	---	---	---	---	---

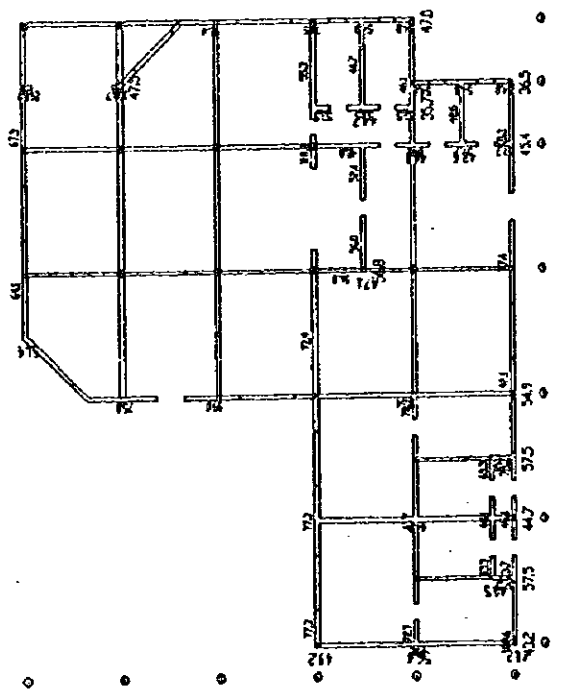
M=	.00	.00	-47.50	-128.84	-107.27	-64.28	.00
As(1)=	313.	0.	339.	970.	795.	463.	313.
As(2)=	313.	0.	0.	0.	0.	0.	313.
TOP							
SECTION	1	2	3	4	5	6	7
M=	191.16	67.55	.00	.00	.00	.00	.14
As(1)=	1511.	488.	0.	0.	0.	0.	313.
As(2)=	1628.	0.	0.	0.	0.	0.	313.

VI= 122.08 NO 1 Vr= 62.45 NO 3 As(3)= 313. Umaxb=.008 Umaxt=.012
 Δsv/s= .00
 PK1 COMPUTE END

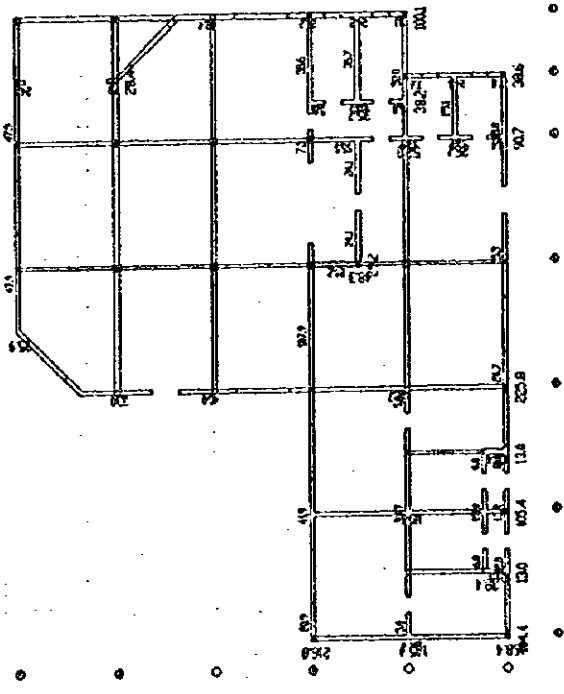


SEISMIC CALCULATION RESULT
 (RATIO BETWEEN RESISTANCE AND APPLIED)
 FIGURE IN BRACKET IS AREA OF REINFORCEMENT
 1. 配筋率 (REINFORCEMENT)

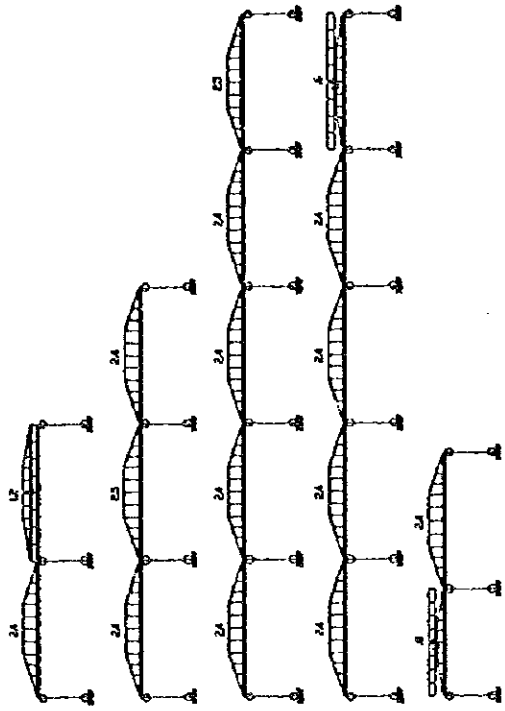
G1=75720 F1=605.7 V1=605.7 L3=7.0 CD=2.0 M=5.0



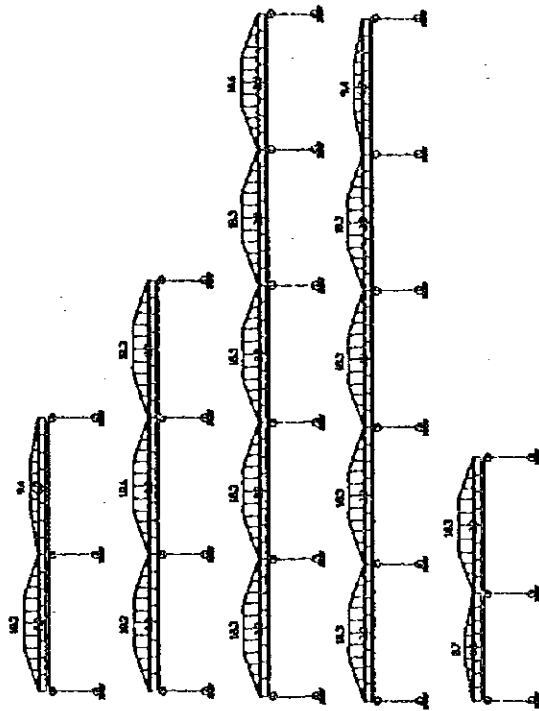
WALL AXIAL FORCE DESIGN VALUE DRAWING (KN/M)
 1. 配筋率 (REINFORCEMENT)



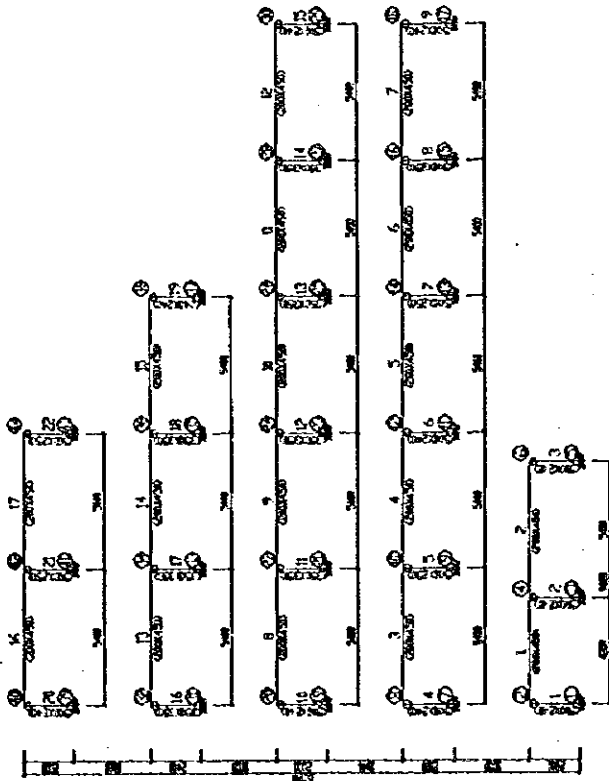
EARTHQUAKE SHEAR FORCE DESIGN VALUE DRAWING (KN)
 1. 配筋率 (REINFORCEMENT)



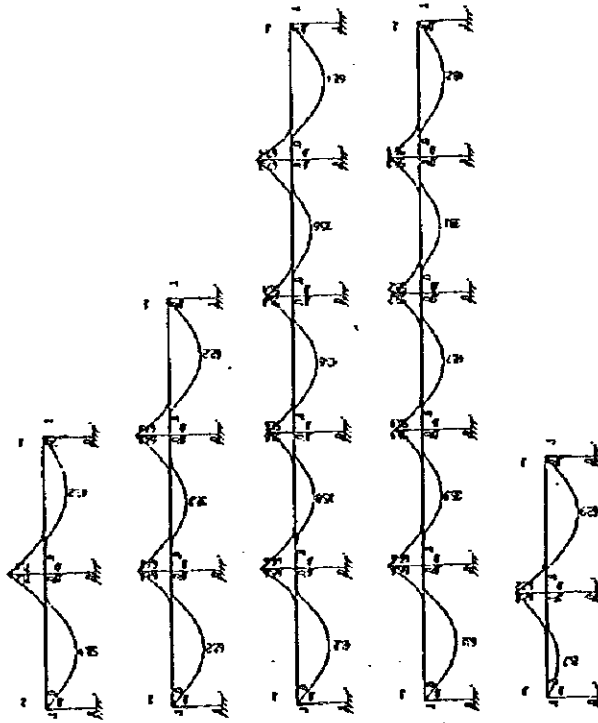
LIVING LOAD DRAWING
SEE (L-L)



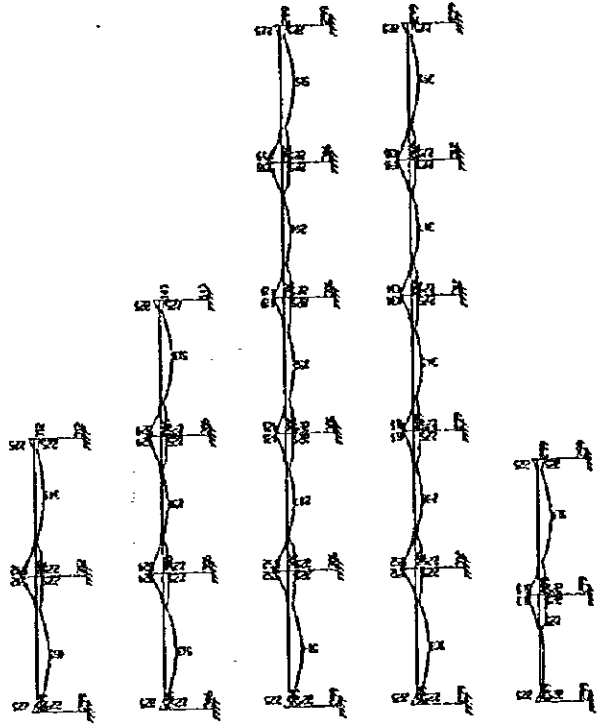
CONSTANT LOAD DRAWING
SEE (U-L)



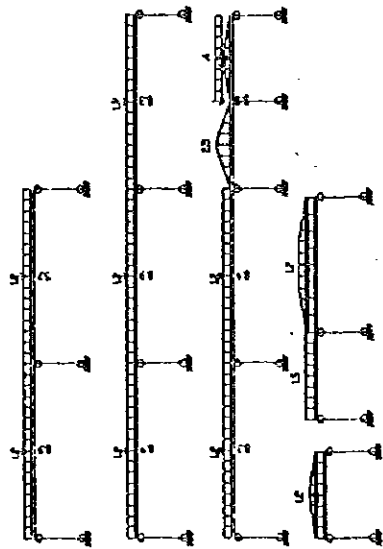
L-12345
FRAME ELEVATION DRAWING
SEE (L-L)



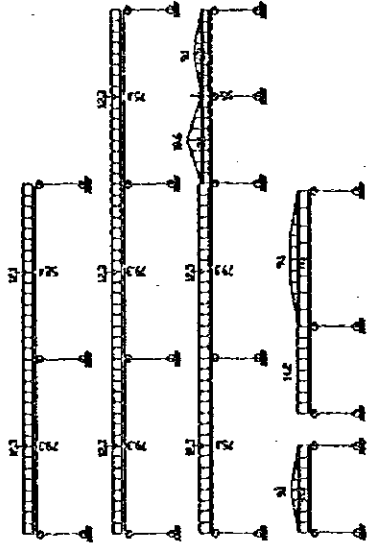
BENDING MOMENT OUTLINE
 弯矩图 (单位)



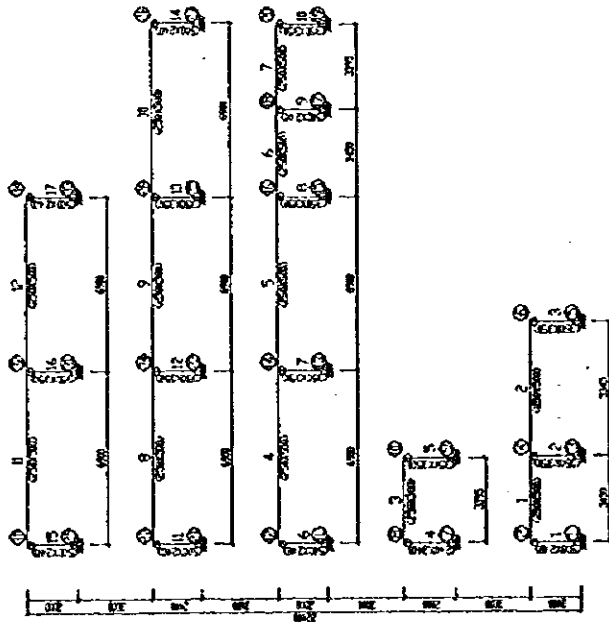
REINFORCEMENT OUTLINE
 配筋图 (单位)



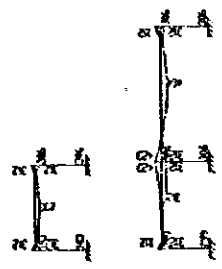
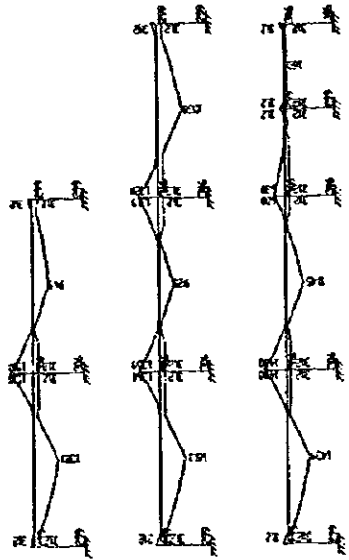
LIVING LOAD DRAWING
FOR (L-L)



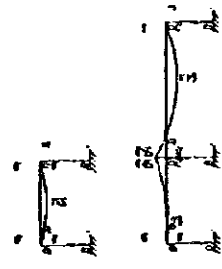
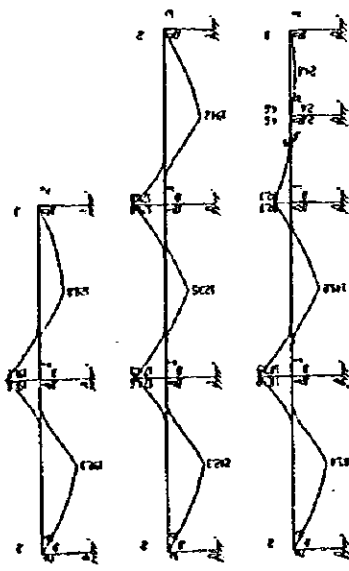
CONSTANT LOAD DRAWING
FOR (L-L)



L-6.7.8.9.10
FRAME ELEVATION DRAWING
FOR (L-L)



REINFORCEMENT OUTLINE
 鋼筋配置圖 (續)



REINFORCING MOMENT OUTLINE
 彎矩鋼筋配置圖 (續)



CONTENTS

- 1 • Design Introduction Pg 2
- 2 • Output of Floors Mass and Center TAT — M.OUT Pg 4
- 3 • Output of Period and Earthquake Forces and Displacements of Floor TAT — 4.OUT Pg 7
- 4 • Output of Combined Force of Column, Wall and Brace on Each Floor NZ — 1 ~ 3.OUT
(This Chapter is in the Disk) Pg 10
- 5 • The Combined Force of Column, Brace and Wall Bottom on Ground Floor DCNL.OUT Pg 210
- 6 • Output of Reinforcements PJ-1 ~ 3.OUT
(This Chapter is in the Disk) Pg 234
- 7 • Structure analysis result document of elastic base beam board EFDAT.OUT
(This Chapter is in the Disk) Pg 409
- 8 • Figures 附图

1 • Design Introduction

I. Name of Project: Shanghai Pudong Airport Oil Depot Complex Office Building (three floors)

II. Seismic intensity: 7

III. Frame seismic grade: 3

IV. Structure importance parameter: $R_0=1.0$

V. Site soil type: IV

VI. Soil endurance: $R=110\text{KPa}$

VII. Foundation load-bearing layer elevation:

VIII. Materials: column -- C30 beam board -- C30

Frame filled wall: light aggregate concrete porous hollow blockbrick

external wall 240mm 1.97KN/m²

internal wall 200mm 1.64KN/m²

I. Load:

1. Living load: floor 1.50KN/m²

washing room 2.00KN/m²

meeting room 2.00KN/m²

roof (with persons) 1.5KN/m²

roof 0.7KN/m²

2. Static load: floor

ceiling 0.45KN/m²

structure layer (100mm) 2.50KN/m²

floor (Floor 1) 1.50KN/m²

total 4.45KN/m²

5.20KN/m² (meeting room)

washing room ceiling 0.45KN/m²

structure layer (100mm) 2.50KN/m²

floor (Floor) 2.35KN/m²

total 5.30KN/m²

roof ceiling 0.45KN/m²

structure layer (100mm) 2.50KN/m²

roof (roof 1) 2.50KN/m²

total 5.45KN/m²

4. Frame filled wall (Architecture & Structure Design Manual -- Shanghai Architecture Design Institute 1996.5)

external wall (240mm)

paste facing brick 0.61KN/m²
 240mm 1.97KN/m²
 interior wall with cement mortar 0.40KN/m²

internal wall (200mm)

internal wall (200m)

200mm 1.64KN/m²

interior wall with cement mortar 0.40x2 KN/m²

2.44x2.8m=7KN/m²

3. Wind load: 0.55 KN/m²

4. Foundation load:

TAT program load calculation

additional load: (column foot elevation -1.10)

-1.10~0.000 240 brick wall 5.2x1.10=5.76KN/m²

1st floor partition wall 240 hollow wall 3.58x3.3=11.814KN/m²

X. Selection of main members

1. Side column 500x500mm

round column D600mm

2. Main beam (L=6000mm)

bxh=250x500mm

Longitudinal beam (L=7200mm Floor 1)

bxh=250x600mm

Secondary beam

bxh=200x500mm

3. Board thickness

h=100mm

XI. Design basis

1. Current national architecture & structure standards and codes;
2. Shanghai City's << Base Foundation Design Codes >> DBJ08--11--89;
3. Shanghai City's << Base Treatment Technical Codes >> DBJ08--40--94;
4. Shanghai City's << Building Anti-seismic Design Standards >> DBJ08--09--92;
5. << Shanghai Pudong Airport Oil Depot Rock & Soil Investigation Immediate Report >> made by China Aviation Industry Investigation & Design Institute;

XII. Computer programs

China Building Science Research Institute CAD Engineering Department

PMCAD CAD, structure plan CAD; August, 1996

TAT Three-dimensional analysis program of high-riser building structure; August, 1996

LTCAD Stair CAD; August, 1996

EF Foundation structure CAD of elastic base beam board; August, 1996

XIII. Conclusion:

It is concluded from calculation above, the integral strength and deformation of structure meet the design requirements, the geometric dimensions also meet the requirements of strength and deformation regulated by Codes. The primary data of structural model, major calculation results, combining results of main internal forces of each member, structural layout, internal force drawing, reinforcing results of major members refer the next page, based on which construction drawings are made.

2 • Output of Floors Mass and Center

```

*****
*                               Output of Floors Mass and Center                               *
*                               TAT-M.OUT                                                    *
* -----                                                                    *
*                               Symbols:                                                    *
* No. --- Number of floor                                                                *
* Tower --- Number of tower                                                            *
* Weight --- Total weight of floor(kN)                                                 *
*           (selfweight of structure + slab loading + loading)                         *
* Mass --- Total mass of each floor(kg)(Weight/10.)                                  *
* X,Y-Center --- Coordinate of mass center(m)                                          *
* Ver-Load --- Total load of loading floor(kN)                                         *
*           (excluding selfweight of beam/column/wall)                                 *
* R-Mass --- Total rotation mass of floor(t*m2)                                       *
* X,Y-Wind --- Wind force in X,Y direction(kN)                                        *
* X,Y-D --- Eccentricity between point of wind and mass center(m)                    *
* X,Y-Wind-V --- Shear of each floor by wind force(kN)                               *
* X,Y-Wind-M --- Moment of each floor by wind force(kN-m)                            *
* hh --- Height of each floor(m)                                                       *
*****
    
```

Flr	Tower	Weight (kN)	F-Weight (kN)	Mass (t)	X-Center (m)	Y-Center (m)	Ver-Load (kN)	R-Mass (t*m2)
4	1	333.2	333.	33.3	52.2	14.8	233.8	449.
3	1	10453.1	10786.	1045.3	36.2	17.8	7707.8	498126.
2	1	12789.2	23576.	1278.9	33.8	16.9	9693.7	661556.
1	1	14858.5	38434.	1485.9	30.4	15.2	10704.9	855808.

Total Vertical Loads = 28340. (kN)
 Total Structure Weight = 38434. (kN)
 Total Mass = 3843.4 (t)

Flr	Tower	X-Wind (kN)	X-D (m)	X-Wind-V (kN)	X-Wind-M (kN-m)	hh (m)
4	1	0.00	0.05	0.00	0.0	3.00
3	1	36.83	-1.46	36.83	121.5	3.30
2	1	53.57	-1.77	90.40	419.8	3.30
1	1	69.72	-2.14	160.12	1188.4	4.80

Fir	Tower	Y-Wind (kN)	Y-D (m)	Y-Wind-V (kN)	Y-Wind-M (kN-m)	hh (m)
4	1	0.00	0.04	0.00	0.0	3.00
3	1	129.15	7.89	129.15	426.2	3.30
2	1	197.80	2.16	326.95	1505.2	3.30
1	1	176.04	5.60	502.99	3919.5	4.80

3 • Output of Period and Earthquake Forces and Displacements of Floor

```

*****
* Output of Period and Earthquake Forces and Displacements of Floor *
*                               TAT-4.OUT                               *
* -----*
* Symbols:
* T(Nm) --- Natural vibration period of structure(sec)
* Flr --- Number of floor
* Nt --- Number of tower
* Nm --- Number of modes
* Mode(Nm) --- Natural vibration mode
* Force(Nm) --- Earthquake force of modes(kN)
* Qox,y --- Ground base shear of seismic force in X,Y direction(kN)
* Mox,y --- Base moment of seismic force in X,Y direction(kN-m)
* Ge --- Total weight of structure(kN)
* X,Y,T-Direct. --- Mode and Seismic force in torsional couple
* X,Y-DISP --- Horizontal displacement of mass center(mm)
* Angle --- Horizontal rotation angle(rad)
* dx,y --- Interfloor displacement in X,Y direction(mm)
* h --- Height of each floor(m)
* Tower --- Number of tower
* Hmax --- Maximum Height of floor(m)
* Dmax --- Maximum displacement on top part(mm)
*****
    
```

The Vibration of X-Direction

X-Direction Period (Second)

$$T_1 = 0.6393 \text{ (s)} \quad T_2 = 0.2759 \text{ (s)} \quad T_3 = 0.1921 \text{ (s)}$$

The Vibration Modes-X & Earthquake Forces-X

No	Nt	Mode 1	Force 1 (kN)	Mode 2	Force 2 (kN)	Mode 3	Force 3 (kN)
4	1	1.0000	41.18	1.0000	-22.49	1.0000	8.32
3	1	0.8049	1039.54	-0.0043	3.01	-0.9908	-258.57
2	1	0.6527	1031.35	-0.0208	17.99	0.2878	91.88

1	1	0.3934	722.19	-0.0211	21.18	0.9583	355.45
---	---	--------	--------	---------	-------	--------	--------

 Q_{ox} = 2841.167 (kN) Q_{ox}/G_e = 7.39%
 M_{ox} = 24267.113 (kN-m)

The Vibration of Y-Direction

Y-Direction Period (Second)

T₁ = 0.6511 (s) T₂ = 0.2729 (s) T₃ = 0.1987 (s)

The Vibration Modes-Y & Earthquake Forces-Y

No	Nt	Mode 1	Force 1 (kN)	Mode 2	Force 2 (kN)	Mode 3	Force 3 (kN)
4	1	1.0000	45.02	1.0000	-34.71	-1.0000	16.77
3	1	0.7447	1051.66	0.0070	-7.60	0.4933	-259.45
2	1	0.5848	1010.40	-0.0278	37.06	-0.1486	95.59
1	1	0.3441	690.80	-0.0351	54.32	-0.4686	350.28

 Q_{oy} = 2805.683 (kN) Q_{oy}/G_e = 7.30%
 M_{oy} = 24138.779 (kN-m)

----- Displacements of Floor -----

==== TYPE1 ==== The displacements of floor under X-Earthquake Force

Flr	Nt	X-DISP (mm)	Y-DISP (mm)	Angle (rad)	dx/h	dx (mm)	h (m)
4	1	12.86	0.39	0.00011	1/1034.	2.90	3.00
3	1	10.30	0.11	0.00002	1/1688.	1.96	3.30
2	1	8.35	0.06	0.00002	1/1000.	3.30	3.30
1	1	5.04	0.00	0.00001	1/953.	5.04	4.80

Tower = 1 (D_{max}/H_{max}=1/1120.), D_{max}= 12.9(mm) H_{max}= 14.40(m)

==== TYPE2 ==== The displacements of floor under Y-Earthquake Force

Flr	Nt	X-DISP (mm)	Y-DISP (mm)	Angle (rad)	dy/h	dy (mm)	h (m)
4	1	0.03	14.65	0.00004	1/857.	3.50	3.00

3	1	0.12	10.81	0.00005	1/1479.	2.23	3.30
2	1	0.07	8.48	0.00005	1/973.	3.39	3.30
1	1	0.01	5.00	0.00003	1/960.	5.00	4.80

Tower = 1 (Dmax/Hmax=1/983.), Dmax= 14.6(mm) Hmax= 14.40(m)

==== TYPE3 ==== The displacements of floor under X-Wind Force

Flr	Nt	X-DISP (mm)	Y-DISP (mm)	Angle (rad)	dx/h	dx (mm)	h (m)
4	1	0.51	0.02	0.00000	1/9999.	0.01	3.00
3	1	0.50	0.00	0.00000	1/9999.	0.07	3.30
2	1	0.42	0.00	0.00000	1/9999.	0.15	3.30
1	1	0.27	0.00	0.00000	1/9999.	0.27	4.80

Tower = 1 (Dmax/Hmax=1/9999.), Dmax= 0.5(mm) Hmax= 14.40(m)

==== TYPE4 ==== The displacements of floor under Y-Wind Force

Flr	Nt	X-DISP (mm)	Y-DISP (mm)	Angle (rad)	dy/h	dy (mm)	h (m)
4	1	0.02	2.21	0.00002	1/9999.	0.07	3.00
3	1	-0.04	1.80	0.00002	1/9999.	0.30	3.30
2	1	-0.02	1.45	0.00002	1/6090.	0.54	3.30
1	1	0.00	0.87	0.00001	1/5510.	0.87	4.80

Tower = 1 (Dmax/Hmax=1/6507.), Dmax= 2.2(mm) Hmax= 14.40(m)

==== TYPE5 ==== The displacements of floor under Dead Vertical Force

Flr	Nt	X-DISP (mm)	Y-DISP (mm)	Angle (rad)
4	1	0.06	0.18	0.00000
3	1	0.00	0.02	0.00000
2	1	-0.02	0.05	0.00000
1	1	-0.01	0.02	0.00000

==== TYPE6 ==== The displacements of floor under Live Vertical Force

Flr	Nt	X-DISP (mm)	Y-DISP (mm)	Angle (rad)
4	1	0.00	0.15	0.00001
3	1	0.00	0.01	0.00000
2	1	0.00	0.00	0.00000
1	1	0.00	0.01	0.00000

4 • Output of Combined Force of Column, Wall and Brace on Each Floor

```

*****
* Output of Combined Force of Column, Wall and Brace on Each Floor *
*                               NZ-I.OUT                               *
* ----- *
* Symbols: *
* C,W,G --- Element number of column, shear wall and brace *
* ND(TOP,BOT) --- Number of up and down node of column, wall, brace *
* V-X,Y --- Shear in X,Y direction(kN) *
* N --- Axial force(kN) *
* M-X,Y --- Moment in X,Y direction(kN·m) *
* N(I1-I2) --- Number of branch of shear wall *
* I1-I2 --- Number of nodes in front and back of wall branch *
* M,N,V-T --- Moment, axial force and shear of branch *
* B-I,J --- Number of node on left and right of beam *
* V,T,M-I,J --- Shear, torsion and moment on left and right of beam *
*****

```

5 · The Combined Force of Column, Brace and Wall Bottom on Ground Floor DCNL.OUT

| The Combined Force of Column, Brace and Wall Bottom on Ground Floor |

Total-Columns = 62 Total-Shear Walls = 0

N-C(Nc)	N	V-X	V-Y	=N=	M-X	M-Y	NE
1(20)	1	69.31	7.63	-415.11	-17.69	195.04	1 Vxmax
1(21)	1	9.47	-39.13	-295.41	134.00	6.81	1 Vymax
1(25)	1	7.02	-39.75	-236.62	134.89	2.92	1 Nmin
1(14)	1	17.35	9.32	-372.64	-22.59	30.35	0 Nmax
1(21)	1	9.47	-39.13	-295.41	134.00	6.81	1 Mxmax
1(20)	1	69.31	7.63	-415.11	-17.69	195.04	1 Mymax
1(1)	1	15.84	4.09	-369.62	-5.78	25.18	0 V-V
1(0)	1	12.47	4.14	-362.62	-6.12	15.37	0 Wx+V
1(0)	1	18.60	3.82	-367.79	-5.18	34.03	0 -Wx+V
1(0)	1	13.73	-1.35	-357.76	11.30	19.05	0 Wy+V
1(0)	1	17.35	9.32	-372.64	-22.59	30.35	0 -Wy+V
1(0)	1	-39.91	-0.25	-290.45	7.11	-148.35	1 Ex+V
1(0)	1	69.31	7.63	-415.11	-17.69	195.04	1 -Ex+V
1(0)	1	9.47	-39.13	-295.41	134.00	6.81	1 Ey+V
1(0)	1	19.92	46.51	-410.15	-144.58	39.87	1 -Ey+V

2(19)	2	-32.23	-2.43	-40.72	11.68	-154.70	1 Vxmax
2(21)	2	-3.45	-27.69	-40.72	132.92	-16.56	1 Vymax
2(26)	2	3.60	27.34	-33.93	-131.22	17.30	1 Nmin
2(1)	2	0.10	-0.24	-40.72	1.17	0.49	0 Nmax
2(21)	2	-3.45	-27.69	-40.72	132.92	-16.56	1 Mxmax
2(19)	2	-32.23	-2.43	-40.72	11.68	-154.70	1 Mymax
2(1)	2	0.10	-0.24	-40.72	1.17	0.49	0 V-V
2(0)	2	-1.61	-0.15	-40.72	0.72	-7.75	0 Wx+V
2(0)	2	1.81	-0.31	-40.72	1.49	8.69	0 -Wx+V
2(0)	2	-1.09	-3.56	-40.72	17.07	-5.24	0 Wy+V
2(0)	2	1.29	3.10	-40.72	-14.86	6.18	0 -Wy+V
2(0)	2	-32.23	-2.43	-40.72	11.68	-154.70	1 Ex+V
2(0)	2	32.40	2.05	-40.72	-9.83	155.50	1 -Ex+V
2(0)	2	-3.45	-27.69	-40.72	132.92	-16.56	1 Ey+V
2(0)	2	3.62	27.31	-40.72	-131.07	17.36	1 -Ey+V

3(19)	3	-81.08	-12.22	-441.89	24.39	-213.17	1 Vxmax
3(21)	3	-30.32	-55.28	-334.88	163.22	-55.81	1 Vymax

3(25)	3	-27.07	-54.70	-256.82	162.23	-50.72	1	Nmin
3(14)	3	-17.98	3.71	-502.67	-15.14	-25.26	0	Nmax
3(21)	3	-30.32	-55.28	-334.88	163.22	-55.81	1	Mxmax
3(19)	3	-81.08	-12.22	-441.89	24.39	-213.17	1	Mymax
3(1)	3	-21.04	-3.39	-492.69	5.94	-32.86	0	V-V
3(0)	3	-24.03	-3.55	-485.60	5.98	-42.09	0	Wx+V
3(0)	3	-17.25	-3.27	-487.02	5.88	-22.40	0	-Wx+V
3(0)	3	-23.30	-10.53	-469.94	26.99	-39.23	0	Wy+V
3(0)	3	-17.98	3.71	-502.67	-15.14	-25.26	0	-Wy+V
3(0)	3	-81.08	-12.22	-441.89	24.39	-213.17	1	Ex+V
3(0)	3	42.03	5.30	-494.87	-12.57	152.12	1	-Ex+V
3(0)	3	-30.32	-55.28	-334.88	163.22	-55.81	1	Ey+V
3(0)	3	-8.73	48.36	-601.88	-151.40	-5.24	1	-Ey+V

4(19)	4	-106.74	67.99	-392.34	-102.70	-272.27	1	Vxmax
4(22)	4	3.07	147.42	-442.73	-329.10	15.26	1	Vymax
4(25)	4	-8.04	-20.88	-269.43	131.11	-22.59	1	Nmin
4(1)	4	-2.91	77.08	-418.57	-120.53	-4.27	0	Nmax
4(22)	4	3.07	147.42	-442.73	-329.10	15.26	1	Mxmax
4(19)	4	-106.74	67.99	-392.34	-102.70	-272.27	1	Mymax
4(1)	4	-2.91	77.08	-418.57	-120.53	-4.27	0	V-V
4(0)	4	-8.34	75.17	-410.99	-117.70	-18.32	0	Wx+V
4(0)	4	2.62	74.76	-410.34	-116.78	9.93	0	-Wx+V
4(0)	4	-5.68	63.94	-403.31	-86.05	-12.08	0	Wy+V
4(0)	4	-0.04	86.00	-418.02	-148.43	3.68	0	-Wy+V
4(0)	4	-106.74	67.99	-392.34	-102.70	-272.27	1	Ex+V
4(0)	4	101.32	70.06	-384.56	-113.28	264.27	1	-Ex+V
4(0)	4	-8.49	-9.37	-334.17	113.11	-23.26	1	Ey+V
4(0)	4	3.07	147.42	-442.73	-329.10	15.26	1	-Ey+V

5(20)	5	127.69	8.58	-347.52	-17.16	306.29	1	Vxmax
5(22)	5	35.88	84.76	-356.50	-226.78	65.13	1	Vymax
5(26)	5	30.47	82.52	-287.93	-223.36	56.58	1	Nmin
5(1)	5	36.08	15.15	-441.59	-23.11	57.01	0	Nmax
5(21)	5	29.06	-57.94	-466.31	185.73	37.43	1	Mxmax
5(20)	5	127.69	8.58	-347.52	-17.16	306.29	1	Mymax
5(1)	5	36.08	15.15	-441.59	-23.11	57.01	0	V-V
5(0)	5	30.08	15.28	-436.16	-23.55	42.07	0	Wx+V
5(0)	5	40.19	14.10	-431.17	-21.31	68.94	0	-Wx+V
5(0)	5	33.12	-5.15	-441.53	5.12	49.42	0	Wy+V
5(0)	5	37.16	24.23	-425.80	-49.98	61.58	0	-Wy+V
5(0)	5	-62.75	18.24	-475.29	-23.90	-203.73	1	Ex+V
5(0)	5	127.69	8.58	-347.52	-17.16	306.29	1	-Ex+V
5(0)	5	29.06	-57.94	-466.31	185.73	37.43	1	Ey+V

5(0)	5	35.88	84.76	-356.50	-226.78	65.13	1	-Ey+V

6(19)	6	-135.87	18.91	-438.32	-27.06	-318.67	1	Vxmax
6(22)	6	-17.13	134.64	-448.39	-312.84	-18.12	1	Vymax
6(25)	6	-56.73	-66.49	-283.11	206.55	-97.55	1	Nmin
6(1)	6	-45.24	41.50	-430.87	-64.65	-70.82	0	Nmax
6(22)	6	-17.13	134.64	-448.39	-312.84	-18.12	1	Mxmax
6(19)	6	-135.87	18.91	-438.32	-27.06	-318.67	1	Mymax
6(1)	6	-45.24	41.50	-430.87	-64.65	-70.82	0	V-V
6(0)	6	-48.89	39.61	-424.67	-61.80	-82.06	0	Wx+V
6(0)	6	-38.99	41.12	-420.34	-64.00	-55.52	0	-Wx+V
6(0)	6	-48.89	25.64	-415.79	-24.63	-79.48	0	Wy+V
6(0)	6	-38.99	55.09	-429.22	-101.18	-58.10	0	-Wy+V
6(0)	6	-135.87	18.91	-438.32	-27.06	-318.67	1	Ex+V
6(0)	6	55.29	55.44	-359.67	-88.89	192.48	1	-Ex+V
6(0)	6	-63.45	-60.29	-349.61	196.88	-108.07	1	Ey+V
6(0)	6	-17.13	134.64	-448.39	-312.84	-18.12	1	-Ey+V

7(20)	7	69.20	3.34	-595.39	-10.94	195.92	1	Vxmax
7(21)	7	10.17	-52.02	-536.67	154.31	10.80	1	Vymax
7(26)	7	15.19	49.12	-445.63	-148.79	29.43	1	Nmin
7(1)	7	15.62	-1.81	-569.78	3.51	24.79	0	Nmax
7(21)	7	10.17	-52.02	-536.67	154.31	10.80	1	Mxmax
7(20)	7	69.20	3.34	-595.39	-10.94	195.92	1	Mymax
7(1)	7	15.62	-1.81	-569.78	3.51	24.79	0	V-V
7(0)	7	12.11	-1.59	-558.14	2.90	14.79	0	Wx+V
7(0)	7	18.18	-1.91	-563.59	3.85	33.29	0	-Wx+V
7(0)	7	13.94	-7.99	-560.11	21.74	20.33	0	Wy+V
7(0)	7	16.35	4.48	-561.61	-14.98	27.75	0	-Wy+V
7(0)	7	-41.54	-6.51	-476.21	16.96	-152.04	1	Ex+V
7(0)	7	69.20	3.34	-595.39	-10.94	195.92	1	-Ex+V
7(0)	7	10.17	-52.02	-536.67	154.31	10.80	1	Ey+V
7(0)	7	17.49	48.85	-534.93	-148.29	33.09	1	-Ey+V

8(19)	8	-69.06	-6.19	-659.59	14.93	-195.36	1	Vxmax
8(21)	8	-10.43	-61.27	-640.07	172.66	-21.59	1	Vymax
8(26)	8	-4.48	55.63	-537.40	-162.92	-1.56	1	Nmin
8(1)	8	-9.23	-3.57	-689.21	6.21	-14.31	0	Nmax
8(21)	8	-10.43	-61.27	-640.07	172.66	-21.59	1	Mxmax
8(19)	8	-69.06	-6.19	-659.59	14.93	-195.36	1	Mymax
8(1)	8	-9.23	-3.57	-689.21	6.21	-14.31	0	V-V
8(0)	8	-12.24	-3.26	-677.71	5.52	-23.55	0	Wx+V
8(0)	8	-5.63	-3.62	-676.06	6.44	-4.20	0	-Wx+V
8(0)	8	-10.03	-11.26	-676.82	28.13	-17.40	0	Wy+V

8(0)	8	-7.85	4.38	-676.95	-16.18	-10.34	0	-Wy+V
8(0)	8	-69.06	-6.19	-659.59	14.93	-195.36	1	Ex+V
8(0)	8	52.79	0.03	-624.93	-4.30	170.11	1	-Ex+V
8(0)	8	-10.43	-61.27	-640.07	172.66	-21.59	1	Ey+V
8(0)	8	-5.84	55.12	-644.44	-162.03	-3.66	1	-Ey+V

9(20)	9	105.83	4.83	-238.25	-11.85	254.14	1	Vxmax
9(21)	9	36.81	-77.04	-219.43	197.50	54.17	1	Vymax
9(26)	9	36.60	76.51	-180.00	-195.81	61.66	1	Nmin
9(1)	9	44.46	-0.32	-234.98	1.10	70.16	0	Nmax
9(21)	9	36.81	-77.04	-219.43	197.50	54.17	1	Mxmax
9(20)	9	105.83	4.83	-238.25	-11.85	254.14	1	Mymax
9(1)	9	44.46	-0.32	-234.98	1.10	70.16	0	V-V
9(0)	9	39.93	-0.16	-229.43	0.65	58.57	0	Wx+V
9(0)	9	46.67	-0.46	-231.55	1.46	78.09	0	-Wx+V
9(0)	9	42.28	-10.23	-230.46	26.51	65.39	0	Wy+V
9(0)	9	44.32	9.60	-230.51	-24.40	71.26	0	-Wy+V
9(0)	9	-25.75	-5.40	-197.49	13.69	-127.78	1	Ex+V
9(0)	9	105.83	4.83	-238.25	-11.85	254.14	1	-Ex+V
9(0)	9	36.81	-77.04	-219.43	197.50	54.17	1	Ey+V
9(0)	9	43.28	76.46	-216.31	-195.66	72.19	1	-Ey+V

10(19)	10	-121.06	-3.19	-326.23	7.07	-296.86	1	Vxmax
10(21)	10	-33.35	-92.34	-250.29	248.81	-58.03	1	Vymax
10(24)	10	59.20	6.21	-156.95	-11.03	199.98	1	Nmin
10(1)	10	-37.88	1.93	-280.76	-2.48	-59.32	0	Nmax
10(21)	10	-33.35	-92.34	-250.29	248.81	-58.03	1	Mxmax
10(19)	10	-121.06	-3.19	-326.23	7.07	-296.86	1	Mymax
10(1)	10	-37.88	1.93	-280.76	-2.48	-59.32	0	V-V
10(0)	10	-41.25	1.74	-279.44	-2.29	-70.06	0	Wx+V
10(0)	10	-32.34	1.97	-273.05	-2.50	-45.17	0	-Wx+V
10(0)	10	-37.65	-12.44	-275.05	35.74	-60.58	0	Wy+V
10(0)	10	-35.94	16.15	-277.44	-40.54	-54.65	0	-Wy+V
10(0)	10	-121.06	-3.19	-326.23	7.07	-296.86	1	Ex+V
10(0)	10	53.58	6.49	-200.87	-11.39	191.17	1	-Ex+V
10(0)	10	-33.35	-92.34	-250.29	248.81	-58.03	1	Ey+V
10(0)	10	-34.13	95.64	-276.81	-253.12	-47.67	1	-Ey+V

11(20)	11	75.45	10.56	-860.75	-22.30	206.81	1	Vxmax
11(21)	11	17.68	-44.64	-783.25	142.72	-25.51	1	Vymax
11(26)	11	17.84	54.54	-665.76	-157.34	30.65	1	Nmin
11(1)	11	21.19	5.44	-849.40	-7.91	33.52	0	Nmax
11(21)	11	17.68	-44.64	-783.25	142.72	25.51	1	Mxmax
11(20)	11	75.45	10.56	-860.75	-22.30	206.81	1	Mymax

11(1)	11	21.19	5.44	-849.40	-7.91	33.52	0	V-V
11(0)	11	17.72	5.57	-830.92	-8.37	23.61	0	Wx+V
11(0)	11	23.71	5.29	-836.89	-7.48	41.91	0	-Wx+V
11(0)	11	20.16	-0.68	-833.27	10.23	31.05	0	Wy+V
11(0)	11	21.27	11.54	-834.54	-26.08	34.47	0	-Wy+V
11(0)	11	-36.70	0.24	-720.00	6.34	-145.54	1	Ex+V
11(0)	11	75.45	10.56	-860.75	-22.30	206.81	1	-Ex+V
11(0)	11	17.68	-44.64	-783.25	142.72	25.51	1	Ey+V
11(0)	11	21.07	55.44	-797.49	-158.67	35.75	1	-Ey+V

12(19)	12	-74.81	9.05	-1224.73	-9.06	-205.54	1	Vxmax
12(22)	12	-6.25	70.19	-1180.29	-185.76	-7.24	1	Vymax
12(26)	12	-4.83	68.05	-978.55	-182.47	-5.04	1	Nmin
12(1)	12	-8.81	13.92	-1326.09	-21.32	-13.71	0	Nmax
12(22)	12	-6.25	70.19	-1180.29	-185.76	-7.24	1	Mxmax
12(19)	12	-74.81	9.05	-1224.73	-9.06	-205.54	1	Mymax
12(1)	12	-8.81	13.92	-1326.09	-21.32	-13.71	0	V-V
12(0)	12	-12.20	13.78	-1296.20	-21.30	-23.49	0	Wx+V
12(0)	12	-5.24	13.50	-1295.26	-20.52	-3.66	0	-Wx+V
12(0)	12	-9.40	5.99	-1300.43	0.99	-15.48	0	Wy+V
12(0)	12	-8.05	21.29	-1291.02	-42.81	-11.67	0	-Wy+V
12(0)	12	-74.81	9.05	-1224.73	-9.06	-205.54	1	Ex+V
12(0)	12	57.86	16.64	-1196.14	-30.44	179.13	1	-Ex+V
12(0)	12	-10.70	-44.50	-1240.58	146.26	-19.17	1	Ey+V
12(0)	12	-6.25	70.19	-1180.29	-185.76	-7.24	1	-Ey+V

13(19)	13	-65.77	-41.73	-1283.53	69.34	-191.32	1	Vxmax
13(21)	13	2.31	-103.14	-1238.45	242.35	1.31	1	Vymax
13(26)	13	4.57	32.29	-1093.35	-130.06	9.75	1	Nmin
13(1)	13	4.28	-43.06	-1398.63	68.31	6.90	0	Nmax
13(21)	13	2.31	-103.14	-1238.45	242.35	1.31	1	Mxmax
13(19)	13	-65.77	-41.73	-1283.53	69.34	-191.32	1	Mymax
13(1)	13	4.28	-43.06	-1398.63	68.31	6.90	0	V-V
13(0)	13	0.50	-41.82	-1366.00	66.20	-3.50	0	Wx+V
13(0)	13	7.79	-41.99	-1364.73	66.71	16.85	0	-Wx+V
13(0)	13	3.54	-51.14	-1362.26	92.15	4.88	0	Wy+V
13(0)	13	4.75	-32.67	-1368.46	40.76	8.47	0	-Wy+V
13(0)	13	-65.77	-41.73	-1283.53	69.34	-191.32	1	Ex+V
13(0)	13	73.27	-35.56	-1260.26	53.15	203.39	1	-Ex+V
13(0)	13	2.31	-103.14	-1238.45	242.35	1.31	1	Ey+V
13(0)	13	5.19	25.84	-1305.33	-119.85	10.76	1	-Ey+V

14(19)	14	-74.90	-6.18	-982.02	11.74	-205.69	1	Vxmax
14(21)	14	-6.48	-80.95	-1015.40	211.22	-12.94	1	Vymax

14(26)	14	-6.19	61.97	-875.52	-180.67	-6.76	1	Nmin
14(1)	14	-8.09	-11.70	-1124.71	18.88	-12.57	0	Nmax
14(21)	14	-6.48	-80.95	-1015.40	211.22	-12.94	1	Mxmax
14(19)	14	-74.90	-6.18	-982.02	11.74	-205.69	1	Mymax
14(1)	14	-8.09	-11.70	-1124.71	18.88	-12.57	0	V-V
14(0)	14	-11.34	-10.99	-1097.72	17.67	-22.13	0	Wx+V
14(0)	14	-4.22	-11.70	-1102.71	18.93	-2.05	0	-Wx+V
14(0)	14	-8.11	-22.03	-1099.51	47.58	-13.45	0	Wy+V
14(0)	14	-7.45	-0.66	-1100.92	-10.98	-10.73	0	-Wy+V
14(0)	14	-74.90	-6.18	-982.02	11.74	-205.69	1	Ex+V
14(0)	14	61.07	-14.52	-1080.81	21.58	184.19	1	-Ex+V
14(0)	14	-6.48	-80.95	-1015.40	211.22	-12.94	1	Ey+V
14(0)	14	-7.35	60.25	-1047.42	-177.89	-8.56	1	-Ey+V

15(19)	15	-70.20	6.67	-745.48	-9.93	-198.27	1	Vxmax
15(22)	15	-12.48	59.93	-793.95	-181.26	-17.06	1	Vymax
15(25)	15	-15.21	-48.55	-503.67	163.94	-26.28	1	Nmin
15(1)	15	-16.24	6.62	-762.30	-10.01	-25.40	0	Nmax
15(21)	15	-17.73	-47.51	-621.63	162.36	-30.22	1	Mxmax
15(19)	15	-70.20	6.67	-745.48	-9.93	-198.27	1	Mymax
15(1)	15	-16.24	6.62	-762.30	-10.01	-25.40	0	V-V
15(0)	15	-18.90	6.55	-749.81	-9.95	-34.03	0	Wx+V
15(0)	15	-12.99	6.47	-746.18	-9.77	-15.85	0	-Wx+V
15(0)	15	-16.64	-2.28	-736.69	17.75	-26.87	0	Wy+V
15(0)	15	-15.25	15.31	-759.29	-37.48	-23.01	0	-Wy+V
15(0)	15	-70.20	6.67	-745.48	-9.93	-198.27	1	Ex+V
15(0)	15	40.00	5.75	-670.10	-8.97	151.00	1	-Ex+V
15(0)	15	-17.73	-47.51	-621.63	162.36	-30.22	1	Ey+V
15(0)	15	-12.48	59.93	-793.95	-181.26	-17.06	1	-Ey+V

16(19)	16	-36.54	-1.55	-536.21	1.51	-145.21	1	Vxmax
16(21)	16	-0.86	-42.05	-482.21	157.50	-3.67	1	Vymax
16(25)	16	-0.89	-41.67	-392.89	156.87	-3.75	1	Nmin
16(1)	16	0.26	-2.58	-579.65	4.40	0.57	0	Nmax
16(21)	16	-0.86	-42.05	-482.21	157.50	-3.67	1	Mxmax
16(19)	16	-36.54	-1.55	-536.21	1.51	-145.21	1	Mymax
16(1)	16	0.26	-2.58	-579.65	4.40	0.57	0	V-V
16(0)	16	-1.84	-2.50	-568.16	4.29	-7.18	0	Wx+V
16(0)	16	2.34	-2.48	-568.17	4.20	8.27	0	-Wx+V
16(0)	16	-0.11	-9.53	-561.19	30.40	-0.86	0	Wy+V
16(0)	16	0.60	4.55	-575.14	-21.91	1.94	0	-Wy+V
16(0)	16	-36.54	-1.55	-536.21	1.51	-145.21	1	Ex+V
16(0)	16	36.96	-2.94	-535.61	6.10	146.15	1	-Ex+V
16(0)	16	-0.86	-42.05	-482.21	157.50	-3.67	1	Ey+V

16(0)	16	1.28	37.55	-589.61	-149.89	4.61	1	-Ey+V

17(20)	17	70.31	3.98	-756.85	-3.37	198.72	1	Vxmax
17(21)	17	14.46	-59.26	-588.90	188.46	20.44	1	Vymax
17(25)	17	11.87	-60.18	-468.41	189.86	16.34	1	Nmin
17(14)	17	17.13	17.37	-786.49	-43.46	27.96	0	Nmax
17(21)	17	14.46	-59.26	-588.90	188.46	20.44	1	Mxmax
17(20)	17	70.31	3.98	-756.85	-3.37	198.72	1	Mymax
17(1)	17	17.08	5.98	-781.26	-9.12	27.04	0	V-V
17(0)	17	13.75	5.77	-764.18	-8.74	17.35	0	Wx+V
17(0)	17	19.62	5.93	-767.69	-9.15	35.47	0	-Wx+V
17(0)	17	16.23	-5.67	-745.38	25.57	24.86	0	Wy+V
17(0)	17	17.13	17.37	-786.49	-43.46	27.96	0	-Wy+V
17(0)	17	-39.18	7.02	-688.94	-13.50	-149.44	1	Ex+V
17(0)	17	70.31	3.98	-756.85	-3.37	198.72	1	-Ex+V
17(0)	17	14.46	-59.26	-588.90	188.46	20.44	1	Ey+V
17(0)	17	16.68	70.26	-856.89	-205.32	28.84	1	-Ey+V

18(19)	18	-75.78	18.50	-871.66	-33.10	-207.08	1	Vxmax
18(22)	18	-5.45	76.00	-985.78	-218.26	-5.99	1	Vymax
18(25)	18	-8.89	-47.08	-653.52	173.05	-16.33	1	Nmin
18(14)	18	-7.82	27.77	-942.50	-61.19	-11.31	0	Nmax
18(22)	18	-5.45	76.00	-985.78	-218.26	-5.99	1	Mxmax
18(19)	18	-75.78	18.50	-871.66	-33.10	-207.08	1	Mymax
18(1)	18	-8.81	16.86	-941.32	-26.32	-13.70	0	V-V
18(0)	18	-12.12	16.49	-928.26	-25.62	-23.36	0	Wx+V
18(0)	18	-4.98	16.66	-929.63	-26.15	-3.25	0	-Wx+V
18(0)	18	-9.28	5.38	-915.39	9.43	-15.29	0	Wy+V
18(0)	18	-7.82	27.77	-942.50	-61.19	-11.31	0	-Wy+V
18(0)	18	-75.78	18.50	-871.66	-33.10	-207.08	1	Ex+V
18(0)	18	60.14	13.05	-916.67	-16.21	182.72	1	-Ex+V
18(0)	18	-10.19	-44.45	-802.55	168.94	-18.36	1	Ey+V
18(0)	18	-5.45	76.00	-985.78	-218.26	-5.99	1	-Ey+V

19(19)	19	-6.44	4.18	-376.30	-6.92	-14.93	1	Vxmax
19(22)	19	0.21	9.15	-385.33	-19.92	0.46	1	Vymax
19(26)	19	0.20	8.49	-323.60	-18.88	0.45	1	Nmin
19(1)	19	0.06	4.15	-385.34	-6.60	0.10	0	Nmax
19(22)	19	0.21	9.15	-385.33	-19.92	0.46	1	Mxmax
19(19)	19	-6.44	4.18	-376.30	-6.92	-14.93	1	Mymax
19(1)	19	0.06	4.15	-385.34	-6.60	0.10	0	V-V
19(0)	19	-0.27	4.08	-381.37	-6.48	-0.66	0	Wx+V
19(0)	19	0.37	4.09	-381.45	-6.53	0.84	0	-Wx+V
19(0)	19	-0.01	3.12	-379.76	-4.00	-0.05	0	Wy+V

19(0)	19	0.11	5.05	-383.07	-9.02	0.23	0	-Wy+V
19(0)	19	-6.44	4.18	-376.30	-6.92	-14.93	1	Ex+V
19(0)	19	6.51	3.64	-364.49	-5.54	15.06	1	-Ex+V
19(0)	19	-0.14	-1.32	-355.46	7.46	-0.34	1	Ey+V
19(0)	19	0.21	9.15	-385.33	-19.92	0.46	1	-Ey+V

20(20)	20	75.24	10.93	-781.59	-11.44	206.49	1	Vxmax
20(22)	20	9.50	77.81	-896.30	-225.02	17.54	1	Vymax
20(25)	20	5.03	-50.40	-583.83	182.11	5.57	1	Nmin
20(1)	20	8.69	16.45	-873.25	-25.74	13.84	0	Nmax
20(22)	20	9.50	77.81	-896.30	-225.02	17.54	1	Mxmax
20(19)	20	-59.39	18.97	-833.09	-35.37	-181.27	1	Mymax
20(1)	20	8.69	16.45	-873.25	-25.74	13.84	0	V-V
20(0)	20	4.96	15.95	-856.57	-24.78	3.53	0	Wx+V
20(0)	20	12.01	16.17	-855.33	-25.47	23.50	0	-Wx+V
20(0)	20	7.89	4.01	-841.63	12.83	11.74	0	Wy+V
20(0)	20	9.08	28.11	-870.27	-63.08	15.29	0	-Wy+V
20(0)	20	-59.39	18.97	-833.09	-35.37	-181.27	1	Ex+V
20(0)	20	75.24	10.93	-781.59	-11.44	206.49	1	-Ex+V
20(0)	20	6.35	-47.91	-718.38	178.21	7.68	1	Ey+V
20(0)	20	9.50	77.81	-896.30	-225.02	17.54	1	-Ey+V

21(19)	21	-66.68	21.97	-908.68	-41.62	-192.75	1	Vxmax
21(22)	21	2.64	82.64	-999.51	-236.54	6.74	1	Vymax
21(25)	21	-1.37	-51.34	-673.54	187.40	-4.50	1	Nmin
21(1)	21	0.76	18.75	-999.87	-29.42	1.36	0	Nmax
21(22)	21	2.64	82.64	-999.51	-236.54	6.74	1	Mxmax
21(19)	21	-66.68	21.97	-908.68	-41.62	-192.75	1	Mymax
21(1)	21	0.76	18.75	-999.87	-29.42	1.36	0	V-V
21(0)	21	-2.79	18.16	-976.47	-28.27	-8.68	0	Wx+V
21(0)	21	4.28	18.46	-977.43	-29.19	11.33	0	-Wx+V
21(0)	21	0.09	5.38	-961.98	11.92	-0.55	0	Wy+V
21(0)	21	1.40	31.24	-991.92	-69.38	3.20	0	-Wy+V
21(0)	21	-66.68	21.97	-908.68	-41.62	-192.75	1	Ex+V
21(0)	21	68.06	12.18	-916.47	-11.99	195.20	1	-Ex+V
21(0)	21	-1.26	-48.49	-825.64	182.93	-4.30	1	Ey+V
21(0)	21	2.64	82.64	-999.51	-236.54	6.74	1	-Ey+V

22(19)	22	-70.71	17.22	-635.39	-35.68	-199.09	1	Vxmax
22(22)	22	-13.20	77.99	-643.65	-233.14	-18.19	1	Vymax
22(25)	22	-13.86	-58.02	-384.98	201.74	-24.15	1	Nmin
22(14)	22	-15.02	25.14	-606.69	-61.15	-22.65	0	Nmax
22(21)	22	-16.32	-56.20	-478.50	198.88	-28.00	1	Mxmax
22(19)	22	-70.71	17.22	-635.39	-35.68	-199.09	1	Mymax

22(1)	22	-15.85	11.79	-603.61	-18.52	-24.78	0	V-V
22(0)	22	-18.55	11.40	-595.21	-17.64	-33.47	0	Wx+V
22(0)	22	-12.57	11.71	-589.68	-18.67	-15.20	0	-Wx+V
22(0)	22	-16.10	-2.04	-578.20	24.84	-26.02	0	Wy+V
22(0)	22	-15.02	25.14	-606.69	-61.15	-22.65	0	-Wy+V
22(0)	22	-70.71	17.22	-635.39	-35.68	-199.09	1	Ex+V
22(0)	22	41.20	4.57	-486.76	1.42	152.89	1	-Ex+V
22(0)	22	-16.32	-56.20	-478.50	198.88	-28.00	1	Ey+V
22(0)	22	-13.20	77.99	-643.65	-233.14	-18.19	1	-Ey+V

23(20)	23	71.62	-5.70	-713.75	3.29	201.95	1	Vxmax
23(21)	23	16.78	-66.33	-432.58	176.86	27.30	1	Vymax
23(25)	23	14.29	-64.51	-327.16	173.91	23.36	1	Nmin
23(14)	23	15.53	-4.76	-692.77	-0.44	24.30	0	Nmax
23(21)	23	16.78	-66.33	-432.58	176.86	27.30	1	Mxmax
23(20)	23	71.62	-5.70	-713.75	3.29	201.95	1	Mymax
23(1)	23	16.20	-11.72	-687.72	19.11	25.61	0	V-V
23(0)	23	12.91	-11.33	-670.87	18.24	16.03	0	Wx+V
23(0)	23	18.83	-11.69	-675.61	19.24	34.14	0	-Wx+V
23(0)	23	16.21	-18.27	-653.71	37.92	25.87	0	Wy+V
23(0)	23	15.53	-4.76	-692.77	-0.44	24.30	0	-Wy+V
23(0)	23	-41.75	-16.13	-551.36	32.10	-154.74	1	Ex+V
23(0)	23	71.62	-5.70	-713.75	3.29	201.95	1	-Ex+V
23(0)	23	16.78	-66.33	-432.58	176.86	27.30	1	Ey+V
23(0)	23	13.10	44.51	-832.52	-141.47	19.91	1	-Ey+V

24(19)	24	-73.38	-15.97	-953.15	30.33	-204.55	1	Vxmax
24(21)	24	-4.17	-71.08	-756.17	188.10	-5.68	1	Vymax
24(25)	24	-3.40	-69.08	-596.89	184.88	-4.47	1	Nmin
24(1)	24	-4.82	-13.18	-1071.24	21.34	-7.48	0	Nmax
24(21)	24	-4.17	-71.08	-756.17	188.10	-5.68	1	Mxmax
24(19)	24	-73.38	-15.97	-953.15	30.33	-204.55	1	Mymax
24(1)	24	-4.82	-13.18	-1071.24	21.34	-7.48	0	V-V
24(0)	24	-8.30	-12.73	-1041.55	20.42	-17.35	0	Wx+V
24(0)	24	-1.26	-13.00	-1040.28	21.20	2.52	0	-Wx+V
24(0)	24	-4.59	-20.75	-1019.19	43.08	-6.87	0	Wy+V
24(0)	24	-4.97	-4.98	-1062.64	-1.46	-7.97	0	-Wy+V
24(0)	24	-73.38	-15.97	-953.15	30.33	-204.55	1	Ex+V
24(0)	24	64.06	-7.99	-958.24	8.33	190.05	1	-Ex+V
24(0)	24	-4.17	-71.08	-756.17	188.10	-5.68	1	Ey+V
24(0)	24	-5.15	47.11	-1155.22	-149.44	-8.82	1	-Ey+V

25(19)	25	-61.51	-10.64	-1025.31	20.40	-185.85	1	Vxmax
25(21)	25	4.13	-69.68	-797.09	189.68	7.40	1	Vymax

25(25)	25	3.60	-68.36	-629.46	187.54	6.55	1	Nmin
25(1)	25	3.66	-8.93	-1117.63	14.58	5.86	0	Nmax
25(21)	25	4.13	-69.68	-797.09	189.68	7.40	1	Mxmax
25(19)	25	-61.51	-10.64	-1025.31	20.40	-185.85	1	Mymax
25(1)	25	3.66	-8.93	-1117.63	14.58	5.86	0	V-V
25(0)	25	0.20	-8.56	-1089.61	13.86	-3.98	0	Wx+V
25(0)	25	6.86	-8.76	-1086.93	14.41	15.29	0	-Wx+V
25(0)	25	3.78	-17.56	-1063.41	39.29	6.30	0	Wy+V
25(0)	25	3.28	0.24	-1113.13	-11.03	5.01	0	-Wy+V
25(0)	25	-61.51	-10.64	-1025.31	20.40	-185.85	1	Ex+V
25(0)	25	67.85	-5.18	-986.22	5.33	196.01	1	-Ex+V
25(0)	25	4.13	-69.68	-797.09	189.68	7.40	1	Ey+V
25(0)	25	2.21	53.86	-1214.45	-163.95	2.77	1	-Ey+V

26(20)	26	65.98	-0.69	-889.18	-0.31	192.89	1	Vxmax
26(21)	26	13.33	-64.75	-777.69	185.70	21.39	1	Vymax
26(25)	26	11.21	-64.45	-630.96	185.18	18.03	1	Nmin
26(1)	26	13.97	-2.02	-970.12	3.65	22.10	0	Nmax
26(21)	26	13.33	-64.75	-777.69	185.70	21.39	1	Mxmax
26(20)	26	65.98	-0.69	-889.18	-0.31	192.89	1	Mymax
26(1)	26	13.97	-2.02	-970.12	3.65	22.10	0	V-V
26(0)	26	10.84	-1.89	-946.37	3.34	12.77	0	Wx+V
26(0)	26	16.44	-2.03	-946.77	3.70	30.39	0	-Wx+V
26(0)	26	13.77	-11.62	-933.37	31.20	21.87	0	Wy+V
26(0)	26	13.51	7.71	-959.77	-24.16	21.29	0	-Wy+V
26(0)	26	-40.53	-2.86	-871.62	6.63	-152.63	1	Ex+V
26(0)	26	65.98	-0.69	-889.18	-0.31	192.89	1	-Ex+V
26(0)	26	13.33	-64.75	-777.69	185.70	21.39	1	Ey+V
26(0)	26	12.13	61.20	-983.11	-179.38	18.87	1	-Ey+V

27(19)	27	-72.65	-1.93	-889.03	3.63	-203.20	1	Vxmax
27(21)	27	-9.79	-67.87	-816.25	194.41	-14.99	1	Vymax
27(25)	27	-8.12	-67.88	-663.22	194.38	-12.38	1	Nmin
27(1)	27	-11.14	0.09	-1008.34	0.27	-17.41	0	Nmax
27(21)	27	-9.79	-67.87	-816.25	194.41	-14.99	1	Mxmax
27(19)	27	-72.65	-1.93	-889.03	3.63	-203.20	1	Mymax
27(1)	27	-11.14	0.09	-1008.34	0.27	-17.41	0	V-V
27(0)	27	-14.08	0.02	-983.50	0.33	-26.46	0	Wx+V
27(0)	27	-7.60	0.16	-985.83	0.16	-7.44	0	-Wx+V
27(0)	27	-10.76	-10.90	-970.65	31.31	-16.73	0	Wy+V
27(0)	27	-10.92	11.08	-998.67	-30.82	-17.16	0	-Wy+V
27(0)	27	-72.65	-1.93	-889.03	3.63	-203.20	1	Ex+V
27(0)	27	52.63	2.13	-947.28	-3.30	171.89	1	-Ex+V
27(0)	27	-9.79	-67.87	-816.25	194.41	-14.99	1	Ey+V

27(0)	27	-10.23	68.06	-1020.07	-194.07	-16.31	1	-Ey+V
28(19)	28	-67.07	8.64	-771.58	-14.53	-194.43	1	Vxmax
28(22)	28	1.12	68.85	-930.43	-199.21	1.55	1	Vymax
28(25)	28	1.24	-54.60	-485.38	177.27	2.35	1	Nmin
28(14)	28	1.34	18.74	-854.32	-44.25	2.13	0	Nmax
28(21)	28	1.46	-53.30	-614.09	175.27	2.70	1	Mxmax
28(19)	28	-67.07	8.64	-771.58	-14.53	-194.43	1	Mymax
28(1)	28	1.45	8.46	-851.36	-12.97	2.40	0	V-V
28(0)	28	-2.10	8.26	-830.48	-12.64	-7.60	0	Wx+V
28(0)	28	4.92	8.30	-830.71	-12.77	12.26	0	-Wx+V
28(0)	28	1.48	-2.19	-806.87	18.84	2.53	0	Wy+V
28(0)	28	1.34	18.74	-854.32	-44.25	2.13	0	-Wy+V
28(0)	28	-67.07	8.64	-771.58	-14.53	-194.43	1	Ex+V
28(0)	28	69.65	6.91	-772.94	-9.41	198.68	1	-Ex+V
28(0)	28	1.46	-53.30	-614.09	175.27	2.70	1	Ey+V
28(0)	28	1.12	68.85	-930.43	-199.21	1.55	1	-Ey+V
29(19)	29	-59.96	6.82	-893.98	-13.19	-183.22	1	Vxmax
29(21)	29	-0.15	-78.98	-723.91	219.51	0.17	1	Vymax
29(25)	29	-0.02	-79.48	-583.06	220.26	0.36	1	Nmin
29(1)	29	-0.64	3.30	-927.47	-4.91	-0.89	0	Nmax
29(21)	29	-0.15	-78.98	-723.91	219.51	0.17	1	Mxmax
29(19)	29	-59.96	6.82	-893.98	-13.19	-183.22	1	Mymax
29(1)	29	-0.64	3.30	-927.47	-4.91	-0.89	0	V-V
29(0)	29	-3.76	3.21	-907.72	-4.71	-10.21	0	Wx+V
29(0)	29	2.39	3.22	-903.96	-4.88	8.28	0	-Wx+V
29(0)	29	-0.53	-11.19	-887.43	34.27	-0.63	0	Wy+V
29(0)	29	-0.84	17.63	-924.26	-43.86	-1.29	0	-Wy+V
29(0)	29	-59.96	6.82	-893.98	-13.19	-183.22	1	Ex+V
29(0)	29	58.34	-0.85	-796.20	4.24	180.88	1	-Ex+V
29(0)	29	-0.15	-78.98	-723.91	219.51	0.17	1	Ey+V
29(0)	29	-1.46	84.95	-966.27	-228.47	-2.51	1	-Ey+V
30(19)	30	-72.83	-7.53	-1062.74	7.86	-203.67	1	Vxmax
30(21)	30	-8.65	-89.10	-890.93	239.24	-12.72	1	Vymax
30(25)	30	-7.09	-87.25	-703.95	236.30	-10.28	1	Nmin
30(14)	30	-10.70	2.68	-1214.86	-21.69	-16.98	0	Nmax
30(21)	30	-8.65	-89.10	-890.93	239.24	-12.72	1	Mxmax
30(19)	30	-72.83	-7.53	-1062.74	7.86	-203.67	1	Mymax
30(1)	30	-10.88	-11.81	-1199.77	18.82	-17.01	0	V-V
30(0)	30	-13.76	-11.73	-1176.69	18.80	-25.94	0	Wx+V
30(0)	30	-7.21	-11.53	-1181.97	18.22	-6.84	0	-Wx+V
30(0)	30	-10.27	-25.93	-1143.80	58.72	-15.80	0	Wy+V

30(0)	30	-10.70	2.68	-1214.86	-21.69	-16.98	0	-Wy+V
30(0)	30	-72.83	-7.53	-1062.74	7.86	-203.67	1	Ex+V
30(0)	30	54.08	-14.68	-1181.08	27.44	174.34	1	-Ex+V
30(0)	30	-8.65	-89.10	-890.93	239.24	-12.72	1	Ey+V
30(0)	30	-10.10	66.89	-1352.88	-203.94	-16.60	1	-Ey+V

31(19)	31	-6.68	-3.41	-463.65	5.18	-15.38	1	Vxmax
31(21)	31	-0.01	-9.20	-448.05	20.03	0.04	1	Vymax
31(26)	31	-0.11	2.44	-382.19	-9.23	-0.21	1	Nmin
31(1)	31	-0.04	-3.92	-476.71	6.25	-0.06	0	Nmax
31(21)	31	-0.01	-9.20	-448.05	20.03	0.04	1	Mxmax
31(19)	31	-6.68	-3.41	-463.65	5.18	-15.38	1	Mymax
31(1)	31	-0.04	-3.92	-476.71	6.25	-0.06	0	V-V
31(0)	31	-0.37	-3.86	-470.70	6.18	-0.82	0	Wx+V
31(0)	31	0.28	-3.85	-470.19	6.13	0.68	0	-Wx+V
31(0)	31	-0.03	-4.87	-470.13	8.75	-0.03	0	Wy+V
31(0)	31	-0.07	-2.84	-470.76	3.57	-0.11	0	-Wy+V
31(0)	31	-6.68	-3.41	-463.65	5.18	-15.38	1	Ex+V
31(0)	31	6.55	-3.97	-442.06	6.60	15.18	1	-Ex+V
31(0)	31	-0.01	-9.20	-448.05	20.03	0.04	1	Ey+V
31(0)	31	-0.12	1.83	-457.66	-8.25	-0.23	1	-Ey+V

32(20)	32	76.69	-15.48	-864.50	30.13	209.93	1	Vxmax
32(21)	32	8.96	-92.17	-652.43	247.88	14.99	1	Vymax
32(25)	32	7.55	-90.40	-503.35	245.08	12.76	1	Nmin
32(14)	32	8.94	3.99	-1001.88	-25.12	13.92	0	Nmax
32(21)	32	8.96	-92.17	-652.43	247.88	14.99	1	Mxmax
32(19)	32	-59.77	-5.76	-924.53	3.55	-183.12	1	Mymax
32(1)	32	9.36	-11.74	-985.66	18.63	14.84	0	V-V
32(0)	32	5.63	-11.59	-962.08	18.56	4.58	0	Wx+V
32(0)	32	12.62	-11.30	-961.38	17.76	24.36	0	-Wx+V
32(0)	32	9.31	-26.88	-921.58	61.45	15.01	0	Wy+V
32(0)	32	8.94	3.99	-1001.88	-25.12	13.92	0	-Wy+V
32(0)	32	-59.77	-5.76	-924.53	3.55	-183.12	1	Ex+V
32(0)	32	76.69	-15.48	-864.50	30.13	209.93	1	-Ex+V
32(0)	32	8.96	-92.17	-652.43	247.88	14.99	1	Ey+V
32(0)	32	7.96	70.93	-1136.59	-214.20	11.82	1	-Ey+V

33(19)	33	-67.69	-5.26	-974.05	1.23	-195.58	1	Vxmax
33(21)	33	1.56	-96.30	-717.60	258.20	3.35	1	Vymax
33(25)	33	1.44	-94.40	-555.81	255.19	3.14	1	Nmin
33(14)	33	0.51	4.27	-1101.45	-26.93	0.66	0	Nmax
33(21)	33	1.56	-96.30	-717.60	258.20	3.35	1	Mxmax
33(19)	33	-67.69	-5.26	-974.05	1.23	-195.58	1	Mymax

33(1)	33	0.77	-12.57	-1088.82	19.88	1.33	0	V-V
33(0)	33	-2.75	-12.45	-1057.01	19.91	-8.61	0	Wx+V
33(0)	33	4.26	-12.08	-1058.64	18.88	11.20	0	-Wx+V
33(0)	33	1.01	-28.79	-1014.19	65.71	1.94	0	Wy+V
33(0)	33	0.51	4.27	-1101.45	-26.93	0.66	0	-Wy+V
33(0)	33	-67.69	-5.26	-974.05	1.23	-195.58	1	Ex+V
33(0)	33	69.10	-17.55	-967.42	34.81	198.00	1	-Ex+V
33(0)	33	1.56	-96.30	-717.60	258.20	3.35	1	Ey+V
33(0)	33	-0.14	73.49	-1223.87	-222.16	-0.93	1	-Ey+V

34(19)	34	-73.54	0.23	-704.12	-8.95	-204.78	1	Vxmax
34(21)	34	-18.41	-94.65	-350.86	259.41	-28.09	1	Vymax
34(25)	34	-15.59	-93.46	-247.59	257.54	-23.68	1	Nmin
34(22)	34	-15.34	80.40	-888.43	-236.95	-24.84	1	Nmax
34(21)	34	-18.41	-94.65	-350.86	259.41	-28.09	1	Mxmax
34(19)	34	-73.54	0.23	-704.12	-8.95	-204.78	1	Mymax
34(1)	34	-18.37	-7.70	-676.82	12.16	-28.80	0	V-V
34(0)	34	-20.94	-7.78	-664.12	12.55	-37.25	0	Wx+V
34(0)	34	-15.01	-7.33	-659.50	11.29	-19.13	0	-Wx+V
34(0)	34	-18.19	-25.05	-613.82	61.07	-28.28	0	Wy+V
34(0)	34	-17.76	9.95	-709.80	-37.23	-28.10	0	-Wy+V
34(0)	34	-73.54	0.23	-704.12	-8.95	-204.78	1	Ex+V
34(0)	34	39.79	-14.48	-535.17	31.41	151.85	1	-Ex+V
34(0)	34	-18.41	-94.65	-350.86	259.41	-28.09	1	Ey+V
34(0)	34	-15.34	80.40	-888.43	-236.95	-24.84	1	-Ey+V

35(20)	35	74.29	11.78	-679.59	-24.22	206.55	1	Vxmax
35(22)	35	17.31	62.42	-421.57	-169.67	25.01	1	Vymax
35(26)	35	14.46	61.34	-318.66	-168.06	20.52	1	Nmin
35(13)	35	18.48	-0.04	-679.08	9.23	29.80	0	Nmax
35(21)	35	16.82	-49.47	-813.34	150.32	28.87	1	Mxmax
35(20)	35	74.29	11.78	-679.59	-24.22	206.55	1	Mymax
35(1)	35	18.60	6.89	-674.74	-10.19	29.37	0	V-V
35(0)	35	15.25	6.96	-656.18	-10.55	19.71	0	Wx+V
35(0)	35	21.14	6.60	-663.22	-9.55	37.75	0	-Wx+V
35(0)	35	18.48	-0.04	-679.08	9.23	29.80	0	Wy+V
35(0)	35	17.92	13.60	-640.32	-29.33	27.66	0	-Wy+V
35(0)	35	-40.16	1.17	-555.33	4.88	-152.67	1	Ex+V
35(0)	35	74.29	11.78	-679.59	-24.22	206.55	1	-Ex+V
35(0)	35	16.82	-49.47	-813.34	150.32	28.87	1	Ey+V
35(0)	35	17.31	62.42	-421.57	-169.67	25.01	1	-Ey+V

36(19)	36	-69.35	6.55	-984.46	-5.13	-198.64	1	Vxmax
36(22)	36	-2.33	70.09	-774.70	-185.60	-5.52	1	Vymax

36(26)	36	-2.22	68.32	-612.94	-182.91	-5.37	1	Nmin
36(1)	36	-0.66	11.56	-1088.77	-17.61	-0.95	0	Nmax
36(21)	36	1.07	-48.94	-1166.35	153.25	3.70	1	Mxmax
36(19)	36	-69.35	6.55	-984.46	-5.13	-198.64	1	Mymax
36(1)	36	-0.66	11.56	-1088.77	-17.61	-0.95	0	V-V
36(0)	36	-4.14	11.44	-1057.59	-17.62	-10.82	0	Wx+V
36(0)	36	2.84	11.17	-1057.88	-16.84	8.94	0	-Wx+V
36(0)	36	-0.12	3.36	-1078.99	5.13	0.53	0	Wy+V
36(0)	36	-1.18	19.25	-1036.47	-39.59	-2.41	0	-Wy+V
36(0)	36	-69.35	6.55	-984.46	-5.13	-198.64	1	Ex+V
36(0)	36	68.09	14.60	-956.59	-27.23	196.82	1	-Ex+V
36(0)	36	1.07	-48.94	-1166.35	153.25	3.70	1	Ey+V
36(0)	36	-2.33	70.09	-774.70	-185.60	-5.52	1	-Ey+V

37(19)	37	-77.75	5.93	-907.31	-5.67	-211.86	1	Vxmax
37(22)	37	-10.62	71.37	-709.73	-191.51	-18.57	1	Vymax
37(26)	37	-9.09	69.90	-557.93	-189.27	-16.17	1	Nmin
37(1)	37	-10.09	9.68	-1008.56	-14.70	-15.78	0	Nmax
37(21)	37	-7.78	-53.74	-1111.81	164.59	-10.23	1	Mxmax
37(19)	37	-77.75	5.93	-907.31	-5.67	-211.86	1	Mymax
37(1)	37	-10.09	9.68	-1008.56	-14.70	-15.78	0	V-V
37(0)	37	-13.33	9.54	-982.21	-14.64	-25.28	0	Wx+V
37(0)	37	-6.37	9.36	-983.56	-14.11	-5.56	0	-Wx+V
37(0)	37	-9.35	0.45	-1006.79	10.95	-14.00	0	Wy+V
37(0)	37	-10.35	18.45	-958.99	-39.70	-16.84	0	-Wy+V
37(0)	37	-77.75	5.93	-907.31	-5.67	-211.86	1	Ex+V
37(0)	37	59.35	11.71	-914.22	-21.25	183.05	1	-Ex+V
37(0)	37	-7.78	-53.74	-1111.81	164.59	-10.23	1	Ey+V
37(0)	37	-10.62	71.37	-709.73	-191.51	-18.57	1	-Ey+V

38(19)	38	-6.53	3.38	-312.78	-5.24	-15.16	1	Vxmax
38(22)	38	-0.05	7.95	-313.99	-16.98	-0.18	1	Vymax
38(26)	38	-0.06	7.36	-262.12	-16.05	-0.20	1	Nmin
38(1)	38	0.06	3.73	-328.72	-5.92	0.09	0	Nmax
38(22)	38	-0.05	7.95	-313.99	-16.98	-0.18	1	Mxmax
38(19)	38	-6.53	3.38	-312.78	-5.24	-15.16	1	Mymax
38(1)	38	0.06	3.73	-328.72	-5.92	0.09	0	V-V
38(0)	38	-0.26	3.68	-324.21	-5.85	-0.65	0	Wx+V
38(0)	38	0.38	3.67	-324.07	-5.82	0.84	0	-Wx+V
38(0)	38	0.10	3.03	-323.67	-4.18	0.20	0	Wy+V
38(0)	38	0.02	4.33	-324.61	-7.50	0.00	0	-Wy+V
38(0)	38	-6.53	3.38	-312.78	-5.24	-15.16	1	Ex+V
38(0)	38	6.66	3.67	-309.72	-5.96	15.38	1	-Ex+V
38(0)	38	0.19	-0.90	-308.51	5.78	0.41	1	Ey+V

38(0)	38	-0.05	7.95	-313.99	-16.98	-0.18	1	-Ey+V

39(20)	39	78.24	8.02	-1014.85	-14.01	212.79	1	Vxmax
39(21)	39	10.54	-58.20	-1145.55	175.40	18.60	1	Vymax
39(26)	39	5.72	69.83	-752.59	-193.03	7.13	1	Nmin
39(1)	39	9.77	6.28	-1119.30	-9.42	15.48	0	Nmax
39(21)	39	10.54	-58.20	-1145.55	175.40	18.60	1	Mxmax
39(19)	39	-60.51	4.68	-1055.86	-5.23	-184.72	1	Mymax
39(1)	39	9.77	6.28	-1119.30	-9.42	15.48	0	V-V
39(0)	39	6.02	6.35	-1097.98	-9.62	5.18	0	Wx+V
39(0)	39	13.06	6.25	-1096.55	-9.33	25.02	0	-Wx+V
39(0)	39	10.06	-3.59	-1111.29	18.56	16.56	0	Wy+V
39(0)	39	9.01	16.19	-1083.25	-37.50	13.64	0	-Wy+V
39(0)	39	-60.51	4.68	-1055.86	-5.23	-184.72	1	Ex+V
39(0)	39	78.24	8.02	-1014.85	-14.01	212.79	1	-Ex+V
39(0)	39	10.54	-58.20	-1145.55	175.40	18.60	1	Ey+V
39(0)	39	7.20	70.89	-925.15	-194.63	9.47	1	-Ey+V

40(19)	40	-79.59	-2.31	-968.25	4.22	-214.75	1	Vxmax
40(21)	40	-10.02	-62.94	-1122.89	186.64	-13.75	1	Vymax
40(26)	40	-11.92	55.62	-657.69	-174.54	-20.64	1	Nmin
40(1)	40	-13.07	-4.34	-1068.76	7.23	-20.48	0	Nmax
40(21)	40	-10.02	-62.94	-1122.89	186.64	-13.75	1	Mxmax
40(19)	40	-79.59	-2.31	-968.25	4.22	-214.75	1	Mymax
40(1)	40	-13.07	-4.34	-1068.76	7.23	-20.48	0	V-V
40(0)	40	-16.22	-4.14	-1042.96	6.89	-29.82	0	Wx+V
40(0)	40	-9.34	-4.35	-1043.35	7.25	-10.23	0	-Wx+V
40(0)	40	-12.22	-13.87	-1064.35	35.99	-18.51	0	Wy+V
40(0)	40	-13.35	5.38	-1021.96	-21.86	-21.55	0	-Wy+V
40(0)	40	-79.59	-2.31	-968.25	4.22	-214.75	1	Ex+V
40(0)	40	55.65	-5.68	-974.20	8.99	177.24	1	-Ex+V
40(0)	40	-10.02	-62.94	-1122.89	186.64	-13.75	1	Ey+V
40(0)	40	-13.92	54.96	-819.56	-173.44	-23.76	1	-Ey+V

41(19)	41	-67.26	-7.70	-817.48	11.19	-195.34	1	Vxmax
41(21)	41	2.49	-69.81	-989.28	201.26	5.94	1	Vymax
41(26)	41	-1.31	53.95	-511.76	-175.80	-3.93	1	Nmin
41(13)	41	1.26	-19.76	-908.16	46.50	2.69	0	Nmax
41(21)	41	2.49	-69.81	-989.28	201.26	5.94	1	Mxmax
41(19)	41	-67.26	-7.70	-817.48	11.19	-195.34	1	Mymax
41(1)	41	0.72	-9.51	-905.64	15.31	1.23	0	V-V
41(0)	41	-2.75	-9.30	-882.87	15.00	-8.62	0	Wx+V
41(0)	41	4.16	-9.26	-882.79	14.88	11.01	0	-Wx+V
41(0)	41	1.26	-19.76	-908.16	46.50	2.69	0	Wy+V

41(0)	41	0.15	1.19	-857.51	-16.63	-0.31	0	-Wy+V
41(0)	41	-67.26	-7.70	-817.48	11.19	-195.34	1	Ex+V
41(0)	41	68.55	-9.60	-820.03	16.58	197.53	1	-Ex+V
41(0)	41	2.49	-69.81	-989.28	201.26	5.94	1	Ey+V
41(0)	41	-1.20	52.51	-648.22	-173.49	-3.75	1	-Ey+V

42(20)	42	76.73	-4.32	-953.68	9.69	210.40	1	Vxmax
42(21)	42	9.86	-87.84	-1045.43	233.46	17.54	1	Vymax
42(26)	42	5.75	82.35	-696.93	-224.41	7.17	1	Nmin
42(1)	42	9.62	-3.32	-1044.43	5.50	15.23	0	Nmax
42(21)	42	9.86	-87.84	-1045.43	233.46	17.54	1	Mxmax
42(19)	42	-59.70	-1.68	-947.07	0.19	-183.44	1	Mymax
42(1)	42	9.62	-3.32	-1044.43	5.50	15.23	0	V-V
42(0)	42	5.86	-3.36	-1019.74	5.63	4.94	0	Wx+V
42(0)	42	12.80	-3.11	-1019.74	5.08	24.61	0	-Wx+V
42(0)	42	9.80	-18.09	-1033.76	45.13	16.14	0	Wy+V
42(0)	42	8.86	11.63	-1005.71	-34.42	13.41	0	-Wy+V
42(0)	42	-59.70	-1.68	-947.07	0.19	-183.44	1	Ex+V
42(0)	42	76.73	-4.32	-953.68	9.69	210.40	1	-Ex+V
42(0)	42	9.86	-87.84	-1045.43	233.46	17.54	1	Ey+V
42(0)	42	7.17	81.85	-855.32	-223.58	9.42	1	-Ey+V

43(19)	43	-75.89	15.03	-923.94	-27.65	-208.94	1	Vxmax
43(22)	43	-8.32	92.85	-743.19	-244.80	-14.95	1	Vymax
43(26)	43	-7.19	91.09	-584.49	-242.06	-13.18	1	Nmin
43(13)	43	-6.86	-3.79	-1047.92	23.86	-10.08	0	Nmax
43(21)	43	-5.25	-71.75	-1161.18	211.94	-6.25	1	Mxmax
43(19)	43	-75.89	15.03	-923.94	-27.65	-208.94	1	Mymax
43(1)	43	-7.58	11.53	-1039.89	-17.92	-11.84	0	V-V
43(0)	43	-10.88	11.20	-1016.47	-17.29	-21.42	0	Wx+V
43(0)	43	-3.86	11.35	-1017.26	-17.78	-1.60	0	-Wx+V
43(0)	43	-6.86	-3.79	-1047.92	23.86	-10.08	0	Wy+V
43(0)	43	-7.88	26.33	-985.81	-58.92	-12.94	0	-Wy+V
43(0)	43	-75.89	15.03	-923.94	-27.65	-208.94	1	Ex+V
43(0)	43	62.32	6.07	-980.43	-5.22	187.73	1	-Ex+V
43(0)	43	-5.25	-71.75	-1161.18	211.94	-6.25	1	Ey+V
43(0)	43	-8.32	92.85	-743.19	-244.80	-14.95	1	-Ey+V

44(19)	44	-6.64	5.01	-381.15	-8.24	-15.33	1	Vxmax
44(22)	44	-0.19	9.96	-363.05	-21.21	-0.40	1	Vymax
44(26)	44	-0.18	9.17	-300.26	-19.97	-0.39	1	Nmin
44(1)	44	-0.03	5.17	-411.42	-8.23	-0.05	0	Nmax
44(22)	44	-0.19	9.96	-363.05	-21.21	-0.40	1	Mxmax
44(19)	44	-6.64	5.01	-381.15	-8.24	-15.33	1	Mymax

44(1)	44	-0.03	5.17	-411.42	-8.23	-0.05	0	V-V
44(0)	44	-0.35	5.04	-402.30	-8.01	-0.79	0	Wx+V
44(0)	44	0.29	5.05	-402.32	-8.04	0.69	0	-Wx+V
44(0)	44	0.01	4.07	-403.44	-5.51	0.06	0	Wy+V
44(0)	44	-0.08	6.01	-401.18	-10.55	-0.16	0	-Wy+V
44(0)	44	-6.64	5.01	-381.15	-8.24	-15.33	1	Ex+V
44(0)	44	6.56	4.36	-372.25	-6.68	15.22	1	-Ex+V
44(0)	44	0.11	-0.58	-390.36	6.28	0.29	1	Ey+V
44(0)	44	-0.19	9.96	-363.05	-21.21	-0.40	1	-Ey+V

45(20)	45	77.58	6.24	-879.88	-4.05	211.75	1	Vxmax
45(22)	45	7.27	92.56	-648.64	-248.26	9.59	1	Vymax
45(26)	45	5.78	90.71	-499.68	-245.37	7.23	1	Nmin
45(13)	45	10.11	-3.45	-1003.28	24.58	16.62	0	Nmax
45(21)	45	10.64	-70.35	-1138.93	213.53	18.77	1	Mxmax
45(19)	45	-59.66	15.98	-907.70	-30.67	-183.39	1	Mymax
45(1)	45	9.78	12.27	-987.48	-19.15	15.49	0	V-V
45(0)	45	6.08	11.82	-964.02	-18.28	5.28	0	Wx+V
45(0)	45	13.05	12.11	-961.75	-19.08	25.01	0	-Wx+V
45(0)	45	10.11	-3.45	-1003.28	24.58	16.62	0	Wy+V
45(0)	45	9.03	27.38	-922.49	-61.94	13.67	0	-Wy+V
45(0)	45	-59.66	15.98	-907.70	-30.67	-183.39	1	Ex+V
45(0)	45	77.58	6.24	-879.88	-4.05	211.75	1	-Ex+V
45(0)	45	10.64	-70.35	-1138.93	213.53	18.77	1	Ey+V
45(0)	45	7.27	92.56	-648.64	-248.26	9.59	1	-Ey+V

46(19)	46	-68.07	17.64	-958.49	-34.82	-196.62	1	Vxmax
46(22)	46	-0.79	96.40	-723.09	-258.21	-3.11	1	Vymax
46(26)	46	-0.90	94.48	-560.38	-255.20	-3.29	1	Nmin
46(13)	46	1.18	-4.17	-1107.45	26.95	2.58	0	Nmax
46(21)	46	2.08	-73.39	-1229.41	222.14	5.30	1	Mxmax
46(19)	46	-68.07	17.64	-958.49	-34.82	-196.62	1	Mymax
46(1)	46	0.71	12.67	-1094.95	-19.84	1.21	0	V-V
46(0)	46	-2.80	12.18	-1064.01	-18.85	-8.70	0	Wx+V
46(0)	46	4.19	12.55	-1063.57	-19.88	11.06	0	-Wx+V
46(0)	46	1.18	-4.17	-1107.45	26.95	2.58	0	Wy+V
46(0)	46	0.20	28.89	-1020.13	-65.69	-0.22	0	-Wy+V
46(0)	46	-68.07	17.64	-958.49	-34.82	-196.62	1	Ex+V
46(0)	46	69.36	5.36	-994.01	-1.25	198.81	1	-Ex+V
46(0)	46	2.08	-73.39	-1229.41	222.14	5.30	1	Ey+V
46(0)	46	-0.79	96.40	-723.09	-258.21	-3.11	1	-Ey+V

47(19)	47	-74.16	14.88	-684.45	-32.00	-206.20	1	Vxmax
47(21)	47	-13.41	-80.05	-893.10	236.44	-19.10	1	Vymax

47(26)	47	-17.58	93.76	-253.98	-257.97	-29.53	1	Nmin
47(13)	47	-17.16	-9.56	-716.05	36.69	-26.29	0	Nmax
47(21)	47	-13.41	-80.05	-893.10	236.44	-19.10	1	Mxmax
47(19)	47	-74.16	14.88	-684.45	-32.00	-206.20	1	Mymax
47(1)	47	-18.40	8.10	-683.71	-12.72	-28.87	0	V-V
47(0)	47	-20.95	7.72	-672.08	-11.84	-37.27	0	Wx+V
47(0)	47	-15.06	8.16	-664.87	-13.09	-19.24	0	-Wx+V
47(0)	47	-17.16	-9.56	-716.05	36.69	-26.29	0	Wy+V
47(0)	47	-18.86	25.44	-620.90	-61.62	-30.23	0	-Wy+V
47(0)	47	-74.16	14.88	-684.45	-32.00	-206.20	1	Ex+V
47(0)	47	40.36	0.07	-566.92	8.51	153.15	1	-Ex+V
47(0)	47	-13.41	-80.05	-893.10	236.44	-19.10	1	Ey+V
47(0)	47	-20.39	95.00	-358.27	-259.93	-33.95	1	-Ey+V

48(20)	48	72.90	-8.10	-630.29	7.08	205.53	1	Vxmax
48(21)	48	18.56	-54.37	-625.88	158.01	34.44	1	Vymax
48(26)	48	8.80	32.63	-403.32	-122.84	8.70	1	Nmin
48(1)	48	16.05	-12.91	-604.02	20.98	25.31	0	Nmax
48(21)	48	18.56	-54.37	-625.88	158.01	34.44	1	Mxmax
48(20)	48	72.90	-8.10	-630.29	7.08	205.53	1	Mymax
48(1)	48	16.05	-12.91	-604.02	20.98	25.31	0	V-V
48(0)	48	12.84	-12.48	-589.75	20.04	15.90	0	Wx+V
48(0)	48	18.68	-12.79	-595.90	20.98	33.78	0	-Wx+V
48(0)	48	16.95	-17.87	-599.89	37.29	28.43	0	Wy+V
48(0)	48	14.57	-7.40	-585.77	3.73	21.25	0	-Wy+V
48(0)	48	-43.05	-15.61	-492.46	31.28	-158.48	1	Ex+V
48(0)	48	72.90	-8.10	-630.29	7.08	205.53	1	-Ex+V
48(0)	48	18.56	-54.37	-625.88	158.01	34.44	1	Ey+V
48(0)	48	11.29	30.66	-496.88	-119.64	12.62	1	-Ey+V

49(19)	49	-70.27	-21.29	-921.14	38.69	-201.33	1	Vxmax
49(21)	49	3.66	-63.63	-978.96	176.36	10.99	1	Vymax
49(26)	49	-4.66	30.60	-692.46	-123.51	-12.49	1	Nmin
49(1)	49	-0.58	-19.86	-998.74	31.85	-0.87	0	Nmax
49(21)	49	3.66	-63.63	-978.96	176.36	10.99	1	Mxmax
49(19)	49	-70.27	-21.29	-921.14	38.69	-201.33	1	Mymax
49(1)	49	-0.58	-19.86	-998.74	31.85	-0.87	0	V-V
49(0)	49	-4.03	-19.27	-976.03	30.72	-10.64	0	Wx+V
49(0)	49	2.89	-19.48	-975.75	31.39	8.92	0	-Wx+V
49(0)	49	-0.82	-25.52	-983.01	-50.59	3.05	0	Wy+V
49(0)	49	-1.96	-13.22	-968.77	11.52	-4.76	0	-Wy+V
49(0)	49	-70.27	-21.29	-921.14	38.69	-201.33	1	Ex+V
49(0)	49	69.18	-14.74	-902.22	18.96	199.69	1	-Ex+V
49(0)	49	3.66	-63.63	-978.96	176.36	10.99	1	Ey+V

49(0)	49	-4.75	27.60	-844.41	-118.71	-12.63	1	-Ey+V

50(19)	50	-78.07	-17.76	-798.48	31.61	-213.60	1	Vxmax
50(21)	50	-4.07	-63.60	-882.15	180.09	-1.17	1	Vymax
50(26)	50	-11.42	34.86	-602.43	-134.09	-23.13	1	Nmin
50(1)	50	-9.17	-17.35	-879.56	27.84	-14.39	0	Nmax
50(21)	50	-4.07	-63.60	-882.15	180.09	-1.17	1	Mxmax
50(19)	50	-78.07	-17.76	-798.48	31.61	-213.60	1	Mymax
50(1)	50	-9.17	-17.35	-879.56	27.84	-14.39	0	V-V
50(0)	50	-12.43	-16.83	-860.58	26.87	-23.87	0	Wx+V
50(0)	50	-5.53	-16.99	-861.90	27.37	-4.32	0	-Wx+V
50(0)	50	-7.56	-23.88	-869.90	49.25	-10.15	0	Wy+V
50(0)	50	-10.39	-9.93	-852.58	4.98	-18.04	0	-Wy+V
50(0)	50	-78.07	-17.76	-798.48	31.61	-213.60	1	Ex+V
50(0)	50	61.17	-13.59	-821.07	18.57	187.09	1	-Ex+V
50(0)	50	-4.07	-63.60	-882.15	180.09	-1.17	1	Ey+V
50(0)	50	-12.83	32.25	-737.40	-129.91	-25.34	1	-Ey+V

51(19)	51	-6.78	-3.94	-258.41	6.43	-15.63	1	Vxmax
51(21)	51	0.29	-8.03	-265.11	17.14	0.74	1	Vymax
51(26)	51	-0.49	1.05	-207.31	-5.99	-1.04	1	Nmin
51(1)	51	-0.13	-4.04	-267.87	6.46	-0.20	0	Nmax
51(21)	51	0.29	-8.03	-265.11	17.14	0.74	1	Mxmax
51(19)	51	-6.78	-3.94	-258.41	6.43	-15.63	1	Mymax
51(1)	51	-0.13	-4.04	-267.87	6.46	-0.20	0	V-V
51(0)	51	-0.44	-3.97	-265.21	6.35	-0.93	0	Wx+V
51(0)	51	0.19	-3.98	-265.18	6.38	0.54	0	-Wx+V
51(0)	51	0.00	-4.60	-266.18	7.98	0.10	0	Wy+V
51(0)	51	-0.25	-3.36	-264.21	4.75	-0.49	0	-Wy+V
51(0)	51	-6.78	-3.94	-258.41	6.43	-15.63	1	Ex+V
51(0)	51	6.58	-3.67	-256.97	5.74	15.30	1	-Ex+V
51(0)	51	0.29	-8.03	-265.11	17.14	0.74	1	Ey+V
51(0)	51	-0.50	0.42	-250.26	-4.97	-1.07	1	-Ey+V

52(20)	52	84.76	-11.62	-847.89	16.90	224.21	1	Vxmax
52(21)	52	15.66	-65.42	-898.89	186.76	29.79	1	Vymax
52(26)	52	10.17	41.60	-663.73	-148.58	10.92	1	Nmin
52(1)	52	15.77	-13.58	-910.14	21.84	24.86	0	Nmax
52(21)	52	15.66	-65.42	-898.89	186.76	29.79	1	Mxmax
52(19)	52	-56.59	-14.37	-856.79	24.74	-179.80	1	Mymax
52(1)	52	15.77	-13.58	-910.14	21.84	24.86	0	V-V
52(0)	52	11.83	-13.38	-895.06	21.44	14.33	0	Wx+V
52(0)	52	18.82	-13.46	-894.87	21.71	34.01	0	-Wx+V
52(0)	52	16.31	-21.54	-900.14	46.81	27.43	0	Wy+V

52(0)	52	14.35	-5.31	-889.79	-3.67	20.91	0	-Wy+V
52(0)	52	-56.59	-14.37	-856.79	24.74	-179.80	1	Ex+V
52(0)	52	84.76	-11.62	-847.89	16.90	224.21	1	-Ex+V
52(0)	52	15.66	-65.42	-898.89	186.76	29.79	1	Ey+V
52(0)	52	12.51	39.44	-805.79	-145.11	14.62	1	-Ey+V

53(19)	53	-81.10	-3.08	-828.06	5.45	-218.36	1	Vxmax
53(21)	53	-17.70	-45.18	-800.17	158.66	-22.65	1	Vymax
53(26)	53	-26.29	40.45	-637.12	-150.62	-46.53	1	Nmin
53(1)	53	-26.51	-2.85	-853.08	4.89	-41.69	0	Nmax
53(21)	53	-17.70	-45.18	-800.17	158.66	-22.65	1	Mxmax
53(19)	53	-81.10	-3.08	-828.06	5.45	-218.36	1	Mymax
53(1)	53	-26.51	-2.85	-853.08	4.89	-41.69	0	V-V
53(0)	53	-28.75	-2.79	-836.91	4.75	-49.55	0	Wx+V
53(0)	53	-22.96	-2.77	-832.97	4.77	-31.76	0	-Wx+V
53(0)	53	-24.25	-9.89	-835.51	29.71	-36.41	0	Wy+V
53(0)	53	-27.45	4.33	-834.37	-20.20	-44.89	0	-Wy+V
53(0)	53	-81.10	-3.08	-828.06	5.45	-218.36	1	Ex+V
53(0)	53	33.11	-2.08	-739.90	3.31	142.90	1	-Ex+V
53(0)	53	-17.70	-45.18	-800.17	158.66	-22.65	1	Ey+V
53(0)	53	-30.29	40.02	-767.78	-149.89	-52.82	1	-Ey+V

54(19)	54	-38.29	2.47	-585.98	-4.83	-150.91	1	Vxmax
54(21)	54	2.47	-38.24	-626.82	151.52	9.12	1	Vymax
54(26)	54	-2.49	41.50	-446.35	-156.15	-9.08	1	Nmin
54(1)	54	-0.01	2.05	-636.85	-2.88	0.03	0	Nmax
54(21)	54	2.47	-38.24	-626.82	151.52	9.12	1	Mxmax
54(19)	54	-38.29	2.47	-585.98	-4.83	-150.91	1	Mymax
54(1)	54	-0.01	2.05	-636.85	-2.88	0.03	0	V-V
54(0)	54	-2.05	1.97	-623.38	-2.74	-7.53	0	Wx+V
54(0)	54	2.04	1.99	-623.30	-2.84	7.59	0	-Wx+V
54(0)	54	0.83	-5.09	-628.71	23.41	3.06	0	Wy+V
54(0)	54	-0.84	9.05	-617.97	-28.99	-3.00	0	-Wy+V
54(0)	54	-38.29	2.47	-585.98	-4.83	-150.91	1	Ex+V
54(0)	54	38.27	1.08	-584.75	-0.23	150.96	1	-Ex+V
54(0)	54	2.47	-38.24	-626.82	151.52	9.12	1	Ey+V
54(0)	54	-2.49	41.80	-543.91	-156.57	-9.07	1	-Ey+V

55(20)	55	67.53	-5.07	-435.16	10.89	196.71	1	Vxmax
55(21)	55	15.24	-66.99	-410.65	200.62	28.22	1	Vymax
55(26)	55	11.11	61.23	-329.06	-191.14	13.35	1	Nmin
55(1)	55	15.51	-3.46	-435.93	5.73	24.47	0	Nmax
55(21)	55	15.24	-66.99	-410.65	200.62	28.22	1	Mxmax
55(20)	55	67.53	-5.07	-435.16	10.89	196.71	1	Mymax

55(1)	55	15.51	-3.46	-435.93	5.73	24.47	0	V-V
55(0)	55	12.47	-3.44	-426.13	5.76	15.34	0	Wx+V
55(0)	55	17.95	-3.32	-428.69	5.41	32.66	0	-Wx+V
55(0)	55	15.80	-14.85	-429.21	40.02	26.31	0	Wy+V
55(0)	55	14.63	8.09	-425.62	-28.85	21.69	0	-Wy+V
55(0)	55	-38.78	-1.22	-371.79	-0.55	-151.37	1	Ex+V
55(0)	55	67.53	-5.07	-435.16	10.89	196.71	1	-Ex+V
55(0)	55	15.24	-66.99	-410.65	200.62	28.22	1	Ey+V
55(0)	55	13.51	60.71	-396.31	-190.28	17.13	1	-Ey+V

56(19)	56	-37.95	0.15	-484.58	-2.69	-150.39	1	Vxmax
56(21)	56	3.66	-40.43	-646.10	158.74	10.99	1	Vymax
56(26)	56	-2.37	38.20	-249.26	-154.82	-8.89	1	Nmin
56(13)	56	1.70	-8.64	-538.62	30.26	4.44	0	Nmax
56(21)	56	3.66	-40.43	-646.10	158.74	10.99	1	Mxmax
56(19)	56	-37.95	0.15	-484.58	-2.69	-150.39	1	Mymax
56(1)	56	0.83	-1.37	-525.50	2.44	1.35	0	V-V
56(0)	56	-1.26	-1.37	-515.76	2.50	-6.29	0	Wx+V
56(0)	56	2.86	-1.29	-515.75	2.22	8.88	0	-Wx+V
56(0)	56	1.70	-8.64	-538.62	30.26	4.44	0	Wy+V
56(0)	56	-0.10	5.99	-492.88	-25.54	-1.84	0	-Wy+V
56(0)	56	-37.95	0.15	-484.58	-2.69	-150.39	1	Ex+V
56(0)	56	39.37	-2.58	-492.17	6.97	152.68	1	-Ex+V
56(0)	56	3.66	-40.43	-646.10	158.74	10.99	1	Ey+V
56(0)	56	-2.25	38.00	-330.66	-154.47	-8.70	1	-Ey+V

57(20)	57	73.30	-18.84	-888.64	33.99	206.16	1	Vxmax
57(21)	57	18.46	-82.68	-992.19	229.12	34.29	1	Vymax
57(26)	57	7.88	52.19	-607.10	-180.83	7.24	1	Nmin
57(13)	57	16.42	-29.85	-940.60	64.88	27.59	0	Nmax
57(21)	57	18.46	-82.68	-992.19	229.12	34.29	1	Mxmax
57(20)	57	73.30	-18.84	-888.64	33.99	206.16	1	Mymax
57(1)	57	15.41	-18.04	-939.08	28.61	24.30	0	V-V
57(0)	57	12.16	-17.80	-921.06	28.35	14.84	0	Wx+V
57(0)	57	18.11	-17.54	-922.07	27.69	32.89	0	-Wx+V
57(0)	57	16.42	-29.85	-940.60	64.88	27.59	0	Wy+V
57(0)	57	13.86	-5.48	-902.53	-8.85	20.14	0	-Wy+V
57(0)	57	-44.57	-14.41	-856.04	18.70	-160.86	1	Ex+V
57(0)	57	73.30	-18.84	-888.64	33.99	206.16	1	-Ex+V
57(0)	57	18.46	-82.68	-992.19	229.12	34.29	1	Ey+V
57(0)	57	10.27	49.42	-752.49	-176.44	11.02	1	-Ey+V

58(19)	58	-70.97	-12.47	-948.93	14.11	-202.43	1	Vxmax
58(21)	58	2.70	-79.59	-1036.93	228.06	9.47	1	Vymax

58(26)	58	-4.93	-49.61	-700.99	-180.66	-12.92	1	Nmin
58(1)	58	-1.30	-18.04	-1028.03	28.55	-2.00	0	Nmax
58(21)	58	-2.70	-79.59	-1036.93	228.06	9.47	1	Mxmax
58(19)	58	-70.97	-12.47	-948.93	14.11	-202.43	1	Mymax
58(1)	58	-1.30	-18.04	-1028.03	28.55	-2.00	0	V-V
58(0)	58	-4.74	-17.71	-1007.31	28.20	-11.75	0	Wx+V
58(0)	58	2.18	-17.48	-1006.72	27.49	7.81	0	-Wx+V
58(0)	58	0.06	-29.71	-1021.52	65.90	1.86	0	Wy+V
58(0)	58	-2.62	-5.48	-992.50	-10.21	-5.80	0	-Wy+V
58(0)	58	-70.97	-12.47	-948.93	14.11	-202.43	1	Ex+V
58(0)	58	68.53	-20.23	-946.98	37.61	198.67	1	-Ex+V
58(0)	58	2.70	-79.59	-1036.93	228.06	9.47	1	Ey+V
58(0)	58	-5.13	46.89	-858.98	-176.35	-13.23	1	-Ey+V

59(19)	59	-68.69	-11.92	-898.70	11.71	-198.84	1	Vxmax
59(21)	59	5.24	-82.48	-996.30	236.44	13.47	1	Vymax
59(26)	59	-3.39	51.47	-670.69	-187.49	-10.49	1	Nmin
59(1)	59	1.09	-18.57	-996.17	29.33	1.76	0	Nmax
59(21)	59	5.24	-82.48	-996.30	236.44	13.47	1	Mxmax
59(19)	59	-68.69	-11.92	-898.70	11.71	-198.84	1	Mymax
59(1)	59	1.09	-18.57	-996.17	29.33	1.76	0	V-V
59(0)	59	-2.39	-18.28	-973.25	29.09	-8.06	0	Wx+V
59(0)	59	4.53	-18.00	-973.47	28.19	11.50	0	-Wx+V
59(0)	59	2.46	-31.07	-988.36	69.29	5.63	0	Wy+V
59(0)	59	-0.32	-5.21	-958.36	-12.01	-2.19	0	-Wy+V
59(0)	59	-68.69	-11.92	-898.70	11.71	-198.84	1	Ex+V
59(0)	59	70.71	-21.92	-919.84	41.68	202.10	1	-Ex+V
59(0)	59	5.24	-82.48	-996.30	236.44	13.47	1	Ey+V
59(0)	59	-3.22	48.65	-822.23	-183.04	-10.22	1	-Ey+V

60(19)	60	-73.05	-5.02	-630.81	-0.68	-205.69	1	Vxmax
60(21)	60	-11.55	-77.56	-644.14	232.50	-12.94	1	Vymax
60(26)	60	-16.08	58.35	-387.88	-202.23	-30.47	1	Nmin
60(13)	60	-14.73	-24.67	-608.32	60.46	-21.43	0	Nmax
60(21)	60	-11.55	-77.56	-644.14	232.50	-12.94	1	Mxmax
60(19)	60	-73.05	-5.02	-630.81	-0.68	-205.69	1	Mymax
60(1)	60	-16.21	-11.30	-605.73	17.82	-25.47	0	V-V
60(0)	60	-18.83	-11.28	-597.60	18.06	-33.94	0	Wx+V
60(0)	60	-12.98	-10.89	-591.39	16.89	-16.06	0	-Wx+V
60(0)	60	-14.73	-24.67	-608.32	60.46	-21.43	0	Wy+V
60(0)	60	-17.08	2.50	-580.67	-25.52	-28.56	0	-Wy+V
60(0)	60	-73.05	-5.02	-630.81	-0.68	-205.69	1	Ex+V
60(0)	60	42.91	-15.93	-495.04	33.70	158.33	1	-Ex+V
60(0)	60	-11.55	-77.56	-644.14	232.50	-12.94	1	Ey+V

60(0)	60	-18.59	56.61	-481.71	-199.48	-34.42	1	-Ey+V

61(20)	61	85.17	-11.26	-187.25	16.34	245.81	1	Vxmax
61(21)	61	16.02	-72.14	-165.53	216.63	34.32	1	Vymax
61(23)	61	-66.71	-15.72	-61.86	26.87	-216.78	1	Nmin
61(20)	61	85.17	-11.26	-187.25	16.34	245.81	1	Nmax
61(21)	61	16.02	-72.14	-165.53	216.63	34.32	1	Mxmax
61(19)	61	-65.04	-18.17	-84.50	30.80	-214.14	1	Mymax
61(1)	61	11.10	-16.30	-145.42	26.18	17.45	0	V-V
61(0)	61	7.29	-15.95	-140.45	25.52	6.20	0	Wx+V
61(0)	61	14.36	-15.82	-145.38	25.47	27.84	0	-Wx+V
61(0)	61	12.83	-24.51	-148.16	54.58	23.21	0	Wy+V
61(0)	61	8.82	-7.25	-137.67	-3.59	10.84	0	-Wy+V
61(0)	61	-65.04	-18.17	-84.50	30.80	-214.14	1	Ex+V
61(0)	61	85.17	-11.26	-187.25	16.34	245.81	1	-Ex+V
61(0)	61	16.02	-72.14	-165.53	216.63	34.32	1	Ey+V
61(0)	61	4.11	42.71	-106.22	-169.49	-2.65	1	-Ey+V

62(19)	62	-84.98	-11.30	-185.16	18.83	-245.49	1	Vxmax
62(21)	62	-3.85	-74.40	-157.81	223.08	3.08	1	Vymax
62(24)	62	66.44	-15.89	-63.00	24.65	216.36	1	Nmin
62(19)	62	-84.98	-11.30	-185.16	18.83	-245.49	1	Nmax
62(21)	62	-3.85	-74.40	-157.81	223.08	3.08	1	Mxmax
62(19)	62	-84.98	-11.30	-185.16	18.83	-245.49	1	Mymax
62(1)	62	-11.15	-16.40	-144.70	26.29	-17.52	0	V-V
62(0)	62	-14.40	-15.79	-144.59	25.27	-27.90	0	Wx+V
62(0)	62	-7.36	-16.18	-139.91	25.96	-6.29	0	-Wx+V
62(0)	62	-8.83	-25.34	-145.00	56.83	-10.84	0	Wy+V
62(0)	62	-12.93	-6.64	-139.50	-5.60	-23.35	0	-Wy+V
62(0)	62	-84.98	-11.30	-185.16	18.83	-245.49	1	Ex+V
62(0)	62	64.75	-18.36	-85.56	28.61	213.71	1	-Ex+V
62(0)	62	-3.85	-74.40	-157.81	223.08	3.08	1	Ey+V
62(0)	62	-16.38	44.73	-112.90	-175.65	-34.86	1	-Ey+V

The coordinate points of $M_x=0$ and $M_y=0$

Tower = 1	Xodf =	33.24	Yodf =	16.45	SGM-N =	-44059.3	Vxmax
Tower = 1	Xodf =	33.69	Yodf =	16.52	SGM-N =	-41873.9	Vymax
Tower = 1	Xodf =	32.25	Yodf =	16.34	SGM-N =	-29886.4	Nmin
Tower = 1	Xodf =	33.54	Yodf =	16.50	SGM-N =	-47544.2	Nmax
Tower = 1	Xodf =	33.56	Yodf =	16.58	SGM-N =	-43930.0	Mxmax
Tower = 1	Xodf =	33.39	Yodf =	16.43	SGM-N =	-44139.2	Mymax
Tower = 1	Xodf =	33.32	Yodf =	16.47	SGM-N =	-47083.1	V-V

Tower = 1	Xodf =	33.35	Yodf =	16.46	SGM-N =	-46072.7	Wx+V
Tower = 1	Xodf =	33.29	Yodf =	16.46	SGM-N =	-46072.7	-Wx+V
Tower = 1	Xodf =	33.32	Yodf =	16.48	SGM-N =	-46072.7	Wy+V
Tower = 1	Xodf =	33.32	Yodf =	16.44	SGM-N =	-46072.7	-Wy+V
Tower = 1	Xodf =	34.03	Yodf =	16.44	SGM-N =	-43235.7	Ex+V
Tower = 1	Xodf =	32.57	Yodf =	16.44	SGM-N =	-43232.5	-Ex+V
Tower = 1	Xodf =	33.30	Yodf =	16.66	SGM-N =	-43240.0	Ey+V
Tower = 1	Xodf =	33.30	Yodf =	16.22	SGM-N =	-43228.3	-Ey+V

6 • Output of Reinforcements

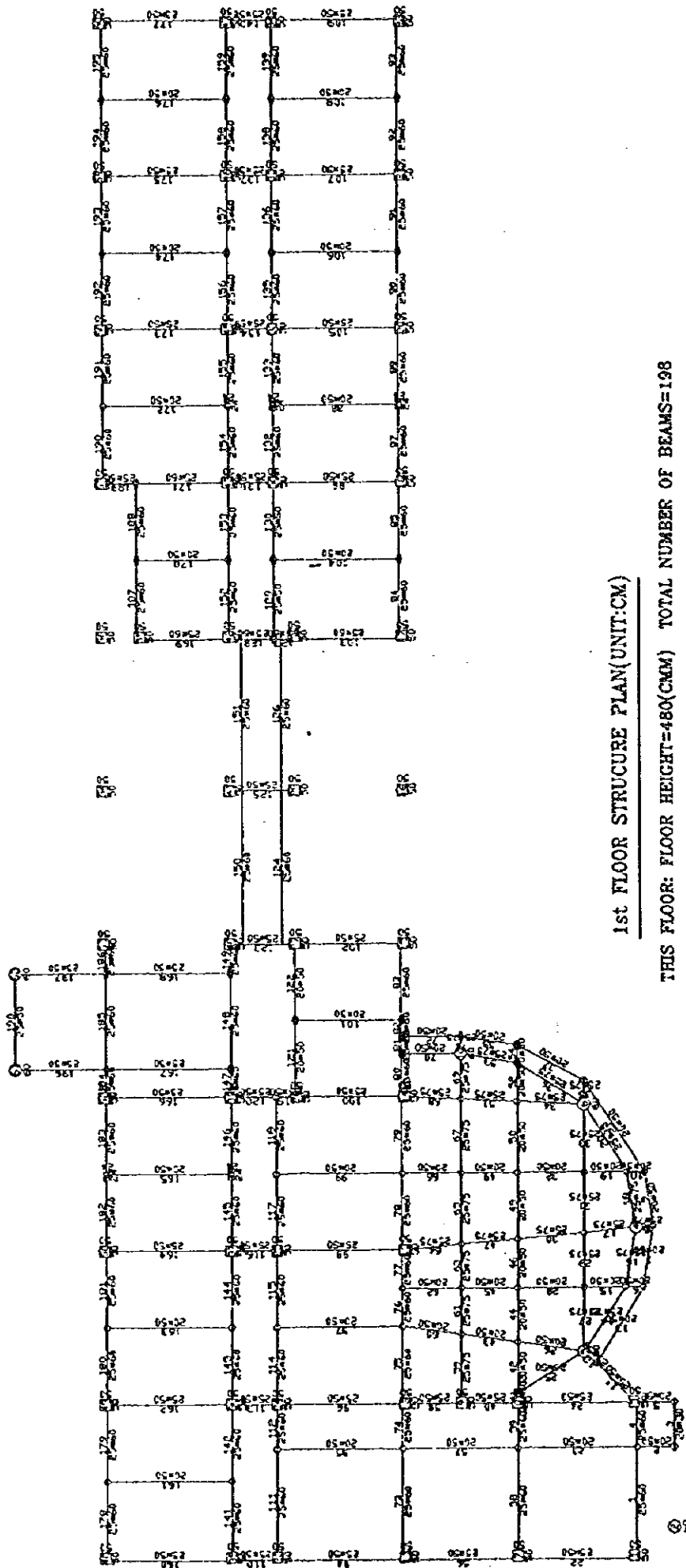
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*****
*                               Output of Reinforcements                               *
*                               PJ-1.OUT                                             *
* -----                                                                    *
*                               Symbols:                                             *
* B,H --- Height and Width of section(m)                                         *
* Lc,Lw,Lg,Lb --- Length of column, shear wall, brace and beam(m)               *
* COLUMN:                                                                           *
* (NUc)Uc --- Ratio of axial force to section axial strength( $N/A \cdot f_c$ )          *
* NUc --- Combinatorial number which controls Uc                                 *
* Asex,y(NAsc) --- Reinforcement area at one side of column(mm2)                 *
* Asc(NAsc)--- Reinforcement area of column of circular section(mm2)             *
* NAsc --- Combinatorial number which controls Asc                               *
* 0 --- Minimum reinforcement                                                       *
* Mc,Nc(x,y) --- Moment and axial force which controls Acs                       *
* Rsc --- Ratio of reinforcement of column( $A_s/B \cdot H$ )                            *
* Asvc(NAsvc) --- Reinforcement area of stirrups for column(mm2)                *
*                                                                                   *
*                                                                                   *
*                               in certain spacing                                *
*                                                                                   *
*                               NAsvc --- Combinatorial number which controls Asvc  *
*                                                                                   *
*                               0 --- Minimum reinforcement                         *
*                                                                                   *
*                               Vc,Nc(x,y) --- Shear and axial force which controls  *
*                               Asvc                                              *
*                                                                                   *
*                               Rsvc --- Volumetric ratio of stirrups of column( $V_s/V_c$ ) *
*                                                                                   *
*                               Vs --- Volume of stirrups in column                *
*                                                                                   *
*                               Vc --- Volume of concrete  $V_c = B \cdot H \cdot Sc$     *
*                                                                                   *
*                               Sc --- Distance of stirrups in column              *
*                                                                                   *
*                                                                                   *
*                                                                                   *
*                                                                                   *
*                                                                                   *
*                                                                                   *
*                                                                                   *
*                               WALL:                                             *
* Arfw --- Angle of section between wall axis and coordinate axis                 *
* N(I1-I2) --- Number of branch of shear wall                                    *
*                                                                                   *
* I1-I2 --- Number of nodes in front and back of wall branch                    *
*                                                                                   *
* T*L --- Thickness and length of wall branch                                     *
    
```

- * aa --- Thickness of nominal cover(mm)(thickness of the wall) *
- * As --- Reinforcement area in the embedded column at one end(mm2) *
- * of branch *
- * Rs --- Ratio of reinforcement of branch($As/2 \cdot T \cdot T$) *
- * (NAs)M,N --- Moment and axial force which controls As *
- * NAs --- Combinatorial number which controls As *
- * Ash --- Horizontal reinforcement area in certain spacing(mm2) *
- * Rsh --- Ratio of horizontal reinforcement($Ash/T \cdot Swh$) *
- * (NAsh)V,Nh --- Shear and axial force which controls Ash *
- * NAsh --- Combinatorial number which controls Ash *
- * Swh --- Distance of horizontal bar in wall *
- * BEAM: *
- * +M(Nm) --- Maximum positive moment of beam on I,1,2,3,J *
- * with equal spacing *
- * -M(Nm) --- Maximum negative moment of beam on I,1,2,3,J *
- * with equal spacing *
- * Nm --- Combinatorial number which controls +M and -M *
- * As(NAs) --- Reinforcement area of beam on I,1,2,3,J(mm2) *
- * with equal spacing *
- * NAs --- Combinatorial number which controls As *
- * 0 --- Minimum reinforcement *
- * Rs --- Ratio of reinforcement of beam($As/B \cdot H$) *
- * V(NV) --- Maximum combined shear of beam *
- * NV --- Combinatorial number which controls V *
- * Asv(NAsv) --- Reinforcement area of stirrups(mm2) *
- * NAsv --- Combinatorial number which controls Asv *
- * 0 --- Minimum reinforcement *
- * Rsv --- Ratio of stirrups of beam($Asv/B \cdot Sb$) *
- * T & V(NTV) --- Maximum Combined torsion and shear(kN-m) *
- * NTV --- Combinatorial number which controls T & V *
- * Ast(NAst) --- Longitudinal reinforcement area by torsion and shear *
- * NAst --- Combinatorial number which controls Ast *
- * 0 --- Minimum reinforcement *
- * Astv --- Reinforcement area of stirrups by torsion and shear(mm2) *
- * Ast1 --- Single reinforcement area of stirrups for torsion(mm2) *
- * Sb --- Distance of stirrups in beam *

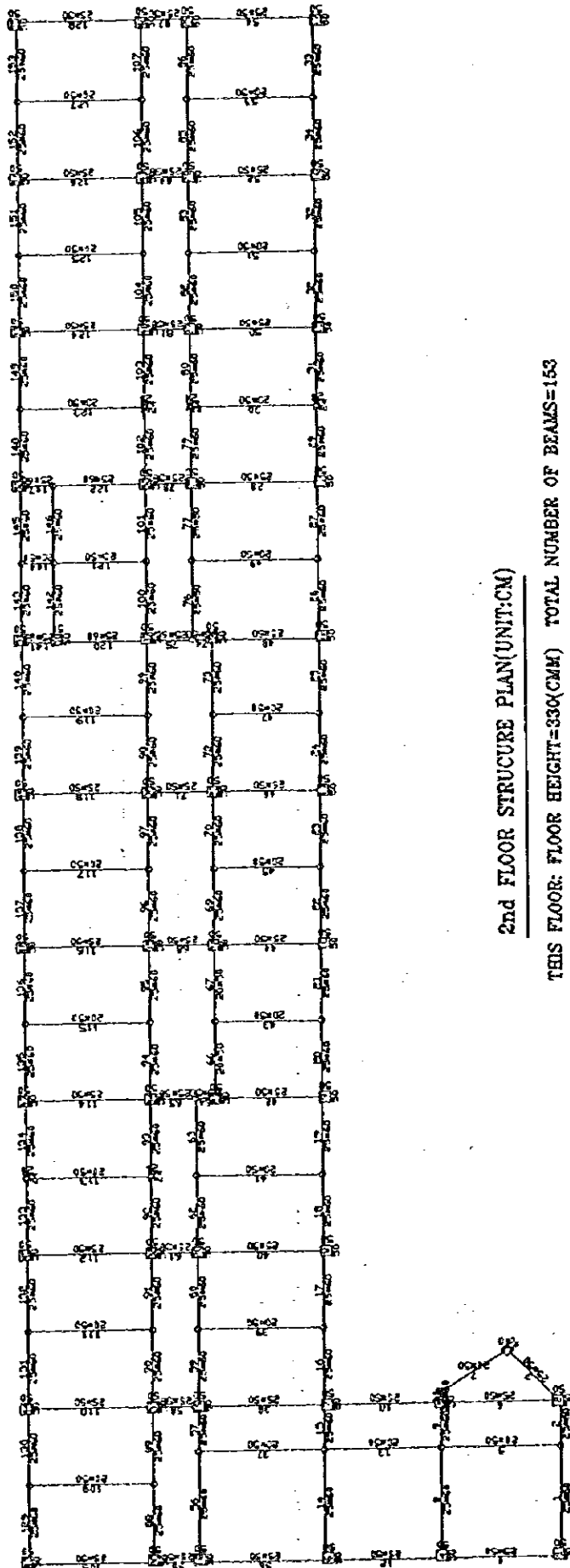
7 • Structure analysis result document of elastic base beam
board EFDAT.OUT

=====END=====



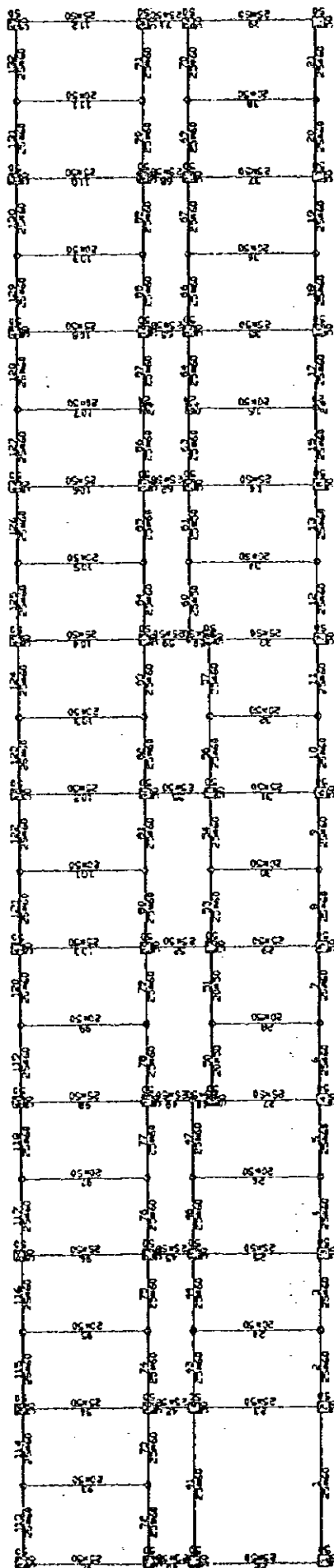
1st FLOOR STRUCTURE PLAN(UNIT:CM)

THIS FLOOR: FLOOR HEIGHT=480(CM) TOTAL NUMBER OF BEAMS=198
 TOTAL NUMBER OF COLUMNS=62
 CONCRETE STRENGTH GRADE: BEAM C_b=30 COLUMN C_c=30



2nd FLOOR STRUCTURE PLAN(UNIT:CM)

THIS FLOOR: FLOOR HEIGHT=330(CMM) TOTAL NUMBER OF BEAMS=153
 TOTAL NUMBER OF COLUMNS=55
 CONCRETE STRENGTH GRADE: BEAM Cb=30 COLUMN Cc=30



3rd FLOOR STRUCURE PLAN(UNIT:CM)

THIS FLOOR: FLOOR HEIGHT=330(CM) TOTAL NUMBER OF BEAMS=132

TOTAL NUMBER OF COLUMNS=47

CONCRETE STRENGTH GRADE: BEAM Cb=30 COLUMN Cc=30